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Teachers' professional image in Turkish school series

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Abstract

The aim of this study is to determine teachers' professional image in Turkish school series on television. Teachers' professional image was analyzed under four categories as demographic characteristics, positive, negative and omitted image components. To this end, four school series broadcasted on different TV channels were analyzed. The TV series were obtained from the websites of the channels or they were downloaded from YouTube. The study was carried out as an ethnographic study which is one of the qualitative designs. Study materials were chosen through criterion sampling method. The first three episodes and main teacher character of the series were included in the study. Data was collected through document review method. To analyze the data ethnographic content analysis was utilized. The following results were obtained. There were not stereotypes in terms of gender or age of the characters. On the other hand, three of the characters were seen as teachers in social sciences while only one of them was a Math teacher. All of the characters were single or widow which was regarded as a negative image component. Additionally, all of the series were set in high schools. As for the positive image components, the characters were idealistic, self-sacrificing, concerned, role-model, respectable and just. The names of the characters can be said to have positive connotations in Turkish language. They had positive visual image and good relations with their students. The characters could solve their students' personal problems. However, some negative image components were present in the series. These can be listed as financial status, the fierce opposition to the school administration, solving the problems at school informally, making exam in the first lesson and using insulting words to the students. Teachers were also depicted as an occupational group which can easily be appointed from place to place as a punishment. It was also determined that there were some omitted image components. Teachers were not depicted while planning, preparing for the lesson, training, participating in the meetings, grading the exams or doing extra tasks.

Key Words: Teacher, professional image, media, television series.

1. Introduction

Teaching is one of the most crucial professions for the survival and development of the society and can be regarded as a profession which will never lose its importance (Arslanoğlu, 1992). In this respect, the success of the teachers affects the whole society. The success of any profession, on the other hand, can be susceptible to self and professional image since the professionals behave in line with this image (Akyüz, 1978). The prestige of teaching profession is the result of factors such as behaviors and attitude displayed by the teachers, dominant culture of the society, politics and some other societal factor. For this reason, the teachers who are perceived as role models are expected to behave suitable to their profession's quality (Aydın, 2013). In today's knowledge society in which social interaction has been very dynamic, it has been an obligation for any profession to present itself accurately and properly (Mynbayeva & Yessenova, 2016). In other words, professionals have to create a positive image. However, it is not only the professionals creating this image with their occupational or daily life. The image can be generated by all kinds of media. People can judge professionals based on the news they read on the paper or a movie they watch on television. So, teachers who carry out an important task for the society should have a positive image in media or the media should reflect them positively.

1.1. Definition of Image

According to Ünsal & Bağçeci (2016), the success of any profession depends on the image of the members' quality, performance, expertise and skills. Image can be defined as the sum of the views about a person, institution or an occasion (Balta Peltekoğlu, 1997). On the other hand, İbicioğlu & Avcı (2003) defines it as the impression a person or institution forms in the eyes of other people and institutions. Bolat (2006) puts forward a more comprehensive definition. According to him, image is the sum of impressions and thoughts about a person or organization which are created as a result of conscious or unconscious broadcast of information or data to



public. These impressions and thoughts may consist of subjective or objective judgments. Polat & Arslan (2015) point out some features of image. It can change over time; it is subjective; it can be positive or negative; it can be formed consciously or unconsciously and it is the result of the interaction between the source and holder of the image.

1.2. Professional Image

Nearly all the professions have an image that is prescribed to their members and this image includes certain qualities, features and competencies. For example, a manager is expected to be “competitive, rational, enterprising and having technical competencies (Demaier & Adams, 2009). In its broadest sense, professional image can be expressed as the people’s generalizations about a profession. Among these generalizations are personalities of profession’s members, the kind of tasks they carry out, their lifestyles and income, working conditions, aptness of the profession to different individuals (Gottfredson, 1981). Factors such as historical, societal, cultural and politics are among the determinants of professional image (Grandy & Mavin, 2011). The attitude and behaviors, achievements and communication styles of the members are also among important factors (Bağçeci, Çetin, & Ünsal, 2013). In addition to these, level of the professionalism it requires, the status it provides for the members, ethical connotations of the profession and the personal qualities of the members can have a positive or negative influence in development of the image (Akkol Gök & Derin, 2014). At the same time, the experiences people have with the members of a profession can contribute to the image they hold about this profession (Çelik, Pasinlioğlu, Kocabeyoğlu & Çetin, 2013). According to Gottfredson (1981) professional image originates more from the lifestyle it offers for the members but less from the tasks the members carry out or the admission requirements for it which can be regarded as a misconception.

The image the society hold about any profession is closely related to the status of that profession and is also very important for the members of the profession (Sis Çelik and et al., 2013). In addition to its personal value, professional image is regarded as one of the factors in the creation and development of organizational image (Taslak & Akin, 2005). Considering the teaching profession which is directly serving to the students and indirectly to the whole society, it can be said that teachers’ professional image becomes much more important (Bağçeci, Çetin ve Ünsal, 2013). It can also be said that perceived image of teachers brings about professional prestige (Hoyle, 2001).

Professional image of the teachers have different functions. These are as following (Mynbayeva & Yessenova, 2016); informing the society and students about teachers’ personality traits; contributing to students’ and even adults’ character formation through a positive image; promoting professional development of teachers and improvement of teaching through a positive image; broadening teachers’ horizons; motivating teachers to self-actualize and leading them to personal achievement. To sum up, in the formation of a professional image not only the factors originating from its members but also external ones can be influential. Among these factors, media is the one whose scope is the widest. In this sense, the relationship between media and teachers’ professional image is an issue which should be taken into consideration seriously.

1.3. Media-Image Relationship

Image can be defined as the opinions which occur as a result of an informing process. People make a decision of impression by judging the information and data they receive from various channels (Gürüz, 2004). Among these channels media is the most influential one. With the development of different kinds of media, its potential power in affecting society’s values and perceptions has been realized (Newman, 2001). In this sense media, whose original function was to meet communicational needs, has become a powerful actor influencing the society. This means a very quick transformation. Firstly, media draws a purposeful image and later it imposes this image to the society (Bal, 2011). According to Türkahraman (2011) media, especially television, creates a pseudo image and suspends people from the reality. Society is tried to be led to a magical and brilliant world by means of mass media. Grandy & Mavin (2011) mentions two basic functions of media: ‘creating perception’ and ‘providing perception’. In its first function, media designs individual’s interpretation of complex phenomenon. In the latter one, media can make purposeful guidance about certain facts. So, we can say that media may have a role in creating, maintaining and changing the image of any profession. Thus, in the literature it is possible to come up with studies investigating the relationship between professional image and different kinds of media (Weaver, Salamonson, Koch, & Jackson, 2013; Wittenberg, 1997; Grandy & Mavin, 2011; Rucks (1978) ve Thompson (1972) cited in Wotruba, 1990; Park & Berger, 2004; Akbaba Altun & Kirkit, 2005).



In terms of teachers' professional image, as mentioned above, media is a major determinant. In their study based on teachers' views, Ünsal & Bağçeci (2016) states that media is one of the top factors in the creation of professional image. The image people hold about schools and teachers can originate from the things they see, read or hear in media (Dalton, 2004; Swetnam, 1992; Cunningham, 1992). Fictional television programs depicting teachers can have a bearing on the society's perceptions and expectations of teachers (Townsend & Ryan, 2012; Swetnam, 1992). In another study, Dagaz & Harger (2011) found that media depictions of teachers affect students' expectations from their instructors at university. On the other hand, teachers' self-image is not independent from media effect (Townsend & Ryan, 2012). Schwarz-Franco (2016) focuses on a similar point and state that the messages in the movies are bilateral. Teachers are depicted as super heroes in movies and it is inspiring for inexperienced ones. On the other hand, it may convey the message that if a teacher wants to create a change, she / he has to confront some challenges. Burbach & Figgins (1993) and Swetnam (1992) draw attention to the omission of some image components about teachers in media which is also an influential factor in the creation of professional image.

Burbach & Figgins (1993) state that teachers' image in movies can be divided into three sub-groups: positive, negative and omitted image. According to them, while positive image components are idealism, being extraordinary, commitment, negative ones are incompetency, being excessively humorous, the message of anyone can become a teacher, desperation, opposition, depicting female teachers' as a symbol of sexuality. Character development, love affairs and teaching activities are not reflected enough in movies. Swetnam (1992) lists the components spoiling teachers' image as demographics, subconscious messages, prejudices about teachers and teachers as extraordinary characters. The image media conveys is very important particularly for the ones who do not interact with teachers one by one. In this sense, it is a requirement to determine teacher image in media especially on television.

Today image has a deep and significant impact on our culture. Many people spend much time in front of television so their thoughts and interpretations are shaped to a great extent by television (Newman, 2001). Television series whose themes are schools and teachers provide affluent records waiting to be investigated in terms of these series' impact on teachers' image and perception of the society (Terzian & Ryan, 2015; Trier, 2001). Studies in English, especially in the scope of movies are plentiful on teachers' image (Schwarz-Franco, 2016; Townsend & Ryan, 2012; Dagaz & Harger, 2011; Ryan & Townsend, 2010; Weaver, 2009; Beyerbach, 2005; McCullick, Belcher, Hardin, & Hardin, 2003; Newman, 2001; Trier, 2001; Burbach & Figgins, 1993; Kaplan, 1990). On the other hand, literature in Turkish is very limited (Akcan & Polat, 2016; Efendioğlu, 2013). According to Swetnam (1992), depiction of teachers in mass and printed media is a salient topic to be studied in terms of preference of teaching as a career and the support to the teachers in the society. For a better educational system it is important to have more realistic expectations which will increase the cooperation between schools and society.

Considering the ratings of television channels and studies carried out, television series in Turkey are breaking track records and becoming a usual part of people's daily speeches (Karadaş, 2013). This proves the force of television series in influencing the society. The current study aims to determine image components in school series and draw attention to them.

2. The aim of the study

This study aims to determine teachers' professional image in school series on television. In line with this aim, it seeks answer to the following question:

- a) What are the demographics of the teachers in school series on television?
- b) What are the positive image components in school series on television?
- c) What are the negative image components in school series on television?
- d) What are the image components omitted in school series on television?

3. Method

3.1. Research Design

The current study utilizes ethnography which is one of the qualitative research designs. Ethnographic design focuses on the perception and behaviors of individuals as well as social structure and mechanism, the definition of cultural units such as values and norms (Yıldırım ve Şimşek, 2016). Ethnographic content analysis is a method used to determine themes and categories generated from data collected through movies, videos and photos (McCullick, Belcher, Hardin, & Hardin, 2003; Seggie ve Bayyurt, 2015).



Data was collected through document review. In ethnographic approach, document review is based on the principles of qualitative research. While analyzing television news, series and movies, it allows using data from narration (Altheide, 1987). Movies, videos and photos can be used in qualitative research (Yıldırım & Şimşek, 2016). These kinds of materials can be data collection tools. According to Mertens (2010), document review provides an important advantage for the researchers because there is not time or space limit. It also allows researchers to reach information which is not normally accessible.

3.2. Study Material

The population of the study consists of recent school series on television (since 2000). Marshall & Rossman (1999 cited in Yıldırım & Şimşek) state that movies, videos and photos provide some advantages for the researchers. The first one is that they present facial expressions and gestures in their original form and within permanence. The second one is that the researcher can watch them more than once and at different times. The third one is that they allow determining the events and phenomena which rarely occur and are difficult to repeat. Lastly, these documents can be used by other researchers; the findings can be verified and compared to the ones by other studies. In this sense, it can be said that the material of this study, namely school series on television, accommodates these advantages. Since 2000, there has been six school series which can be analyzed in the scope of this study (see Table 1). Yet, in the series named “Koçum Benim” the main character is not a teacher so this one was not included in the study. The information about series is presented in Table 1.

Table 1. Information about the school series

Name of Series	Director	Actor / Actress	Character	Date	Tv Channel
Koçum Benim	Vecihi Ener / Serdar Akar	Tarık Akan	Koç Can	2002-2004	TRT-1
Hayat Bilgisi	Tarkan Karlıdağ	Perran Kutman	Afet Güçverir	2003-2006	Kanal D / Show TV
Arka Sıradakiler	Hamdi Alkan	Bülent Emin Yarar	Kemal Güngör	2007-2012	FOX TV
Öğretmen Kemal	Hamdi Alkan	Bülent Emin Yarar	Kemal Güngör	2010	FOX TV
Elde Var Hayat	Cem Tabak	Emre Altuğ	Kenan Öğretmen	2010-2012	TRT-1
Hayat Bazen Tatlıdır	Hamdi Alkan	Birce Akalay	Hayat Öğretmen	2016	Star TV

As can be seen in Table 1, six series on various television channels have been determined since 2000. Both the character and the actor in “Arka Sıradakiler” and “Öğretmen Kemal” are the same. In addition to this, the records of “Arka Sıradakiler” were not accessible so only “Öğretmen Kemal” was analyzed. Since there were too many episodes of each series, it was impossible to analyze all of them. On the other hand, in the first three episodes the characters are introduced in detail. Also, there are a lot of teacher characters in series so it was impossible to analyze all of them. Yıldırım & Şimşek (2016) state that it is impossible to analyze all the documents so researchers can use sampling methods. Based on these, in this study criterion sampling one of purposeful sampling methods was employed. The first three episodes and main characters were included in the study. Patton (2002) defines purposeful sampling as choosing situations purposefully and strategically which are rich in data we want to gather. The type and size of situations may vary based on the aim of the study and resources in hand. Criterion sampling is based on including all the situations in the study which meet the criteria set in advance. In this study criteria are being the main character and acting in the first three episodes of the series as a teacher character.

3.3. Data Collection and Analysis

Forster (1995; cited in Yıldırım and Şimşek) proposed some steps that can be applied in document review. Yet, these steps can be adjusted based on the research problem and how detailed the documents or data will be analyzed. These steps are as following; (1) accessing to document, (2) checking its originality, (3) understanding the documents, (4) analyzing the data and (5) using the data. The series in this study were reached from the websites of the channels they were broadcasted or if not available they were downloaded from Youtube. Descriptive analysis was utilized in the study. In this approach, the data is summarized and interpreted according to themes determined in advance. Data is organized based on the themes derived from research questions. Also, direct quotations are given to reflect the observation more saliently (Yıldırım ve Şimşek, 2016).



In this study the categories by Burbach & Figgins (1993) which are positive, negative and omitted image were used and also demographic characteristics were also analyzed. To support the findings lines and visuals from different scenes were given. The researchers watched the episodes carefully and noted down lines which can be interpreted as an image component. Visuals from some scenes were shot and used in the study. These were thought to increase the validity of the findings.

3.4. Validity and Reliability

To increase the validity of the study the process from determining the study material to analysis was presented in detail and the findings were compared to literature. Also, visuals related to findings were presented to support their validity. As for the reliability, the researchers categorized the image components separately and using the formula by Miles & Huberman (1994) the reliability was calculated. According to this, intercoder reliability was found $p > \%70$ which proved the coder reliability of the study.

4. Findings

Findings on Demographic Characteristics of Characters

Tablo 2. Demographic characteristics of characters

Characters' Name	Gender	Age	Branch	School Level	Marital Status
Afet Güçverir	Female	54	History	High School	Single
Kemal Güngör	Male	56	Turkish Literature	High School	Widow
Kenan Dağışan	Male	40	Mathematics	High School	Widow
Hayat Sarıyaz	Female	32	Turkish Literature	High School	Single

Table 2 shows the demographic characteristics of the characters in the series. Three of the characters are female and two of them are male. Considering the actors real ages, it ranges from 32 to 56. There are characters in his/her 30's, 40's and 50's. Another variable presented in table is teachers' branch in series. It can be seen that three of them are teachers in social sciences while only one of them is a Math teacher. Considering meanings of the names of the characters in Turkish, they all have positive connotations. For example, "Güçverir" means giving power; "Hayat" means life; "Kemal" means maturity, perfection; "Dağışan" means climbing over the mountains. This can be interpreted as a positive image component. As for the marital status, two of them are single and three of them are widow which can be regarded as a negative image component. They do not have a usual family life. On the other hand, all the series take place in high schools which is another salient finding.

Findings on Positive Image

In this section of the study, the positive image components about the main teacher characters in series are presented. To this end, the researchers watched the first three episodes of the series carefully and they tried to find the scenes which reflect a positive image component in terms of teaching profession. First of all, it can be said that all the characters have a positive image visually. Their outfits, hair styles, makeups and shavings are appropriate for a teacher. They give a positive impression. The photos taken from the series below support this finding (see photo 1,2,3,4).



Photo 1



Photo 2



Photo 3



Photo 4



As can be seen in the photos, male teachers wear a suit and the female ones wear a suit elegantly. The men are shaved and the women are made up. So, we can say that teachers have a positive visual image in television series.

Secondly, it can be said that teacher characters in the series are committed to their profession and students. They are self-sacrificing and idealistic teachers. They love their jobs. It can be interpreted from both their speeches and acts. For example, in “Elde Var Hayat” teacher Kenan is appointed to school on summer holiday. He immediately inquires the level of academic success at school. He finds out that the students are not good at Math. On finding out this, he wants to open a free course for students to tutor them during the holiday. Below you can see the dialogue between him and the school principal on this issue.

In principal’s room (Episode 2):

Principal: *How did you find our school, Mr. Dağışan?*

Teacher Kenan: *Quite frankly, I could not walk around much but as far as I can see it is a nice school. In fact it does not mean anything to me when there are not students in it.*

Principal: *I agree with you. In summers it is just a building. We miss our students but I do not think they miss us.*

Teacher Kenan: *They are too young to miss, my dear director. When they get to ages in which they start to lose, they will become acquainted with missing.*

Principal: *You are absolutely right.*

Teacher Kenan: *I wonder the overall success of the school.*

Principal: *Actually, I can not say that we are as successful as we would like. The students are not much interested especially in sciences.*

Teacher Kenan: *It is not a problem. I am used to these kinds of situations. May I have a look at student files to know the students’ past grades?*

Principal: *Of course, you may.*

Then, assistant principal comes in. The principal says that assistant principal can help Teacher Kenan. The assistant principal accepts and says:

Assistant Principal: *You may feel sorry for what you find out.*

Teacher Kenan: *If the grades are low, it means that the students have lots to learn. It also means that I have to spend more time for students. Yet, it is not a problem. I really like to spend time with my students. It is a pleasure for me.*

The dialogue among principal, assistant principal and Teacher Kenan is given above. The expressions above prove that Teacher Kenan is dedicated to his profession. He is concerned about the students and love them which gives a positive impression about him. Also, we can see that he is a self-sacrificing teacher because he volunteers to lecture the students during the summer holiday.

In “Hayat Bilgisi” Teacher Afet has an image of a teacher who is dedicated and loves her profession. She also loves her profession. The dialogue between her and school principal is as following:

In the garden to the principal (Episode 1)

Teacher Afet: *I have always loved the school but the ones (implying principal and assistant principal) at school does not love me.*

To the principal who wants her to be realistic she says:

Teacher Afet: *I am not realistic. I am a teacher. Here is a slum school. Any of the students will not inherit houses or villas from their parents. The only thing these children need is education. And I am here to educate them. We are their only chance.*

The expressions above show how a dedicated teacher she is. She wants to say she will do whatever she can for the students. She is worried about their future. And the only thing she cares about is the education which again gives a positive teacher image.

In “Öğretmen Kemal” a friend of Teacher Kemal who is a principal at a private school offers a job. To persuade him to work at a private school she focuses on the good salary he may get. Teacher Kemal says:



Teacher Kemal: *You know that you can not convince me by talking about money.*

Here we can see that the teacher is not a materialistic one which can also be regarded as a positive image component. Teacher Kemal loves his job and does not care much about money.

There are scenes which portrays the teachers as just. In “Hayat Bilgisi” and “Hayat Bazen Tatlıdır” we can see examples of just teachers. When Teacher Afet sees that her brother who is a student at the same school with her fights with one of his classmates, she takes both of them to the principal’s room to be punished. The dialogue between her and the principal is as following:

In principal’s room (Episode 2):

Teacher Afet: *They should serve their sentence, dear principal!*

Principal: *Yet, in this situation I have to punish your brother, too.*

Teacher Afet: *Of course you will. He must be punished, too. Here is a school not a monarchy.*

In the same series, Teacher Afet says that she will make an oral exam in the second lesson. Her brother Kerem is in the classroom and he is the first student to take the exam. She asks some questions to her brother but he can not answer them. So he gets a low grade. In “Hayat Bazen Tatlıdır” there is a similar scene. Teacher Hayat’s sister is a student in the same school. But she wants her sister to call her as “teacher” not “sister”. These examples indicate how just and professional the teachers are in the series. They do not bestow on their sisters or brothers.

Teachers in these series are concerned about not only educational problems but also personal ones. They try to solve the students’ problems which are actually the main theme of the series. A salient example can be given from “Hayat Bazen Tatlıdır”. Teacher Hayat finds out that one of the best students whose father dies a while ago drops the school and starts to work to earn his family’s living. The student also has to pay the loan his father gets from moneylender. Hayat teacher decides to persuade the student to come back to school and she goes to his home.



Photo 5. Teacher Hayat is at Onur’s home

Following this scene (see Photo 5) Teacher Hayat finds out the street address of the moneylender and opposes to him. She in a way pays the money and the student comes back to school. In the second episode of “Hayat Bilgisi” Teacher Afet comes to the classroom and she sees that some of the students are absent. She asks where they are and why they are absent one by one. Especially these two characters do their best to settle the students’ problems and they fiercely oppose to the school management in favour of students. In “Hayat Bilgisi” the principal uses school garden as toll parking and sells the school’s coal so the school does not heat enough. The one who opposes to the principal is Teacher Afet. In photo 6, she makes a trick with her students to the principal. She puts rocks into the coal sacks which the principal will sell. In “Hayat Bazen Tatlıdır” the principal gets money from students for the computers which a benefactor donated to the school for free use of the students and refuses to install banks in the school garden for the sit of the students. Teacher Hayat does her best to find solutions to these problems and in the end she does.



Photo 6. Teacher Afet and the students are in the boiler room.

In the series teachers are presented as role models for the society. In a scene, teacher Kemal is shown in front of a bookshelf full of books in his new home (see Photo 7). Additionally, teacher Hayat is shown while reading book in some scenes (see Photo 8). She also wears her seatbelt and makes her sister wear it while driving to school. Teacher Afet never sacrifices of her principles. So she was often appointed to different schools. She says *“Instead of doing wrong at the same place during 20 years I prefer following my own truths in different places.”*



Photo 7



Photo 8



Photo 9

In Photo 9 above , Teacher Kenan helps a laborer working in the refurbishment of the school. It is another indication of his selfsacrifice and commitment. In this scene he shows an extra role behavior and he does more than expected from him formally.

When it comes to their personal lives, we can say that Teacher Hayat and Afet are good sisters and Kenan is a good father which presents them as role models. For example, in “Elde Var Hayat” teacher Kenan spends the whole night by his son who has a fever (see Photo 10). Teacher Hayat is also shown while she is caressing her sister’s hair while the sister is sleeping (see Photo 11). Based on these findings, it can be said that the characters are not only good teachers but also good parents.



Photo10



Photo 11



Another finding which supports the positive image of the teachers is their status in the society. A good example of this can be given from “Hayat Bazen Tatlıdır”. While going home from school, teacher Hayat is at the greengrocer’s. When the greengrocer finds out that she is a teacher, they have such a conversation (Episode 2):

Greengrocer: *Are you a teacher?*

Teacher Hayat: *Yes, I am.*

Greengrocer: *That is very nice. You have a good job. My daughter is also a teacher candidate.*

Teacher Hayat: *Really?*

Greengrocer: *You have a sacred profession.*

Teacher Hayat: *Thank you very much.*

Greengrocer’s describing teaching as a sacred profession indicates that teaching is a high status profession in the society. In “Hayat Bilgisi” another scene shows the high status of teaching in the society. Teacher Afet looks for a house to rent for a long time and they go to Metin’s house. The following is the dialogue between Metin and the teacher (Episode 1):

Teacher Afet: *How much is the rent, sir?*

Metin: *I thought 400 TL but since you are a teacher it is 300 TL. I will also ease the damage deposit for you. If you have any problem, I am nextdoor.*

Teacher Afet: *It is OK for me.*

The dialogue above shows that the landlord makes things easier for her since she is a teacher which is an indication of the respect in the society. Lastly, the teachers have a good communication and are loved by the students. It also gives a positive impression about the teachers to the viewer. For example, in “Elde Var Hayat” the principal and assistant principal have a dialogue as following (They are talking about Teacher Kenan):

Principal: *The students in his ex-school rose up. They wanted him not to leave them. Do our students do the same for you?*

The principal’s expression shows that Teacher Kenan is popular among students. The other characters are also popular and have good communication with their students. This also contributes to teachers’ professional image positively. For example, Teacher Kemal’s ex-students visit him and they have very intimate conversation with their teacher. In “Elde Var Hayat” Teacher Kenan plays basketball with his prospective students. (see Photo 12).



Photo 12

Findings on Negative Image

One of the features of image is that it can not only be positive but also negative. In this sense, some negative image components have been determined in the first three episodes of the series. The most striking one is the financial status of the teachers. The cars they have, the houses they rent and the conversations they have with their colleagues are the indicators of this situation. The cars they have, for example, are very old and in addition to this they often break down. However, the characters do not have their cars repaired or buy new ones. This gives the impression that teachers do not earn enough and they have a low financial status (see Photos 13-14-15).



Photo 13



Photo 14



Photo 15

Another negative impression on teachers' financial status is from a scene in the greengrocer's. Teacher Hayat is shopping and the dialogue between her and the greengrocer is as following:

Greengrocer: *I think you are on a diet. (He says this because the teacher buys a few fruits and a little vegetable.*

Teacher Hayat: *The diet is an obligation. This is all I can buy with a teacher's salary.*

In "Hayat Bilgisi" when Teacher Afet finds out the rent of the house, she says to the estate agent *"I think you misunderstood us. We will rent the house. We will not buy it."* In the same series, one of her colleagues asks Teacher Afet *"Do you have a part time job?"* and she replies *"We are new in Istanbul. When we have difficulty with the conditions here, we will do something."* Teacher Kenan's car breaks down on the road. He takes his car to the repairman but the cost of the repair is too much. He finds out that he does not have enough money in his account on going to the bank. He becomes really sad. He calls one of his colleagues to borrow some money but when she complains about lack of money he does not. In the end, he has to sell the bracelets which belong to his lifeless wife. Based on these examples, we can say that teachers are presented as people who have some financial challenges.

Another interesting finding is that in series teachers are appointed to different places easily and without their will. Especially Teacher Hayat and Afet work in a lot of different cities and schools. The reason is their opposition to principals, not sacrificing of their principles and being on the side of justice. This gives a message to the teachers. If they oppose to the principals and if they have their strict principles, they may have to move from place to place. On the other hand, while they are opposing to the principal, the characters do not follow formal procedures since they do not work. So, they have to solve the problematic situations in informal ways. This can also be regarded as a factor contributing to teachers' image negatively. For example, the principal in Hayat Bilgisi makes the school garden toll parking. To solve this problem, Teacher Hayat plays football with the students in the garden and they break the cars' windows and mirrors intentionally (see Photo 16). On seeing that she will not give up opposing him, the principal surrenders. The students go on playing in the garden freely.



Photo 16

Another finding on negative image is that teachers make exams on the first lesson they meet the students. Later, they use the exam results to show the students that they have much to learn. However, this gives the impression that teacher's only and most used weapon is the exam so can be regarded as being negative.



Lastly, it is possible to see the teachers while teasing on the students. For example, Teacher Afet plans to make an exam in the first lesson. One of the students says “Teacher, you have just come. What about meeting each other?” And she replies “Why are we meeting? We will not marry so no need to meet each other.” Some of the students come late to the lesson and she says “Why did you bother to come? We would come to you.” As can be understood from the examples, she is often sarcastic.

Findings on omitted professional image

The omitted professional image in the series is also very important because of their possible contribution to teachers’ professional image in real life. In fact, teachers do much less than in the series than they do in real life. They show a much higher performance than they do in the series. However, when we watch the television series we see that teachers spend very little time in teaching activities since the screenplay of the series is mostly about the personal lives of teachers and students. Teachers in the series find solutions to the personal problems but they do not spend much time for finding solutions to the educational problems. Teachers are not portrayed while doing teaching in the classroom. Teachers do not get prepared for the next day’s lessons; do not do planning or grading the exam papers which are the tasks most of the teachers in real life have to deal with at home. Shortly, we can say that teaching in the classroom and getting ready for the teaching at home are the omitted image components.

Conclusion and Discussion

The aim of this study is to determine teachers’ professional image in school series on television. In this respect, the first three episodes of four series have been watched. Only the main character who is a teacher was analyzed. The series “Öğretmen Kemal” and “Arka Sıradakiler” stars the same actor and as the same character, and also the archive of “Arka Sıradakiler” were not accessible, only “Öğretmen Kemal” was included in the study. Teachers’ professional image was analyzed under four categories: demographics, positive, negative and omitted image.

In terms of demographics, there were not gender or age stereotypes. As for their marital status, school and branch, the situation is different. All the characters are single or widow; they teach in high schools and in social sciences. In this sense, it can be said that the series have an unrealistic portrayal.

The depiction of teachers committed, self-sacrificing, idealistic, just, objective, respectful and prestigious is a factor contributing to teacher image positively. They communicate very well with their students and love them so much. They are presented as role models for the society. They also have a positive visual image. There are similar findings in the literature (Akcan & Polat, 2016; Efendioğlu, 2013; Ellsmore, 2005; Burbach & Figgins, 1993; Swetnam, 1992).

When it comes to negative image, the financial status of the teachers in the series are the most salient point. They are depicted as low-level income people. They are easily appointed from city to city and oppose to the principals fiercely. So they have problems with the principals and in the end solve them informally. During the lessons, they threaten the students by making exam. The last thing that can be regarded as a negative image component is teachers’ being sarcastic against students.

The omitted aspects of teaching profession was also investigated in the study. Teachers are not depicted while planning, teaching, engaging in professional development, grading exams and doing extra tasks. Swetnam (1992) had a similar finding in his study investigating the factors damaging teachers’ image.

It can be suggested that the series on television should depict teachers more positively. They should be broadcasted with the approval of Ministry of National Education and there should be educational experts in screenplay writing process. The actual teaching process should be involved more in the series. The series should avoid from scenes that reflect teaching profession negatively as much as possible.

References

- Akbaba Altun, S., & Kirkit, G. (2005). Okul Yöneticilerinin Basındaki İmajı. *Kuram ve Uygulamada Eğitim Yönetimi* (41), 25-46.
- Akcan, E., & Polat, S. (2016). Eğitim Konulu Türk Filmlerinde Öğretmen İmajı: Öğretmen İmajına Tarihi Bakış. *Kuram ve Uygulamada Eğitim Yönetimi*, 22 (3), 293-320.



- Akkal Göl, A., & Derin, N. (2014). Pazarlama Bölümü Öğrencilerinin Meslek İmajı Algıları ve Meslek İmajını Oluşturan Faktörlerin Belirlenmesine Dair Bir Araştırma. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 28 (2), 133-156.
- Akyüz, Y. (1978). Türkiye’de Öğretmenin “Öğretmen” ve Meslek İmajı. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 11 (1), 115-121.
- Altheide, D. L. (1987). Reflections: Ethnographic content analysis. *Qualitative sociology*, 10(1), 65-77.
- Ansari, U., & Malik, S. K. (2013). Image of an Effective Teacher in 21st Century. *Journal of Educational and Instructional Studies in the World*, 3 (4), 61-68.
- Arslanoğlu, İ. (1992). Öğretmenin Sosyal Statüsü ve Ekonomik Durumu. *G.Ü. Gazi Eğitim Fakültesi Dergisi*, 8 (4), 21-33.
- Bağçeci, B., Çetin, B., & Ünsal, S. (2013). Öğretmenlerin Mesleki İmaj Ölçeği. *Gaziantep University Journal of Social Sciences*, 12 (1), 34-48.
- Bal, M. (2011). İmaj ve Önyargı Faktörünün Gazete Haberlerine Etkisi. *Kahraman Maraş Sütçü İmam Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 1 (2), 201-226.
- Balta Peltekoğlu, F. (1997). Kurumsal İletişim Sürecinde İmajın Yeri. *İstanbul Üniversitesi İletişim Fakültesi Hakemli Dergisi* (4), 125-145.
- Beyersbach, B. (2005). The Social Foundations Classroom: Themes in Sixty Years of Teachers in Film: Fast Times, Dangerous Minds, Stand. *Educational Studies: A Journal of the American Educational Studies Association*, 37 (3), 267-285.
- Bolat, O. İ. (2006). Konaklama İşletmelerinde Kurumsal İmaj Oluşturma Süreci. *Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 9 (15), 107-126.
- Burbach, H. J., & Figgins, M. A. (1993). A Thematic Profile of the Images of Teachers in Film. *Teacher Education Quarterly*, 20 (2), 65-75.
- Cunningham, P. (1992). Teachers' Professional Image and the Press. *History of Education*, 21 (1), 37-56.
- Dagaz, M., & Harger, B. (2011). Race, Gender, and Research: Implications for Teaching from Depictions of Professors in Popular Film, 1985-2005. *Teaching Sociology*, 39 (3), 274-289.
- Dalton, M. M. (2004). *The Hollywood curriculum: Teachers in The Movies*. New York: P. Lang.
- Demaiter, E. I., & Adams, T. L. (2009). 'I Really Didn't Have Any Problems with The Male-Female Thing Until...': Successful Women's Experiences in IT Organizations. *Canadian Journal of Sociology*, 34 (1), 31-53.
- Demiröz, S. (2014). *Öğretmenlerin Örgütsel Vatandaşlık Davranışları Örgütsel İmaj Algıları ve Öğrenci Başarıları Arasındaki İlişki*. Ankara: Yayınlanmamış Doktora Tezi, Hacettepe Üniversitesi.
- Demiröz, S. (2014). *Öğretmenlerin Örgütsel Vatandaşlık Davranışları, Örgütsel İmaj Algıları ve Öğrenci Başarıları Arasındaki İlişki*.
- Gottfredson, L. S. (1981). Circumscription and compromise: a developmental theory of occupational aspirations. *Journal of Counseling Psychology Monograph*, 28 (6), 545-579.
- Grandy, G., & Mavin, S. (2011). Occupational image, organisational image and identity in dirty work: Intersections of organisational efforts and media accounts. *Organization*, 19 (6), 765-786.
- Gürüz, D. (2004). Halkla İlişkiler ve Tanıtım Faaliyetlerinin Etkinliğinde İzlenim (İmaj) Yönetimi (Kurum İmajından Kişisel İmaja). *II. Uluslararası İletişim Sempozyumu*, (s. 789-801). Eskişehir.



- Hoyle, E. (2001). *Educational Management and Administration*, 29 (2), 139-152.
- İbicioğlu, H., & Avcı, U. (2003). Turizm İşletmelerinde Kurumsal İmajı Oluşturan Faktörlere Ve Kurumsal İletişimin Rolüne İlişkin Bir Araştırma. *Süleyman Demirel Üniversitesi Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi*, 8 (2), 23-41.
- Kaplan, G. (1990). TV's Version of Education (and What to Do about It). *The Phi Delta Kappan*, 71 (5), K1-K12.
- McCullick, B., Belcher, D., Hardin, B., & Hardin, M. (2003). Butches, Bullies and Buffoons: Images of Physical Education Teachers in the Movies. *Sport, Education and Society*, 8 (1), 3-16.
- McCullick, B., Belcher, D., Hardin, B., & Hardin, M. (2003). Butches, Bullies and Buffoons: Images of Physical Education Teachers in the Movies, *Sport, Education and Society*. *Sport, Education and Society*, 8 (1), 3-16.
- Mynbayeva, A., & Yessenova, K. (2016). Distinguishing Features of Teacher Image and Faculty Member's Image: Comparative Study. *International Review of Management and Marketing*, 6 (S1), 110-117.
- Newman, V. (2001). Cinema, Women Teachers, and the 1950s and 1960s. *Educational Studies*, 32 (4), 416-437.
- Oržekauskas, P., & Šmaižienė, I. (2007). Public Image and Reputation Management: Retrospective and Actualities. *Viesoji Politika Ir Administravimas*, 19, 90-97.
- Park, D.-J., & Berger, B. K. (2004). The Presentation of CEOs in the Press, 1990-2000: Increasing Salience, Positive Valence, and a Focus on Competency and Personal Dimensions of Image. *Journal of Public Relations Research*, 16 (1), 93-125.
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. California: Sage.
- Peterson, H. (2010). The Gendered Construction of Technical Self-Confidence: Women's Negotiated Positions in Male-dominated, Technical Work Settings. *International Journal of Gender, Science, and Technology*, 2 (1), 65-88.
- Polat, S. (2011). Üniversite Öğrencilerinin Örgütsel İmaj Algıları İle Akademik Başarıları Arasındaki İlişki Düzeyi. *Kuram ve Uygulamada Eğitim Bilimleri*, 11 (1), 249-262.
- Polat, S., & Arslan, Y. (2015). *Örgütsel Yaşamda İmaj: İmaj Geliştirme ve Yöntemleri*. Ankara: Nobel Yayıncılık.
- Ryan, P. A., & Townsend, J. S. (2010). Representations of Teachers' and Students' Inquiry in 1950s Television and Film. *Educational Studies*, 46, 44-66.
- Schwarz-Franco, O. (2016). Teachers in Film: Inspiration for Autonomous and Transformative Teaching or a Warning against It? *Universal Journal of Educational Research*, 4 (5), 994-1002.
- Seggie, F. N. ve Bayyurt, Y. (2015). *Nitel Araştırma Yöntem, Teknik, Analiz ve Yaklaşımları*. Ankara: Anı Yayıncılık.
- Sis Çelik, A., Pasinlioğlu, T., Kocabeyoğlu, T., & Çetin, S. (2013). Hemşirelik Mesleğinin Toplumdaki İmajının Belirlenmesi. *F.N. Hemşirelik Dergisi*, 21 (3), 147-153.
- Taslak, S., & Akin, M. (2005).). Örgüt imajı üzerinde etkili olan faktörlere yönelik bir araştırma: Yozgat ili emniyet müdürlüğü örneği. *EÜ Sosyal Bilimler Enstitüsü Dergisi*, 19 (2), 263-294.
- Terzian, S. G., & Ryan, P. A. (2015). *American Education in Popular Media*. (S. G. Terzian, & P. A. Ryan, Dü) New York: Palgrave Macmillan.



- The Cinematic Representation of the Personal and Professional Lives of Teachers. (2001). *Teacher Education Quarterly, Summer*, 127-142.
- Townsend, J. S., & Ryan, P. A. (2012). Media narratives and possibilities for teachers' embodied concepts of self. *Journal of Media Literacy Education*, 4 (2), 149-158.
- Trier, J. D. (2001). The Cinematic Representation of the Personal and Professional Lives of Teachers. *Teacher Education Quarterly* (Summer), 127-142.
- Ünsal, S., & Bağçeci, B. (2016). Öğretmenlerin Mesleki İmajlarına İlişkin Görüşleri ve Mesleki İmaja Etki Eden Faktörler. *13* (3), 3905-3926.
- Weaver, H. (2009). Beyond Apples and Ice Cream: The Teacher-Student Relationship as Cinematic Romance, 1909–1939. *Film & History: An Interdisciplinary Journal of Film and Television Studies*, 39 (1), 9-20.
- Weaver, R., Salamonson, Y., Koch, J., & Jackson, D. (2013). Nursing on Television: Student Perceptions of Television's Role in Public Image, Recruitment and Education. *Journal of Advanced Nursing* , 2635-2643.
- Wittenberg, P. M. (1997). Leadership and the management of agency image. *Federal Probation*, 46.
- Wotruba, T. R. (1990). The Relationship of Job Image, Performance and Job Satisfaction to Inactivity Proneness of Direct Salespeople. *Journal of the Academy of Marketing Science*, 18 (2), 113-121.



Forums and The Reflection On Teaching/Learning The Mother Tongue: Conceptions Of Students

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Abstract

Students' conceptions on the teaching/learning process influence the way they learn. In a course we teach in a second cycle of studies of Bologna, they must engage in two on line discussion forums to co-construct knowledge on essential topics concerning the teaching of the mother tongue and deliver an individual essay, one of the topics being the expression of their views on their contribution to their training. To determine how these students conceive the teaching/learning process and the role ICT play in it and to discuss their probable consequences, we selected relevant phrases/sentences in the essays and submitted them to content analysis, concluding that they have a very traditional conception of the teaching/learning process, which prevents them from taking profit of an organization that places them at the center of it and affects negatively their ability to propose this kind of interaction to their future pupils.

Keywords: Teacher education; Mother tongue; Conceptions; ICT.

Introduction

This text discusses the results of the analysis of Higher Education students' conceptions on the way online discussion forums affect the process of learning they are engaged in while attending a course included in a second cycle of studies of Bologna centered in their reflection on several aspects of the process of teaching/learning the mother tongue.

Teaching didactics of the mother tongue, supervising teacher training and directing seminars on educational research within Bologna cycles of studies, along with coordinating LEIP/Laboratory for Research on Portuguese Language Education, led us to reflect on factors that may affect the teaching/learning process, namely in Higher Education.

Students' conceptions are one of them, as proved by research, either at national and international level (Pardal et al., 2011; Richardson, 1996). We have been doing research on the importance of students' conceptions to promote a teaching/learning process in which they must engage actively since 2010 (Sá, 2010). Some of these studies – focused on their views on assessment as a way to regulate the teaching/learning process – led us to conclude that they fail to perceive its formative nature, which affects negatively their performance and training (see, for example, Sá, 2013, 2015). Others – focused on their views on the competencies they develop during the training process – revealed that the growing attention they pay to the student centred methodology combined with a formative assessment system the teacher adopted in the courses helps them to develop more competencies essential to their future professional practice (see, for example, Sá, 2014).

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ICT are also more and more important in the teaching/learning process due to their omnipresence in the 21st century society. One must reflect not only on the role they can play in the teaching/learning process (see, for example, Sá, 2016), but also on their impact on teacher education (Macário, Sá & Moreira, 2014a, 2014b; Sá & Macário, 2014) and the promotion of a teaching methodology that places the students in the center of the process and leads them to develop critical thinking (see, for example, Sá, 2016). This interest on ICT is supported by international documents on educational policy, which underline their importance and place their adequate use among the transversal competencies essential to integration in the 21st century society (cf. European Commission, 2007).

In this text, we reflect on student's views concerning the role ICT play in their training.

Method

This study is focused on a course of didactics of the mother tongue we teach in a second cycle of studies of Bologna designed to train early childhood educators and primary school teachers. While they are attending that course, the students must take part in two online discussion forums, selected among the several we have conceived alone or with a coauthor. They are supposed to give the students a leading role in their training process and to help them to coconstruct knowledge on important topics concerning the process of teaching/learning the mother tongue. At the end of the semester, as a part of their assessment portfolio, the students must deliver an individual written essay expressing their views on the contribution of ICT for their training among other topics mentioned in the guidelines presented by the teacher.

In order to determine how the students conceive the role played by these online discussion forums in their training, we used documental analysis to collect phrases/sentences on this topic in their essays, which were afterwards submitted to content analysis (cf. Bardin, 2013) combined with descriptive statistics (absolute and relative frequencies) when necessary.

Findings

We read 117 texts produced along five academic years (from 2010-11 to 2014-15) and collected 302 relevant statements (each one designed by S followed by a number corresponding to its order in the total sequence). We shall use some of them to illustrate aspects the data analysis.

In Table 1, we present the results of the analysis of the aspects of the teaching/learning process the students have related with the use of the online discussion forums:

Table 1. Pedagogical aspects mentioned in the reflection on the use of online discussion forums

Variable	N	%
Acquiring knowledge	199	35.2
Collaborative work	161	28.5
Reflection	122	21.6
Developing competencies	41	7.3
ICT and construction of knowledge	36	6.4
Future didactic use	6	1.0
Total	565	100



The table shows that the majority of the statements (83.6) concerns three categories: acquiring knowledge/collaborative work/reflection.

The most valued category is acquiring knowledge as referred in S21 – [...] The use of the interactive forums [...] reveals the importance of ICT to acquire knowledge and motivates us to assimilate more easily knowledge on reading/writing and other relevant topics.

The students believe that collaborative work has played an important role in this context, as mentioned in S197 – [...] the forums were a very important work device in what concerns the analysis of the contents of this course. As they allowed us to share our ideas with other students [...] we learned by reflecting on other people's views. According to them, collaboration promotes the coconstruction of didactic knowledge, as referred in S117 – [...] Moreover the interaction in the online discussion forums encouraged people [...] to share their ideas – often different – on several topics and thus allowed us to organize that knowledge and transform it into something we could use in our practice.

The use of these forums was also related to reflection, resulting not only of collaborative work, but also of individual analysis of the resources presented in them, as stated in S101 – During the semester I became aware of the important role played by the forums in the acquisition of knowledge. The topics dealt with in them were very interesting and they allowed us to begin by reflecting individually. [...] It was also strengthened by the comparison of the students' opinions with texts of expert authors presented in the forums, as mentioned in S65 – [...] After we had written down the ideas of the whole work team [on the topic of the forum] we were invited to read a document which presented information produced by experts on that topic. [...]

Some students (almost as much as the ones who mentioned developing competencies) explicitly referred to the role played by ICT in the acquisition of knowledge, as exposed in S53 – [...] the work done in the forums made me become aware of the importance attached to the use of ICT in the presentation of contents and the acquisition of knowledge and the development of competencies concerning the process of teaching/learning how to read and write.

Nevertheless, only a few students expressed the intention of using ICT with their future pupils. Those who did so, argued that this strategy allowed the pupils to engage more actively in the learning process and to develop collaborative work (S80 – After interacting in the forums during this semester I understood that they are very useful, because they allow the pupils to present their ideas, share them with their colleagues and discuss them. [...]) and the teacher to follow more closely his/her pupils (S80 – [...] Helps the teacher to follow the work the pupil does at home [...]) and made learning more appealing (S80 – [...] the use of a computer connected to the web makes the work more appealing, more interesting, because the pupils use them in their everyday life with great pleasure.)

In Table 2, we present the results of a further analysis of the statements related to the category ICT and construction of knowledge:



Table 2. Role of ICT in the teaching/learning process

Variable	Number	%
Student centered teaching	37	56.1
Presentation of contents	17	25.8
Motivation	6	9.1
Communication	5	7.5
Following the students	1	1.5
Total	66	100

This table reveals two opposite ways of conceiving the role played by ICT in education. For some students, they are mainly a way of presenting contents, as one can read in S13 – These forums [...] functioned as a kind of guides for research on relevant topics, as well as sources of information presented by the teacher, in order that we could compare our ideas with those of experts. Others present them mainly as instruments to promote a teaching methodology centred in the student, as referred in S39 – [...] forums were a means of making us think about our future practice and pay attention to what is really important, such as the competencies one must develop, the strategies one must adopt and the importance of teaching Portuguese. – or in S107 – [...] working with ICT [...] promoted collaborative work, based on permanent research and reflection, individually and in group, sharing knowledge and experiences. To me this is essential to our professional training and promotes interest in changes, adaptation to the moment and the needs, since everyone we deal with may become our teacher for a moment.

Results, Conclusions and Recommendations

The reflection of these results allowed us to characterize the way these students view the teaching/learning process they are engaged in and the role ICT plays in it.

We concluded that most of them reveal a very traditional conception of the teaching/learning process: the teacher is supposed to communicate knowledge that the student must assimilate. We relate this conclusion with the fact that they concentrate mainly on the acquisition of knowledge (putting aside the development of competencies) and tend to consider that collaborative work and reflection are essential to learn the contents of the course. ICT are viewed as ideal means to present the knowledge on the topics dealt with in the course to be assimilated, produced by the teacher, other students or experts.

But we also observed that some students pointed to a very modern conception of the teaching/learning process, where they were supposed to play the main role. Such conceptions were related to the importance of developing competences and the teaching methodology used in this course, as presented in S225 – In the course, the teacher has adopted several methods, such as theoretical expositions, practical work and interaction in forums. These different strategies made the classes more dynamic, productive and fruitful. In these statements, ICT tend to be viewed specially as means of putting the student in the centre of the teaching/learning process, as described in S265 – Among the distinctive features of this course, I must refer the interaction in the forums, which allowed a better understanding of some of the topics dealt with in it, mainly because we worked in team. [...] Consequently, there was place for mutual findings and feedback related to a frequent sharing of ideas. [...] there were also moments of individual work [...] and the other members in the team were able to accept the ideas expressed by each person.



Therefore there is much work to be done to make students aware of the importance of accepting to be at the center of the teaching/learning process, being able to take profit of that opportunity and reflecting on how to use that teaching methodology with their future pupils.

We believe that presenting them these studies and discussing with them their results and implications will help to solve the problem.

References

- Bardin, L. (2013). *L'analyse de contenu*. Paris: PUF.
- European Commission (2007). *Key competences in the knowledge based society. A framework of eight key competences*. s.l.: European Commission/Directorate-General for Education and Culture.
- Macário, M. J., Sá, C. M., & Moreira, A. (2014a). Trabalho colaborativo em fóruns de discussão online: lugares de encontro na formação inicial de professores. *Investigar em Educação. Revista da Sociedade Portuguesa de Ciências da Educação*, 1(2), 123-138.
- Macário, M. J., Sá, C. M. & Moreira, A. (2014b). Colaboração em fóruns de discussão online para construir conhecimento didático: um estudo na formação inicial de professores. *Indagatio Didactica*, 6(4), 96-111. Available at: <http://revistas.ua.pt/index.php/ID/article/view/3025>
- Pardal, L., Gonçalves, M., Martins, A., Neto-Mendes, A. & Pedro, A. P. (2011). *Trabalho docente: representações e construção de identidade profissional*. Aveiro: UA Editora.
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula, T. J. Buttery, & E. Guyton (Eds.), *Handbook of research on teacher education* (pp. 102-119). New York: McMillan.
- Sá, C. M. (2010). Developing competences in Higher Education: a case in teacher training. In Pedrosa de Jesus, M. H., Evans, C., Charlesworth, Z. & Cools, E. (eds.), *Proceedings of the 15th Annual Conference on the European Learning Styles Information Network: Exploring styles to enhance learning and teaching in diverse contexts*. (pp. 460-466). Aveiro: University of Aveiro/Department of Education.
- Sá, C. M. (2013). Developing competences in Higher Education. *Indagatio Didactica*. 5 (4), 85-103. Available at: <http://revistas.ua.pt/index.php/ID/article/view/2526>
- Sá, C. M. (2014). Developing competences in Higher Education through innovation in the teaching methodology. *Indagatio Didactica*, 6(4), 7-23. Available at: <http://revistas.ua.pt/index.php/ID/article/view/3020>
- Sá, C. M. (2015). Contributo da inovação na avaliação para o desenvolvimento de competências no Ensino Superior. In Estrela, T. M., Cavaco, C., Cardona, M. J., Pinto, P. R., Cabrito, B., Costa, F. A., Pinhal, J., Ferreira, J., Rodrigues, P., & Figueiredo, P., *Diversidade e Complexidade da Avaliação em Educação e Formação. Contributos da Investigação. Atas do XXII Colóquio da AFIRSE Portugal*. (pp. 361-373). Lisboa: EDUCA/AFIRSE Portugal. Available at: <http://afirse.ie.ul.pt/atas/AFIRSEAtas2015.pdf>
- Sá, C. M. (2016). Pensamento crítico, TIC e formação em didática de línguas, *Revista Lusófona de Educação*, 32, 133-147. Available at: <http://revistas.ulusofona.pt/index.php/reducacao/issue/view/682>
- Sá, C. M. & Macário, M. J. (2014). TIC e desenvolvimento de competências em trabalho colaborativo na formação em didática de línguas. *Indagatio Didactica*, 6(1), 480-503. Available at: <http://revistas.ua.pt/index.php/ID/article/view/2698/2553>



Entrepreneurship Education in Sports

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Abstract

Entrepreneurship education includes developing a mindset enabling and encouraging individuals to act in an entrepreneurial manner. According to the report presented to the European Commission by the unit of Entrepreneurship Education (2011), entrepreneurship education requires developing a culture, which is through, for and about entrepreneurship. In line with the findings and suggestions of the relevant research, we conducted a study with pre-service Physical Education teachers enrolled at Çukurova University, College of Physical Education and Sports. This paper provides a synthesis of the material gathered during the course of this particular study and an Erasmus Plus project funded by the European Commission.

Keywords: Entrepreneurship, teacher training, sports

Introduction

European Council recommends entrepreneurship as one of the eight key competences for lifelong learning. According to the European Framework of Key Competences for Lifelong Learning (2006), entrepreneurship includes creativity, innovation, showing initiative and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. Entrepreneurial culture can be developed through education. Education can contribute learners in acquiring a broad set of competencies, which bring them social and economic benefits in every aspect of their lives. There is ample amount of research done showing the essential role that education plays in the development of such mindsets, and in particular the central role that teachers play in this process. The Joint Research Centre for creativity in Schools (2010), for example, recommends teachers to be equipped with the right skills, knowledge and attitudes to be able to provide their students with the new curricula, pedagogies and learning environments that they will need if they are to acquire entrepreneurial competencies. Similarly, Roe Odegard (2006) highlights the importance of teachers by stating that teachers as being important role models play a vital role in promoting a positive attitude among young people in schools toward entrepreneurship. The researcher further adds that this reorientation requires that teachers have knowledge of entrepreneurship. Thus, offering specific training to teachers is crucial in order to make entrepreneurship education generally available and effective (European Commission, Entrepreneurship Education, 2011). However, research carried out by the European Commission shows that the core skills and values linked to entrepreneurship education are seldom a priority in initial teacher education programs. As a contribution to filling the gap in the field, and in line with the findings and suggestions of the relevant research, we conducted a study with pre-service Physical Education teachers enrolled at Cukurova University, College of Physical Education and Sports with the purpose of an improvement in their entrepreneurship skills. This paper describes our novel approach in which student teachers take a more active involvement in entrepreneurship education through opportunities we offered to raise their awareness about and to reinforce the development of entrepreneurial skills.



Method

Since entrepreneurship education is a transversal competence, it should be taught as a theme rather than as a separate subject at all stages and levels of education (ECOTEC, 2010). Following this line of reasoning, we integrated entrepreneurship education into our existing curriculum. To this end, we supported our program by systematically adding modules for entrepreneurship training. These modules were prepared by “Youthsport” EU project partnership under Erasmus Plus Program. “Youthsport” is a European project funded within the Erasmus+ Program by the Italian National Agency for Youth (Agenzia dall'Agenzia Nazionale Giovani). It operates through a partnership in 4 countries: Italy, UK, Romania and Turkey. The main aim of the project is the creation and implementation of an innovative and unique training program for the development of key competences to stimulate youth entrepreneurship in the sports environment. The curriculum prepared for this particular training program is structured in 12 modules of differing lengths (from 1 – 2.5 hours each). The evaluation of the training program implemented was conducted using feedback gathered at the end of the study through self-evaluation matrix, which was developed in accordance with the content of the modules used during the implementation period. Self-Assessment Scale for Entrepreneurship Skills describes in a comprehensive way what knowledge; skills and attitude individuals should have for developing a sense of initiative and entrepreneurship. These descriptors are aligned with the objectives of the “Youthsport” Project training curriculum. Further to the quantitative data collected through self-evaluation matrix, follow-up interviews with the participants were also made for gathering more extensive and reflective data. A total of 30 tertiary level students participated in the study. The students were senior level pre-service teacher candidates enrolled in the department of physical education of Çukurova University, College of Physical Education and Sports. They participated in the training on a voluntary basis. Their age ranges from 23 to 29. The data collected through the matrix was analyzed descriptively using the Statistical Program for Social Sciences (SPSS). The self-evaluation matrix includes six dimensions of social entrepreneurship in sports: management, social and emotional competence, communication skills, leadership and teamwork, social entrepreneurship and financial management and marketing. The scale defines four levels of competence (1 representing beginner level while 4 represents expert level) against which an individual can evaluate his/her conformance with each of the 55 descriptors defining entrepreneurship qualifications. Maximum score that can be achieved is 220 point (level 4 - expert). The lowest score is 55 (level 1 – beginner) followed by 110 for level 2 (intermediate) and 165 for level 3 (advanced). As for the qualitative data gathered through interviews, the transcriptions were read thoroughly and the key expressions reflecting the participants' thoughts regarding the training program were noted.

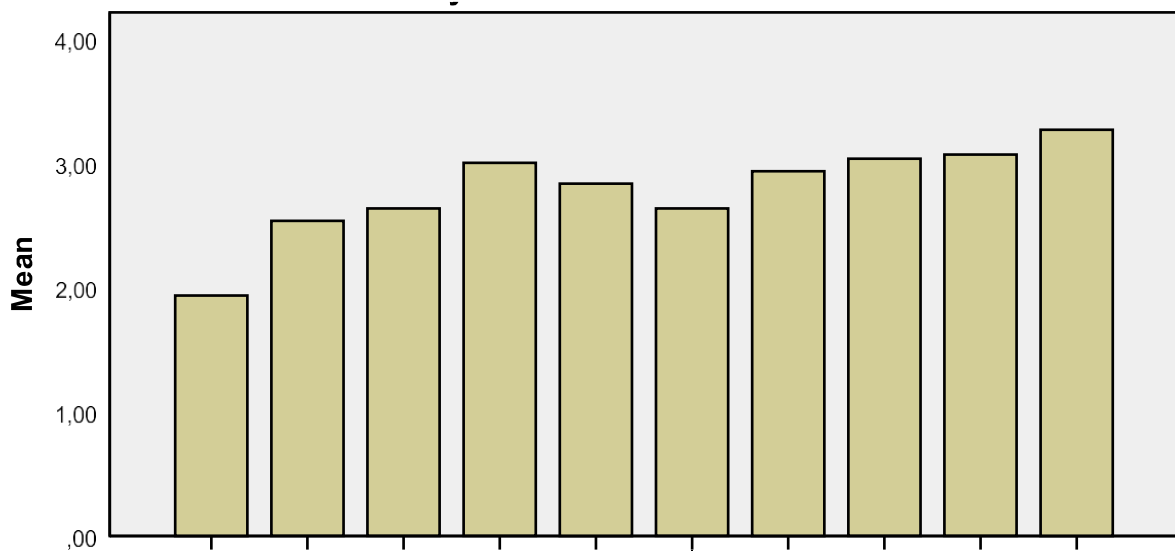
Findings

The findings provided us insights on how the pre-service teachers perceive their competence in entrepreneurial skills. Overall, the participants were pleased with their entrepreneurship skills and perceived themselves as individuals with a good knowledge of entrepreneurship. The total mean score of the participants from the self-evaluation matrix was 168,3 and this represents level 3 (advanced) in the scale. However, a close look at the individual dimensions revealed that the participants did not perceive themselves as equally competent at all aspects of entrepreneurship. To put it in a more concrete way, the findings revealed that the participants, as their weakest areas, evaluated management skills (mean: 2,7) and financial management and marketing skills (mean: 2,8). On the other hand, they perceived themselves as more qualified in communication skills (mean: 3,4), leadership and teamwork (mean: 3,3) social entrepreneurship skills (mean: 3,2) and social and emotional competence (mean: 3,1). That is, the participants viewed themselves as competent/advanced in four of the six dimensions included in the matrix as components of entrepreneurship. Although the mean scores for management, finance and marketing are comparatively lower, they could be still considered as satisfactory since they are within the range from level 2 corresponding to intermediate to level 3 which means advance. The following figure shows the scores of the participants in individual items in management skills. As it can be followed from the chart, the participants' evaluation of their management skill shows variations considering the individual items in this category. For example, while they think of themselves as intermediate (level 2) at the



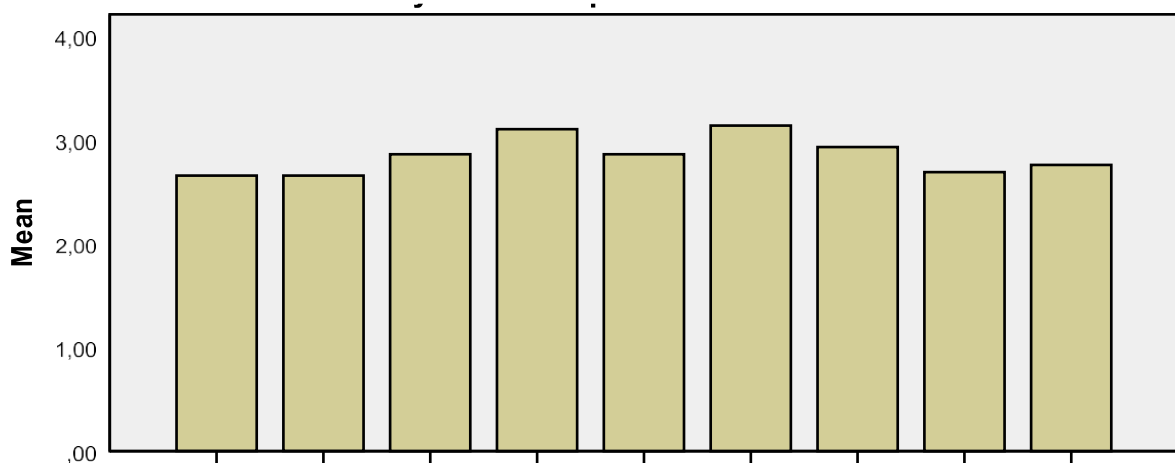
first item which states, “I am equipped with the required skills and knowledge to manage enterprises”, they consider themselves as better when it comes to identifying the strengths and weaknesses within the process (shown as item 4 on the horizontal line). Similarly, the participants perceive themselves as advanced (level 3) in the last item in this category, which is about willingness to defend opinions that are believed to be true.

Figure 1. Management skills



As for the category relating to financial management and marketing, the participants’ scores show variations between 2, 8 and 3 as displayed in Figure 2. The participants evaluated themselves as less competent in conducting cost analysis (item 1), dealing with crisis economy (item 2), market research (item 8) and cost- benefit analysis (item 9). On the other hand, they thought that they could establish good customer relations (item 4) and survey for customer need analysis (item 6).

Figure 2. Financial management and marketing



The informal interviews with the participants yielded parallel results. The participants stated that although they benefited from the training in general, they still perceived themselves as in need of improvement in certain aspects of entrepreneurship skills. The most important contribution of the training was reported as an increase in their awareness regarding entrepreneurship skills. The participants also highlighted the importance of being innovative and taking initiative for being an entrepreneur. Last, the participants stated that although the program developed their self-confidence as young entrepreneurs, they would like to



continue their training for a more developed understanding of the concept and more hands-on experience under guidance.

Results, Conclusions and Recommendations

Acknowledging the critical role teachers play in the development of entrepreneurship education, European Commission, Directorate for Enterprise (2012) envisages a progression from the current position where entrepreneurship education has been highly dependent on the personal effort of individual teachers and their willingness to carry out activities as an extra-curricular activity to one where it is systematically available to every student in every school. The Directorate further reports that this in turn entails entrepreneurship education to be an intrinsic part of both initial and in-service teacher training. In parallel with the proposal made by the Directorate for Enterprise, in their final report, European Commission, Entrepreneurship Education (2011) also mentions a paradigm shift in delivering effective entrepreneurship education and argues that this new understanding requires teachers to be key agents of change. Therefore, according to Entrepreneurship Education (2011), from the beginning it is important that there is a scientific understanding of how teachers perceive entrepreneurship education; and the development of this understanding should inform the development of teacher training with the purpose of identifying core teacher competences within the related scope. However, as Entrepreneurship Education (2011) further argues, the role of teacher education in the development of entrepreneurship is lagging behind since it is not existent in most initial teacher education and continuing professional development. The result of the present study is significant as it shows the importance of establishing a framework of training with respect to entrepreneurship in teacher education programs. As current literature puts forward, since teachers are central to embedding entrepreneurship education more systematically in educational institutions, their attitudes, beliefs and perceptions are important factors to take into account in the entrepreneurship education implementation phase. Thus, by shedding light on pre-service teacher candidates' schema regarding perception of entrepreneurship skills, the study sets out some implications for teacher education. To sum up, as European Commission, Directorate of Enterprise (2012) points out teacher training is clearly a vital component in supporting teachers to deliver effective entrepreneurship education, and for this reason, entrepreneurship education needs to be incorporated into existing teacher training.

References

- ECOTEC (2010). *Towards Greater Cooperation and Coherence in entrepreneurship education*. DG Enterprise and Industry. Retrieved from http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/education-training/entrepreneurship/reflection_panels/files/entr_education_panel_en.pdf
- European Commission, Entrepreneurship Education (2011). *Enabling Teachers as a Critical Success Factor "A report on Teacher Education and Training to prepare teachers for the challenge of entrepreneurship education."* Final Report, Bruxelles.
- European Commission Directorate for Enterprise (2012). Building Entrepreneurial Mindsets and Skills in the EU. http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/index_en.htm
- Joint Research Centre for Creativity in Schools (2010). *Creativity in Schools: A Survey Of Teachers in Europe*. European Commission.
- The Key Competences for Lifelong Learning (2006). *A European Framework on key competences for lifelong learning*. http://europa.eu/LexUriServ/site/en/oj/2006/l_394/l_39420061230en00100018.pdf
- Røe Ødegård, I. K. (2006). Entrepreneurship Education in Europe: Fostering Entrepreneurial Mindsets through Education and Learning. Proceedings of Norwegian Strategy Plan for Entrepreneurship in Education, Oslo, Norway.



Media image of elderly people

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Abstract

Modern society is becoming an aging society. At present, this process is strongly dynamic, and demographic indicators indicate that this trend will intensify in the near future. It is a process that leads to huge transformations in many areas of life - politics, economy, culture, education, medical care, the media, and ultimately the future of all of us. Older people are often perceived by others as weak, insecure, alone, dissatisfied with life, abandoning participation in social life. These are the first symptoms leading to the marginalization and social exclusion of this category of persons. This may be due to a lack of knowledge about the functioning of the elderly, stereotypes or prejudices, as well as their image in the media. In the social sense, often mediated by the media old age and old man is the object of embarrassment, the sense of danger, which is reflected in senseless euphemisms. The aim of this article is to try to present the image of a senior and his social functioning in the media and social space.

Keywords: old age, senior, image, media, ageism

1. The social dimension of old age and aging

Old age is the last of the seven stages of human life. It causes quite often the fear of what is unknown and at the same time inevitable. This period, depending on the characteristics of the individual unit, may vary widely. The concept of old age is identified primarily with a decrease in the overall capacity of the organism, the loss of certain social roles, the deterioration of health, the reduction in the number and intensity of social ties. This is the result of biological, psychological and social changes. The age-old system of biological and psychological processes and changes in the social sphere, in particular the behavioral traits, is dynamic and simultaneously synergistic. Dynamism mainly concerns the time axis of events. Synergy is depicted in the parallel occurrence of aging processes of individuals, which in the short term can lead to complete exclusion of individuals from society (Szatur-Jaworska, Bledowski, Dzięgielewska, 2006: 45). Changes in biological level determine significant changes in functional status, occupational activity and participation in various spheres of social life. It is also an individualized process and runs differently in each unit, so it is again difficult to estimate the time when an individual becomes old. In the literature of the subject, the view prevails that this age is in the range of 60-65 years. This was not the case in Poland until the retirement age. However, there is a tendency to prolong this age. More and more societies are "aging", thus the proportion of elderly people in the social structure is systematically increasing (Błaszczuk, Rynkowska, 2016: 28).

Researchers dealing with aging and aging highlight that this process takes place in four aspects:

- biological - as a natural, irreversible and worsening changes in metabolism and physicochemical properties
- mental - Manifested by decreased psychophysical activity, leading to the non-proliferative nerve cells dying or succumbing to damage, loss of neurotransmitters and fibrinogenic degeneration leading to Alzheimer's disease,
- social - a third stage age is usually of age, the angle yellow rime PART hundred seq ę loss occurs autonomy need for care food 1 manual carriers.
- spiritual - Characterized by greater sensitivity to the affairs of faith, catching up on the field of spiritual life, charity, and still-born questions after death? ((Pikuła 2011:15)

Many authors differently define the concept of old age, which means that the term has a multidimensional meaning. These definitions are the result of an earlier point of view. From a medical point of view, old age is a factor pointing to its biological character and a process that is irreversible within each species and every living



organism. . Psychology points to the degenerative changes in the sphere of human personality: withdrawal from social contacts leading to deepening loneliness. Old age is inscribed into every person's life, but as the process goes on, it is an individual matter. It consists of factors of a genetic, social, cultural, psychological nature and ecological. It is therefore very difficult to determine at what age or at what stage of life begins aging (Chabior 2000: 23-24). Currently, the criterion is metric, meaning arbitrarily determine the age at which the aging begins. Dominant positions, including the World Health Organization as the beginning of old age is 65 years old. It is a contractual age and can not be accepted by gerontologists as an objective indicator of old age. This is because individual nations and races are aging according to the pattern typical of a given area of residence. While the calendar age is facilitating demographic analysis and social policy planning, it does not mean that people over the age automatically go beyond the limits of old age and the biological effects associated with them. The end of this phase of life is death, which in the literature of the subject, especially the gerontological, gives the age of 110-120 years as the maximum length of human life (Brzezinska, Graczkowska 2012: 14). Due to the subject of this article, attention has been paid to the social aspect of aging. The aging of a person in society is defined as "the transformation of the needs and social roles, the way of life and the economic security of an aging person, and how the individual perceives the process of aging and how society relates to it." Between the individual experience of aging and the society in which a person functions " (Zych 2010: 168).

Modern civilization is a tribute to youth and high physical fitness. Today there is no mention of wisdom, of life experience, but features unfavorable qualities of old age such as infirmity, dependency, need for care. In Poland, the use of "old man" in public discussions turns out to be politically incorrect. The use of the adjective "old" to describe a man in an advanced age produces a living protests or even indignation. According to many The use of this term is a form of discrimination, exclusion and even some form of violence against the oldest generation in society. The situation of the elderly in society is evolving and even degrading. Old age appears as the dark side of life, infirm, difficult, afflicted, frustrated.

In the 1960s the term "ageism" came into being, which means discrimination against older people only because of their age. Old age arouses dislike, is identified with weight, and does not fit in the modern image of society. Based on the concept of ageism, several types of discrimination can be identified among older people: avoiding close contact with older people; Dissemination of beliefs about the negative characteristics of the elderly; To classify, according to the law of the elderly, a category of society without rights; Segregation, or isolation of the elderly from the social environment. (Pikla 2011: 45) Numerous manifestations of ageism are an expression of fear, fear of the consequences of natural aging and old age. Older people experience many difficulties and the consequences of their old age also in the social dimension. This is a time when there are many changes in positions, social roles, family, social and professional life.

We live in a time of worship youth and the young, healthy body. The consequence of this is the very serious phenomenon of gerontophobia, which is a panic fear of the old age of young people. It deepens the negative stereotype of old age, which is a harmful and untrue social image.

Aging and old age are phenomena that are associated with a number of stereotypes. Because of the protection of the dignity of an aging human being, it is important to shape the right image of old age on the basis of knowledge that shows the changes taking place during this period of life. This can contribute to weakening or even overthrowing the myths of old people, often very damaging to them, but also to reducing the fear of old age and their own aging. (Tobiasz-Adamczyk 2000: 78-80) The most common myth refers to mental health Older people say that these people are much more susceptible to stress and worse deal with it than young people. However, it has been found that people over the age of life have gained life skills very useful in the fight against stress. M. Seligman cites evidence that the number of stressful situations is decreasing over the years and older people are less likely to experience them. They are no longer experiencing the stresses of working and raising children, and older people are cautious, careful, and prone to risk. This is conducive to a regular schedule, a clear pattern of dishes, and more frequent contact with nature. Religious practices also have implications for finding peace in critical situations (Straš-Romanowska, Frąckowiak 2008: 32).

Ageism manifests itself in excessive exaggeration of external signs of old age: deformed silhouette, grayness, toothlessness, wrinkles, deterioration of sight and hearing, memory problems, difficulty in movement. Such ageist behavior is characteristic for both young and old people, but older people treat themselves as exceptions to



the rule. Older people now have the time to take care of themselves, go for walks, take a diet, go for rehabilitation treatments, which allows them to stay healthy and look good for a long time.

Often it is said that a retired man has a lot of free time, he can not manage it, and therefore evokes memories, lives myths. Every person living in his or her own environment, in society, adopts the patterns he or she professes. Every region of the world is getting old. This is due to upbringing and a different culture (Jakubowska 2009: 15-29). Story has positive and negative aspects. Positives include retirement. Pension is a free time that allows you to contact family, culture - television, cinema, theater, to participate in various forms of education, including. At the University of the Third Age. Retirement gives you the opportunity to become more involved in family life by organizing family gatherings, helping grandchildren to teach, and giving a sense of usefulness and satisfaction. It is also an opportunity to improve or rebuild ties between spouses who have been neglected due to lack of time. Now spouses - retirees can become re-retired, because they have time for themselves, to go out together, even for walks, they have time to share conversations and realize common passions. Families richer with life experience experience the second youth and enjoy each other. The negative effects of aging can also be attributed to retirement, which brings less income, which causes discomfort and the withdrawal of many pleasures for eg buying drugs. Older people have problems with their duties or moving. Stairs, lack of platforms for convenient entry, and even too fast change of traffic lights become a cumbersome obstacle and, at times, makes it impossible to get out of the house. Difficulties for older people make civilization and technical progress. The problem is the support of the cell, the computer, the ATM, and even the support of home appliances. Often, an older person encounters a lack of understanding even in the immediate family, who does not always notice the lack of fitness and helplessness of an older person. This causes a feeling of loneliness and regret to the ones nearest. They can not accept the fact that they are aging and that their silhouette changes, the body that more and more wrinkles appear on the face. Then they are less likely to leave home fearing the negative reaction of their friends. In this way stereotypes are passed down from generation to generation. Even TV commercials show the old man as a frail and afflicted person, and this gloomy picture juxtaposes with youth, health and fitness. The society receives an image of a nonproductive and demanding person. Even when older people live with their families, they rarely have good contact with their grandchildren who do not understand and sometimes even dismiss the old man without looking for any positive value. These two generations are alien to each other, and young people see an unattractive partner in an older person in terms of appearance and intellect (Baranowska, Kościńska, Wasilewska-Ostrowska 2013: 106-107).

Older people experience different consequences of old age not only in the social dimension. The position of older people often depends on the stereotype of a given socio-cultural environment. The cult of youth in modern societies causes that "it is not necessary to be old." The problem is complicated by the media, where there is still room for building a positive image of old age, for example by promoting a culture of active aging.

2. Image of old age and older people in the media

The media is an important factor shaping the cultural-social reality of human life. Their significance is growing with the ever faster, more intensive development of information technology. With functions such as information, education, entertainment, integration and opinion generation, the media (especially those with mass coverage) are not only an add-on facilitating the understanding of everyday life, but they also have the power to create the reality in which we function. The strongest influence is attributed to the press, the radio, the television and the Internet (Uzar 2011: 213). Specifically, the relationship between old age, the elderly and media, especially the rapidly developing digital media, is a specific image. Old-word displaced from social consciousness as a synonym for crisis, poor living condition, loneliness and negative emotions. The concept of "old age" as a sociological and cultural category disappeared from the mass media, the names of social projects and even scientific studies. The term "old" is replaced by terms such as older people, seniors, seniors, people aged 60 +, 70 +. Eliminating the notion of public language influences the social perception of the phenomenon itself, in this case old age. Old age, however named, is not today a subject of wide public debate and media debate. Old age is outside the mainstream of public interest, it causes fear and fear, is displaced from the social consciousness. Significant responsibility for the marginalization of old age in culture and social life is borne by the mass media and the Internet (Doktorowicz 2005).

Contemporary media is changing many areas of life, including, but not limited to, the way we spend our free time, which is largely devoted to the use of television, multimedia and the internet. Television is providing more



and more entertainment, the Internet allows participation in virtual communities, newsgroups and portals. social networks. Media civilization does not deny old age, but its mainstream is aimed at the generation born in the days of computer, internet and satellite television (Goban -Klas 2005).

However, research on older people clearly indicates that the development of leisure time by seniors is closely correlated with age and education level. In general, however, the area of interest of seniors is quite narrow. Rarely is the use of cinema, theater, hobbies, engaging in social or political activities. They most often watch television, listen to the radio, and increasingly use the Internet. Research shows that the overwhelming majority of seniors in Poland are engaged in leisure activities such as those that require little or no financial effort.

According to the CBOS survey in 2013, people aged 55-64 accounted for as much as 13% of all Poles using the Internet. Grandparents are less and less distant for children because, like the younger ones, they are becoming more and more involved in cultural and virtual life, blogs written by seniors, sharing on the Web, activity on Facebook - just a few examples. The intergenerational gap in some sense is getting smaller and smaller. The grandmother's grandfather's stilettos and grandfather on the rocking chair survived mainly in commercials. Seniors participate and are active recipients of modern media, but aggressive advertising and marketing are targeted at younger groups. Older people have more free time and television is considered as the primary source of information and entertainment. TV media offers series that set the daily rhythm of the lives of many seniors. For older and lonely heroes the series becomes members of their families. Television media, Internet portals are dominated by sensational, political, information about the lives of celebrities and people involved in the entertainment world. This problem is seldom related to the elderly. Media culture is primarily a world of serials, reality shows and shows. These messages dominate the active world, the participant, the buyer. Such attributes of contemporary media are not in the interest of senior citizens.

The lifestyle of people in late adulthood, mainly because of their pauperization, is not interesting for Polish media. The way in which a person experiences his or her old age may be due to individual personality conditions, but also to the way of life in the family, the cultivating of traditions. Active older people can be characterized by their preference for selected lifestyles.

Polish senior man is poor, sick, resigned and lonely, so it is often presented in the media. The products of the contemporary commercial world presented in television commercials are beyond his reach, primarily for financial reasons. Therefore, advertisers are less interested in senior subjects. Undoubtedly, the image of older people is influenced by advertising and advertising, both social and commercial. Advertising is an emotional message that encourages specific actions to trigger needs and desires. Advertising advertising not only brings new products to the market but also shapes consumption patterns, lifestyles and customs.

Old age does not meet the basic market requirements, because its economic situation does not allow for the development of consumption. They are not potential customers with high creditworthiness, young, healthy and with a happy and beautiful family. Advertising campaigns targeting seniors show mainly insurance products, pharmaceuticals (pharmaceuticals and vitamins) and financial institutions, primarily offering easy-to-access consumer loans or reverse mortgages (an offer based on the difficult financial condition of old people). Mass culture patterns deny old age from older people's awareness. The language of advertising is used. The standard of advertising for retirement funds is called the autumn of life, and the names of illnesses of old age do not even fall. Old age disabilities are unesthetic, shameful and in the media world would not be at all if the companies did not have to earn them. Seniors advertising painkillers, supplements, vitamins, look happy with life, rejuvenated, without problems and signs so old age. Actresses who advertise preparations for menopausal women are like 40 years old. The idea is that the aging process has been stopped as a result of these preparations. Older people also appear on the background of their families in food or cold food advertising, performing their stereotypical roles. However, presenting older people as unattractive and neglected as a contrast to consumer lifestyle is no longer socially acceptable. The evolving 60+ consumer market forces a different approach to the media image of senior citizens. In addition, the idealized image of television characters, especially women, who create the world without aging and wrinkles, is increasingly frustrating and socially frustrated.

Real characters of old people appear in documentaries, reportages, most often in the context of difficult problems and family conflicts. In Polish television media such characters appear in programs: Note, Reporter, Intervention. Nursing homes, illness, poverty, loneliness, soulless social workers, violence are the image of old



age in the lens of the Polish reporter. The television image, press photography, and photo shoots are increasingly influencing opinion formation and stereotyping. Image culture, short texts, simplified messages and passwords in some way restricts reflection on old age and old people.

In 2007, a report was published on the content of the Polish publications entitled "The image of the elderly in the media. 900 publications and 470 Polish web portals were analyzed. The results show that older people are presented as dependents, poorly positioned, often with mental problems. The most frequently discussed topics are retirement pensions and retirement pensions (Doktorowicz 2012: 151). Local and regional grocery publishers usually publish information on longevity and their jubilees. Much less is the problem of their health, well-being or activity. The image of older people in the media is also affected by the fact that the elderly are poorly organized, rarely appearing publicly and do not generate media topics. (Borowska) Few television shows on the issues of the elderly appear in the television broadcast. Dominant information about poor social services, neglect in hospitals, social welfare homes or the use of violence against the elderly are predominant. The information presented in this way is building new stereotypes about the incapacity, dependence and injustice of seniors. On the other hand, rapid technological changes and the development of the information society are, in effect, excluding from the market the current 70 and 80 year olds who are not quite up to the new media.

This is connected with the phenomenon of the digital divide, the digital divide occurring in modern societies, which are particularly vulnerable seniors (Porębski 2004 :: 91) is .Związane deficiencies in access to computers, software skills, cost of ownership, as well as physical barriers And psychic. Thus seniors are perceived as less educated, slower learners, unfamiliar with modern technical, contemporary digital reality and related concepts. Older people, especially after the age of 70, are afraid of new media. Often, the use of mobile phones or basic computer programs is beyond the physical capabilities of the elderly. Seniors are often hearing impaired and visually impaired. New generations of new media are becoming increasingly complex, especially when used in miniaturized devices. This does not encourage older users. In the case of using the internet by older people anxiety raises the lack of understanding of vocabulary, specific language, concepts and definitions. Internet culture is a world of short texts, acronyms and new phraseology that permeates everyday language. However, this is not the language of the elderly. Nonetheless, it is in the new media that prospects for seniors should be seen. The Internet, specialized news channels, as well as networking opportunities create a unique opportunity for active and efficient aging, breaking stereotypes about the old man and his image in the media reality.

Conclusion

As mentioned, the media is the important factor shaping the cultural-social reality of human life. Their significance is growing with the ever faster, more intensive development of information technology. The image of old age in modern society is influenced by many factors such as tradition, cultural values, social and civilizational changes, social policy and mass media. The latter play a special role in creating or rather depressing the image and problems of old age from social awareness. Old age and the elderly are not much interested in the world of entertainment, crowds, applause and flashes. The commercialization of modern media makes them primarily interested in consumers whose physical and economic condition allows full, active, hedonistic participation in social life. Old age and the elderly are simply non-medical.

However, the current demographic trends indicate that we will be an increasingly aging society, with all its determinants of changes in everyday life, in family, neighborhood, social and human relations. Replacing old age and aging is contradictory to demographic processes that tend to grow. It seems important to draw attention to media old age and seniors, where the idea of media coverage of old age should be an emphasis on the potential and wealth of this last stage of life - for the seniors themselves and the whole of society. This kind of solutions should become more intensive and frequent contact of media representatives with the environment, organizations in which seniors participate. There is a need for mutual openness - on the one hand interest, discovery of old age as an important media subject, and the desire to leave, show Opportunities of old age. While promoting and support the media sometimes referred „ the first power 'positive vision aging society, which becomes an aging society in Europe" (Lepa 2000).

Refereces

Baranowska A., Kościńska E., Wasilewska – Ostrowska K.M., (2013), *Spoleczny wymiar życia i aktywności osób starszych*, Wyd. AKAPIT, Toruń



- Błaszczuk K, Rynkowska D.,(2014), *Wybrane problem zdrowia publicznego w perspektywie pracy socjalnej*, Rzeszów
- Błaszczuk K., Rynkowska D., (2016), *Problemy społeczne i opiekuńcze seniorów i ich rodzin. Studium socjologiczne na przykładzie opinii pracowników socjalnych*, Rzeszów 2016
- Borowska M., *Jaka okładka dla starości? Seniorzy w mediach*, Portal Organizacji Pozarządowych <http://ngo.pl>
- Brzezińska M. Grackowska M.(2012).*Zaradnik terapeutyczny*. Difin, Warszawa
- Chabior A.(2000) . *Rola aktywności kulturalno- oświatowej w adaptacji do starości*. Instytut Technologii Eksploatacji : Radom- Kielce
- Doktorowicz K. (2012), *Cywilizacja medialna -świat bez starości?*,[w:]*Przestrzenie starości*, (red.) M.zrałek, Wyższa Szkoła Humanitas, Sosnowiec
- Doktorowicz K.(2005), *Europejski model społeczeństwa informacyjnego .Polityczna strategia UE w kontekście globalnych problemów wieku informacji*, Uniwersytet Śląski, Katowice
- Goban-Klas T.(2005), *Cywilizacja medialna*, WSiP, Warszawa
- Jakubowska H.(2009), *Spółeczne wytwarzanie starości: definicje, granice, konteksty*, [w:] *Patrząc na starość*, (red:) H. Jakubowska, A. Raciniewska, Ł. Rogowski, wyd. UAM, Poznań
- Lepa A.(2000), *Pedagogika mass mediów*. Archidiecezjalne Wydawnictwo Łódzkie, Łódź
- Pikuła N.,(2011), *Gerontologia dla pracowników socjalnych. Etos starości w aspekcie społecznym*, Kraków
- Porębski L.(2004), *Ubóstwo informacyjne-nowy wymiar społecznego wykluczenia*, [w:] *Bogactwo i bieda: próba refleksji humanistycznej*, (red.)R.borkowski, Uczelniane Wydawnictwo Naukowo-Dydaktyczne AGH, Kraków
- Straś -Romanowska M., Frąckowiak T.,(2008), *Potoczne przekonania na temat starzenia się w świetle badań psychologicznych*, [w:] Kowalski J.T., Szukalski P.(red.) *Starość starzenie się jako doświadczanie jednostki i zbiorowości ludzkich* , Wyd. Uniwersytetu Łódzkiego, Łódź
- Szatur-Jaworska B., Błędowski P.,Dzięgielska M., (2006) *Podstawy gerontologii społecznej*, Oficyna Wydawnicza ASPRA-JR, Warszawa
- Tobiasz-Adamczyk b., (2000), *Psychospołeczne aspekty wieku podeszłego,Zarys gerontologii klinicznej*, Medyczne Centrum Kształcenia Podyplomowego UJ, Kraków
- Uzar K.(2011), *Wychowanie w perspektywie starości .Personalistyczne podstawy geragogiki*, Wydawnictwo KUL, Lublin
- Zych A.A.(2010), *Leksykon gerontologii*.Oficyna Wydawnicza Impuls, Kraków



Concept of friendship among Russian university students in the Czech Republic

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Abstract

The study is concerned with the perception and experience of the phenomenon of friendship among Russian university students in the Czech Republic, considering its relation to the complex context of their life and adaptation to the mainstream Czech society. The research problem is approached from a combination of sociological, psychological, anthropological as well as cognitive-linguistic perspectives. The main research questions focus on the perception and experience of friendship among young representatives of the Russian minority in the Czech Republic and the meaning attributed to this phenomenon in the participants' lives with a special emphasis on the context of living and studying abroad. The study is based on an original qualitative research, conducted as an interpretative phenomenological analysis (IPA). The data were obtained via in-depth semi-structured interviews and analysed in accordance with the IPA methodology with respect to the whole context of the participants' lives.

Keywords: Russians, University students, Linguistic anthropology, Cognitive linguistics, Friendship, Identity, Multicultural Education.

Introduction

This study is a follow-up to a previous qualitative research focusing on the issue of the identity and its transformation among young Russians who study at one of the universities in the Czech Republic. From a long-term point of view, the Russian minority is one of the largest in the Czech Republic, therefore, the numbers of Russian students at all the levels of the Czech education system in comparison with other nations are among the highest (cf. Kleňhová, 2016). However, an ambivalent or negative perception of Russians can be found within the Czech society, potentially connected with the hostile attitudes of a part of the majority towards the Russian minority, as evidenced by various studies, among others by our first research. Apart from other negative characteristics, such as the remaining consequences of the Soviet-era relations between the countries or a fear of security breaches and increased crime rates, the Russian minority is also perceived as rather inaccessible and oriented primarily towards the community-based ties. On the other hand, our research confirmed that young Russians themselves perceive their contact with the representatives of the Czech society as problem-free or even pleasant although carried out predominantly within the limits of necessity. The research shows the importance of interpersonal relationships, namely the relationship known as “družba” in the Russian language, as a significant source of social security and psychological well-being, as well as some specific transformations of the perception of interpersonal relationships in the conditions of living abroad. The results suggest that the participants perceive finding friends among their Czech peers as difficult, if not impossible. The term “družba” refers to something exclusive, hardly definable, something that is – at the most abstract level – associated with the Russian origin as such. The common origin of Russians, their mentality and language ended up being some of the most commonly mentioned aspects of an existing stable friendships. Czechs were perceived largely positively, some participants even attributed certain good qualities to their peer-to-peer



contacts with them. However, it was declared by the Russians that it was not possible for them to create relationships with their Czech counterparts that would meet the criteria of “druzhba”, as understood by the participants (Cichá, Janečková, 2016).

The research problem is studied from the point of view of linguistic anthropology and cognitive linguistics; in particular, it works with the postulates of language relativity and the concept of friendship (“druzhba”) within the image of the world created by the Russian language. Cognitive linguistics is based on the conviction that each language provides a specific interpretation of the world shared across the language community. The language image of the world determines how the members of a specific language society (can) understand the world; it sets the boundaries to their common conceptualization. The differences between particular linguistic images of the world should be understood as testimonies of various cultural and social conditions and experience. On the other hand, there are certain universal components present in the image of the world that can be found across different languages (cf. Vaňková, 2005). Interpersonal relationships, their importance and differentiation are considered a significant feature of the Russian linguistic and cultural community. According to the Polish linguist Anna Wierzbicka, the Russian language possesses an unusually well-engineered categorization of interpersonal relations, not only in comparison with the Western European languages but also in comparison with other Slavic languages. “Druzhba” and, analogically, a person called “drug” are at the top of the hierarchy of categorizing interpersonal relationships as these words are expressions of utmost intensity and proximity of a relationship (Wierzbicka, 2001). The linguoculturological discourse views “druzhba” as a forming ethical concept with a clearly expressed normative. The key elements of the concept include the aspects of help, reciprocity and equality component (Konjaeva, n.d.). Therefore, the paper works with the assumption that there can be a relationship between a language and the image of the world created by it and the psychosocial dimension of its speaker’s life. The issue of friendship has been discussed in many works and viewed from different perspectives across the historical stages of the human kind. At this point, we can mention e. g. the definition by Joseph de Vito who defines friendship as an interpersonal relationship that is beneficial for both of the parties, is created and maintained on the basis of mutual freedom of decision and characterized by a mutual positive assessment (de Vito, 2001). The basic components of this relationship include strong positive emotions, mutual support and recognition, respect and trust (cf. de Vito, 2001; Plháková, 2007; Hewstone & Stroebe, 2006 etc.).

Therefore, the aim of the paper is to describe how young Russians who live and study in the Czech Republic experience friendship, to discover what kind of importance they attribute to this phenomenon in their lives and to identify the factors influencing these attitudes within the whole context of their life experience. Although the Russian-English equivalence of the terms in this sphere of human life is, for example according to above-mentioned Anna Wierzbicka (2001), quite problematic, in order to achieve a greater clarity in some passages of the text, we will use the English terms „friendship“ and „friend/s“.

Method

Keeping in regard that the nature of the topic requires an in-depth insight, we have come to choose the qualitative research methodology. When selecting the research design, the fact that the aim is to understand the experience of friendship among a specifically defined group of people led us to the conclusion that the phenomenological research would be appropriate. Phenomenology belongs to the part of the humanist tradition that emphasizes the common experience of all human beings and our ability to understand the feelings of others (Bernard, 1995). The fundamental purpose of phenomenology is to reduce individual experience with the studied phenomenon in order to describe the universal nature of it; the procedure should provide a deep understanding of the phenomenon (Creswell, 2013).



These postulates are at the base of the research approach called Interpretative Phenomenological Analysis (IPA). The main difference, compared to classical phenomenology, lies in the potential that IPA offers to the researcher. It provides a perspective oriented not only towards a description of things but also towards an interpretation of the meaning that the participants attach to their experience with the studied phenomenon. The experience is constructed as a result of the joint efforts of the researcher and the participant while preserving the clarity of both perspectives. In addition to phenomenology, IPA is also theoretically anchored in ideography and hermeneutics. The method is characterized by the work with the hermeneutic circle and the so-called double hermeneutics which means the process under which the participants try to understand their experience with a phenomenon and, at the same time, the researcher tries to understand the process of the creation of the participant's understanding (Koutná, Kostínková, Čermák, 2013). Considering the nature of the research, the research sample usually consists of a relatively small number of participants who, however, are well-representative of the studied phenomenon. The participants are selected purposefully, with regard to the particular perspective they can provide to the researcher (Smith, Flowers, Larkin, 2009).

At the very basic level, the sample in our research is made up of ethnic Russians living in the Czech Republic. Considering the methodological recommendations on maximizing the homogeneity of the group as well as the practical aspect of the existing contacts obtained during conducting the first research among Russian university students, the next step of defining the research sample was based on the criterion of the university student status and of at least a two years long stay in the Czech Republic. The length of the stay criterion was chosen to ensure that the sample would only include participants with a certain level of orientation in the Czech society and a certain degree of knowledge of the Czech language. The initial contact with all the participants was realized through the social networks. The contacts were obtained through our previously obtained connections. One of the five participants participated in the first research as well. From the gender perspective, the sample consisted of three females and two male. The participants were, according to themselves, motivated to engage in the research by trying to help another student (the researcher) but also by a positive perception of the Russia-related topic. Before the interviews, the participants were informed about the nature of the research and the probable form and duration of the interview. The participants were also asked to participate in the next stages of the research – in particular in reading and commenting on the interpretations and the final text. This step is very important with regard to the language in which the interviews were conducted. Since the first research which was held in the Czech language proved to be rather chaotic, it seemed appropriate to conduct the interviews in the second research study in the Russian language, allowing the participants to express their feelings and associations freely. The interviews were translated into the Czech language within the first phase of the analysis. The subsequent consultations with the participants, among other things, served as a means of verifying the accuracy of the translation and correct understanding of the meanings.

In contrast to the classical phenomenology, the most common data collection tool for the IPA is a semi-structured interview that gives the participants enough space for a free expression of their ideas but also allows the researcher to adjust the interview if necessary (Smith, Flowers, Larkin, 2009). The primary research question was set as follows: *How do young Russians perceive and experience friendship and what meanings do they attribute to this phenomenon in their life?* The secondary research questions were focused on comparing the acquired data with the interpretations available in the psychological, sociological and cognitive linguistics literature.

The data analysis was carried out in accordance with the instructions presented by Smith, Flowers and Larkin (2009). Each case was analysed separately. The zeroth phase, as recommended by the literature, was focused on the reflection of our own experience with the phenomenon, our motivations and beliefs. Then, after repeated reading of the translated interviews, conducted in order to gain an insider perspective, conceptual notes and comments were created and transformed. Based on comments and notes, main individual topics were identified. This process led to capturing the essential quality of the participant's experience. In the last phase, the context



and the way of their interconnection were sought among the identified topics. Once this process was applied to all the cases, all the research material was compared and analysed as a whole.

Through the deep insight into the inner world of the participants, the research was to present a comprehensive concept of the interpersonal relation sphere with a specific focus on the relationship denoted by the Russian expression “druzhba”. This paper presents five individual perspectives embedded in the participants’ lives’ context, it identifies the distinctive connectors between them as well as their probable causes. Although the research was conducted on a very small sample, combined with the data obtained in the first research, the primary value of the work is seen in the subjective views of a certain phenomenon which are understood as some of the most important concepts in the psychosocial life presented from a purely emic perspective.

Findings

In accordance with the results of the first research, the major significance of interpersonal relationships and especially the relationship called “druzhba” in the participants’ lives was confirmed. “Druzhba” is regarded as a very positive part of life; in three cases, it was perceived as an existential aspect. “Druzhba” was defined predominantly within an absolutist approach as a spiritual family, as a condition of existence itself or as probably the most important relationship of life. “Druzhba” serves as a means of meeting the need for a highly intense, intimate interpersonal contact that brings a sense of security. However, a strong practical dimension is an inherent part of this type of a relationship as well – “druzhba” is an essential aspect of achieving satisfaction in life. The key sense of “druzhba” can be expressed as a permanent satisfaction of the emotional needs. At the most basic level, “druzhba” serves to eliminate the burden of loneliness, primarily on a spiritual level. The essence of this feature lies in the feeling that there is someone who is prepared to provide support when problems emerge, whatever the problems might be (e.g. the “mere” feeling of loneliness), someone who is prepared to provide support even if they are thousands of miles away. Life security is understood by the participants as the knowledge that one is accepted without any conditions or limitations. The life support expected from a person called “drug” means the unlimited possibility to rely on this person. It should be noted that the material/practical side of this kind of an assistance is not considered the most important part of “druzhba”. Although the material aspect of a friend’s support is an essential part of the relationship, it is not enough to fulfil the definition of this relationship all by itself.

“Druzhba” is also characterized by a strong non-rational aspect. The irrational factor accompanies “druzhba” from the beginning, when it forms the conditions for its creation, and at the later stages of the relationship, it significantly affects its functioning. Specific factors of attraction were not mentioned either at all or only as subordinated to the factors such as situation, circumstances and environment which are perceived as hardly or partly influenced by an individual. A decisive influence on the development of “druzhba” at all of its stages is attributed to the configuration of particular life situation itself. Thus, it is possible to speak of a kind of a personified concept of the situation the character of which has a considerable power over the direction of the human life. The essence of a personal attraction is primarily abstract and spiritual. Generally, the aspects of the human nature that can only occur as a result of a sufficiently long and meaningful contact with one another are the most important ones. Regardless of how clearly the criteria of “drug” are defined, the most powerful attraction factor is a sort of a non-subordinate entity, “something”. This “something” is a permanent factor of attraction that can maintain the relationship despite a relatively strong crisis (caused consciously or unconsciously). The determining factor of time is one of the most specific. The amount of time spent together can be always found at the beginning of the chain of circumstances that lead to the perception of a person as “drug”. A direct proportion can be found between the intensity of the other components of “druzhba”, such as proximity, trust and understanding, and the amount of time spent together. In this context, time is also an essential condition for the development of a relationship affected by negative events. From the perspective of the participants, the concept of time seemed almost magical, as it can take away old wounds and acts as a healing



force that gives the chance to rebuild damaged or temporarily completely broken relationships. “Druzhba” is primarily represented by highly intense positive emotions. Certain negative emotions are understood as a natural part of the relationship, their perception, however, depends on the source of their origin, their strength and durability. The relationship is associated with the feelings of pleasure, friendly love, harmony and emotional comfort. The participants also associate “druzhba” with a source of warm and “sunny” feelings. On the other hand, complications and decline of the relationship are associated with the cold. The intensity and depth of the experienced positive feelings connect “druzhba” with a partner’s love. The difference between these two intense relationships can be found in the element of an intimate attraction which is absent in “druzhba”. Unlike love that can end with complete disappearance of a former partner from one’s life, the true “druzhba” is perceived as a permanent, life-long value.

Just like the participants have certain expectations about the behaviour of their friends, they require the same kind of behaviour from themselves. For them, “druzhba” represents a set of serious commitments of the highest priority. In the hierarchy of the friends’ duties to each other, support and help occupy some of the highest levels. One of the participants expressed the idea as follows: “drop everything and come as quickly as possible.” While staying in touch is generally considered significant, not all of the participants share the same opinion on the quantity and quality of it. This circumstance is especially important with regard to the importance of the relationships maintained with the friends in Russia. Although there are some limits to maintaining the relationship through the social networks, most of the participants do not perceive them as „fatal“, so the real “druzhba” can adapt to these conditions.

Of all the common topics discussed in the interviews, the gender composition of the relationships was the most controversial one. The research sample was divided into two groups: while three participants consider “druzhba” between men and women completely problem-free and fully-fledged, two (female) participants are convinced that in that types of a relationship, friendship is not or cannot possibly be the final state of things. Similar inconsistencies within the sample appeared when discussing the issue of the ideal / possible number of friends. While one of the participants assumes that there can be a manageable and enriching friendly relationship with fifteen people for her, other participants are more sceptical. Regardless of how many people they describe as friends, the participants have, according to their words, a large number of mates and other relationships in lower, less emotionally intense categories.

The perception of “druzhba” as presented by the participants corresponds to a large extent to the theoretical humanistic definition of the phenomenon of friendship. The findings correspond to the basic definition of friendship as a positive emotional relationship which represents an important life value, is characterized by intense emotions and greatly contributes to one’s psychological comfort. Particular emphasis was put on the element of support and assistance. The basic platform of “druzhba” as understood by the participants seems to be in accordance with the professional literature – it is an identified mutual understanding. The common attitudes were defined as a common worldview, the same way of thinking or the same moral views. An absolutely obvious part of “druzhba” for the participants are very personal themes and secrets. Sharing the intimate details of one’s life is nevertheless a component that brings the feeling of trust which is necessarily preceded by a stage of less binding contacts. An important role is also played by a similarity in the field of the friends’ intellectual orientation. There are various sources for the creation and transformation of the perception of “druzhba”: not only personal experience but also the circumstances of the personal development and cultural and media influences.



Results, Conclusion and Recommendations

The debates on the topic of “druzhba” have shown how rich the topic is and therefore, by its nature, cannot be endowed with a simple and unambiguous attitude with a predominant rational component. As the factors influencing the formation of the perception of “druzhba”, the participants identified some psychological specifics, the circumstances of their personality development as well as the impact of the surrounding environment, i.e. the factors considered as partly influenced by individuals, as well as culture-specific influences. The role of the Russian language in establishing close relationships but also in creating the ideas and expectations associated with the person identified as friend (“drug”) is evident. The research revealed a close link between the perception of friendship and the pillars of the participants’ identity derived from their Russian origin and the Russian language. Friendship, in terms of a relationship between Russian-speaking individuals, in many cases maintained across the Czech and Russian borders, is one of the most important sources of psychological stability when living and studying abroad.

Just like “druzhba”, the less “serious” types of relationships are characterized by having a positive dimension to them, however, they differ from “druzhba” by providing a lower degree of spiritual depth and durability. The relationships with the members of the Czech majority society fall into this category of positive but in comparison with the actual “druzhba” less important relationships as well. This fact needs to be seen in a wider context regarding the identity of the participants, as surveyed in our first research. The participants often suggested that there is a direct link between their identity and the Russian origin and language. These factors can be understood as an explanation of the participants’ perception of the relationships with the representatives of the majority society. The participants declared that they do not have particularly strong ties to the Czech environment, nor do they consider it necessary. The data verified one of the conclusions of the previous researches, namely the relative inaccessibility of the Russian community from the outside and the participants’ preference of maintaining relationships with their compatriots. The “compatriot category”, in most cases, included people from other post-Soviet states as well. The participants also confirmed the previously described model of Russian relations with the Czech majority society – the relationships are limited but perceived as problem-free. For the participants, the difference in the mentality was the main factor that does not allow the establishment of deeper and more permanent relationships and is responsible for the limited contact with the majority. Establishing relationships with Czechs was evaluated as difficult, in particular because the Czechs’ understanding of friendship is quite different to the Russian.

Although the partial attitudes and views of the participants correspond to the postulates of the linguistic and anthropological studies based on the ideas of linguistic relativism, an individual perspective based on unique experiences plays an equally important role in each life’s trajectory. At the same time, we can confirm the compliance of the findings with the general humanitarian definition of friendship. To sum up, the research results reveal a combination of identified culturally-linguistic influences, individual psychological factors and a kind of universal nature of the phenomenon of friendship. However, it is necessary to approach these conclusions as relative, contextually affected (e.g. factors as age, length of stay or specific living environment should be considered).

The paper strived to present the life beyond the borders of the native land and education in a language other than one’s mother tongue as a dynamic, context-dependent and multidimensional process in which the dimension of language competence itself is essentially inseparable from other dimensions, namely sociocultural and psychological. The work emphasizes the importance of a multidimensional relativistic approach as the only meaningful approach to the people from different cultural, language or educational environment.

References

Bernard, H. R. (1995). *Research methods in anthropology: Qualitative and quantitative approaches*. Lanham: Altamira Press.



- Cichá, M., Janečková, T. (2015). Proměny národní a kulturní identity ruských vysokoškolských studentů. In POSPÍŠIL, I. (ed.) *Střední Evropa včera a dnes: proměny koncepcí*, pp. 591-600. Brno: Galium.
- Creswell, J. W. (2007). *Qualitative inquiry research design: Choosing among five approaches*. Los Angeles, Calif: SAGE Publications.
- De Vito, J. (2001). *Základy mezilidské komunikace*. Praha: Grada Publishing.
- Hewstone, M., Stroebe, W. (2006). *Sociální psychologie: moderní učebnice sociální psychologie*. Praha: Portál.
- Kleňhová, M. (2016). Cizinci vzdělávající se na českých školách. Retrieved from: <http://www.statistikaamy.cz/2016/02/cizinci-vzdelavajici-se-na-ceskych-skolach/>.
- Konjaeva, J. V. (n.d.). Koncept «družba» po dannym nauchnyh issledovanij. *Ural'skij federal'nyj universitet*. Retrieved from http://elar.urfu.ru/bitstream/10995/28010/1/sk_2014-08.pdf.
- Plháková, A. (2004). *Učebnice obecné psychologie*. Praha: Academia.
- Smith, J. A., Flowers, P., Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research*. Thousand Oaks: Sage.
- Vaňková, I. et al. (2005). *Co na srdci, to na jazyku: kapitoly z kognitivní lingvistiky*. Praha: Karolinum.
- Wierzbicka, A. (2001). *Ponimanie kul'tur cherez posredstvo ključevyh slov*. Moskva: Jazyku slavjanskoj kul'tury.
- Zaliznjak, A. A., Levontina, I. B., Shmel'jov, A. D. (2002). Ključevye idei russkoj jazykovoj kartiny mira. *Zhurnal'nyj zal*. Retrieved from http://magazines.russ.ru/oz/2002/3/2002_03_22.html.



Czech schools in Croatia and their importance for preserving Czech national identity

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Abstract

The study deals with evaluation of the importance of Czech schools in Croatia for the local expatriate community, specifically for preservation of the Czech national identity abroad. The aim of the study is to provide a description of educational reality in Czech schools in Croatia and consequently explore the potential of using gathered data in the process of improvement the quality of education, both with regard to the needs of the Czech minority and the preservation of its national and cultural identity. The research seeks to discover whether there are any specific educational needs of children belonging to the Czech national minority in the context of cultural models of education in Croatia and Czech schools in Croatia and what is the role of the Czech language in the process of maintaining the Czech identity. The study is based on field study conducted in Croatia in 2016 via qualitative research methods (interviews with Czech teachers and other compatriots). The research results pointed out the significant role of bilingualism as an integral part of participants' identity. However, there is a strong tendency identified by Czech minority members to prefer the Croatian language in everyday communication at Czech schools. The representatives seek to create measures that would contribute to preservation of the Czech identity in Croatia in future generations. The anti-assimilation tendency applied in Czech minority education in Croatia is mainly of a language character. This condition results in emphasizing the need to formulate and implement a new objective - development of the Czech language competencies of the teaching staff.

Keywords: Czech minority, Croatia, Bilingualism, Minority education, Multicultural education

Introduction

The Czechs in Croatia constitute a significant national minority, the members of which identify themselves with the language and cultural legacy of their ancestors. Today, over 10.000 Czechs live in Croatia. On the other hand, about 25.000 people claimed their nationality was Czech in the 1970s (Vaculík, 2009: 62–66; Brouček, 2017). When trying to determine the factors that can help preserve the Czech national identity outside Czech borders, we must acknowledge the existence of Czech schools and the education in the Czech language as some of the most crucial ones.

Minority schools in Croatia started to emerge after World War I (Daněk, 1997; Janotová, 2009) and they went through a major development after 1945 (Matušek, 1993; Kolouch, 1993). This study focuses on the evaluation of their significance for the local compatriot community. The aim of this article is to describe the current state of minority education in Croatia and to analyse its strengths and weaknesses as we are convinced that those are reflected in the potential of the Czech minority either to resist the pressure to assimilate or to surrender to it. Presently though, many compatriots are concerned with the deteriorating influence of Czech schools in Croatia as far as preserving the Czech identity. Many critical observations were presented at the Symposium on the Czech Language in May 2016, organized by the Union of Czechs in Croatia. The discussions mainly revolved around the curricular reform in Croatia in which three models of minority education (A, B, C), differentiated by the degree of the use of minority languages, were created (Ministarstvo znanosti i obrazovanja, online; Český lidový kalendář 2016, 2015). In order to put the problem across clearly, we will now summarize the basic information on the models of education from the point of view of the Czech minority.



At the schools educating according to Model A, all the classes are taught in the minority (Czech) language (except for the Croatian language classes). The teachers' documents are translated into Czech although – for the purposes of the administration – a Croatian version of the documents must be available as well. Even the students' certificates are bilingual, using both the Croatian and the Czech languages. Only two Czech primary schools (Česká základní škola J. A. Komenského Daruvar and Česká základní škola Josefa Růžičky Končence), six district schools (Daruvarský Brestov, Lipovec, Horní Daruvar, Dolany, Dolní Střežany a Ivanovo Selo) and two kindergartens (Česká mateřská škola Ferdy Mravence Daruvar and Česká mateřská škola Končence) provide an education in accordance with Model A.

Model B, also called bilingual, requires that the same numbers of lessons of the minority language and the Croatian language are taught, making it possible for the students to take up a Czech language exam as a part of their school-leaving exams. Most social science classes and humanities are taught in the minority language (history, geography, art, music classes). Unlike the curricula of regular Croatian schools, the curricula of minority schools contain Czech history and culture lessons and further information about the Czech minority in Croatia. Other subjects, such as mathematics, physics etc., are taught in the official (Croatian) language. Since 2016, this model of education has been used at Gymnázium Daruvar while. In the past, a separate department was dedicated to the minority students, whereas now, the Czech students are integrated in a regular class.

Finally, Model C has been the most common model in minority education in Croatia, the Czech schools being no exception. Within this model, the “minority language education” is reduced to a subject called Czech language and culture, implemented in 2–3 extra-curricular lessons per week. Trying to help the students to be able to participate in the activities of the compatriot clubs called besedas (a form of Czech compatriot organizations), the subject is not only focused on the language but also on Czech culture (traditions, music etc.). Since the majority of the Czech schools have adopted Model C, major differences in the Czech language proficiency have emerged among the senior students: “Many people will know that there are Czechs living in Croatia but it will be at the expense of the knowledge of the Czech language. It can be seen at the schools; the interest in Czech culture based on Model C prevails but not so much the interest in the Czech language based on Model A” (R20).

Nevertheless, the Czech language has constantly been considered the foundation stone of the national identity of the Czechs in Croatia which has helped the compatriots resist assimilation for over two centuries. Is it at all possible for a minority group living abroad to keep its national identity despite the worldwide process of globalization, or even cultivate its own culture? And many other questions come to mind: “What significance does it have to endeavour to preserve and protect the national culture and its values?” (Hajko, 2006: 50). “Why should we strive to slow down and stop ethnic and language assimilation?” (Šatava, 2009: 50–51). It is obvious that there are no simple answers to these questions, although in trying to find one, we might refer to the lived reality of the Czech minority in Croatia which has been continuously making this enormous effort. For some reason, it is worthwhile for them – but why?

Above all, it is necessary to realize that one's national identity is closely related to their emotional experience and, therefore, in many ways, it becomes a source of their personal happiness and social enrichment (Šatava, 2009: 30). Similarly, historian Miroslav Hroch argues that “the relationship to one's nation always includes certain emotional features. The inter-war anthropology defined a nation as a ‘community of emotional life’ in which the emotional connections to the nation are derived from the members' everyday habits, forms of thinking and common practice”. Emotions play a key, irreplaceable role in preserving the national identity. Nevertheless, it is obvious that it is not good enough. “It is extremely difficult to try to categorize or create a typology of national symbols and other cultural phenomena that can help to strengthen the national identity” (Hroch, 2009: 240). Therefore, we are unable to provide a universally truthful answer to the question of how to resist complete



assimilation. However, using the example of Croatian Czechs, we can analyse the area where all the factors that come into play when trying to preserve the compatriot national identity meet – the minority education.

Method

In 2016, we carried out a research study focusing on the broad topic of the past and the present of the Czech minority in Croatia, specifically in the region around the town of Daruvar. The anthropological field research presented in this paper was based on the qualitative approach. We used in-depth interviews with the members of the compatriot community as the main technique of acquiring our data. However, the interviews were not constructed as biographical narrations – they were defined by an opening question: „What does it mean to you to be a Czech in Croatia?” Subsequently, other open-ended questions were used which allowed to keep the interviews as informal as possible and enabled the respondents to answer the questions at their own discretion. Only a basic framework had been prepared beforehand, setting the topics of the interview, not specific questions. This unique kind of semi-structured interview, also known as “interview with a manual”, is “as a consequence of having the topics set beforehand more structured than a completely free-form narrative interview and it is typically used when the research goal is limited to specific topics only” (Kreisslová, 2013: 62).

The respondents for our research were acquired in three ways: 1) via their official role in the community (in the Union of Czechs in Croatia, Czech kindergartens and primary schools etc.); 2) via snowball sampling by acquiring further contacts from our respondents; 3) via randomly approaching the compatriots at compatriot events or in the public space.

Step by step, it was possible to record interviews with over thirty respondents who expressed their permission to be recorded. In order to analyse and interpret the interviews, they were anonymised and marked with the respective numbers R1–R25; a few of the interviewees were occasionally marked with a letter as well (e.g. R4a, R4b) since some of the interviews were carried out in a group. The acquired data was continuously confronted with the literature and resources available to us during the field work. The data was analysed using the open-coding method and categorization.

For the purpose of this particular article, only the findings related to the topic of minority education – which turned out to be an essential theme in the entire research – have been chosen to be presented. A complex analysis and interpretation of our data is available elsewhere (Barteček, Máčalová, Kočí, 2017). The aim of the presented study is to describe the reality of education at Czech schools in Croatia at a general level and the changes which have occurred over a long time span regarding the preservation of the Czech national and cultural identity abroad. We presume that the Czech language plays a major role as a means of providing education. The role of the Czech language is considered to be substantial in that process.

Findings

For most of us, Czechs, who were born and raised in Czechoslovakia or, subsequently, in the Czech Republic, the declaration of our ethnic or national affiliation is fairly straightforward, regardless of whether we have ever contemplated it or consciously thought about it. We are Czechs. And yet, there are Czechs (thousands of miles away as well as those in our midst) who experience their national awareness. They are Czechs not because it is part of the natural order of things but because they want to be Czechs – because the affiliation to being Czech and the declaration of their national or ethnic identity is part of their lives, just like marriage, parenthood or any other long-term status that requires responsibility.

Asking about the Czech national identity abroad, we got many different answers. There was not one, however, which would not – directly or indirectly – refer to the Czech language: “*I am Czech, my parents were Czech, we*



have always spoken Czech” (R12). Being an immanent part of their identity, bilingualism plays an important role in the lives of Croatian Czechs: *“I feel like I’m both Czech and Croatian since both Czech and Croatian are my mother tongues”* (R7). In the past though, it was not an exception that the descendants of Czech colonists only learned Croatian when they started attending school or, alternatively, in the spontaneous contact with their environment: *“As a child, I didn’t speak Croatian at all, I only started learning it in the first grade”* (R5). The cause of that can be found in the predominant number of endogamous marriages due to which the Czech language kept being used as the compatriots’ mother tongue. However, Czech as a primary language has been disappearing, most likely due to the increased rate of mixed marriages: *“For me, the Czech language is my mother tongue and a value. Sadly, that’s just my opinion and it isn’t spread throughout the community very much”* (R18). Moreover, the phenomenon is reflected in the official census as well: *“The statistics show that only 70 percent of the compatriots who identify themselves as Czech consider Czech to be their mother tongue”* (R12). Therefore, the families are no longer able to help to develop their children’s language skills and the responsibility to do so is delegated to kindergartens and primary schools following Model A.

At the moment, Czech schools do not suffer from a lack of pupils – on the contrary, many parents who do not have Czech ancestors or those who generally do not identify themselves as Czechs show interest in Czech education: *“It has become a trend that Croatian children want to be enrolled in Czech kindergartens”* (R12). The trend originates in the good reputation of Czech schools on the national level and their good equipment: *“We’ve got children from Czech families and the families with at least some Czech roots, for example a Czech grandma, but we also have children who are not from Czech families. But the parents realise that for the same amount of money, the children will learn more. That’s one of the advantages – that they’ll learn one more language. Another advantage is that we are much better equipped because the Ministry of Education funds us as a minority kindergarten and the Czechoslovak Foreign Institute in Prague contributes as well”* (R5).

Apart from the quality of equipment and the actual education, the personal engagement of the Czech teachers who have to meet the specific requirements imposed on the minority schools represents another major strength of Czech schools compared to regular Croatian schools. The increased requirements include translating study materials into Czech and creating new ones but also more administrative work as well as many complications caused by the fact that some of the pupils do not speak Czech at all: *“When a child comes from a purely Croatian family, the teacher has to adapt to the situation as best as she can. When it happens that there are five children from Croatian families in the first grade, she might have to give instructions both in Czech and Croatian for the first few months. The children progressively move to the Czech language then”* (R7).

The teachers might strive to use Czech as the main means of communication in the classes but they are unable to prevent the increasing interaction of the students in the Croatian language during the breaks and after-school activities: *“We’re a Czech school but we’re in Croatia so our children talk to one another both in Czech and Croatian, we can’t prevent that. We can try to preserve Czech as long as we can. But the children might still switch to Croatian in the school’s corridors or at home. Somebody turns to someone, says a sentence in Czech and then speaks Croatian to somebody else. Those are the things that we can’t influence, for example, in the corridors during the breaks. There are different families. Even some families – in some of them, everybody speaks Czech and it really is the child’s mother tongue. And we also have pupils whose mom speaks Croatian, the dad speaks Czech, or we have children who have never been spoken to in Czech”* (R7).

That aspect precisely can be considered a weakness of the minority education which is quite new to the Czech minority: *“Our generation, as long as I can remember, we never talked in Croatian, we always talked in Czech”* (R17). In fact, it was not unusual that the people of other nationalities were influenced by the Czech language: *“Back then, 99 percent of the people in Končevice were Czech. Even the baker’s children, they came from Macedonia, attended the Czech school. (...) We would only speak Czech in Končevice. Even those who weren’t Czech would attend the Czech school. The baker’s daughter spoke Czech really well; she had no problems with*



Czech grammar” (R5). In the last few years, the influence of Croatian (so called croatisation) has become more intense. We can witness it both at school – „*Mainly Croatian can be heard during the breaks*” (R20) – and during after-school activities – “*Children finish dancing in Czech folk costumes and start talking in Croatian*” (R22).

The Czech education itself is sometimes criticised as well: “*Nobody was looking forward to the Czech language lessons at school; it didn’t get the children to become interested in participating in the activities of the community*” (R22). Similarly, some of the respondents were not satisfied with the class management at grammar school (called “gymnasium”): “*It was horrible at the grammar school, if I hadn’t liked the Czech language, I’d have never started studying it – because of that teacher of ours*” (R17). In the long run, we can observe some deterioration of the teachers’ language skills as well: “*I don’t know how things are now but when we were in the eighth grade, a teacher who didn’t speak English very well started teaching us; she only learned Czech at the faculty, we spoke Czech better than she did*” (R17). In the past, Czech intelligentsia came to Croatia and some of the compatriots completed their studies in the Czech lands so that they could work in favour of the Czech minority in Croatia. Now, those who leave to study in the Czech Republic stay in the land of their ancestors and are not motivated to return to Croatia: “*The teachers teaching at Czech schools are just the local pupils who graduated from universities in Croatia and returned to the Czech environment and are supposed to teach a subject that they studied in Croatian. I think it’s noticeable, especially at those schools*” (R18).

Being aware of these drawbacks, the representatives of the Czech minority strive to take actions that could help to preserve the Czech identity in Croatia in the next generations. A different opinion can be heard as well, though, mainly expressed by the parents and teachers, saying that “it is not necessary to encourage the children to speak Czech, we can only offer them to learn different languages and it is up to them which language they choose to communicate in” (Stráníková, 2017). It is impossible to force the children to learn Czech since it would mean restricting their personal freedom: “*On the one hand, there are parents who keep trying to instil the Czech language and culture in their children from a very young age, on the other hand, there are also children from Croatian families that have no relation to the Czech culture, let alone the language. We have to give the children as much as they require, not force them into anything*” (R20). It was also mentioned by the respondents that it is necessary to “build” the relationship to the Czech language first: “*Many of the children come from mixed families so it’s only logical that they speak Croatian as well. So it’s necessary to make sure that they experience Czech at a Czech school, not just the grammar, but in regular communication, to build love for the Czech language so that they’ll pass it on to their children*” (R7).

Studying at Czech schools is associated with the necessity of putting a great amount of effort and time into it and not everyone is willing to undertake that. Some people also fear that the children attending Czechs schools might not be able to adapt to higher levels of education where schooling in Czech is no longer available: “*Our neighbours have a little girl, I don’t know why they talk to her in Croatian, perhaps they’re worried that if they spoke to her in Czech, she wouldn’t be able to learn Croatian – but we all have learned Croatian*” (R17). The schools try to minimize this “handicap” by implementing some lessons in Croatian in the eighth, final year of study: “*In the eighth grade, we do it half-bilingually. It’s because of the transition of the students to secondary schools. Not all of our students will go up to the Czech department of grammar school. They’ll go up to technical schools or schools of economy where they’ll have lessons in in Croatian. So to make the transition easier for the children, we do in a bilingual way*” (R7).

On the other hand, the knowledge of another language is an undisputable benefit, regarded as highly valuable by the majority of Croatian Czechs: “*I tell the parents not to be afraid to send their children to a Czech school, that it makes them more self-sufficient as they have to learn everything by themselves*” (R5). Another respondent agrees with that: “*And it is important that the children learn the language, that the parents know why the language is so important for them. Especially these days*” (R12). Young Croatians and their parents often realise



that Czech can be a ticket to a better future for the children since the economic potential of a state located by the sea (such as Croatia) is highly dependent on tourism and Czechs constitute one of the biggest groups of tourists in Croatia. Every summer, Croatia is visited by about 800.000 Czech tourists.

Results, Conclusions and Recommendations

The language is considered to be a symbol of the Czech existence in Croatia by the majority of the compatriots. That is one of the reasons they put such an emphasis on it. It is no coincidence that the song called *Ta naše písnička česká* (*That Czech Song of Ours*), which is played at all the compatriot events, is very dear to them or even perceived as the Czech compatriot anthem. If Czech songs and Czech language stopped sounding in the area of Daruvar, would the Czech identity that has resisted assimilation for more than two centuries be truly gone? “In order to keep a language a functional means of communication in a minority group, it is necessary that the members of the community use it every day, in different situations; however, the private, interpersonal communication between the members of the community is the most important thing. That is why it is important for the young people to get used to talking in Czech because if they don’t get used to talking in Czech to the people around, will they feel the need to pass the language on to their children one day? Or is it that the language will no longer be one of the main features of their ethnic identity and they will identify themselves as Czechs based on other values?” (Stráníková, 2017).

It has progressively become more and more common that the Czech language is put aside and the representatives of the minority develop their identity based on other factors. Tradition, folklore, endogamy or the social life in the *besedas* might become the main aspects of the self-identification of the compatriots in Croatia, just like it is for those in America. The changes of the ethnic and cultural identity of Czech immigrants in the United States of America have been described by Alena Jaklová (2014). About 1.3 million people claimed to be of Czech origin in the census of 1990 (1.6 million claimed to be of Czechoslovak origin) which is the highest number of Czech compatriots living abroad in one country. Czechs have lived in the USA for about 160 years which is about one or two generations less than in Croatia. It should be noted that the Czech minority in the USA has always been very diverse since the migration took place at different times and for different reasons. Most of American Czechs identify themselves with Czech culture, they are interested in their ancestors and traditions but they do not speak Czech. We can assume that for them, the Czech language has been gradually losing its “communicative function and its only function left is the ethnically-symbolic one” (Jaklová, 2014: 92). Jaklová (2014: 97) argues that the ethnic and cultural identity of the compatriots has changed significantly over the years: “The Czechs once engaged in the national activities have become devoted Americans.” Today, the Czechs in the USA consider their Czech identity merely one of the possible forms of collective identity, standing next to other forms of identity that are not based on ethnicity (e.g. state-related identity, town-related identity, social identity etc.).

We must also consider that Czech compatriot communities do not create a separate world but that they are part of a multinational space. The Czech language spoken by Croatian Czechs is not as perfect as they wish it to be, on the other hand, the fact that some Croatian features have been actively incorporated into the Czech language leads us to believe that the language is alive, that it is actually used in everyday communication. The language is not reserved for a certain group of people or to be used exclusively at official compatriot events, it is not a cultural artefact (unlike the original folk costumes that the compatriot dancing groups wear). Not even standard Czech stays untouched by the development since it adopts vocabulary from different languages, mainly from English; the dialects are even more influenced by other languages, especially by Slovak, Polish or German, depending on the historical development or the proximity of the regions. The influence of the Croatian language is completely logical and natural.

Furthermore, when it comes to the Daruvar region, we can – without any exaggeration – say that the region is also being “bohemised”: If the local Croatians do not actively speak Czech, they at least understand it. Croatians



attend Czech kindergartens and schools, they participate in the activities of Czech *besedas* and are engaged in Czech social events. The same thing can be said about other significant national groups that live in the region of Daruvar and are influenced by Croatian Czechs as well, not even necessarily due to the Czech-Serbian or Czech-Bosnian mixed marriages. In a way, the coexistence of the Czech minority in Croatia is a typical example of inclusion of immigrants in a receiving country (to put it in the words of contemporary migration studies). The Czech presence in Croatia is an example of conflict-free inclusion that has not resulted in full assimilation or an ethnicity-based collision (even though there have surely been opportunities for that to happen).

In conclusion, it seems appropriate to ask the following question: Does the Czech minority education in Croatia play a major role in trying to fight the tendencies towards assimilation, mainly concerning the language aspect of identity? We believe that the process of assimilation could be slowed down by a consistent development of the teachers' language proficiency; however, it cannot be stopped completely. National identity, as a process of conscious self-identification, is certainly not a simple matter. The concept of identity cannot be reduced to an idea of a national identity tied to a state in which a person was born. Therefore, it is not possible to come to a similar conclusion concerning the language that a bearer of a national identity prefers.

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References

- Barteček, I., Máčalová, J., Kočí, V. (Eds.). (2017). *Po českých stopách na Daruvarsku*. Olomouc: Univerzita Palackého.
- Brouček, S., et al. (2017). *Migrace z české republiky po roce 1989 v základních tematických okruzích*. Praha: Etnologický ústav AV ČR.
- Český lidový kalendář 2016 (2015). Daruvar: Jednota.
- Daněk, A. (Ed.). (1997). *75 let České základní školy J. A. Komenského v Daruvaru, 70 let České mateřské školy Ferda mravenec v Daruvaru*. Daruvar: Jednota.
- Hajko, D. (2006). Jednota v různosti – překonání názorového izolacionismu v kulturně-civilizačních procesech (národní kultura a evropská integrace). *Identita ve vztahu k národnostním menšinám*. Praha: Komise Rady hl. m. Prahy pro oblast národnostních menšin.
- Hroch, M. (2009). *Národy nejsou dílem náhody*. Praha: SLON.
- Jaklová, A. (2014). *Proměny etnické a kulturní identity českých přistěhovalců ve Spojených státech amerických. Interpretace analýz českoamerického periodického tisku 19. a 20. století*. Praha: Národohospodářský ústav Josefa Hlávky.
- Janotová, L. (Ed.). (2009). *Česká základní škola Jana Amose Komenského 1997-2007: deset let činnosti slovem i obrazem*. Daruvar: Jednota.
- Kolouch, O. (1993). České školství v Chorvatsku po II. světové válce. *Přehled kulturních a historických, literárních a školských otázek*, 1993(14), 87-97.
- Kreisslová, S. (2013). *Konstrukce etnické identity a kolektivní paměti v biografických vyprávěních českých Němců*. Praha: Filozofická fakulta Univerzity Karlovy.
- Matušík, J. (1993). České školy v Chorvatsku (1922–1941). *Přehled kulturních a historických, literárních a školských otázek*, 1993(14), 65-86.
- Ministarstvo znanosti i obrazovanja (2017). *Obrazovanje na jeziku i pismu nacionalnih manjina*. Retrieved from <https://mzo.hr/hr/rubrike/obrazovanje-nacionalnih-manjina>
- Stráníková, H. (2017). Jazyk jako jeden ze základních pilířů identity. *Po českých stopách na Daruvarsku*. Olomouc: Univerzita Palackého.
- Šatava, L. (2009). *Jazyk a identita etnických menšin*. Praha: SLON.
- Vaculík, J. (2009). *České menšiny v Evropě a ve světě*. Praha: Libri.



Reflection on cultural diversity in Czech schools

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Abstract

The study aims to explore the value orientation among the representatives of Czech educational system – teachers and students – and their attitudes towards cultural minorities in order to get an overview about the perception of heterogeneity in contemporary Czech society, specifically focused on the status and perspectives of multicultural education. The data was gathered by the researchers' own questionnaire combining closed-ended, half-open and open format questions, sometimes giving respondents the possibility to substantiate their other answers. The acquired data were primarily processed through the statistical methods of the SPSS program, however, during the open-ended questions analysis, we also used some qualitative methods such as open coding and categorization. Teachers and students are influenced by their mutual interaction, which is why we came to the conclusion that effective multicultural education is important for both groups. Unfortunately, accepting the ideas of multiculturalism that are very distant to the Czech society and particularly the acceptance through the pedagogical process is going to be a long-term process.

Keywords: Diversity, Culture, Multicultural education, Values, Attitudes

Introduction

The contemporary society is living in an age of globalization, and along with that, it is also an age of plurality of ethical and political values. We ought to accept the reality of a world inhabited by people with different experiences, creating various stories about the world, living their lives in different ways and holding different political views and religious beliefs. When viewed from the position of postmodernism, it means that we do not live in a single world, but that we de facto inhabit a number of different worlds and we use varied, personal vocabularies to describe them. Globalization does not only bring new opportunities in its wake, but it also brings difficulties in the understanding of intercultural communication. A sound education which is capable of leading to the support for tolerance in a multicultural coexistence and general tolerance towards diversity, and also capable of implying a development of cross-cultural communication, should therefore be an implicit part of education in contemporary societies.

We are aware that the school environment is not the only factor influencing the values and attitudes of the younger generation, but that the family (socio-economic) environment and the media also have a significant influence. However, schools are a reflection of the society to which they belong (Sleeter, Grant, 2009), just as many research probes focused on the issue of the media construction of the reality have revealed, that the mass media interfere significantly in the transformation of our society. We returned here to the themes that we have discussed previously (Preissová Krejčí, 2014; 2013), and through our experience in managing the ESF OP VK project "Anti-prejudice workshops" we focused on the practical application of the ideas of multiculturalism in the educational process. Subsequently, we dealt with the same topic within the SGS 2014–2015 project, under which we carried out a research in 2014–2015 which sought to uncover the value orientation of adolescents, with a focus on the multicultural aspects of their education.



Method

Between September 2014 and June 2015, we conducted a broad research among the elementary and secondary school students and teachers in Olomouc, Zlín and Moravskoslezský district. The research focused on their values and attitudes towards the members of various ethnic and cultural minorities. To gather our data, we devised our own questionnaire, by combining different closed-ended, half-open and open format questions, sometimes giving our respondents the possibility to substantiate their own answers. The acquired data were primarily processed through the statistical methods of the SPSS program, however, in order to analyse the open-ended questions and substantiations, we also used some qualitative methods such as open coding and categorization (Skutil, 2011). The categories, that constitute the basis of our categorization, were not created a priori, but emerged from a deep analysis of the open answers, that represent the superstructure of every quantitative research; where the “hard” data face their limits, open answers provide a new, different kind of information that is highly valuable for the researcher as well (Disman, 2008: 163; Švaříček, Šed'ová, 2014).

Our research sample consisted of 228 teachers from 26 elementary and secondary schools and 915 students from 15 elementary and secondary schools. Our respondents were between 24 and 68 years of age, therefore 45 was a median value and the most frequent age was 37. Also, most of the teachers (85.0 %) were women. The average age of „our” students (as well as median and modus) was 14 years and the gender layout was very even with a slight superiority of women (51.1 %) to men (48.5 %). This also corresponds with the gender layout of the Czech population and therefore confirms the representativeness of our research sample (ČSÚ, online).

Some of the questions in both types of the questionnaires matched in some points as we wanted to be able to compare them. The questionnaire starts with a few identification questions, followed by the content questions which we can differentiate as 1) those that were designed to determine the respondents’ attitudes towards foreigners or specific ethnic and cultural groups and 2) those designed to determine the attitude of other people towards foreigners or specific ethnic and cultural groups as they were mediated by our respondents. Firstly, we focus our attention on which general values our students and teachers consider the most important and less important. Thereafter, we will analyse their attitudes towards specific ethnic or religious groups.

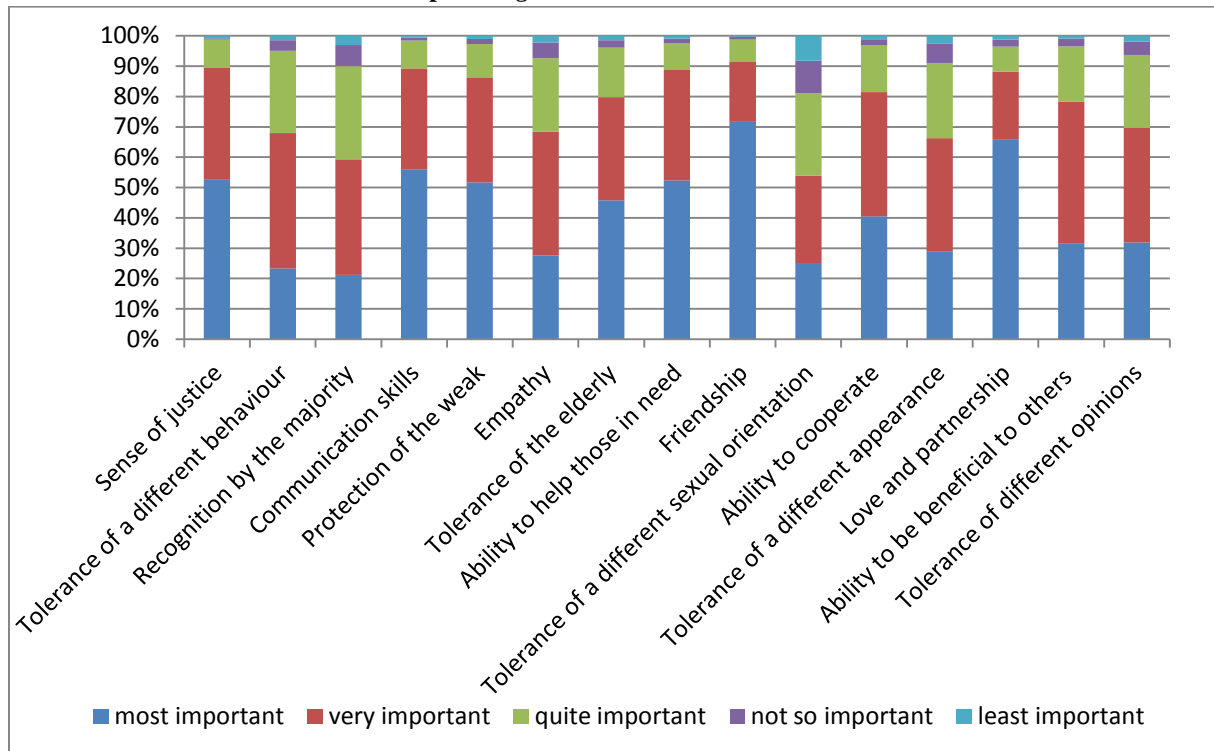
Findings

Values of students and teachers in the context of otherness

By using one of our closed-ended scale questions, we tried to discover the significance of the values, which we chose for this questionnaire. Our intention was to confront the results of the value orientation of our respondents with the answers we got from the questions dealing with otherness.



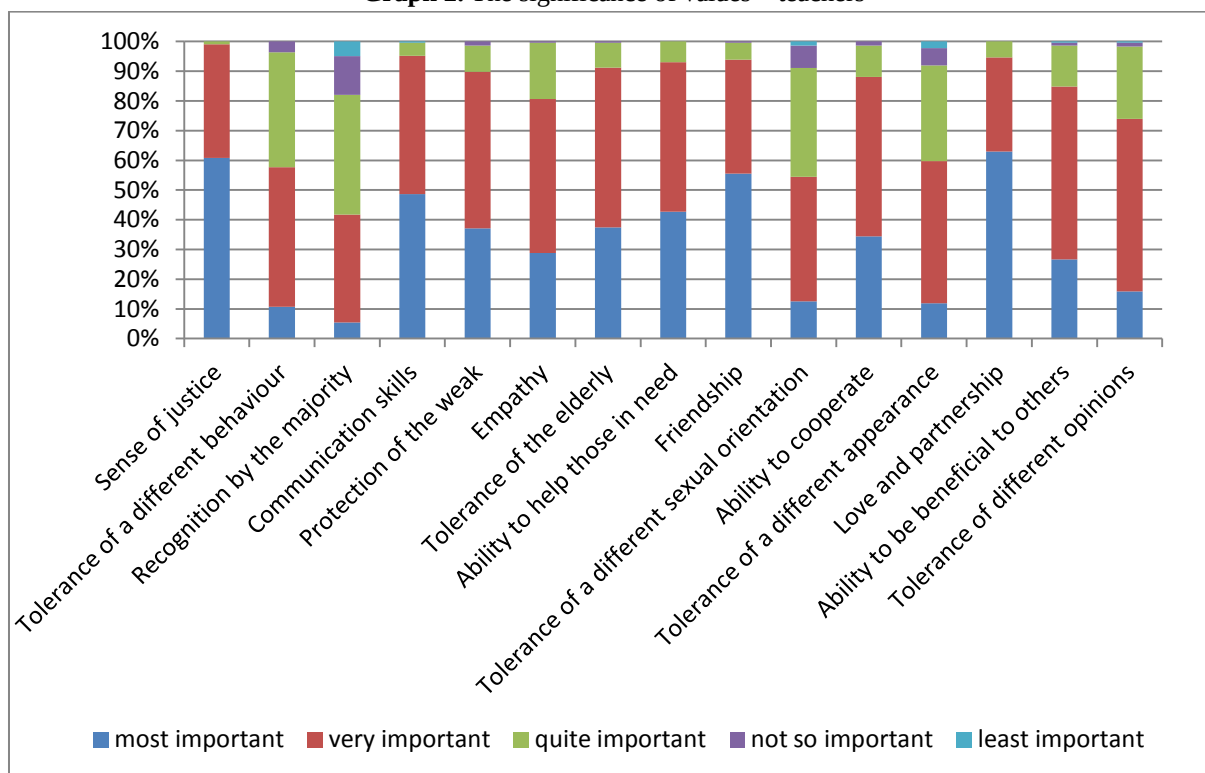
Graph 1. Significance of values – students



The most significant value evaluated by the students was Friendship, which was marked as the most important in 71.6 % of the cases of the answers and as very important in another 19.8 %. Love and partnership were also considered very significant and chosen as the most important in 66.6 % and very important in 22.2 % of the cases. Among the other significant values, Communication skills, Sense of justice and the Ability to help those in need were chosen. On the other side of the scale, Tolerance of a different sexual orientation was considered not so important in 10.8 % of the answers and the least important in 8.2 % of them. Some of the other values were assessed very differently by different respondents, especially the value of Tolerance of a different appearance.



Graph 2. The significance of values – teachers



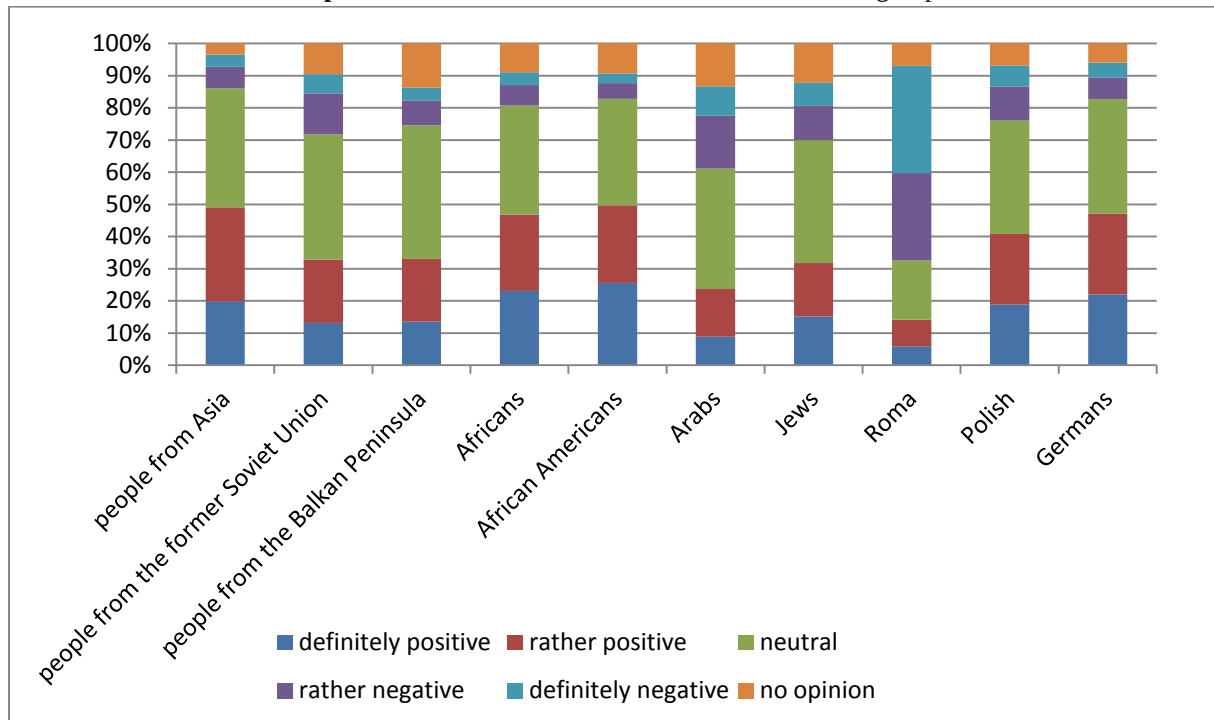
The values, that the teachers regarded as the most relevant are Love and partnership (63.0 %), Sense of justice (60.8 %) and Friendship (55.5 %). Some other values were also considered important, e.g.: Communication skills (the answers “most important” and “very important” combined represented 95.2 % of all the answers), the Ability to help those in need (92.9 %), Tolerance of the elderly (91.1 %), Protection of the weak (89.8 %) etc. As the less relevant and the least significant values, the teachers viewed Recognition by the majority (17.9 %), Tolerance of a different sexual orientation (8.9 %) and Tolerance of a different appearance (8.0 %).

Attitudes towards the representatives of otherness

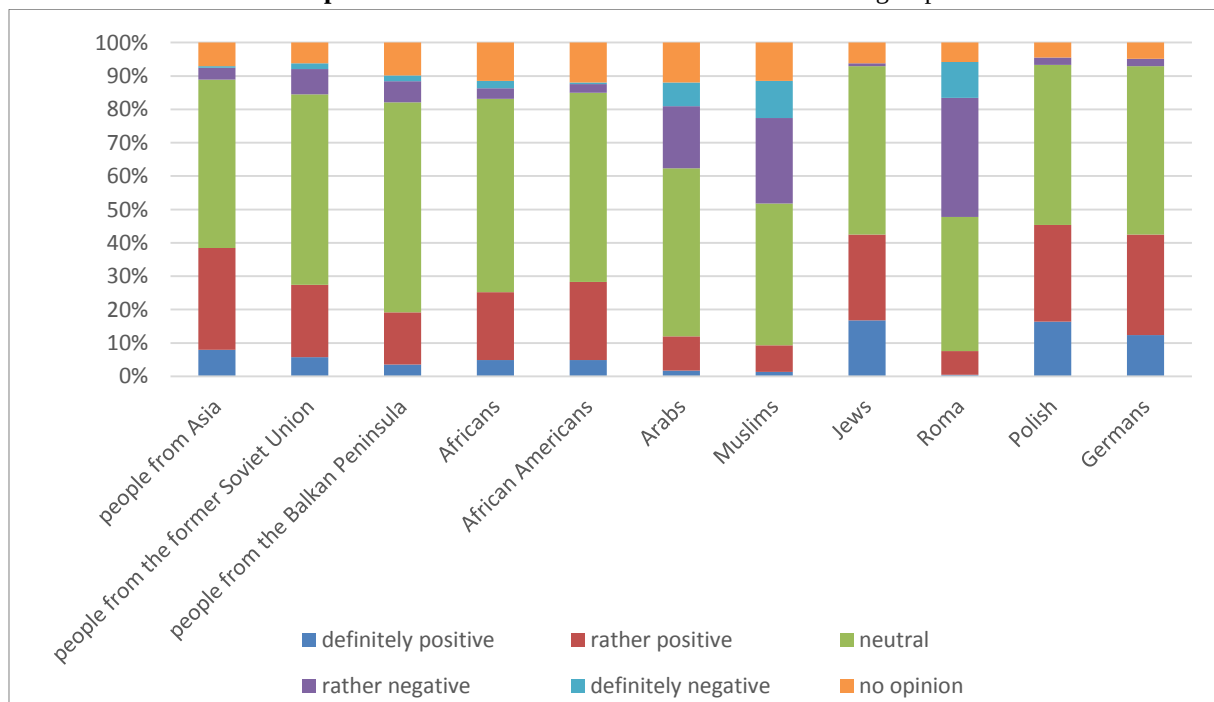
To find out what attitudes towards different ethnic and cultural groups are adopted by our respondents, we used a closed-ended question with the possibility of a verbal justification of the answer. We divided the question into ten parts according to the specific groups we had chosen: the people from Asia, people from the former Soviet Union, people from the Balkan Peninsula, Africans, African Americans, Arabs, Muslims, Jews, the Roma, the Polish and Germans.



Graph 3. Attitudes of students towards different ethnic groups



Graph 4. Attitudes of teachers towards different ethnic groups



It is very clear that in the case of the students, neutral and positive attitudes are more common than the negative attitudes with only one exception, the Roma minority; the number of the positive answers, however, was the lowest when evaluating the Arabs.



The teachers also assessed their own attitudes to the majority of these groups as mostly neutral but the positive attitudes predominated over the negative ones; again, with the exception of the Roma minority. The most common explanations of the neutral attitudes expressed a lack of the respondent's knowledge of the groups and their members, which made it impossible for them to form an attitude other than neutral.

Our respondents evaluate their attitudes towards other ethnicities and cultures in a very similar way. The students chose the neutral attitude in 46.2 %, mostly positive in 17.1 % and in 13.3 % they answered that they had no opinion. The teachers assessed their attitude as neutral in 60.0 %, positive in 29.3 % and negative in 8.8 % of all of the cases. We have previously mentioned that the closed-ended part of the question was strengthened by the respondents' justifications. These, we later subjected to a qualitative analysis (open coding and categorization). Among students, we identified 619 answers and divided them into 11 codes. When it came to the teachers, we received 105 answers which were distributed into 12 codes. The most apparent feature in these answers is the emphasis on the reluctance of members of different ethnic groups to assimilate, behave according to the principles recognized as desirable in the Czech Republic ("It depends on their behaviour, on their willingness to assimilate"). This kind of sentiment constitutes 22.1 % of the students' answers and 34.3 % of the teachers' ones. More than 10.0 % of them emphasised that their attitude depends on what religious or ethnic group a person is a member of. The same approach was registered in less than 3.0 % of the answers in the teachers' questionnaires. The respondents usually reflected on their own experience even though it was absent from the answer (21.9 % of teachers and 8.1 % of students). In less than 10.0 % of answers the respondents talk about equality without any distinction among all people (9.5 % of teachers and 8.1 % of students). About 5.0 % of answers of our students mentioned fear of an increase in the numbers of the members of ethnic minorities in the Czech Republic, combined with the sense of patriotism or even nationalism. Among the teachers, this approach was identified only in one case.

The Roma minority – bearers of negative stigmas

The Roma minority represented the only exception from the neutral and positive attitude of our respondents towards different ethnicities and cultures; in their case the attitude was mostly rather negative and definitely negative (60.5 % from students and 46.0 % from teachers).

We were looking for the roots of these negative attitudes by using an open-ended question that was asking our respondents what the first thing that comes to their mind when someone says "the Roma minority" is. The results show that more than 70.0 % of these associations of our teachers and more than 56.4 % of those of students have negative connotations since only 23.7 % teachers' and 10.8 % students' answers were neutral or without any emotional character. Ambivalent answers were combining positive and negative tone and appeared in 4.0 % in the case of the teachers and in 5.2 % in the case of the students. Strictly positive answers appeared in 1.5 % of the answers of our teachers and 3.0 % of answers of our students. The main topics the answers focused on are connected with the respondents activities and behaviour (e.g.: abusing social benefits, criminal activities, murders, vandalism), ascribed traits and characteristics (e.g.: they refuse to work) and ascribed identity (e.g.: gypsies – orig. cikáni) or emotions (e.g.: fear, suspiciousness).

These answers did not expose the real roots of the respondents' attitudes, but reveal that with the label Roma are automatically, mostly unconsciously predominantly connected with negative qualities, characteristics or events, and thus this designation carries a significant negative stigma through which the individuals who are ranked in this ethnic group are regarded and complicates their successful integration into society. Our students mentioned the abuse of the social benefits and the excess of money they have thanks to that.



Results, Conclusions and Recommendations

In the case of both the teachers and the students, the most appreciated and important values are those related to the personal relationships among individuals. The same cannot be said about the values related to the tolerance of otherness, individual uniqueness of each and every person and our mutual differences in sexual orientation, appearance etc.

Jan Průcha mentions “ethnicity consciousness of the youth” and divides students of the middle school age into groups of antiracist, racist and xenophobic also known as undefined group (Průcha, 2011: 49–50). However these categories are not consistent with our own results. For example, the xenophobic group is, according to Průcha, characterized as follows: “When different races behave well, they can move around freely” (Průcha, 2011: 50). But our respondents hardly ever mentioned races and when we asked them about their attitudes toward different ethnicities they usually answered in this manner: “They can be both decent and indecent”. Or even: “It does not matter, if they are foreigners when they are friendly; sometimes they even behave better than people who were born here”. These statements are neither antiracist nor xenophobic, they are neutral, as neutral as shortage of information or lack of interest and Průcha did not accept that as a possible way of thinking. It is time to think how to encourage the interest in otherness among the students and how to show them that respect and tolerance for otherness are one of the most important values for mutual coexistence of different ethnic and religious groups.

The students’ image about the Roma people who are living in the excluded localities is very foggy and is related to the spatial separation of these localities (Preissová Krejčí, 2013: 17). This chasm in conceptions about the life of the Roma minority is therefore getting more and more obvious. Social exclusion is a part of social inequality and stands opposite of the social and economic privileges. Johnson (2001: 54) mentions, that “historically one of the ways that white men have justified their domination over black men has been to portray them as sexual predators who pose threat to white women.” The Roma people are pictured as criminals and vandals and therefore as a threat for the whole of Czech society. This image is often used as justification for any excessive behaviour towards the Roma nation from the superior social or economic position. This image therefore created the image of unchangeable “Roma essence”, firmly definable by physical appearance (Jakoubek, 2004: 69). Any person belonging to the Roma minority is then a bearer of the typical Roma identity and therefore also of specific character traits. This one specific image is shared by most of our respondents, teachers and students alike.

Fundamental inadequacy of this image of the Roma people is the fact that in Czech Republic it is called “the Roma problem”. Allan G. Johnson (2001: 10) warns, that “the “problem” of race cannot be only a problem of being black, Chinese Sioux or Mexican. It has to be more than that, because there is no way to separate the “problem” of being, say, black (or in our case being Roma) from the “problem” of not being white. And there is no way to separate the problem of not being white from being white.” This is therefore a mutual affair that should be resolved inside its own context and by the whole of society, without excluding the privileged.

The attitudes of our respondents towards the ideas of multicultural coexistence are generally ambivalent, rather non-radical. However, both the teachers and the students share negative attitudes towards the Roma, who are considered the main problem of multicultural education. In the Czech Republic, the Roma are the group of “the different” that the teachers and the students are most frequently confronted with, personally or through the media. Therefore, the findings of our research confirm that, based on the concept of our American colleagues, even in the Czech Republic, “schools are a reflection of the society to which they belong” (Sleeter, Grant, 2009: 19). It is clear that the attitudes of the teachers and students are influenced by their mutual interaction, which is why we came to the conclusion that multicultural education is important as for the students as it is for their teachers.



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References

- ČSÚ. (2014). *Obyvatelstvo podle pohlaví, věku a rodinného stavu*. Retrieved from <https://www.czso.cz/documents/10180/20541835/30000414k01.pdf/1a3310e8-ed0f-43f6-a0c7-f5871b963cb2?version=1.1>
- Disman, M. (2008). *Jak se vyrábí sociologická znalost*. Praha: Karolinum.
- Jakoubek, M. (2004). *Romové – konec (ne)jednoho mýtu: tractatus culturo(mo)logicus*. Praha: BMSS-Start.
- Johnson, Allan G. (2001). *Privilege, Power and Difference*. New York: McGraw-Hill.
- Preissová Krejčí, A. (2013). Multikulturní koncept ve vzdělávání a výchově v České republice. *Sociální exkluze v multikulturních společnostech. Komparace současné situace v České republice a v Mexiku*. Olomouc: Univerzita Palackého, pp. 11–45.
- Preissová Krejčí, A. (2014). *Multikulturalismus – ztracené paradigma?* Olomouc: Univerzita Palackého.
- Průcha, J. (2011). *Multikulturní výchova: příručka (nejen) pro učitele*. Praha: Triton.
- Skutil, M., et al. (2011). *Základy pedagogicko-psychologického výzkumu pro studenty učitelství*. Praha: Portál.
- Sleeter C. E, Grant C. A. (2009). *Making Choices for Multicultural Education*. New York: John Wiley & Sons.
- Švaříček, R., Šedřová, K., et al. (2014). *Kvalitativní výzkum v pedagogických vědách*. Praha: Portál.



The role of social capital and cultural capital in the process of lifelong learning

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Abstract

This paper presents the results of sociological quantitative research conducted in south-eastern Poland on a sample of 2,500 respondents. The purpose of this article is to confront the theory of cultural capital and social capital social reality in cross-border regions of the south-eastern part of Poland, with particular emphasis on the role played by the process of lifelong education. This confrontation will include both theoretical reflection on the nature, focusing on the problem of the application of the theory of cultural capital and social capital to describe societies of the south-eastern part of Poland. The specific objective of the paper is to analyze the concept of cultural capital and social capital as a factor of computers skills and language skills inhabitants of Poland. The present paper is an attempt to reflect on the role of social capital and cultural capital in the process of formation and functioning of the knowledge society. In the theoretical paper will be appealed to the role of social capital and cultural capital in contemporary society. The paper will be to establish the classic manuscripts of: Pierre Bourdieu, Robert Putnam, James Coleman or Francis Fukuyama, raising the problem of social capital and cultural capital. The concepts of social capital and cultural capital are today one of the most frequently raised concepts in the social sciences dealing with the changes taking place in the modern world. Social capital is a frequently discussed in the literature and examined empirically, factors affecting the formation, operation and development of the knowledge society.

Keywords: Social capital, Cultural capital, Computer skills, Language skills, Knowledge society.

Introduction

Emphasizing the role of immaterial types of capital as factors of development has become very common in the social sciences over the last twenty years. Apart from the concept of human capital and cultural capital, the concept of social capital is another attempt to theoretically complement the economic model in order to explain various phenomena both in the field of economy and in other areas of social life, including problems of regional development. The interest of sociologists in this issue is primarily related to the search for factors that enable and facilitate solution of problems of social groups, local communities and entire societies. In this connection it is assumed that social relationships and networks of interpersonal relationships can be seen as a resource thanks to which certain benefits can be achieved. Despite numerous studies on this subject, contrary to many other social science terms, there is no strict definition of social capital. The concept of social capital is defined in many different ways and in consequence it is not unambiguous. The list of elements that make up social capital is quite long, and the most important ones usually include diverse interpersonal connections, confidence, willingness to reach consent, set of common values and behaviors, as well as social networks conditioning joint activities. Social capital involves everything that determines collective activities for the common benefit in every field: economy, culture or politics. The theory of cultural capital is first of all based on Pierre Bourdieu's considerations.

The term "cultural capital" has been introduced as a key issue into the theory of social science. At the general theoretical level, this concept is used in the theory of reproduction of social structure published by Pierre Bourdieu. This theory was later developed by this sociologist in collaboration with Jean-Claude Passeron (Bartoszek, 2003, p. 22). Bourdieu and Passeron define cultural capital as "cultural goods provided by various family pedagogical activities whose value, as cultural capital, is the function of the distance between the cultural arbitrariness imposed by the dominant pedagogical activities, and cultural arbitrariness implemented by family pedagogical activities in different groups or classes (Bourdieu, Passeron, Neyman, & Kłoskowska, 1990, p. 60). According to Bourdieu, cultural capital is a system acquired by individuals, consisting of hierarchical and



approved cultural contents, defining legally valid values, knowledge, aspirations, lifestyles; which are prerequisites for achievements while competing with others (Bartoszek, 2003, p. 22).

Method

The results of the study presented in this paper include the research material collected within the framework of the project "The model of local community activation and IT tools through MASiT_COD co-design". As a part of the research, we managed to obtain very interesting and di-verse data. For their acquisition, the PAPI (Pen And Paper Interviews) method was used, and the research was carried out between November 2015 and July 2016 in five districts of South-Eastern Poland - Podkarpackie Voivodship. In total, 2,131 PAPI interviews were carried out.

Social capital and human capital - theoretical context of research

Social and cultural capital has become one of the most widely used concepts in social sciences in recent years. Theories dealing with these two types of capital proved to be particularly useful in attempt to explain the changes taking place within the social structure of post-communist societies. These changes can be seen at the level of change of attitudes and behaviors in the lives of representatives of different social classes. You can also try to grasp their consequences at the level of general mechanisms and directions of social mobility in the vertical sphere, i.e. between layers and classes, or horizontal mobility, between different segments of social structure (Bartoszek 2003, p. 7). The particular usefulness of Pierre Bourdieu's cultural capital theory, as well as the very concept of cultural capital in analyzing the changes taking place in the societies of Central and Eastern Europe after 1989, was emphasized by Ivan Szelényi. He wrote that the unprecedented increase in the value of cultural capital is evident when we look at the composition of political class that has come to power in recent years. In post-communist societies, the power is fully con-trolled by intellectuals and professionals. Presidents, prime ministers, ministers, parliamentarians, mayors and almost all leading persons both in the ruling and opposition parties are intellectuals or specialists. In capitalist countries, specialists play an important role in politics, but they are usually lawyers or economists. Humanistic intelligentsia rarely gets to the top of the political ladder. In post-communist societies, however, occupation of key positions in the structures of power by humanistic intellectuals is a rule rather than an exception. Leading post-communist politicians are playwrights, historians, sociologists, anthropologists and philosophers (Szelényi et al. 1995, p. 17).

In the literature, it is generally emphasized that social capital facilitates cooperation within groups and international corporations and extends the capacity of collective activities in order to achieve mutual benefits. In addition, it strengthens the collective learning process and is a key element in creation, diffusion and transformation of knowledge; those processes are of crucial importance for innovation and competitiveness. Finally, social capital cements the values that pro-mote networks as impulses to create regional clusters and regional innovation and policy strategies. This issue is especially important for underdeveloped regions with weaker social capital and weaker dissemination of science and knowledge. Under such conditions, those regions must meet the fundamental challenges of technological and social change (Kukliński, 2003, 9-10). The location factors are no longer the proximity of natural resources, the supply of labor or a large local market but the availability of adequate resources of cultural and social capital. In the social sciences in recent years, the concept of social capital is one of the most widely used theories. As Alejandro Portes points out, in recent years, the notion of social capital has become the starting point for formulating one of the most popular sociological theories that has been transferred into everyday language (Portes, 1998, p. 2). Despite numerous studies on this subject, contrary to many other social science terms, there is no strict definition of social capital. The concept of social capital is defined in many different ways and in consequence it is not unambiguous. The list of elements that make up social capital is quite long, and the most important ones usually include: diverse interpersonal connections, confidence, willingness to reach consent, set of common values and behaviors, as well as social net-



works conditioning common activities. Social capital involves everything that determines collective activities for the common benefit in every field: economy, culture or politics. (Kotarski, 2013, p. 17-18).

In scientific literature, the notion of cultural capital is primarily used in reference to Pierre Bourdieu's theory of social structure reproduction that was developed in collaboration with Jean-Claude Passeron. At this point, it is worth mentioning that the tenet of Bourdieu's concept was based on the use of the notion of capital to describe the whole of the social world. Bourdieu found that relationships and social inequalities can be described by a system of capitals in which, apart from the classical economic capital, analogous notions of social capital and cultural capital are used. (Zarycki 2009). The French sociologist defined the capital as "collected in work (in the materialized form or in its »objectified« shape, embodied in something), which, when it is privately appropriated, i.e. on an exclusive basis, by a person or a group of people, it allows them to usurp the social energy in form of objectified or live work" (Bourdieu 1986, s. 241). Bourdieu's theory describes the reproduction of distances and structural differences by the educational system. This is achieved by means of symbolic violence mechanisms and social selection of individuals, conditioned by discrepancy between the inherited capital of their native habitus and the cultural habitus of dominant classes. In this theory, "cultural capital" is understood as provided to individuals system of hierarchical and approved cultural contents that defines legitimate values, knowledge, aspirations and lifestyles, which are the means of achieving success in competition with other persons. (Bartoszek 2003, p. 22). In his reflections on cultural capital, Bourdieu stated that the capital can exist in three forms: in the embodied state, i.e., in the form of long-lasting dispositions of the mind and body; in the objectified state, in the form of cultural goods (pictures, books, dictionaries, instruments, machines, etc.), which are the trace or realization of theories or critiques of these theories, problematics, etc.; and in the institutionalized state (Bourdieu 1986, p. 243). As the essential component of such concept of cultural capital, Bourdieu recognizes the linguistic capital, i.e. the ability to use complex logical and conceptual structures developed in the course of education and shaped to a large extent by the language spoken in the family as the primary group. According to P. Bourdieu and J.-C. Passeron, the cultural capital of an individual is most strongly influenced by father's education and occupation and it impacts the level of their school performance. (Bourdieu et al. 1990, p. 130–131). The cultural capital of students coming from higher social classes gives them a clear advantage over students coming from lower classes in the transition of social selection, from the earliest levels of education on, it favors them in getting admission to better university faculties and achieving better results. (Bourdieu et al. 1990, p. 152–153). In conclusion, it can be stated that the concept of so defined cultural capital makes it possible to deepen the perceptions of the role of the social status of parents in achieving higher positions by their children (Bartoszek 2003).

Findings

Nowadays, information has become one of the most desirable goods. Limitations in access to sources of electronic information or lack of skills in using them, is considered to be a modern form of illiteracy. In the era of development of electronic types of communication and flexible types of employment, the place of residence loses its importance. Thanks mainly to the wide-spread access to the Internet and its increasing capacity, peripheral location has ceased to be regarded as a barrier of development. We are dealing with the increasingly widespread phenomenon of working at home and communicating with business partners using modern types of electronic communications. Therefore, access to information is such an important aspect of social capital building. If the residents are well informed, the information channel between them and the representatives of authorities, social organizations, will not be disturbed and the process of social capital building will be unobstructed. The level of social trust will increase, the residents will broaden their knowledge of social organizations and their activities. Access to information will make it easier for residents to be involved in joint initiatives and their level of interest in the local community affairs will increase. The importance of getting access to information resources in the process of social capital building was highlighted by James Coleman, who

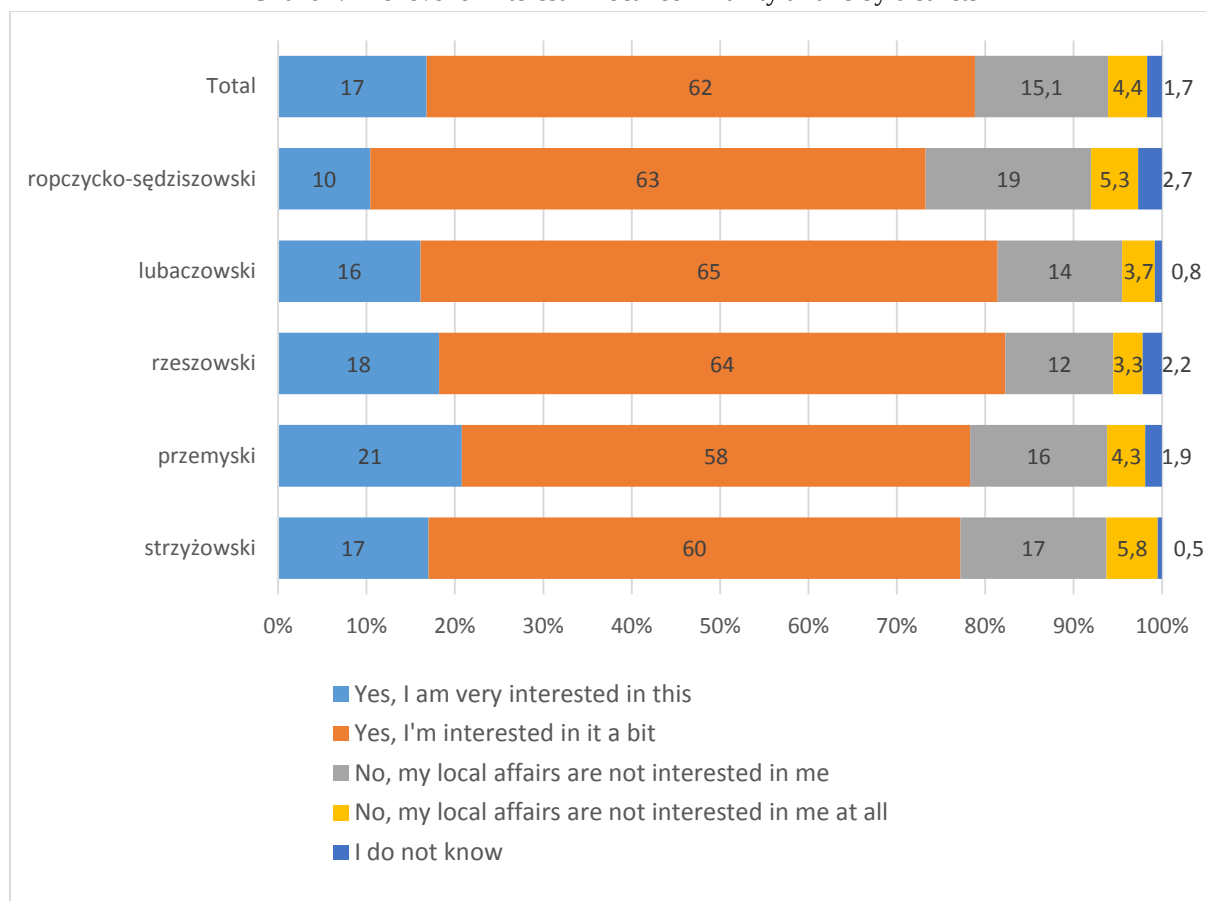


states that information is a part of an action, and in this connection the ability to access information, as a component of social relationships, is an important form of social capital. (Coleman, 1988, p. 104-108)

The research has shown that the vast majority of inhabitants of five districts of Podkarpackie Province is interested in what is happening in their local community. The level of that interest was varied. More than sixteen percent of respondents said that they were very much interested in affairs concerning their place of residence (16.8%). Nearly two thirds defined the level of their interest as medium, stating that they are a bit interested in those affairs (62.1%). Every fifth respondent is to a limited degree or not at all interested in what is happening in their village or town (15.1% are rather uninterested in affairs concerning their place of residence, 4.4% are not interested in them at all).

The level of interest in local community affairs was different due to the place of residence, i.e. the district in which the respondents lived. The highest level of interest was observed in Przemyśl and Rzeszów districts. In these two districts the highest response rate "I am very much interested in affairs concerning my place of residence" was recorded. The lowest level of interest was noted in the district of Ropczyce-Sędziszów..

Chart 1. The level of interest in local community affairs by districts



The level of interest in local community affairs also translates into conversations with other residents about issues regarding their common locality (Table 1). More than half of respondents who often talk to others about issues regarding their place of residence showed a high interest in what was happening in their locality (55.2%). Seventy percent of respondents, who never talked to anyone about what was happening in their area, were practically not interested in local affairs at all (70.6%). The Pearson's chi-squared test showed that there is a



statistically significant relationship between the level of interest in local community affairs and conversations with other inhabitants about their common place of residence.

For the surveyed residents of five districts, the value of Pearson's contingency coefficient was 0.612. This is a very high strength of the relationship.

Table 1. Does the respondent talk with other people about town affairs? The level of interest in what is happening in the local community (cross-table).

Do you talk with other persons about your town's affairs?	Tell me, please, if you are generally interested or not interested in what is happening in your place of residence?			
	Yes, I am very much interested in it.	Yes, I am interested in it, but just a bit	No, I am not interested in my town's affairs	No, I am not interested in my town's affairs at all
Yes, very often	55,2	7,6	2,3	2,4
Yes, from time to time	35,8	61,4	16,2	5,9
Yes, but very seldom	6,2	26,7	48,7	21,2
No, I never talk about it	2,8	4,3	32,8	70,6
Total	100,0	100,0	100,0	100,0

An important element of communication between residents and local authorities is the transparency of activities taken up by authorities and the awareness of the people's ability to control the authorities. The respondents were asked the following question: "Do you think that in your place of residence, people like you have the ability to control the activities of municipal authorities or are they deprived of that opportunity?" The analysis has shown that in opinion of residents, their ability to control the activities of authorities was rather low. More than one third believed that their ability was medium (38.0%). Not many less respondents thought that their ability was low or none (33.2%). Every fourth respondent pointed out that their ability to control the authorities was high or very high.

Table 1. Residents' ability to control activities of local authorities.

Residents' ability of to control activities of local authorities	%
Their abilities are very high	3,9
Their abilities are high	22,3
Their abilities are medium	38,0
Their abilities are low	19,6
They have no such abilities	13,6
I do not know, it is difficult to tell	2,7

As mentioned above, limited access to electronic sources of information or no skills in using them are currently regarded as a modern form of illiteracy. Therefore, in the course of the research it was analyzed if the respondents used electronic information sources in form of a computer, a tablet, or using the Internet and what they used a computer or a tablet for.

More than three quarters of respondents use a computer or a tablet as a tool for work, playing games or communication. The level of variation in the use of modern types of communication in form of a computer or a tablet was different due to the respondents' place of residence, i.e. the district. The highest level of using these tools was observed in respondents from the districts of Strzyżów and Ropczyce-Sędziszów. Slightly lower values were obtained in Lubaczów and Rzeszów districts, and the lowest ones in the district of Przemyśl. A similar trend can be observed with regard to using the Internet. Seven out of ten respondents use this type of communication. As in the case of using a computer or a tablet, the level of Internet usage variability was different due to the respondents' place of residence, i.e. the district. The highest level of using this type of communication was observed in the respondents from the district of Strzyżów and Ropczyce-Sędziszów. Slightly lower values were obtained in the districts of Lubaczów and Rzeszów, and the lowest ones in the district of Przemyśl.



Table 3. Using a computer / tablet by districts.

	Use	Do not use
strzyżowski	78,0	22,0
przemyski	64,1	35,9
rzeszowski	69,7	30,3
lubaczowski	68,7	31,3
ropczycko-sędziszowski	73,8	26,2
Total	70,7	29,3

Table 4. Using the Internet by districts.

	Use	Do not use
strzyżowski	77,2	22,8
przemyski	63,9	36,1
rzeszowski	70,8	29,2
lubaczowski	68,0	32,0
ropczycko-sędziszowski	75,0	25,0
Total	70,9	29,1

In the research, the ways of computer use in daily life were examined. More than half of respondents (51.9%) check and send emails, forty-five percent of respondents use Facebook (45.6%) and browse the Internet websites for entertainment purposes (45.3%). Nearly forty percent of respondents use computer in order to collect materials for study or work (39.4%); a slightly lower percentage of respondents uses the online banking (38.7%), acquires information from the websites of public institutions (38.2%), or buys products and services online in Poland (38.1%). The lowest percentage of respondents buys products and services over the Internet from abroad (10.9%), participates in Internet courses or trainings (14.0%) and takes part in Internet chat sessions (15.8%).

Table 5. Ways to use a computer.

Ways to use a computer	Yes	No
Checking and sending emails	51,9	48,1
Using the Facebook	45,6	54,4
Browsing Internet websites for entertainment purposes	45,3	54,7
Collecting materials for study or work	39,4	60,6
Using online banking	38,7	61,3
Acquisition of information from websites of public institutions	38,2	61,8
Buying products and services online in Poland	38,1	61,9
Listening to music or radio through the Internet	36,1	63,9
Phoning via the Internet (Voip, Skype)	33,0	67,0
Using communicators which make it possible to communicate with friends (communicators etc.)	28,3	71,7
Reading newspapers or books online	27,9	72,1
Downloading or completing official forms	25,7	74,3
Using other social portals	25,4	74,6
Booking tickets (e.g. train, bus, plane, cinema tickets, etc.)	24,9	75,1
Using the Internet and electronic mail at home for professional purposes	24,6	75,4
Downloading free music, films	24,3	75,7
Watching TV via the Internet	24,3	75,7
Looking for a job, sending job offers	20,3	79,7
Participation in discussion groups or forums	20,2	79,8
Participation in online auctions	20,2	79,8
Playing network games online	17,4	82,6
Downloading free software	17,0	83,0
Participation in chats	15,8	84,2
Participation in courses or trainings through the Internet	14,0	86,0
Buying products and services online from abroad	10,9	89,1



An important element of human life in an open globalized society and at the same time openness to the "outside world" and people living there is the knowledge of foreign languages. The most popular foreign language is English. However, only sixteen percent of respondents are able to communicate freely in this language, while a fifth of them (19.7%) are able to communicate. More than half of respondents (52.1%) do not speak English at all. In the case of other languages, the level of their knowledge is even lower.

Table 6. The level of foreign language skills.

Level of foreign language skills	Quite well, I can communicate freely	Poor, but I can communicate efficiently	Very poor, I would have problems with communication	I do not know the language at all
English	16,0	19,7	12,2	52,1
German	5,7	16,6	18,0	59,7
French	0,4	2,7	4,1	92,8
Spanish	0,4	1,0	1,4	97,1
Italian	1,7	2,5	2,7	93,2
Russian	7,0	26,9	19,9	46,2

Results, Conclusions and Recommendations

Summarizing the presented results of the research, it can be stated that social capital and cultural capital are the basic elements of building the model of a society which is open to knowledge and capable of lifelong learning. The analyzed types of capital can provide the basis for stimulation of endogenous resources of local communities. Social capital is a "lubricant" and at the same time a "binder" of grassroots activities and a fundamental element of social development. Cultural capital is a resource for investing, stimulating and encouraging the development of an individual.

Based on the conducted detailed analysis, it is possible to formulate some more general conclusions. Pearson's chi-squared test showed that there is a statistically significant relationship between the level of interest in local community affairs and conversations with other inhabitants of common place of residence. For the surveyed residents of five districts, the value of the Pearson's contingency coefficient was 0.612. This is a very high strength of the relationship.

More than three quarters of respondents use a computer or a tablet as a tool for work, playing games or communication. The level of variation in the use of modern types of communication by means of a computer or a tablet was different due to the respondents' place of residence, i.e. the district. A similar trend can be observed when using the Internet. Seven out of ten respondents use this type of communication. As in the case of using a computer or a tablet, the level of Internet usage variability was different due to the respondents' place of residence, i.e. the district. In the research, the ways of computer use in daily life was examined. More than half of respondents (51.9%) check and send emails, forty-five percent of respondents use Facebook (45.6%) and browse the websites for entertainment purposes (45.3%). Nearly forty percent of respondents use computer in order to collect materials for study or work (39.4%); a slightly lower percentage uses the online banking (38.7%), acquires information from public institutions websites (38.2%), or buys products and services online in Poland (38.1%). The lowest percentage of respondents buys products and services over the Internet from abroad (10.9%), participates in Internet courses or trainings (14.0%) and takes part in online chat sessions (15.8%).

The surveyed residents feature a very low level of foreign languages skills. English is the most popular foreign language. However, only sixteen percent of respondents are able to communicate freely in this language. Every fifth respondent (19.7%) is able to communicate. More than half of the respondents (52.1%) do not speak English at all. In the case of other languages, the level of their knowledge is even lower. It should be emphasized



that the factor that differentiated foreign language skills was the age of respondents. English, French, Spanish or Italian is mainly the domain of young people. The older the age group, the better the knowledge of Russian language.

References

- Bartoszek, A. (2003). Kapitał społeczno-kulturowy młodej inteligencji wobec wymogów rynku. Katowice: Wydaw. Uniwersytetu Śląskiego. Prace Naukowe Uniwersytetu Śląskiego w Katowicach. nr 2111.
- Bourdieu, P. (1986). The forms of capital. In: Richardson, J., Handbook of Theory and Research for the Sociology of Education. Westport, CT: Greenwood.
- Bourdieu, P., Passeron, J.-C., Neyman, E., & Kłosowska, A. (1990). Reprodukcyjność: Elementy teorii systemu nauczania. Warszawa: Państwowe Wydawnictwo Naukowe.
- Coleman J. (1988). Social Capital in the Creation of Human Capital, The American Journal of Sociology t. 94, Supplement.
- Kotarski H. (2013), Kapitał ludzki i kapitał społeczny a rozwój województwa podkarpackiego, Wydawnictwo Uniwersytetu Rzeszowskiego, Rzeszów.
- Kukliński A. (2003). O nowym modelu polityki regionalnej – artykuł dyskusyjny, Studia Regionalne i Lokalne Nr 4(14).
- Portes, A., 1998. Social Capital: Its Origins and Applications in Modern Sociology [online]. Annual Review of Sociology, 24(1), 1-24.
- Szelényi, I., Treiman, D., Wnuk-Lipiński, E. (1995). Elity w Polsce, w Rosji i na Węgrzech: Wymiana czy reprodukcyjność? Warszawa: ISP PAN.
- Zarycki, T., 2009. Kapitał kulturowy – założenia i perspektywy zastosowań teorii Pierre’a Bourdieua. Psychologia Społeczna, (tom 4 1–2 (10)).



Effects of Multi-Learning Environments on Student Attitudes in Social Studies Courses

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Abstract

The aim of this study is to analyse the effects of multi-learning environments on student attitudes in social studies courses. The study also deals with the student views about social studies courses which are delivered through multi-learning environments. The study has both qualitative and quantitative research questions to achieve these goals. The quantitative research question of the study is as follows: “Do pre- and post-test scores of the experimental and control group students significantly vary?”. The qualitative research question is as follows: “what are the views of the students about the social studies courses which are delivered through multi-learning environments?”. The study was designed as a sequential explanatory research, which is part of mixed research methods. In the sequential explanatory design the first part is qualitative implementation. Then the qualitative part is constructed based on the findings obtained from the quantitative data. The participants of the study were the fifth-grade students attending two sections of a public secondary school in Afyon. Their pre-test scores did not significantly vary. The quantitative data obtained were analysed using percentage, frequency, the Mann Whitney U test and the Wilcoxon signed-rank test. The findings showed that there was no statistically significant differences between pre-test attitude scores of experimental students and those of control students. The pre-test attitude scores of both groups were found to be “high”. The post-scores of the participants showed that social studies courses which were delivered through multi-learning environments positively influenced students’ attitudes towards social studies courses. This effect was found to be statistically insignificant. The qualitative findings showed that more than the half of the participants reported that social studies courses which were delivered through multi-learning environments positively affected their interest in the courses. It was also found that the participants liked social studies courses which were delivered through multi-learning environments and that the most interesting part of the courses for them was the use of animations.

Keywords: Multi-Learning Environments, Student attitudes, Social studies

Introduction

Advances in knowledge accumulation have caused many changes in different fields. One of such fields is education in that formal education became an indispensable part of societies. Formal education is delivered in a special setting using pre-established educational program (Fidan, 2012). On the other hand, formal education has both advantages and disadvantages. One of such disadvantages is that artificial settings needed for delivering formal education (i.e., school, courses) present information about events and situations in an isolated way which may make it difficult to construct knowledge in a desired manner.

Given that some real world events are difficult or impossible to repeat in classrooms students may not clearly understand the related facts and concepts. For instance, in classrooms it is not possible to observe the natural occurrence of mountains or valleys. Therefore, such events that cannot be observed in classrooms are explained verbally by teachers to students. Such an effort may cause incomplete learning of the facts or misconceptions by students. The study by Demirkaya & Karacan (2016) showed that giving only definitions of the concepts involved in the social studies textbook is not enough to have a good understanding of these concepts by the students. In order to avoid such undesired teaching approaches both in concept teaching and skill and attitude teaching there should be various learning and teaching materials that appeal to more than one senses of students.



It is well-known that materials are essential elements of learning environment and they stimulate the senses of students and therefore, make them active participants of learning environments. One of such materials are multimedia materials. In a study which analysed the recall levels among students about the previous learning it is concluded that students recall 10% of what they read, 20% of what they heard, 30% of what they say, 50% of what they both saw and heard, 70% of what they said and 90% of what they both did and said (Yalın, 2015). Therefore, it is safe to argue that a learning and teaching process which is based on multimedia approach can increase the recall levels of students. Daşdemir & Doymuş (2013) analysed the effects of animations, which are seen as part of multimedia materials, on recall levels and concluded that the experiment group which taught the course through animations retained learning for much longer period in contrast to the control group.

Akkoyunlu & Yılmaz (2005) defined multimedia based education approach as the use of a combination of materials which contain both audio and visual elements and stimulate individuals' senses such as movies and animations. Multimedia based learning environments are much more joyful for students. In addition such environments have positive effects on student achievement. For instance, Arkün (2007) found that 92% of the students participated in the study considered multimedia materials as contributing to make the learning environment much more joyful. In the study by Yılmaz (2012) it was concluded that those students who were taught through multimedia materials were much more successful than control subjects. In Yünkül & Oğuz-Er (2014)'s study found that multimedia educational software has positive effects on student interest. The other studies concerning the effects of multimedia materials found that such materials increase students' achievement (Altınışık, 2001; Bülbül, 2009; Sezgin, 2009; Taşçı & Soran, 2008; Yeşiltaş, 2010) and positive student attitudes towards the courses (Yeşiltaş, 2010; Yünkül & Oğuz-Er, 2014)

It is well-known that learning environment should be designed to have effective learning and active student participation. One of the ways to achieve it is to employ a multimedia based approach. This study deals with the effects of multimedia based teaching in social studies course on the student attitudes towards the course.

Aim

The aim of the study is to analyse the effects of multimedia based teaching in social studies course on the student attitudes towards the course. It also attempts to reveal the views of students regarding the effects of multimedia based teaching in social studies course on the student attitudes towards the course.

Problem statement

In parallel to this aim the study attempts to answer the following research question: What are the effects of multimedia based teaching in social studies course on the student attitudes towards the course?

Sub research questions

Based on the major research problem given above the study has also the following sub research questions:

- ✓ Is there a statistically significant difference between experiment and control groups in terms of their pre-test attitude scores?
- ✓ Is there a statistically significant difference between experiment and control groups in terms of their post-test attitude scores?
- ✓ Is there a statistically significant difference between experiment and control groups in terms of their pre- and post-test attitude scores?
- ✓ What are the views of the participants about the multimedia-based teaching approach in social studies course?



Method

Study design

This study is designed as an eclectic study. This approach was adopted in the study due to the fact it makes it possible to better understand the topic of the study (Creswell & Garrett, 2008: 322) and it has many advantages in contrast to using a single method (Johnson & Onwuegbuzie, 2004). Eclectic method has many sub-categories. In the study exploratory sequential category of the eclectic method was used. This design is mostly used to describe and interpret those results which are interesting and extraordinary (Morse, 1991) or are very significant (Plano Clark & Creswell, 2008). This design is consisted of several steps. In the first step quantitative data are collected and analysed. Next qualitative data are gathered and analysed. Then the quantitative data collected are discussed based on the qualitative data. Therefore the quantitative data are reviewed using the qualitative data to account for significant, extraordinary or interesting results (Creswell & Plano Clark, 2014).

In the quantitative part of the study the study was designed as “pre-post-test matched control-experiment groups” which is part of semi-experimental designs to observe the effects of multimedia approach on student attitudes (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2013). In the qualitative part of the study structured interview forms are employed to determine the views of the participants about multimedia approach.

Participants

The participants of the study were the fifth grade students attending two different branches at Hoca Ahmet Yesevi Secondary School in Afyon Karahisar during the fall semester of the school year 2016-2017. Those participated in the quantificational part of the study were identified through the conventional sampling technique. This sampling technique makes it possible to sample those who are available and easy to access (Aziz, 2013). The participants voluntarily took part in the study. To determine the participants who would take part in the qualitative part of the study the maximum sampling technique was employed (Yıldırım & Şimşek, 2013).

The number of the students in the experiment and control groups was equal, each 48. However, due to several reasons such as absenteeism or class changes pre-test was administered to 46 students in 5/A and to 42 students in 5/E.

Table 1. Gender based distribution of the participants

Gender \ Groups	class 5/A		class 5/E	
	f	%	f	%
Female	17	40	21	50
Male	29	60	21	50
Total	46	100	42	100

As can be seen in table 1 in 5-A there were a total of 46 students of whom 17 female and 29 male. There were 42 students in 5-E where equal number of female and male students. Based on the pre-test attitude test scores the class of 5/A was designated as the experiment group and the class of 5/E as the control group.

Data collection tools

In order to collect quantificational data a data collection tool with two sections was employed. Its first section included items about the demographical characteristics of the participants. The second part included the scale for attitudes towards social studies course.

Scale for attitudes towards social studies course: In order to determine the participants' attitudes towards social studies course the scale for attitudes towards social studies course developed by Demir & Akengin (2010)



was employed. The Kaiser Meyer Olkin value of the scale was found to be 0.906 and its Bartlett test value was found to be significant at 0,001 level. The original analyses included a total of 72 items. Following the analysis it was found that 46 items had a factor load value under 0.50 and these items were excluded from the scale. Therefore, the scale is consisted of 26 items of which 11 were positively stated and 15 negatively stated. The Cronbach alpha internal consistency coefficient of the scale is 0,93. Its Spearman Brown internal consistency coefficient of the scale is 0,93 and its Guttman internal consistency coefficient of the scale is 0.93. internal consistency coefficient of the scale as a whole and of its sub-dimensions indicate that the scale is a reliable tool and all items in the scale have good level of discrimination. The responses to the items are given using a 5-point Likert scale: “1: completely disagree” and “5: completely agree”. Negative statements in the scale are scored in a reverse order. Higher scores from the scale indicate positive student attitudes towards social studies course (Demir & Akengin, 2010).

In the study the scale was also reviewed by field specialists. As a result of the feedbacks by them one of the items, item 14, (I like to listen to historical stories.) was also excluded from the scale due to the fact that it violated the content validity. Because the units covered in the course during the study were all about the geographical regions and were not concerned with historical events and topics. Following this modification on the scale a reliability analysis was carried out. The results of the analysis showed that the Cronbach Alpha internal consistency coefficient of the scale was found to be 0,91. Tekindal (2009: 62) argued that the scores related to the internal consistency coefficient refer to the followings: between 0.60 and 0.65 undesired, between 0.65 and 0.70 acceptable at minimum level, between 0.70 and 0.80 quite good, between 0.80 and 0.90 very good and between 0.90 and 1.00 excellent. Therefore, it can be stated that the scale used in the study is an excellent and reliable tool ($\alpha = 0,91$).

Interview forms: Interview forms were employed to collect qualitative data. Structured interviews are very similar to “fixed format survey interviews” described by Rubin (1983) in terms of content and method (cited in Yıldırım & Şimşek, 2013: 148-149). In order to develop an interview form first the related studies were reviewed (Akbulut, 2013; Arkün, 2007; Kan, 2012; Kunduz, 2013; İbili, 2013; Yazar, 2010). Then based on these review an item pool was developed. The items were designed to uncover the views of students concerning the use of multimedia materials in social studies. The interview form was reviewed by four specialists. Two of them were specialists in educational sciences, one in computer teaching and technology and the other one in Turkish language education and in social studies education. Based on the feedbacks by the specialists the interview form was finalized.

Teaching materials employed in the experiment and control groups

1. Teaching materials employed in the experiment group

- ✓ Teaching materials used in the experiment group were identified based on a review of literature.
- ✓ Various audio-visual materials (animations, videos, maps, photographs, pictures) were used which were accessed through educational websites such as Vitamin and Morps that were developed based on the premises of the social studies education programs.
- ✓ Some of the audio-visual materials were recorded from original studies as digital materials and the others were used online in the learning and teaching process.

2. Teaching materials employed in the control group

- ✓ In the control group textbook, guides and study sheets were employed.
- ✓ The same study sheets were used in both groups.
- ✓ The same topics and concepts were taught in both groups.



Data analysis

1. Quantificational data analysis

The normality analysis was carried on the scores of the participants from the scale of social studies course attitudes and the results showed that the scores did not have a normal distribution. Therefore, the scores of the participants were analysed using the *non-parametric tests*. The Mann Whitney U-test was employed to analyse the pre-test attitude scores of both experiment and control groups and to compare their scores. Comparisons of pre- and post-test attitude scores of both groups were made using the Wilcoxon signed rank test (Büyüköztürk, 2012; Can, 2013).

2. Qualificational data analysis

The qualitative data collected through structures interviews were analysed using the content analysis. The content analysis used in the study involved the following four steps:

- 1- Data coding,
- 2- Identifying the themes,
- 3- Organization of codes and themes,
- 4- Description of the findings (Yıldırım ve Şimşek, 2013:259-260).

Findings

Discussion of quantitative findings

The Mann-Whitney U-test was employed to analyse the pre-test attitude test scores of the experiment and control groups. The results of the test are given in Table 2 as follows:

Table 2. Results of the Mann-Whitney U-test about pre-test attitude scores of the groups

Groups	N	Mean rank	Total rank	U	p
Experiment	44	41,57	1829	789	,813
Control	37	40,32	1492		

Table 2 indicates that pre-test attitudinal scores of the experiment group (41,57) is higher than that of the control group (40,32). However, this difference is found not to be statistically significant ($U=789$, $p>0.05$). The Mann Whitney U-test was also used to response the following research question: Is there a statistically significant difference between experiment and control groups in terms of their post-test attitude scores? Table 2 presents the results of Mann Whitney U-test.

Table 3. Results of Mann Whitney U-test about post-test attitude scores of the groups

Groups	N	Mean rank	Total rank	U	P
Experiment group	44	43,56	1917	702	,286
Control group	37	37,96	1405		

Table 3 shows that the post-test attitude scores of the experiment group is much higher than those of the control group. However, this difference is found not to be statistically significant ($U=702$, $p>0.05$).

As stated earlier the comparisons of pre- and post-test attitude scores of both groups were made using the Wilcoxon signed rank test. Table 4 shows the results of the analysis.



Table 4. Results of the Wilcoxon signed rank test concerning the comparisons of pre- and post-test attitude scores of both groups

Groups	Post- and pre-test	N	Mean rank	Total rank	Z	P
Experiment group	Negative rank	18	19,97	360		
	Positive rank	25	23,46	587	-1,371	,170
	Equal	1	-	-		
Control group	Negative rank	18	16,58	299		
	Positive rank	17	19,50	332	-,271	,787
	Equal	2	-	-		

Table 4 indicates that concerning the experiment group's pre- and post-test attitude scores positive ranks are much higher. However, this difference is found not to be statistically significant ($z=-1,371$, $p>0.05$). Therefore, it is safe to argue that multimedia based social studies course has positive effects on the attitudes of the students towards the course, but this effect is not statistically significant.

Concerning the control group's pre- and post-test attitude scores positive ranks are much higher. However, this difference is found not to be statistically significant. Therefore, it can be argued that traditional approach does not have a significant effect on the attitudes of students towards the course.

Discussion of qualitative findings

The responses to the interview items were analysed using the descriptive statistics. Table 5 indicates the results of the statistics regarding their responses to the first item. This analysis identified the common codes and themes in this regard.

First interview item: What are the points that you liked or found interesting in the social studies course that was taught for six weeks? Why?

Table 5. Descriptive statistics regarding the student views about interesting and good points about multimedia based social studies course

Themes	Codes	f
About materials	Animations	19
	Maps	5
	Pictures/Photographs	4
	Interactive board	1
	Total	29
Teaching methods and techniques	Lectures/course delivery	12
	Demonstration technique	5
	Question-response/ discussion	3
	Brainstorming technique	1
	Total	21
Teaching	Entertaining	14



characteristics	Informative/productive	5
	Total	19
Teacher characteristics	Communication between students and teachers	2
Total		71

As can be seen in table 5 the content analysis related to the first interview item produced a total of 71 codes. These codes are categorized under four themes: materials (29), teaching methods and techniques (21), teaching characteristics (19) and teacher characteristics (2). Among the themes the materials involve the highest number of codes. The most liked materials are found to be animations, maps, pictures/photographs and interactive boards.

The following statements show the views of the students about these materials. It is seen that a single statement includes more than one code.

S 24: “I liked everything that we were taught for six weeks. Because each topic was very nice and interesting. For instance, pictures, videos (animations), and expressions.”

S 3: “I liked the videos (animations), pictures, animations and maps; because they were all entertaining and our teacher explained them very nice.”

S 16: “I liked animations most; because they are both joyful and informative ...”

S 22: “I liked the pictures. Animations were interesting.”

These direct quotations indicate that the students most liked the following materials: animations, maps, pictures/photographs and interactive boards.

Table 5 also shows that the theme of teaching methods and techniques is the second theme in terms of having higher number of codes. Therefore, it can be argued that the participants also liked or found interesting teaching methods and techniques in the social studies course which was delivered using a multimedia approach. The codes included in this theme is as follows: lectures/delivery of the course (12), demonstration (5), question-answer sessions/discussion (3) and brainstorming technique (1). The participants seemed not to know the difference between question-answer technique and discussions. Therefore, it is hard to make a distinction concerning their responses to them. As a result these two were grouped under a single code. The brainstorming technique was given as a response by only one student.

The following statements show the views of the students about this theme. It is seen that a single statement includes more than one code.

S 11: “I liked most watching videos and animations from EBA.”

S 40: “I liked most lectures and watching animations; these were very beautiful.”

S 31: “Our teacher taught the topics very nice using pictures and watching animations.”

It is seen that the participants mostly liked lectures and animations which were used in the courses.

S 4: “The things I liked most were lectures and questions the teacher asked.”

S 25: “I liked that the courses were very productive and that the teacher asked several questions to us.”

As can be seen in table 5 the third theme is about teaching characteristics. It is possible to argue that the participants liked some characteristics of teaching in the course. This theme included two codes: entertaining (14) and productive (5). The participants mostly liked that the courses are entertaining. They also liked that their courses were productive.

The following statements show the views of the students about this theme. It is seen that a single statement includes more than one code.

S 25: I liked that the courses were productive and the teacher asked various questions to us.



S 13: I liked that the courses were nice and productive.

S 24: I liked everything that we were taught for six weeks. The reason was that each topic was interesting, for instance, pictures, videos, lectures, etc.

S 39: I liked that the courses were productive. There were animations.

In short, the participants liked the entertaining and productive courses which were based on a multimedia approach.

Table 5 shows that the last theme is about teacher characteristics. It means that the participants liked some characteristics of their teachers. This theme has one code, teacher-student communication. The following statements show the views of the students about this theme.

S 1: “Lecturing style of teacher, interesting videos and kindness of the teacher. I liked that the animations were entertaining and interesting.”

Second interview item: What are the points that you did not like or found uninteresting in the social studies course that was taught for six weeks? Why?

This items sought to identify the negative views of the participants regarding the social studies courses based on a multimedia approach. Table 6 indicates the results of the descriptive statistics regarding their responses to the second item. This analysis identified the common codes and themes in this regard.

Table 6. Descriptive statistics regarding the students’ negative views about multimedia based social studies course

Themes	Codes	f
Learning environment	Noise	7
	Maps	2
Teaching materials	Pictures/photographs	1
	Total	3
Total		10

As can be seen from table 6 some of the students had negative views about the course, but more than half of them stated that they had no negative view about it. The following quotations show such responses of the participants:

S 24: “There was nothing I disliked in the course. Because everything that the teacher taught and showed us was very nice.”

S 7: “Nothing, because everyting was very joyful.”

S 16: “I liked everything. I did not dislike anything; because the teacher made us liked everything in the course.”

S 25: “There was nothing I disliked in the course.”

S 26: “I liked everything; because the teacher taught the course very nice.”

S 3: “There was nothing I disliked; because everthing was beautiful.”

Therefore, it can be stated that some students disliked anything in the social studies course which employed a multimedia approach.

On the other hand, Table 6 shows that there are ten codes which were found by the participants to be negative in the social studies course which employed a multimedia approach. These negative views are grouped under two themes: “learning environment” and “materials”. Negative student views concerning learning environment is coded as noise which was expressed by seven participants. It seems that these seven participants regarded the noise occurred during the course delivery. The following quotations show such student views.



S 1: “I could not understand anything due to the noise in the classroom.”

S 8: “My friends shouted at the class so the teacher had difficulty in delivering the course.”

S 27: “Those who were talking during the course.”

S 4: “The teacher could not manage to make my peers not talking during the course delivery... I could not hear what he said.”

S 13: I disliked that my friends talked so much in the course.”

The participants reported that the classroom was very noisy due to excessive talk by the students and it made them uncomfortable.

As can be seen in table 6 the other disliked point was about materials used in the course. the theme of materials included two codes, each was expressed by three participants. One of such materials was maps. The following direct quotations show such views about maps:

S 6: Maps; because for me maps are boring.

S 17: I found the maps used in the course uninteresting.

Within the theme of materials another code is pictures/photographs. It was reported by one participant who stated that he disliked pictures/photographs without giving any reason. In general the participants disliked the noise occurred in the classroom during the courses. In addition, two students reported that they disliked maps while one student disliked pictures/photographs.

Third interview item: Did the social studies course that you have taken for six weeks change your interest towards the course? How?

Table 7 indicates the results of the descriptive statistics regarding the responses of the participants to the third item. This analysis identified the common codes and themes in this regard.

Table 7. Descriptive statistics regarding the students’ views about the effects of the multimedia based social studies course on their interest

	Themes	Codes	f
Yes	Effective learning and teaching	Lectures	10
		Better understanding/learning	9
		Total	19
	Teaching characteristics	Entertaining	9
		Motivation increase	10
		Total	19
	Materials	Animations	3
		Pictures	1
		Maps	1
		Total	5
	No	No effect	6
	Total		49

As can be seen in table 7 more than half of the participants reported that the course increased their interest in the social studies course. On the other hand, six students reported that the course did not lead to any change in their interest towards the course.



Table 7 shows that the reasons for changing student attitudes and interest due to taking a social studies course based multimedia approach are grouped under three themes. These three themes were reported by 43 participants. Of these codes nineteen students mentioned the theme of “effective teaching and learning”, another nineteen the theme of “teaching characteristics” and five the theme of “materials”.

The theme of “effective teaching and learning” included two codes: lectures and better learning/understanding. Lectures were most frequently mentioned by the participants. The following direct quotations exemplify these codes:

S 12: “Yes. The teacher explained the topics very good. He showed us animations, videos, pictures....”

S 4: “Yes. Lectures were very nice and animations were not boring.”

S 3: “Yes, I begin to like the social studies course more. The teacher gave the lecture very nice that increased my interest in the course.”

S 10: “Yes. I used to like the social studies course, now I like it more. It is due to my teacher’s effort.”

Therefore, it can be stated that delivering the social studies course based on multimedia approach increased student interest towards the course.

S 24: Yes. I got much more information about the topics in contrast to previous courses and the topics were explained in a well manner.

S 21: Yes, I better learned the topics.

S 20: Yes. I could better learn the topics.

It is possible to argue that multimedia based teaching made it possible for students to better learn and understand the topics, which increased their interest in the social studies course.

As can be seen in table 7 the other theme is “teaching characteristics”. This theme also includes two codes: entertaining and motivating. These codes seem to positively increase student interest. Of these codes motivating feature of the course was much more mentioned by the participants (n=10). The other factor in increasing student factor is the fact that the multimedia based course was found to be entertaining by the participants (n=9). The following statements show the views of the students about these codes, motivating and entertaining. It is seen that a single statement includes more than one code.

S 11: “Yes, the course was very nice. Now the social studies course is a part of my life.”

S 16: “It caused a change; because the course was very entertaining. I begin to like the course.”

S 38: “Yes. Now I like the social studies course more.”

S 18: “Yes; lecturing was entertaining.”

S 23: “Yes, the courses were very entertaining.”

S 35: “Yes; I had fun in the courses.”

It seems that the participants perceived the multimedia social studies course as entertaining and motivating which increased the student interest towards the course.

Table 7 shows that the third theme is “materials”. Therefore, one of the factors which increased the student interest towards the course is the materials used in the course. The theme of materials is composed of three codes: animations (n=3), pictures/photographs (n=1) and maps (n=1). It is seen that more students regarded animations as a factor in their increased interest towards the course. It is followed by pictures/photographs and maps. The following quotations exemplify the views of the participants about these materials used in the course

S 34: “Yes, it changed my interest positively. Because there were much better activities in the course. Animations were very interesting.”

S 4: “Yes. Lectures were very nice and animations were not boring.”

S 12: “Yes. The teacher told every topic very nice. He showed us animations, videos and pictures.”

S 26: “Yes, it was very beautiful. There were maps and different topics in the course.”



It is seen that three materials, namely animations, pictures/photographs and maps, used in the course were concerned to be a factor in improved interest of the participants concerning the course.

Six participants reported that the multimedia based social studies course did not change their interest towards the course. The following quotations exemplify the views of the participants about it:

S 7: “Nothing changed. The course was and is entertaining.”

S 6: “No, there is no change in my interest towards the course.”

S 14: “No. I liked the course before this specific one.”

Some students reported that they liked the course before the multimedia based version of social studies course. Some others stated that the multimedia based course did not change their interest towards the course without giving any explanation.

Discussion of Findings and Conclusions

Pre-test attitude score analysis indicated that there is no significant difference between the experiment (101,6) and control groups (102,5). In other words the groups had similar and high attitude scores before the implementation. Post-test analysis on their attitude scores also showed that both groups had higher attitude scores.

Although the attitude scores of the experiment groups increased following the implementation, this did not lead a statistically significant difference between the groups. Therefore, it can be stated that the use of a multimedia approach in the social studies courses did not cause a positive significant increase in the attitudes of the participants in the experiment group. However, the multimedia approach produced much more positive increase in the attitudes of the participants in the experiment group.

In the structured interviews it is found that the participants disliked the noise occurred in the classroom during the multimedia activities. Such a negative view may affect the attitudes of the students towards the course. Tabancalı (2008) argued that noise is a factor which makes individuals uncomfortable, distracts their attention and affects their physical and mental health in a negative way. There were also other students who disliked maps and photographs. Yalın (2015) stated that each student has its own learning style and therefore, they cannot benefit from the learning environment presented at equal levels. Some students better learn through reading the materials, the others through seeing or hearing it. Some of them may prefer two of these modes simultaneously. Therefore, it can be suggested that individual preferences of some participants may not fit to the multimedia based educational approach and that such a situation may limit the effects of the multimedia based educational approach on student interest.

This finding of the study is consistent with previous findings. For instance, Akbulut (2013) analysed the effects of computer-assisted multimedia approach on the ninth grade students. Similar to the current findings, the students in the experiment and control groups had similar levels of attitude scores both in pre- and post-test. The authors argued that the reason for not having a statistically different post-test attitude scores between the groups is their similar and higher pre-test attitude scores. In addition, they suggested that a six-week implementation is not enough to change the students' established perceptions about education. Bayturan (2011) analysed the effects of the computer-assisted multimedia education on the student achievement, attitudes and self-efficacy perceptions. No statistically significant difference was found between the experiment group and control group in terms of attitudes. Balkan (2013) investigated the effects of the multimedia based computer presentations on the attitudes of the participants towards the mathematics course. It was concluded that the multimedia based approach did not have a visible effect on the student attitudes. Another study of which the findings are consistent with the current findings was carried out by Çener (2011). It dealt with the effects of the multimedia



based computer presentations in the social studies course on the student attitudes and gains. It was found that the multimedia based presentations did not have a significant effect on the student attitudes. A study by Altınışık (2001) also concluded that the multimedia based approach employed in the social studies course did not have a significant effect on the student attitudes. The reasons for this were given as short implementation period, unfamiliar learning environment for students and the attitudes of the teachers towards the presentations.

There are also some studies of which the findings are not consistent with the current findings. İnan (2015) analysed the effects of the computer-assisted multimedia presentations on student achievement and attitudes. It was found that the computer-assisted multimedia presentations produced very significant changes in student attitudes in contrast to traditional learning environment. Beydoğan & Hayran (2015) dealt with the effects of multimedia-based teaching in social studies courses on concept learning and student attitudes. It is concluded that the multimedia-based teaching in social studies courses has significant effects of student attitudes towards the course. Özüpekçe (2015) also found similar results among high school students.

In the current study it is found that although the multimedia based teaching made no significant effects of student attitudes, the attitude scores of the experiment group were higher than those of the control group. This finding is consistent with previous findings given above. It is also found that nearly all participants reported that their interest in the course increased following the implementation of the multimedia based teaching. For instance, a student reported: “ My interest has increased. Because we made better activities in the course. (Particularly) animations were very interesting.” Another student reported: “A change occurred. The courses were very joyful. I begin to like the social studies courses”. Another student reported: “Yes, a positive change occurred. Lectures was very nice and animations were not boring.”. The reasons for positive changes can be given as follows: the multimedia based teaching makes it possible to better understand the topics, produces much more entertaining and motivating course, and the use of such materials as animations, pictures, maps. Multimedia based learning environment also improved the attitudes of the teacher towards lecturing styles, methods and techniques. The students preferred to be taught the social studies topics through a multimedia based approach. The things they liked most include animations, lecturing style (method, techniques and materials), maps, demonstrations, pictures/photographs and question-answer/discussion activities. The students were asked to make a comparison between their prior experience of social studies courses and the multimedia based teaching. More than half of the students reported that the multimedia based teaching is much better.

However, three students reported that both the multimedia based teaching and traditional teaching method are good. There were also three students who stated that traditional approach is much better. Although the implementation positively affected the views of the students about the multimedia based teaching in the social studies courses, there were six students whose attitude was not positively affected by the implementation.

There is no consensus about the effects of the multimedia based teaching on student attitudes. Some findings suggest that the multimedia based teaching has significant positive effects on student attitudes, but there are also other findings that the multimedia based teaching does not have any significant effect on student attitudes. The latter group of findings may be resulted from short-periods of implementation, students' prior attitudes, different participant groups (in terms of age, and other variables) and physical conditions of the classrooms.



References

- Akbulut, Y. (2011). Bilişsel Yük Kuramı ve Çoklu Ortam Tasarımı. Ö. Ö. Dursun ve H. F. Odabaşı, (Ed.), *Çoklu Ortam Tasarımı* içinde (38-55). Ankara: Pegem Akademi.
- Akkoyunlu, B., ve Yılmaz, M. (2005). Türetimci çoklu ortam öğrenme kuramı. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 28 (28), 9-18.
- Altınışik, S. (2001). *Sosyal bilgiler dersinde çoklu ortamın öğrencilerin akademik başarıları ve derse karşı tutumları üzerindeki etkisi*. (Yayımlanmamış Yüksek Lisans Tezi). Yıldız Teknik Üniversitesi, İstanbul.
- Arkün, S. (2007). *Addie Tasarım Modeline göre Çoklu Öğrenme Ortamı Geliştirme Süreci ve Geliştirilen Ortam Hakkında Öğrenci Görüşleri Üzerine Bir Çalışma*. (Yayımlanmamış Yüksek Lisans Tezi). Hacettepe Üniversitesi, Ankara.
- Aziz, A. (2013). *Sosyal bilimlerde araştırma yöntem ve teknikleri* (7. Baskı). Ankara: Nobel Akademik Yayıncılık.
- Balkan, İ. (2013). *Bilgisayar destekli öğretimin, ilköğretim 7. Sınıf öğrencilerinin matematik dersi “tablo ve grafikler” alt öğrenme alanındaki, akademik başarılarına ve tutumlarına etkisi*. (Yayımlanmamış Yüksek Lisans Tezi). Gazi Üniversitesi, Ankara.
- Bayturan, S. (2011). *Ortaöğretim matematik eğitiminde bilgisayar destekli öğretimin, öğrencilerin başarıları, tutumları ve bilgisayar öz-yeterlik algıları üzerindeki etkisi*. (Yayımlanmamış Doktora Tezi). Dokuz Eylül Üniversitesi, İzmir.
- Beydoğan, H. Ö. & Hayran, Z. (2015). The effect of multimedia-based learning on the concept learning levels and attitudes of students. *Eurasian Journal of Educational Research*, 60, 261-280 Doi: 10.14689/ejer.2015.60.14
- Bülbül, O. (2009). *Fizik dersi optik ünitesinin bilgisayar destekli öğretiminde kullanılan animasyonların ve simülasyonların akademik başarıya ve akılda kalıcılığa etkisinin incelenmesi*. (Yayımlanmamış Yüksek Lisans Tezi). Çukurova Üniversitesi, Adana.
- Büyüköztürk, Ş. (2012). *Sosyal bilimler için veri analizi el kitabı* (16. Baskı). Ankara: Pegem Akademi.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş. ve Demirel, F. (2013). *Bilimsel araştırma yöntemleri* (14. Baskı). Ankara: Pegem Akademi.
- Can, A. (2013). *SPSS ile bilimsel araştırma sürecinde nicel veri analizi*. Ankara: Pegem Akademi.
- Creswell, J. W., & Garrett, A. L. (2008). The “movement” of mixed methods research and the role of educators. *South African Journal of Education*, 28, 321–333.
- Creswell, J., & Plano Clark, V. L. (2014). *Karma yöntem araştırmalar: tasarımı ve yürütülmesi*. (Y. Dede ve S. B. Demir, çev. ed.). Ankara: Anı Yayıncılık.
- Çener, E. (2011). *Sosyal bilgiler dersinde bilgisayar destekli öğretim uygulamalarının öğrencilerin erişimi ve tutumlarına etkisi*. (Yayımlanmamış Yüksek Lisans Tezi). Uşak Üniversitesi, Uşak.
- Daşdemir, İ. ve Doymuş, K. (2013). Maddenin yapısı ve özellikleri ünitesinde animasyon kullanımının öğrencilerin akademik başarılarına, hatırlama düzeyine ve bilimsel Süreç becerilerine etkisi. *Bayburt Üniversitesi Eğitim Fakültesi*, 8(1), 84-101.
- Demir, S. B. ve Akengin H. (2010). Sosyal bilgiler dersine yönelik bir tutum ölçeğinin geliştirilmesi: Geçerlik ve güvenirlik çalışması. *E-İnternational Journal of Educational Research*, 1(1), 26-40.
- Demirkaya, H. (2013). Sosyal Bilgiler Öğretiminde Ders Kitabı. R. Sever ve E. Koçoğlu, (Ed.), *Sosyal bilgiler öğretiminde eğitim teknolojileri ve materyal tasarımı* içinde (89-104). Ankara: Pegem Akademi.
- Fidan, N. (2012). *Okulda öğrenme ve öğretme* (3. Baskı). Ankara: Pegem Akademi.
- İbili, E. (2013). *Geometri Dersi İçin Artırılmış Gerçeklik Materyallerinin Geliştirilmesi, Uygulanması ve Etkisinin Değerlendirilmesi*. (Yayımlanmamış Doktora Tezi). Gazi Üniversitesi, Ankara.
- İnan, B. (2015). *Bilgisayar destekli öğretimin ortaokul 6. sınıf öğrencilerinin fen bilimleri dersi başarılarına ve tutumlarına etkileri*. (Yayımlanmamış Yüksek Lisans Tezi). Niğde Üniversitesi, Niğde.
- Johnson, R., & Onwuegbuzie, A. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.



- Kan, A. Ü. (2012). *Sosyal Bilgiler Dersinde Bireysel ve Grupla Zihin Haritası Oluşturmanın Öğrenci Başarısına, Kalıcılığa ve Öğrenmedeki Duyuşsal Özelliklere Etkisi*. (Yayımlanmamış Doktora Tezi). Fırat Üniversitesi, Elazığ.
- Kunduz, N. (2013). *The Effect of Teaching with Animations And Educational Games On Academic Achievement in Subject Of "Precipitation Titration"*. (Yayımlanmamış Yüksek Lisans Tezi). Hacettepe Üniversitesi, Ankara.
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, 40(1), 120–123.
- Özüpekçe, S. (2015). *Ortaöğretim lise 1. sınıf coğrafya derslerinde bilgisayar destekli coğrafya öğretiminin öğrencilerin coğrafya dersine karşı tutum, başarı ve hatırd tutma düzeylerine etkisi*. (Yayımlanmamış Doktora tezi). Dokuz Eylül Üniversitesi, İzmir.
- Plano Clark, V. L., & Creswell, J. W. (2008). *The mixed methods reader*. Sage. https://books.google.com.tr/books?id=iBr6Y7cBmOQC&printsec=frontcover&hl=tr&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false Erişim tarihi: 06/06/2017
- Sezgin, M. E. (2009). *Çok ortamlı öğrenmede bilişsel kuram ilkelerine göre hazırlanan öğretim yazılımının bilişsel yüke, öğrenme düzeylerine ve kalıcılığa etkisi*. (Yayımlanmamış Doktora Tezi). Çukurova Üniversitesi, Adana.
- Tabancalı, E. (2008). Sınıf Ortamının Fiziksel Özellikleri. H. Kıran (Ed.), *Etkili Sınıf Yönetimi* (4. Baskı), içinde (61-81).Ankara: Anı Yayıncılık.
- Taşçı, G. ve Soran, H. (2008). Hücre Bölünmesi Konusunda Çoklu Ortam Uygulamalarının Kavrama Ve Uygulama Düzeyinde Öğrenme Başarısına Etkisi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 34, 233-243.
- Tekindal, S. (2009). *Duyuşsal özelliklerin ölçülmesi için araç oluşturma* (2. Baskı). Ankara: Pegem Akademi.
- Yalın, H. İ. (2015). *Öğretim teknolojileri ve materyal geliştirme* (28. Baskı). Ankara: Nobel Akademi Yayıncılık.
- Yarar, S. (2010). *Flash Programında Kavram Karikatürleri ile Desteklenerek Hazırlanmış Öğrenme Nesnelerinin Sosyal Bilgiler Dersinde Kullanılması*. (Yayımlanmamış Yüksek Lisans Tezi). Rize Üniversitesi, Rize.
- Yeşiltaş, E. (2010). *Sosyal bilgiler öğretimine yönelik geliştirilen bilgisayar yazılımının akademik başarı ve tutuma etkisi*. (Yayımlanmamış Doktora Tezi). Gazi Üniversitesi, Ankara.
- Yıldırım, A. ve Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri* (9. Baskı). Ankara: Seçkin Yayıncılık.
- Yılmaz, M. (2012). *C# Programlama dersinde, çoklu ortam tasarım ilkelerine göre hazırlanmış materyallerin moodle öğrenme yönetim sistemi üzerinden kullanılmasının yüksek öğrenim öğrencilerinin bilişsel yüklerine ve ders başarılarına etkisi*. (Yayımlanmamış Yüksek Lisans Tezi). Başkent Üniversitesi, Ankara.
- Yünkül, E. ve Oğuz-Er, K. (2014). The effect of multimedia software course on student attitudes. *Eğitimde Kuram ve Uygulama*, 10 (2), 316-330.



Interaction in university classrooms in Spain

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Abstract

Research has shown the advantages of interaction and dialogue-based teaching in classrooms. However, in Spain, it is still only used in a minority of cases. The purpose of this paper is to investigate the state of interaction as a teaching-learning method in Higher Education. An exploratory study was carried out based on fifty in-depth interviews with students from all fields of knowledge from two Spanish universities. The results show that the usual teaching methods in Spanish universities are expository in nature, whereas teaching-learning through interaction takes place only sporadically. It can be concluded that there is an urgent need to introduce interaction-based teaching-learning practices in Spanish universities: students demand a methodological change, and those who have had some interactive experiences stated that they thoroughly enjoyed them, were more involved in their studies, further deepened their learning, and obtained better results.

Keywords: Learning interaction, University teaching, educational debate, oral language.

Introduction

One of the most important aspects of teaching is the communicative interaction that takes place in the classroom, as this is where student-student and student-teacher communication is promoted and a complex network of exchanges can be produced. However, teaching-learning practices through interaction are not predominant at the different levels of the education system (Gillies, 2014).

It is a major challenge to shift from a one-directional communicative model, in which the teacher is the custodian of knowledge and whose job it is to inform, to proposing a change in the teaching role that requires the teacher to 'create pedagogical situations that promote a construction of shared meanings among all class participants' (De Longhi, Ferreyra and Peme, 2012: 179). In an interactive class, verbal language is used to submit content for consideration by all involved, exchange meanings, ask questions, present arguments, discuss arguments, clarify misunderstandings, and so on. In so doing, knowledge is transformed and better internalised, since interaction occurs between the various concepts previously held by students, the new issues to be learnt, and the teacher's knowledge (Wells, 1999, Ashwin, 2012, Tlhoale, Hofman and Winnips, 2014). By working in this way, the teacher is able to monitor students' learning, identify errors or knowledge gaps, and evaluate the overall progress of the class. In addition, students can communicate, propose and negotiate meanings, and develop higher cognitive processes (Mercer and Howe, 2012, Skidmore and Murakami, 2012, Longhi, Ferreyra and Peme, 2012, Teo, 2013). This process similarly occurs through language, when students interact with each other. The interaction between peers, inside or outside the classroom, is also an important element for learning and for psychosocial and cognitive development (Nicol and Boyle, 2003, Wells and Arauz, 2006, Camila, Mercuri and Da Silva, 2011). In this context, research has shown that the more interaction between the agents that make up the classroom, the more opportunities arise for thinking, participation, motivation, satisfaction and learning (Mercer and Howe, 2012; Gillies, 2014; Richardson and Radloff, 2014; Tlhoale, Hofman and Winnips, 2014, Yannuzzi and Martin, 2014). It is therefore necessary to propose the use of interactive teaching practices in the field of higher education.

Academic output on interactive teaching practices has grown significantly in recent years, but is still very scarce in the context of university teaching and learning (Ashwin, 2012, Richardson and Radloff, 2014). However, some evidence on the matter already exists at both international and national level.



The study by De Longhi, Ferreyra and Peme (2012: 184-188) in Argentina, in which they analysed the communicative interactions used by different lecturers in science classes, has helped to identify four main types of dialogic circuits:

1. Content transfer flow: this is a traditional expository class in which the teacher initiates the teaching process and transmits closed knowledge to students, without leaving room for any questions, either from students, or allowing the knowledge presented to be questioned, using a logic defined beforehand. In this model, the teacher imposes a sequence of contents (conceptual or procedural) on the students, without awaiting their responses. The only return expected is a reproduction of that very transmitted knowledge, which should occur—most desirably—at the time of the examination.
2. Open presentation: these are classes in which the teacher initiates the process and checks students' knowledge of a given topic, in order to monitor the areas (concepts or processes) they are familiar with, regardless of whether or not they had been previously seen in class. The teacher usually introduces new content and asks related questions to analyse if the students understood it as it was being presented. Students respond to these requests by conveying what they already know or what they can interpret and make explicit at that moment, always with an evaluation purpose in mind. Finally, the teacher immediately assesses the answers, provides the correct ones, sometimes ignoring the incorrect ones, and legitimises the appropriate answer to the question.
3. Controlled dialogue: the teacher initiates the process, and checks the knowledge students have about a given topic in order to find out their ideas regarding the subject to be taught. The teacher puts strategies in place so that students can express them verbally and encourages the participation of the whole class. They make statements or ask questions that elicit a range of opinions from the group. The students respond using their previously-held ideas, that is to say, they put into words their experiences and representations on the subject from their everyday knowledge, or those seen in previous stages of schooling. The teacher gathers these answers, gives them some perspective and relocates these contributions in the context of the questions asked and the development of the issue at hand. In this way, information is gathered in order to subsequently provide an integrated, re-elaborated version that goes beyond the one given by each of the students. In these cases, the teacher does not make an exhaustive assessment of the students' contributions or question the logic behind these interventions. This involves that the teacher's knowledge is the reference point against which the content to be learned will be monitored.
4. Dialogical inquiry guided by the teacher: the teacher holds all students' contributions to be valid and worth being included in the thread of the topic under study, and uses them as a basis to work from. They are grouped according to their characteristics and elicit their analysis by the group. This allows the teacher to encourage students to investigate the understanding of what is being expressed, or to present alternatives that generate conflict, lead to review the activity performed or raise a problem or task to solve, or questions to give rise to hypotheses and/or justifications. Students, on their part, not only express their knowledge, but also give their own interpretation and understanding of it, sharing their opinions and constructing hypotheses. However, as in the previous cases, questions from students are rare in this type of dialogue; when questions are asked, they are intended to request clarification, confirm their ideas or request more details about the assigned topic. The purpose of this communicative proposal is for students to begin a process whereby they become aware of the answers they are developing during the pedagogical dialogue and to reinterpret them in the situations that the teacher proposes through new, successive questions. Unlike the previous case, not only do situations arise for students to express their ideas, but also to return to them, explore them and generate successive corrections, which give the teacher the opportunity to introduce new content to the class.



These identified dialogic circuits can help to understand the multiple forms of interaction that may be used in teaching practice, and to assess the degree and quality of the interaction that takes place in the classroom.

Richardson and Radloff's study (2014) in Australia, in which they examined data from numerous students and teachers, concluded that the teaching-learning processes through interaction generated higher levels of student participation, higher satisfaction, better academic self-orientation, and a lower dropout rate. The study by Yannuzzi and Martin (2014) on the introduction of dilemmas and debates in the classroom concluded that it is very important to allow students to have a voice in the classroom because it enables them to express themselves, as well as to strengthen their identity and improve their relationships with teachers. In Spain, the study conducted by Prados and Cubero (2016) on the use of academic or experiential utterances in the classroom by the teacher verified that this strategy facilitates the construction of knowledge in the classroom and the appropriation by the students of the forms of speech and the modes of discourse specific to educational contexts. This in turn generates a breeding ground to improve the training of university lecturers.

A recent study (Ononye, 2015) identified aspects that negatively affect educational communication, such as the lexical repertoire used in the classroom. The lexical options of the teacher, both in teaching and in evaluating (register used, synonymy, antonymy, hyponymy and colloquialism) broaden or reduce the options of participation in classroom dynamics. There are also some studies that have identified aspects that favour interaction-based teaching-learning. Several have demonstrated that the use of new technologies (blogs, virtual forums, wikis, social networks, etc.) as a complement to the interaction of face-to-face teaching can foster cooperative learning among peers, solve questions, and collectively build knowledge (Nicol and Boyle 2003; Tien-Chi, Yueh-Min and Fu-Yun 2011; Castano-Munoz, Sancho-Vinuesa and Duarte, 2013). Likewise, Cox and Orehovec's (2005) study of students living on North American university campuses explored the complex nature of teacher-student interaction outside the classroom, and concluded that non-academic interactions between students and teachers can be significant for students. They established five typologies (disengagement, incidental contact, functional interaction, personal interaction and mentoring) for these kinds of interaction. This study highlighted the importance of building bridges between lecturers and students outside the classroom.

In Spain, the study by San Fabián, Belver and Álvarez (2014) on the implementation of the European Higher Education Area concluded that future studies should verify whether new methods have been actually implemented in university classrooms, as they observed that students reported that the dominant model was the theoretical-master class, which is far removed from the development of competencies, and from the object of discussion here: teaching-learning through interaction.

This paper specifically investigates the state of affairs regarding interaction-based teaching practices in Spanish universities.

Method

The aim of this study is to gain a better understanding of interaction-based teaching practices in university classrooms, from a pedagogical perspective. I agree with De Longhi, Ferreyra and Peme (2012) that 'it is fundamental to deal with the subject of communication in the training and practice of teachers from a pedagogical perspective'. The specific objectives of this paper are: (1) to discover the communicative roles that are enacted in university classrooms; (2) to discover the communicative roles enacted in other times and spaces: before and after classes, virtual classrooms, tutorials and reviews; (3) to analyse the factors that facilitate or hinder interaction in the classroom and (4) to explore interactive teaching practices.

In order to meet these objectives, a qualitative study took place based on in-depth interviews with university students. Two Spanish public universities located in the capital of two one-province Autonomous Regions were



selected, and students from the five major fields of knowledge (Natural Sciences, Social Sciences, Health Sciences, Engineering and Humanities) were contacted. A total of 50 in-depth interviews were carried out with 10 students from each of the five fields of knowledge to ensure a diversity of subjects studied. Different levels of academic results and educational motivations existed among them. They were reached through various contacts from within their respective faculties (thanks to the support of lecturers, chancellors' teams, student associations, etc.).

The topics covered by the interviews were:

- Class interactions: types, frequency, etc.
- Interactions before and after class, virtual classrooms, tutorials and reviews.
- Factors that facilitate or hinder interaction.
- Outstanding educational experiences of classroom interaction.

The interviews were recorded and later transcribed. Subsequently, the various statements about university teaching that had been collected were organised and analysed by the use of content analysis. Extracts from the interviews will be used to substantiate the findings, using the name of the subjects (a pseudonym) and the field of knowledge to which each of them belonged.

Findings

The results have been grouped around three broad categories: (1) interaction in the university classroom; (2) interaction in other times and spaces ; (3) facilitating and hindering factors for interaction and (4) interaction practices.

Interaction in the university classroom

The answers provided by the fifty students interviewed revealed the usual dynamics that take place in university classrooms for different fields of knowledge.

It is particularly striking that a large number of statements reported that the usual form encountered is the master class, which is expository in nature and involves little or no interaction. 'Except for a few notable exceptions, here we have master classes, the typical old-fashioned ones ' (Lourdes, Health Sciences).

Given that the most common approach used in the classes is expository, questions and answers as the main means of communication in the classroom are of special interest. However, students expressed an enormous diversity of possible responses in this regard: some lecturers do not allow them, because they judge them to be an interruption; some do not respond adequately when they arise, in order to prevent them from happening; closed questions asked only to evaluate if the student knows the answer; a mixture of open and closed questions; open questions are used at the beginning of new topics to probe the level that students have; and those lecturers who ask, 'is this clear?' but continue to move on and introduce new content without waiting for a response; some lecturers who are delighted to be asked and answer questions, and to ask and find students willing to answer, etc. Regardless of the professional field, the students believed that it was (mainly) more a question of attitude, both of lecturers and students in the classroom.

It depends on the lecturer. I have some that before explaining or doing things, ask us if we think if it is true or false, they give us time to think about it, ask us how many people think this or that ... But, basically most of them don't do that. Most do the exercises and on we go. You may as well not understand anything. If you don't ask a question, and if you have gone three days without checking something at home, you may be very lost (Alicia, Natural Science).



Today, classes are usually organised around the lecturer's reading of PowerPoint slides. Students criticise their uselessness when they contain only text and the lecturer merely explains them. 'Seventy percent of them read the slides. There is no difference between being in class or being at home in front of the computer and reading them' (Félix, Engineering). Faced with this situation, students disconnect and become demotivated. 'If you're given a 55-minute non-stop talk, it's much easier to lose the thread, and you're likely to get your computer and Google and start looking at something else' (Lucas, Humanities).

This is transferred to the evaluation, as it involves merely reproducing the content they have been taught. 'The lecturers that I have learned the most with teach through interaction. But there are others, who are the majority, who use memory. You memorise it, do the exam and that is it' (Luis, Social Sciences).

The students value hold lecturers who are open to interaction with them in high regard, because they help them to stay focused and understand the subject.

I had two subjects where we talked more. I think it's necessary to have constant interaction, because otherwise you lose people. You have to explain and ask. Or directly, ask and then explain. That way your previous thoughts are cut through by what is explained later. Learning by interaction is very valuable. You have prior knowledge that can be radically changed by what you are told later. What do you think is X? I think it's this, this and this ... Everyone shares their ideas and then the lecturer explains what is right and what isn't, and that changes your views' (Guillermo, Social Sciences).

Even students who have declared themselves to be very shy and have difficulty making contributions in the classroom showed greater satisfaction with interactive teaching:

All contributions are enriching. Some of us are more withdrawn and we contribute less, but the debates help you get ideas, and even if you don't not write them down, if you have a bit of memory, help with discourse and with the exam. You retain information better, because generally the pace of the classes is very intense, so those moments of debate, discussion, exchange, serve a double purpose: drawing from what others say and having clear ideas about what you think, you understand ... There are some lecturers who give you speeches, and it's very difficult to keep focused then' (Adrián, Humanities).

As this student mentioned, interactive teaching has notable advantages: it helps learn more and enjoy it more, students retain knowledge better, it helps them overcoming laziness and embarrassment, follow the subject better, ask questions, concentrate more in class, question their own previously-held ideas, and improve results. Due to all of this, students would like classroom dynamics to be much more interactive.

I would love to have a lot more interaction during the lessons. To have to take in two hours of this non-stop stuff... I find it boring. I have tested this: the subjects in which I have the best grades are the ones with the most interaction, because they are the ones that I enjoy the most and I get involved more (Monica, Social Sciences).

Interaction non-class time and space

As well as the interaction-based teaching-learning approach, a particularly important aspect in the dynamics of higher education are the interactions that occur in other spaces and at other times that are complementary to the daily work of the university classroom. Students were therefore asked about the time before and after school, tutorials and the use of digital platforms.



As for the times before and after classes, students agreed that while teachers differ greatly, and some are open to interaction at all times, others only allow it at the end of the class or in tutorials. Students expressed satisfaction with those lecturers who were open to listen to them at all times, and especially with those who stayed after the class to clarify things when needed.

Before the classes, they are distant. After them, they become friendlier. We usually wait until the end of the class to solve any individual issues so we don't do it out aloud' (Dário, Health Sciences).

As reported by this student, interaction styles in tutorials differ greatly:

'Lecturers in tutorials are divided into two groups: those who are available in their office hours and encourage you to see them, and those who believe that they are the Pope and you have to go chasing them outside of their scheduled times. Usually they complain that we go to see them less than we should, and they are right' (Sandra, Humanities).

In any case, the few students who said they have gone to tutorials thought that, usually, their questions are answered and they are treated in a friendly way. 'Many teachers change radically in face-to-face interaction, in tutorials. There is a lecturer who seemed very distant in class, but then was much more approachable face-to-face' (Guillermo, Social Sciences).

In addition, if the tutorial was intended for a review of grades, the relationship was reported to be more or less interactive depending on many variables: the student's grade, the number of students waiting in the corridor to review their exam, etc. The vast majority of students said that the interaction with the teacher was usually friendly, close and positive, although there were also cases in which they recognised that it did not enable learning:

Many times, I have gone to reviews to see my mistakes because I had to repeat the exam in September. They think you are going because you want to up a grade and many times it is not the case. Generally, they do not explain much in reviews. In tutorials they do, but in grade reviews they don't usually explain very much (Angela, Humanities).

However, there are other forms of exam review that do enable learning, but do not usually allow interaction, as this student commented:

'One of our exam reviews involved the lecturer uploading a corrected exam to Moodle. The review in that case was to go to a classroom and retake the exam. And that was it, you weren't told if you had got something wrong, or anything. That's the typical review. The normal thing would be to go to the lecturer's office and for them to explain things to you by interacting with you' (Francisco, Engineering).

Great diversity was reported in ways of interacting with students by the use of digital platforms. The students interviewed stated that the most common use of these was to download content, without interacting with anyone. 'We only download things in Moodle. There is a discussion forum but it is there for all subjects and there is never even a single entry' (Antonio, Natural Sciences). As this student noted, forums available in virtual classrooms are rarely used, and students considered that they would be very helpful. Those who had had the experience of using them valued them very highly.



'In my degree, virtual forums are used a lot and they are very useful, especially in the more complex subjects. It is helpful, because if you don't have the courage or you do not have time... you ask your question there, and your classmates (in addition to the teacher) can help you and explain things to you as equals, at your level. It helps' (Laura, Social Sciences).

Moreover, students said that younger lecturers generally use ICT (e-mail, virtual classroom, videos in class, etc.) much more and this leads to a better teaching standard. 'There are very old teachers who should really be retired and they are stuck in a way of teaching that is old-fashioned. We only have one lecturer to whom we can send work by email, the rest continue to demand paper. I'm astonished' (Agustín, Humanities).

Facilitating and hindering factors for interaction.

In categorising the answers of the students interviewed, it some of the main facilitating and hindering factors for interaction in the university classrooms were identify. These are displayed in the following two tables. These are answers that were consistently repeated by the university students consulted.

Table n.1. Factors facilitating interaction.

Factors facilitating interaction.

- Lecturers encouraging and consciously promoting participation on a regular basis
- Lecturers and/or students not being afraid to participate (asking, responding, formulating hypotheses,...)
- Lecturers making it the norm to address students and asking questions directly
- Lecturers forcing students to pay attention and preventing them from causing disruption in the classroom
- Presentations containing graphical information (maps, videos, graphs, photographs, etc.) and not just text to be read
- Having small groups (less than 30 people)
- Practising in pairs, groups of three or small groups in the classroom
- Having class debates
- Having mature students within the classroom, who are committed to their degree and their learning
- Enabling participation to be an element of evaluation
- Understanding error as a form of learning, without restricting or sanctioning it
- Having cohesive groups and a good atmosphere in the classroom (relaxed atmosphere, lecturers who makes jokes and uses anecdotes, etc.)
- Higher courses than the degree: reducing group sizes, the students who remain are more filtered, more mature and subjects are more specific

Table n.2. Factors hindering interaction

Factors hindering interaction

- The size of some groups (more than 50 people and in some cases, more than 120) and the lack of basic procedural knowledge to hold a debate
- Lecturer's comfort. It is easier to teach a class one-directionally than to interact with students in class constantly
- Negative reaction of the lecturer to questions being asked on the subject or a debate being held
- Fear of making mistakes, ridicule or reprisals from lecturers or students
- The tradition of teaching by dictating notes or projecting a presentation
- The tradition of teaching in a very individualistic rather than cooperative style



-
- Lack of training given to lecturers on how to plan interactive classes
 - Shyness, embarrassment or indifference of students within the classroom
 - Lack of students' interest in the subject or the degree they are studying
 - There are very technical subjects about which students lack previous knowledge to be able to encourage their participation
 - Class-mates with very different levels within the same class
 - Very broad and complex curricula, which are hastily approached. This would require reorganising the time allocated to each year and each class
 - Lecturers only being interested in research (not in teaching)
-

Interaction Practices

A large number of students considered that they had not had any interactive experience worth noting in their university classrooms. At times, they mentioned some specific classroom activity in which teachers and students had interacted with each other, but those concerned regarded it to be very isolated and infrequent. They made comments about specific classes, specific classroom, computer or laboratory practices, especially with interactive or dynamic lecturers, work through virtual forums, etc. Only a few students interviewed were able to provide some examples of interactive teaching-learning practices that they had experienced while at university. These practical experiences of interaction are extremely varied in nature and importance and, as shall be seen below, the students valued them highly. For reasons of space, and by way of example, five significant experiences will be highlighted, each of them taken from one field of knowledge:

Lucas, a Humanities student, highlighted a teaching experience based on reading seminars:

I had a fairly interactive experience that kept me really hooked. It was used in seminars and made me want to know more, to understand, to read, to find new ideas, especially to read. It has been much harder, but also much more manageable, because wanting to go to class is essential'.

Laura, a Social Sciences student, highlighted a subject in which they had to work collaboratively to solve exercises:

I had a subject in which we were solving exercises all the time and the teacher asked us "what would you put here", "what would you do there ". It was a good experience. At first it was a mess because we hardly knew how to do anything and we lacked the basics, but in the end, we did it. When you discuss the subject, you take away concrete examples from the class and you remember everything better. Even in the exam I remember the example that we analysed in class. Sometimes you were called to do an exercise on the blackboard and the lecturer kept asking you questions to encourage you to explain how you were solving it. If you got stuck, everyone would help you and sometimes it was like that for the whole hour.

Andrés, a Health Sciences student, highlighted that the classes in which they had to work cooperatively to argue for their answers, after the lecturer had offered different alternatives through group oral multiple choice tests.

With one lecturer, we sometimes worked with multiple choice tests, giving the correct answer in groups, and this was very good. People did participate more there, it's true. I retain content better when we do multiple choice tests or discuss examples of clinical cases. In our case, open questions are very difficult to answer. If you ask us multiple choice questions you are arguing and discarding, and you can find the answer. That helps. You're more certain when you answer. Until you study the theory, you can't get the answer. You can't work out the answer by yourself.



Elisa, a Natural Sciences student, decorated a teaching experience in which a lecturer always asked them about the class content during the class itself, to check for understanding, if they are paying attention and learning progress.

We do not have especially interactive classes in which we talk about topics or discuss things frequently, but there is a lecturer that others should imitate. He always asks us questions. This forces us to pay attention. I am shy, and knowing that tomorrow he may ask me, helps me to pay attention and encourages me to review content so that I am prepared when I go to class. He interacted a lot. He asked us questions to find out if we had understood what he had explained. In this degree, we need to interact with classmates and lecturers, but we don't do it much. The other day we had a very good class in which the lecturer started to ask us things we should know and we were shocked because we were supposed to know these things and more or less we knew, but now we remember everything we discussed.

Ezequiel, an Engineering student, highlighted his experience in two areas in which peer interaction was strengthened to solve practical assumptions:

There are two subjects I can talk about that are different. They are completely practical and make us come together as a group and we can talk and say 'here is what happens' and we support each other. We are asked to do things such as: 'Identify these plans'. But in the other subjects about plans, we never get together in a group. The lecturer arrives and explains, but there are never any stimuli, they never go further. It's all very individual-based.

As can be seen from their statements, some isolated experiences of interaction can be identified in all knowledge fields in university teaching. All of them were very highly valued, since students believe that the class environment is improved (collaboration is promoted, as opposed to individualism), the class is more enjoyable (there is more attention and involvement), and learning is enhanced (the use of debates and discussions encourages deeper learning of course content, which is retained better).

Conclusions

The results obtained confirm the low presence of interactive teaching-learning methods in university teaching in Spain. In the terms of the study by De Longhi, Ferreyra and Peme (2012: 184-188), which identified four main dialogic circuits (content transfer flow, open presentation, controlled dialogue and dialogical inquiry guided by the teacher), it could be said that, in general, university teaching in Spain mainly follows the first two models. Although all four of them can be found, the third and the fourth are used only by a minority. Monological discursive practices predominate, in which there is hardly any room for lecturers to interact with students or for students to interact with each other. Students easily identified classroom practices with non-interactive expository classes, following the traditional academic rationale, as well as other practices that were similar, but were open to questions, queries and observations during classes. Students also criticised the misuse and abuse of PowerPoint presentations.

In the interviews, it was observed how this style of teaching was generally applied in all the fields of knowledge, and it generated a certain feeling of disappointment with university teaching among students, as aptly expressed by Antonio, a Natural Sciences student:

I don't know whether debates should happen inside or outside the classroom, but I miss them a lot.
I think people who go to university expect something else. Certainly not just going to classes,



taking notes and reviewing them. That's okay, but give me some forum or some group discussion tool as well. That's missing. I miss it. And other people too!

It is important that students in all disciplines understand that these disciplines are alive and that there are eternal dilemmas underlying them, which should find expression in teaching as scientific debates, competing ideas, position-taking, etc. (Wells, 1999; Wells and Arauz, 2006).

In other times and spaces linked to teaching and learning in the university, there is a lot of diversity, and students interviewed identified that the differences lie in the lecturer's interest in paying attention to the student before or after classes. Very different practices exist regarding tutorials and exam revision, although in general students considered that relationships are closer and lecturers are more accessible in these face-to-face meetings, which enables them to have their questions answered. Everything suggests that these extra-curricular spaces and times are of great importance and could be used for educational improvement (Cox and Orehovec, 2005). The same applies to digital platforms, which were reported to be often underused, despite the many resources they provide (blogs, virtual forums, wikis, social networks, etc.) to enhance collaborative interaction in the process of knowledge construction (Tien-Chi, Yueh-Min and Fu-Yun, 2011; Castano-Munoz, Sancho-Vinuesa and Duarte, 2013).

It can be concluded that students identify many facilitating and hindering factors for interactive teaching in university classrooms: lecturers' accessibility, fear of ridicule, size of groups, interest in subjects or degree, tradition, the cohesion of groups, etc., are all some of the variables that positively or negatively affect the classroom environment, and therefore, the management of dialogue in the classroom. These results are consistent with those shown in international studies (Wells and Arauz, 2006, Ashwin, 2012, Gillies, 2014, Tlhoale, Hofman and Winnips, 2014, Ononye, 2015).

It is also possible to conclude that students had serious difficulties in identifying interactive practices in which the teaching-learning process overcomes these models. This is partly due to the fact that they are rarely used. Most of the students interviewed were not able to identify any interactive practices, or if they did, they had mostly occurred at other education stages or in informal education (mainly referring to private tuition). Teaching-learning experiences through interaction in the university were 'isolated cases', but are very highly valued by students. In spite of this, there are interactive teaching practices in the university in all fields of knowledge in other countries (De Longhi, Ferreyra and Peme, 2012).

Despite the important conclusions referred to, it is not possible to make broader ones using this study, since it only reflects the view of the matter by students, and it would need to be replicated to include lecturers and professors. The repetition of this study with university teaching staff might offer additional perspectives to this field of research. Federico, a student of Natural Sciences, stated the following: 'When you see lecturers who don't motivate you in class, you do not feel like going, and when you have lecturers who do other things, then you are the one who discourages them'. Questions arise, however, as to how teachers are prepared for university teaching, and what pedagogical training they have to be able to use an interactive teaching style, whether they know specific techniques to enhance teaching-learning through interaction, what results they obtained when using them or putting into practice other 'home-grown' methods, etc. Given this situation, this may be something future studies could investigate to complement the present one. This remains a new field and much more research is needed (Ashwin, 2012, Richardson and Radloff, 2014, Prados and Cubero, 2016).

Nevertheless, and despite this limitation, a message is clear: students demand a methodological change in which the interaction in the teaching-learning process is prioritised. Those who have had some interactive experiences claim to have been more involved in their studies and to have felt part of the educational process, to have asked themselves more questions, to have had a deeper understanding of course, to have enjoyed their subjects more, to



have paid more attention in class and to have obtained better academic results (Mercer And Howe, 2012, Skidmore and Murakami, 2012, Longhi, Ferreyra and Peme, 2012, Teo, 2013). A methodological change is required in today's university classrooms in Spain, and teaching-learning practices through the use of interaction are essential in order to promote it (Mercer and Howe, 2012; Gillies, 2014, Richardson and Radloff, 2014, Yannuzzi and Martin, 2014).

I am aware that despite the high expectations for change in the European Higher Education Area, there is still much room for improvement in Spanish universities (some degree programmes are oversubscribed, there have been funding cuts, the employment situation of some lecturers needs improving, etc.). However, a commitment to the introduction of dialogic teaching-learning practices in our universities is viable, necessary and urgent, and could be a major step towards improving the quality of teaching and of the Higher Education system in Spain.

References

- Álvarez, C., Silió, G. & Fernández, E. (2012). Planificación, colaboración, innovación: tres claves para conseguir una buena práctica docente universitaria. *Revista de Docencia Universitaria. REDU. Monográfico: Buenas prácticas docentes en la enseñanza universitaria*. 10 (1), 415-430. Recuperado el 25-2-2016 en <http://redaberta.usc.es/redu>
- Ashwin, P. (2012). *Analysing Teaching-Learning Interactions in Higher Education: Accounting for structure and agency*. London: Continuum.
- Camila, F., Mercuri, E. & Da Silva, L. (2011). Escala de interação com pares: construção e evidências de validade para estudantes do ensino superior. *Psico-USF*, 16(1), 11-21.
- Castano-Munoz, J., Sancho-Vinuesa, T. & Duart, J. M. (2013). Online Interaction in Higher Education: Is There Evidence of Diminishing Returns? *Internacional review of research in open and distance learning*, 14(5), 240-257.
- Cox, B. E. & Orehovec, E. (2005). Faculty-student interaction outside the classroom: A typology from a residential college. *Review of Higher Education*, 30(4), 343-362.
- De Longhi, A. L., Ferreyra, H. A., & Peme, C. (2012). La interacción comunicativa en clases de ciencias naturales. Un análisis didáctico a través de circuitos discursivos. *Revista Eureka sobre enseñanza y divulgación de las ciencias*, 9(2), 178-195.
- Gillies, R. M. (2014). Developments in classroom-based talk. *International Journal of Educational Research*. 63, 63-68.
- Mercer, N. & Howe, C. (2012). Explaining the dialogic processes of teaching and learning: The value and potential of sociocultural theory. *Learning, Culture and Social Interaction*. 1(1), 12-21.
- Nicol, D. J. & Boyle, J. T. (2003). Peer instruction versus class-wide discussion in large classes: a comparison of two interaction methods in the wired classroom. *Studies in higher education*, 28(4), 457-473.
- Prados, M. M. & Cubero, M. (2016). ¿Cómo argumentan docentes y discentes en las aulas universitarias? *Educación XX1*, 19(1), 115-134, doi:10.5944/educXX1.13939.
- Richardson, S. & Radloff, A. (2014). Allies in learning: critical insights into the importance of staff-student interactions in university education. *Teaching in Higher Education*, 19(6), 603-615.
- San Fabián, J.L., Belver, J.L. & Álvarez, C. (2014). ¿Nuevas Estrategias y Enfoques de aprendizaje en el contexto del Espacio Europeo de Educación Superior? *REDU - Revista de Docencia Universitaria*, 12 (4), 249-280. Recuperado el 29-2-2016 en <http://www.red-u.net>
- Skidmore, D. & Murakami, K. (2012). Claiming our own space: polyphony in teacher-student dialogue. *Linguistics and Education*. 23(2), 200-210.
- Tien-Chi, H., Yueh-Min, H. & Fu-Yun, Y. (2011). Cooperative Weblog Learning in Higher Education: Its Facilitating Effects on Social Interaction, Time Lag, and Cognitive Load. *Educational technology & Society*, 14(1), 95-106.
- Tlhoale, M., Hofman, A. & Winnips, K. (2014). The impact of interactive engagement methods on students' academic achievement. *Higher Education Research & Development*, 33(5), 1020-1034.



- Ononye, C. F. (2015). Style and Lexical Choices in Teacher-Student Classroom Interaction. *International journal of Humanities and cultural studies*, 2(2), 368-381.
- Teo, P. (2013). 'Stretch your answers': Opening the dialogic space in teaching and learning. *Learning, Culture and Social Interaction*. 2(2), 91-101.
- Wells, G. (1999). *Dialogic Inquiry: Towards a Sociocultural Practice and Theory of Education*. England: Oxford University Press.
- Wells, G. & Arauz, R. M. (2006). Dialogue in the classroom. *The journal of the learning sciences*. 15(3), 379-428.
- Yannuzzi, T. J. & Martin, D. (2014). Voice, identity, and the organizing of student experience: managing pedagogical dilemmas in critical classroom discussions. *Teaching in Higher Education*, 19(6), 709-720.



The Importance of the Tutor's Psycho-Pedagogical Development in Training Nurses

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Abstract

In today's healthcare system, nurses make up the largest professional category. During clinical training, the nurse trainee learns, while working in a team or alongside a community, how to plan, how to put into practice and evaluate general medical care, based on previously acquired skills and knowledge. One of the most important members of the tutoring team is the nursing tutor. In order for the tutors to really meet the needs of the students, they are required to be acquainted with the learning knowledge theories and their models, as well as the application of learning methods specific to the pedagogy of medical education, coupled with a continuing personal and professional development. Thus, the definition of psycho-pedagogical training for clinical practice tutors, followed by the development of specific skills, regulation and status consolidation for them represent the strategic objectives in a general context of training for future nurses.

Keywords: tutor, nursing, psycho-pedagogical skills

Introduction

The first ideas of tutoring come from antiquity, when Socrates (470/469 BC - 399 BC) questioned himself and created thinking directions for the sake of learning from experience. His ideas were taken over by Comenius (1592-1670), who in the study "Didactica Magna" ("Great Didactic") considered education inseparable from social life and linked the idea of practice to the learning process. Thus, students will be directly involved in the education process if they develop practical skills for theoretical knowledge. This principle applies by extension to any person undergoing a learning process. An avant-garde in perfecting pedagogical methods, Comenius has created a concept of teachers being assisted by advanced students, who have the role of conducting practical application activities for beginner students. This profile outlined by Comenius defines what will later be called tutoring, and the person empowered to carry out these guidance and support activities to facilitate the progress of a student or group of students will be called a tutor.

The idea that the tutor could be equipped with psycho-pedagogical abilities is relatively new in the Romanian educational environment. While other countries are concerned with their training, even at an academic level, in Romania the tutors do not have a pedagogical profile and a clear status.

Mentoring and the Mentor are defined in the Romanian legal teaching framework of post-secondary education. Meanwhile, tutorship is only defined in the context of tertiary education, as follows: "tutorship is a program of support and counselling for students meant to facilitate integration in university education, to provide guidance in choosing the most student-appropriate didactic, cultural and social options, as well as encouraging the sharing of students' knowledge and skills, improving academic performance. The tutorship system encourages students' communication and trust towards the university and the academic environment" (Babeş-Bolyai University Cluj, Titu Maiorescu University Bucharest). The omission to define tutorship for the pre-university environment has negative effects on the tutor, leading to volunteering activity, lacking a well-defined legal and professional framework.

Student-centred education, known as the Bologna Process, is the main benchmark for European education and, implicitly, for Romanian education. According to this system, the student is a future expert, an active actor in education and training, and is considered a partner of those who build this type of education. Practical work is an integral part of the learning process. The specialized practice is compulsory for the student whose specialization



includes this type of activity according to the curriculum. Internship allows the application of the knowledge and skills acquired during the theoretical courses and has learning objectives, forms competencies and converges to the foundation and finalization of the bases of the profession.

Training tutors – last goal in teaching nurses

In today's health care system, nurses make up the professional category with the most numerous staff. The World Health Organization shows that there are currently over 9000000 nurses and midwives working in 141 countries. Clinical training of nurses takes place in hospitals, other health care facilities, including home medical care, under the responsibility of teacher nurses, and with the collaboration of other qualified nurses. By definition, nursing means caring. It is a profession within the health care sector focused on the care of individuals, families and communities so they may attain, maintain or recover optimal health and quality of life. However, there is a subtle difference between the two: nursing is widely considered as an art and a science, wherein caring forms the theoretical framework of nursing. Nursing and caring are grounded in a relational understanding, unity, and connection between the professional nurse and the patient. Task-oriented approaches challenge nurses in keeping care in nursing. This challenge is on-going as professional nurses strive to maintain the concept, art, and act of caring as the moral centre of the nursing profession. Keeping the care in nursing involves the application of art and science through theoretical concepts, scientific research, conscious commitment to the art of caring as an identity of nursing, and purposeful efforts to include caring behaviours during each nurse-patient interaction.

In clinical education, the assistant candidate learns, alongside a team, in direct contact with the sick or healthy person or community, to plan, practice and assess general medical care based on previously acquired knowledge and skills. The guidance team has in its composition a practice tutor whose decisive role in the formation of future nurses has been and is a subject of interest, research and development for all education systems. The triad of teaching / learning / practice and research is an indispensable element in the training of nurses. Practical experience of future nurses is an essential pivot in their training. The integrative alternation process, student guidance made by a professional, leads to a profession appropriation and allows the student to gradually acquire the necessary skills in the profession for which they are preparing.

In this process, the tutor's abilities are not limited to communicating, presenting, planning, guiding, understanding, analysing, interpreting, coordinating, examining, demonstrating, they also involve pedagogical knowledge, individual-specific knowledge and nursing theory, to be able to accept and guide clinical practice in accordance to current requirements. One of the components of basic care, as Virginia Henderson said, is “to help someone learn, discover, or satisfy their curiosity, all of which lead to normal development and health.”

Can we define, in the context of the changes taking place in Romanian education, based on the current legislation, who deals with the students' practice in the institutions of training future nurses (post-secondary schools, faculties)?

What is the role of the tutor?

Who can become a tutor?

Is the tutor a learning facilitator?

Can tutoring be regarded as a didactic profession?

Is the psycho-pedagogical training of the tutor necessary?

We use the term tutoring to define the support work done by a tutor to facilitate the progress of a learner or group of learners who don't only use theoretical materials in the care of the patient for learning, but also practice these techniques in a hospital unit. This activity can take different forms, the role of the tutor being interpreted from one system to another: diagnosing student problems, aiding learning skills, supporting practical activities, enriching, diversifying the type of patients, depending on affections - generally those activities whose purpose is to promote the study and to facilitate the implementation of accumulated theoretical notions.



The tutor is, in theory, the only person who comes in direct contact with the student (telephone, internet, face to face), but their role is only that of a mediator between the study material and the learner, in no case replacing a sequence of materials presented through a face-to-face form of teaching. Correlated with the activity of the tutor, different types of theoretical education can be used distinctly, which also impose the roles within the practice institution - hospitals, clinics, home care services, other health institutions, as follows:

- Institutions where lecturers and tutors prepare the necessary materials and distribute them;
- Institutions where the materials made in specialized centres are adapted by tutors according to the specialisation of the unit in which the practice is performed, for a specific target group and then distributed;
- Institutions where tutors distribute materials made in other centres without changing them.

Generally speaking, the title of “tutor” in a training system for future nurses involves certain types of tasks, some of which are also accomplished through consulting other programme participants.

As far as the necessary knowledge and skills are concerned, in the following table they are schematically highlighted in correlation with the tasks involved in the tutorial:

Table 1. Correlation between psycho-pedagogical skills and tutoring activities

Psycho – pedagogical key aspects	Tasks	Skills/Knowledge
Personalisation and adaptability	Selection and adaptation of learning materials Preparation of learning materials	Assimilation and use of content for courses and databases - Knowledge of the target group, course objectives and evaluation requirements - Selecting the right training package by including work experience - Ability to design the required materials
Guidance and freedom	Pre-course counselling (determining the learning needs)	- Knowledge of the course material available - Counselling / guidance skills, inter-personal relationships - Identification of training needs based on established practice objectives
Motivation & Developing self-regulated learning	Induction Learning support	Communication, guidance and motivating abilities - Knowledge of the psychology of education - Adapting to learning styles - Monitoring of practical work - Knowledge and assessment skills, assessment techniques - Maintaining and permanent review of the database - Managing crisis situations
Collaboration and good practice sharing	Post-course counselling	- Counselling and socio-professional orientation. - Knowledge of labour market requirements.

After analyzing the tasks and abilities extracted, one can deduce the most important functions of a tutor:

☐ **Management function:**

- They organise the group and establish responsibilities
- They aim for reaching the established learning objectives
- They elaborate a specific action plan
- They validate each stage before moving forward to the next one
- They fix the objectives through feed-back
- They ensure direct communication between the practice partner and the school

☐ ☐ **Pedagogical function:**

- They ensure proper transmission of information through verbal and non-verbal communication
- They give and offer feed-back
- They give educational support to the student (guidance) in the process of accumulating professional abilities
- They continuously provide learning situations (case studies)



We view tutoring as a knowledge-rich profession with tutors as “learning specialists”. As professionals in their field, tutors can be expected to process and evaluate new knowledge relevant for their core professional practice and to regularly update their knowledge base to improve their practice and to meet new teaching demands. By investigating the knowledge underlying effective teaching and learning, we are studying how to improve the tutor’s teaching quality. Teaching quality itself is an important factor in determining gains in student achievement and to improve student outcomes.

There are many features that characterise good teachers, which include extensive pedagogical content knowledge, better problem-solving strategies, better adaptation for diverse learners, better decision making, better perception of classroom events, greater sensitivity to context, and greater respect for students.

A good teacher is one that is capable of performing in a variety of teaching styles, thus having the opportunity to adapt their work to different circumstances, allowing more flexibility and an efficient delivery of the content. A current and modern teaching style is the creative one. Some teachers show more flexibility than others in their teaching attitude, being receptive to new ideas and experiences, demonstrating boldness, more freedom of thought manifested also in their teaching style, having the ability to take risks and willing to try new methods, new strategies.

Thus, in addition to proven professionalism, the tutor must also acquire the characteristics of a good teacher, so that his knowledge and experience are transmitted as well as possible. In other words, teachers teach knowledge and tutors teach/share professional experience and guidance.

While teacher knowledge is certainly a component of teacher professionalism, professional competence involves more than just knowledge. Skills, attitudes, and motivational variables also contribute to the mastery of teaching and learning. Blömeke and Delaney (2012) proposed a model that identifies cognitive abilities and affective-motivational characteristics as the two main components of teachers’ professional competence:

Table 2. Professional competence of teachers adapted from Blömeke and Delaney (2012)

Cognitive abilities	Affective-motivational characteristics
professional knowledge	Motivation
general pedagogical knowledge	self-regulation
content knowledge	professional beliefs about teaching and learning and the subject content
pedagogical content knowledge	

The pedagogical ‘knowledge base’ of teachers/tutors includes all the required cognitive knowledge for creating effective teaching and learning environments. So, it is the distinction between declarative (‘knowing that’) and procedural knowledge (‘knowing how’). This approach is relevant as it focuses on understanding how knowledge is related to behaviour, or in other words, the quality of teaching performance. Therefore it is very important to underline that pedagogical content knowledge is the knowledge which integrates the content knowledge of a specific subject and the pedagogical knowledge for teaching that particular subject. Also, general pedagogical knowledge is essential for developing quality teachers/tutors. Psychological components account for the fact that learning occurs in a social context and learning success depends on the general cognitive and affective characteristics of individual students.

Investigating the knowledge of tutors as ‘learning specialists’ involves understanding how this knowledge functions in the tutoring-learning process; more specifically, how tutors apply their knowledge in making decisions, for example, about case study design or making on-the-spot judgements in the clinical environment.

We can conceptualise the teaching profession as a ‘clinical practice profession’ and compare it to the medical profession. Some argue that decision-making is actually a basic teaching skill – decisions are made regularly by



teachers while processing cognitively complex information about the student in order to decide alternatives for increasing their understanding. But that is exactly what a tutor must do along the whole process of tutoring.

The nursing teacher is by definition a practitioner and a promoter of interactive methods, considering the ultimate goal of the teaching nurses – training the tutors.

Findings

Sanitary Post-high School “Fundeni” Bucharest is the most important state educational institution in Romania in the field of health care and a centre for continuous training of teachers in this field. Founded in 1950, it has traversed all the historical, economic and social periods of the Romanian educational environment, maintaining its leading position in the educational offer in the field of health care, through the high quality of the educational process and the development of a professorial elite. In full knowledge of the importance of training and preparation, it has been running many projects and partnerships, of which the most relevant are: "NURSING - Convergence of pre-university medical education with active life" (2009-2011); "SOS - Medical Sector!" - pilot project for the optimization of practice and insertion, correlated with national promotion campaigns, orientation and counselling for the reduction of medical personnel deficit (2010-2012); "Multiregional Program for Improving the Transition from School to Active Life for Students in Health Schools" (2010-2013) in the major field of intervention 2.1 "Transition from School to Active Life", Priority Axis 2 "Correlation of Learning Throughout Life with the Labour Market ", Sectoral Operational Program Human Resources Development 2007-2013, European Social Fund. Both through the development of partnerships and projects as well as through the current activity, the school permanently pursues the following objectives:

- ☐ Preparation of practical skills necessary for employment through practical training for potential employers;
- ☐ Development of career prospects by providing guidance and counselling services in support of the transition from school to active life;
- ☐ Improving the quality and effectiveness of internships through the training of nominee tutors through practical conventions and the development of support materials (practice books, evaluation and monitoring questionnaires for practical internships and a good practice manual);
- ☐ Developing partnerships with potential employers.

In the Sanitary Post-high School „Fundeni” the nursing teachers pay special attention to the professional development of the students, while also focusing on the skills needed for the nursing practice of the care process. The competencies, abilities, as well as psycho-motor, cognitive and relational skills for the nursing practice are conveyed and improved by the nursing teachers’art of teaching. They must select and use the teaching methods which shape the personalities of students, enabling them to provide individualized, personalized care in real-world context of health problems.

The methods and strategies used by us are aimed at communicating and exploring the patients’ health problems, as well as selecting the proper ways to solve them. Learning by experience and by applying certain gained knowledge in practice is the most efficient method of training skilled nurses.

The active and participative methods represent the leap from "learning" to "learning to be and become", i.e. the training to cope by gaining the motivation for action and involvement.

As a result, for the successful application of these methods, the teacher has to change their way of thinking and the methodology of training and education, in order to work with students, to become a real model for continuing education through flexibility and originality, to become involved in decisions pertaining to education, to ensure quality education for all. The teacher management training, the learning of the management culture, apart from the traditional psycho-pedagogical and methodical one, could provide the understanding and the application of the



authority-freedom relationship, as a new meaning for education by means of the teaching-learning process and by solving other cases related to the educational process.

The successful teaching and learning process is not only based on the factual and scientific competencies, but also on the pedagogical and psychological experience and safety. It demands from the teacher a continuous professional development, in which training is a valuable tool. The most important part of the training is learning through reflection.

The pedagogical competence does not only develop through experience, but it should also be strengthened by self-assessment. In the reflection process there can be a comparison of the lesson plan with what actually happened. For example, the students might behave differently than it was anticipated or one of the phases of the teaching process may take longer than expected. This happens quite frequently when applying participatory methods. Thus, by passing through the analysis phase and by identifying the root cause of the deviations from the plan, the teacher may have valuable cues both for the application of the teaching strategies and for their own professional development. Add to these a better observation and knowledge of the students, which implicitly leads to the best environment for valuing their potential.

These principles of interactive teaching methods represent the core of the psycho-pedagogical training of tutors offered by the school.

The training programme for tutors is done through a psycho-pedagogical module consisting of 90 hours – theoretical training and 60 hours for a compulsory pedagogical internship. The aim of this programme is to develop psycho-pedagogical skills that would allow tutors to identify efficient ways of transmitting knowledge and knowhow, using specific material resources.

Conclusions

Considering the European health strategies and the state of health of the population in our country, in the process of health education, nurses should not be prepared only to meet the needs of the individual, the family, the community, but also to trust their own intellectual and clinical capabilities so that they can work responsibly and autonomously to cope with more complex health needs. Educational results should enable the student, the future nurse, to select information to make it possible to assess, plan, implement and evaluate nursing care.

Tutor quality is conditioned by proven professional skills. The tutor's real encounter with the needs of the students requires knowing the theories of learning and their models, applying the teaching methods specific to medical pedagogy, alongside a continuous personal and professional development. Thus, defining the psycho-pedagogical training of the clinical practice guardian followed by the development of specific competences, the regulation and strengthening of the state are strategic objectives in the general context of preparing the future nurses. It is not enough for young nurses to have all the theoretical knowledge they need. In addition to knowing, their preoccupation with training must also focus on their preparation for the correct application of knowledge, which can only be achieved by the intervention of a tutor equipped with psycho-pedagogical abilities.

References

- Alter, J & Coggshall, J.G. (2009). *Teaching as a clinical practice profession: Implications for teacher preparation and state policy*. New York: New York Comprehensive Center for Teacher Quality.
- Ackley, J.B., Ladwig, B.G. (2010). *Nursing Diagnosis Handbook – An Evidence-Based Guide to Planning Care*. Mosby Elsevier, 9th Edition.
- Boghici, C., Boghici, S.T. (2013). *The interactive methods and techniques stimulating creativity crucial components of the didactic strategies* – article in **Bulletin of the Transilvania University of Braşov (Series VIII: Performing Arts, Vol. 6 (55) No. 2 – 2013)**.



- Blömeke, S. & Delaney, S. (2012). *Assessment of teacher knowledge across countries: A review of the state of research*. ZDM Mathematics Education, 44, 223-247.
- Cerghit, I. (2002). *Sisteme alternative și complementare de instruire*. București, Editura Didactică și Pedagogică.
- Dubois V., Wanrooy B. von, Hibble A. (1998). *Teaching the teachers-hand book for the Roumanian course for teachers in general practice*, Bucharest.
ec.europa.eu/dgs/education_culture/teachercomp_en.pdf
- Moorhead, Johnson & Maas (2004). *Nursing outcomes classification (NOC)*. 3rd edition. Mosby Elsevier
- OECD. (2005). *Teachers Matter: Attracting, Developing, and Retaining Effective Teachers*. Paris: OECD Publishing.
- Szőke-Milinte E. (2013). *Didactic teaching strategies for successful learning* – article in PedActa (Volume 3, Number 2, 2013).
- Tayray, J. (2009). *Art, Science, or Both? Keeping the Care in Nursing* – article in Nursing Clinics of North America (Volume 44, Issue 4, December 2009, Pages 415-421).
- Voss, T., Kunter, M., & Baumert, J. (2011). *Assessing teacher candidates' general pedagogical/psychological knowledge: Test construction and validation*. Journal of Educational Psychology, 103(4), 952-969.
- www.slideshare.net/Role Project/psycho-pedagogical approach.



Human interaction skills and employability at information technology internships

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Abstract

To implement internships with undergraduate students is a pedagogical option with good results perceived by academic staff, employers, and among graduates. The Human Interaction Skills development as well as the attractiveness of such experiences for higher education students are topics assumed as core in the conception and management of the activities implemented in the undergraduate courses offered at the last three decades in computer science degree and in information systems technologies degree at one Portuguese private university. The objectives of this paper are to gather evidence of the Human Interaction Skills explained and valued at Information Technology Internships and to evaluate the importance and the relevance of these experiences in promoting employability after the Information Technology Internships. Data collection was based on the application of questionnaire to trainee supervisors and to students who have completed Information Technology Internships in the last decade at one Portuguese private university. The trainee supervisor, responsible for monitoring the student's performance at Information Technology Internships, evaluates the following Human Interaction Skills: Motivation and interest in the activities developed, interpersonal relationship, cooperation in company activities, assiduity, ease of knowledge apprehension, compliance with norms, insertion in the work environment, productivity, initiative, ability to take responsibility, creativity in proposing solutions, and self-confidence. The results show that in the concluding phase of these undergraduate courses students have positive levels of development of Human Interaction Skills and that these students, once they finish their degree, initiate remunerated work functions, mainly by invitation of the institutions in which they perform Information Technology Internships. Findings provided strong evidence of Human Interaction Skills advantages contribute to widen the analysis of its effectiveness in terms of future research and actions in regard to the transition from Higher Education pathways to the Labour Market.

Keywords: Human Interaction Skills; Employability; Internships; Information Technology; Higher Education

Introduction

To implement internships with undergraduate students is a pedagogical option with good results perceived by academic staff, employers, and among graduates. In recent years, the authors of social cognitive theory of career have been explaining the influence of academic experiences at Higher Education Institutions in various aspects of vocational development emphasizing that academic experiences are a source of relevant information in the process of constructing meaning the role of modeling, evaluation, performance and merit, contributing to the development of higher education students vocational interests and values (Costa-Lobo, 2011; Costa-Lobo and Ferreira, 2012; Magalhães et al., 2017). The transition to the labour market is seen as an component of vocational development which is categorized by a long process in time, which starts before the conclusion of graduation courses and that endures even subsequently the beginning of the labour activity (Lent, Taveira, & Costa-Lobo, 2012; Magalhães, 2017). The research carried out over the last eighty years on the issue of "school-labour market transition" has been emphasizing the importance of looking at the preparation of higher education for work in a developmental perspective (Brennan & Little, 2006; Fugate & Kinicki, 2008; Weible, 2009; Yorke & Knight, 2007; Zhao & Liden, 2011). There are few learning experiences in a work context during a course degree, which makes it difficult to understand how the labour market works, what is expected of young people in a professional context, what skills they need to develop, as well as learn what skills are necessary and valued in their area of expertise (Brennan & Little, 2006; Daniels & Brooker, 2014; Fugate & Kinicki, 2008; Jesus-Silva,



Medeiros, Caramelo-Gomes, & Costa-Lobo, 2016; Weible, 2009). These aspects are related to the difficulties in the transition to the labour market acknowledged both by employers and by young people - the struggle in adjusting to the hierarchical structure of companies, in understanding what is their role within and demystifying their expectations on tasks they feel able to do and/or hoping to make and those they really are assigned to do (Magalhães et al., 2017; Taveira et al., 2010, Weible, 2009; Yorke & Knight, 2007; Zhao & Liden, 2011). According to Vieira and Marques (2014) the skills chosen by employers as the most important for professional purposes in the first five years are: analysis and problem solving, creativity and innovation, adaptability and flexibility, planning and organization, motivation for excellence. Offer opportunities for the simulation and experimentation of roles designed to prepare students to solve everyday problems in employment, training in career management techniques and role-testing are types of intervention strategies recommended in preparing graduates for the transition to the labour market (Magalhães et al., 2017). Learning approaches should include learning by doing, learning by experimenting, learning by interacting, learning from mistakes in a group context, should promote contribution, problem solving and decision-making, it should also promote teamwork between individuals with divergent backgrounds, because the diversity of paths can lead to a larger collection of competences and joint decision-making among actors with complementary competences (Costa-Lobo, 2011). This paper describes activities implemented at one Portuguese private university, Portucalense University (UPT). UPT is a private institution of higher education, certified by ISO 9001, recognized by the Portuguese Government and by the Portuguese Agency for the Evaluation and Accreditation of Higher Education, located in the city of Porto, in the north of Portugal. The organizational philosophy that supports Information technology internships at Portucalense University is presented at figure 1.



Figure 1. Information technology internships at Portucalense University: Organizational Philosophy (adapted from Magalhães et al., 2017)

Information Technology Internships at Portucalense University are understood in a learning environment systematized in table 1.



Table 1 – Information technology internships at Portucalense University: Characterization of the learning environment (adapted from Magalhães et al., 2017)

Steps	Task	Procedure(s)	Participants
1	Company Procurement and Student Preference Survey	Short list of organizations segmented by area, location and type of internship. Identification of the organizations that correspond to the area, place and typology of preference for the curricular internship. Management of the contacts with the welcoming companies (contacts with the partners and reception of the requests) Internship regulations are sent to the organization.	Curricular internship student (AEC) Internship Coordinating Council (CCE) Welcoming trainees Organization (LAO)
2	Organizational Philosophy of Curricular Internship	Student CV is sent to the organizations to plan an interview and select the student. Appointment of the curricular internship advisor and supervisor, after approval of the student CV by the organization. Assignment of the project to the student and definition of the respective planning (gant chart). At the first internship meeting, the protocol is presented and the objectives of the internship are explained.	Curricular internship advisor (OEC) Curricular internship student (AEC) Curricular internship supervisor (SEC) Direction of the Department of Economics, Management and Informatics Internship Coordinating Council, UPT (CCE) Welcoming trainees Organization (LAO)
3	Internship Project	Signing of the internship protocol between the organization and the UPT. Development of the curricular internship project under the OEC orientation (practical implementation of the project) and supervision by the SEC (theoretical framework of the project). Note whether there are deviations in the project from the objectives and tasks carried out in relation to the planned. Realign the project, if necessary, considering the organization's initial objectives and expectations.	Core of internship: Curricular internship advisor (OEC) Curricular internship student (AEC) Curricular internship supervisor (SEC)
4	Internship Report	CCE evaluates and approves the report. OEC ensures that the writing of the internship report fulfils the objectives and initial expectations of the OAE organization. SEC guarantees that the writing of the internship report complies with the guidelines pre-defined by the Internship Coordinating Council of UPT (CCE).	Curricular internship advisor (OEC) Curricular internship student (AEC) Curricular internship supervisor (SEC) Internship Coordinating Council (CCE)
5	Evaluation of the Internship Report	ECC critically evaluates the report proposing suggestions for continuous improvement and good practices of the curricular trainee projects to the OEC. OEC assigns a qualitative evaluation on a Likert scale of 5 points, according to 12 evaluation and performance criteria. SEC and CCE quantitatively evaluate the student's report and oral test from 0 to 20 values. Student submits the report to the CCE and requests the marking of the oral test made up of 3 elements (SEC, OEC and CCE).	Curricular internship advisor (OEC) Curricular internship student (AEC) Curricular internship supervisor (SEC) Internship Coordinating Council (CCE)
6	Conclusion of work contract with the trainee student	Student demonstrated throughout the curricular internship project to have certain skills, abilities and knowledge of the labour market interest that are important and attractive to the company.	Curricular internship advisor (OEC) Curricular internship student (AEC)



This learning environment is characterized by the following properties: Participatory and Problem-solving oriented. Information Technology Internships at Portucalense University apply a student centered approach where they are actively engaged in the learning process, using learning-by-doing and experience-based approaches. The Human Interaction Skills development as well as the attractiveness of such experiences for higher education students are topics assumed as core in the conception and management of the activities implemented in the undergraduate courses offered at the last three decades in computer science degree and in information systems technologies degree at UPT.

The objectives of this paper are to gather evidence of the Human Interaction Skills explained and valued at Information Technology Internships and to evaluate the importance and the relevance of these experiences in promoting employability after the Information Technology Internships.

Method

Data collection was based on the application of questionnaire to trainee supervisors and to students who have completed Information Technology Internships in the last decade at Portucalense University. The data presented and discussed for this study are based on a sample of 60 students from IT courses referring to nine school years (2006/07 to 2015/16). This sample is predominantly composed of male students (83.3%), a pattern that is constant throughout the school years studied. The trainee supervisor, responsible for monitoring the student's performance at Information Technology Internships, evaluates the following Human Interaction Skills: Motivation and interest in the activities developed, interpersonal relationship, cooperation in company activities, assiduity, ease of knowledge apprehension, compliance with norms, insertion in the work environment, productivity, initiative, ability to take responsibility, creativity in proposing solutions, and self-confidence. Statistical analyzes were performed using IBM SPSS software, v.22. Pearson's correlation coefficient was used to study the relationship between the assessment attributed by the curriculum internship advisor and the final grade obtained by the student. Regarding the students' performance in the curricular stage carried out in the company, the evaluations attributed by the company advisor regarding the cognitive skills, business skills and human interaction skills (questions Q1 to Q12) were analyzed, separately by sex. To evaluate the validity of the use of the Exploratory Factorial Analysis (EFA) the KMO criterion (Kaiser-Meyer-Olkin measure of sampling adequacy) was used with the criteria of classification defined by Marôco (2014a,b). Having observed a KMO = 0.803, EFA was used because this value indicates that the use of this factorial model is adequate; more, the Bartlett's test of sphericity has associated a level of significance of 0.000 that led to the rejection of the hypothesis that the correlation matrix is an identity matrix, reinforcing the existence, already verified, of correlation between the variables. If this were not the case, the use of this factorial model would be reconsidered (Pestana & Gageiro, 2008). In order to verify if these variables are strongly associated with each other independently of the student's sex, and given their nature (ordinal qualitative variables) was used Spearman's correlation coefficient. The relational structure of the 12 variables relating to the evaluation of curricular internship was evaluated by EFA based on correlation matrix, with extraction of the factors by Principal Component Analysis with orthogonal Quartimax rotation. The application of EFA allowed to retain two common factors that explained approximately 66% of the total variance. Finally, with the objective of grouping the variables into homogeneous groups and reinforcing the conclusions obtained by EFA, was used Hierarchical Cluster Analysis (exploratory multivariate data analysis).



Findings

The information was monetized concerning year in which the trainee student completed the 1st cycle of studies at Portucalense University, sex, bachelor's degree course attended (Informatics, Management Informatics, Informatics-software branch and Informatics-Information Systems branch), degree's final classification, and concerning internship final classification (these last two classifications were measured on a scale between 0 and 20 values). Each student indicated if was employed at the time of graduation and, if so, if was employed at the place where he / she performed the curricular internship. In addition to these data, information was collected on a set of 12 questions (Q1 to Q12) concerning the quantitative evaluation carried out by the curricular internship advisor based on the classification of a five-point Likert scale (1- poor, to 5-high), being the questions corresponding to components of the following skills: motivation and interest in the activities developed (Q1), interpersonal relationship (Q2), cooperation in company activities (Q3), assiduity (Q4), ease of knowledge apprehension (Q5), compliance with norms (Q6), insertion in the work environment (Q7), productivity (Q8), initiative (Q9), ability to take responsibilities (Q10), creativity in proposing solutions (Q11) and self-confidence (Q12).

Pearson's correlation coefficient was used to study the relationship between the assessment attributed to the curriculum internship advisor and the final grade, and a moderate positive correlation ($r = 0.47$) was found to be statistically significant at 1% (rejects the null hypothesis of the correlation is 0).

It can be concluded that the better is the student's academic performance (measured by their final grade), the better is their performance in the stage (as measured by the curricular stage grade) and the average final grade of these students is approximately 12,5 values ($SD = 0.96$), with a mean score of 15.4 ($SD = 1.25$), which indicates that students are well prepared while their curricular training is in progress. Hence, the high employability rate at the end of the curricular traineeship (77.8%) and the high percentage (57.1%) of these undergraduate degrees *alumni* who work at the company where they completed the internship are not surprising. These classifications were also analyzed separately by sex and it was found that there were no significant differences.

Regarding the performance of students in the curricular stage carried out in the company, the assessments attributed by the company advisor regarding cognitive skills, business skills and human interaction skills (Q1 to Q12) are presented in Table 1. This study was conducted separately by sex (see Table 2). For both sexes all the evaluations present an average score of over 4 (between good and very good), except for Q8 (productivity) and for Q9 (Initiative) for the female sex (being *Mean* = 4.8 in females, and being *Mean* = 4.4 in males). It should be noted that the average score obtained for male students is higher in all questions than the scores obtained for female students, except for "assiduity" (Q4) where the trend reverses ($m = 4.8$ in the Females vs $m = 4.4$ in males). These high ratings reinforce and explain the high classifications obtained in the curricular stage in detriment of the markedly lower scores in the final grade of the degree.



Table 2 – Descriptive statistics for questions Q1 to Q12

	Gender			
	Male		Female	
	Mean	Std. Deviation	Mean	Std. Deviation
Q1. Motivation and interest in the activities developed (Mean=4,48)	4,52	,646	4,30	,675
Q2. Interpersonal relationship (Mean=4,37)	4,40	,782	4,20	,632
Q3. Cooperation in the activities of the company (Mean=4,20)	4,24	1,001	4,00	,667
Q4. Assiduity (Mean=4,48)	4,42	,928	4,80	,422
Q5. Ease of knowledge apprehension (Mean=4,25)	4,28	,948	4,10	,568
Q6. Compliance with norms (Mean=4,63)	4,68	,551	4,40	,699
Q7. Insertion into the work environment (Mean=4,35)	4,36	1,005	4,30	,823
Q8. Productivity (Mean=4,25)	4,33	,718	3,90	,316
Q9. Initiative (Mean=4,20)	4,28	,834	3,80	,789
Q10. Ability to take on responsibilities (Mean=4,28)	4,28	,784	4,30	,949
Q11. Creativity in proposing solutions (Mean=4,10)	4,12	,824	4,00	,471
Q12. Self-confidence (Mean=4,12)	4,13	,789	4,10	,738

To verify if these variables are strongly associated with each other, regardless of the gender of the student, and given their nature (ordinal qualitative variables) Spearman's correlation coefficient was used. The correlations found are positive and globally high, namely between interpersonal relationship (Q2) and cooperation in company activities (Q3) ($r_s = 0.642$), between productivity (Q8) and creativity in proposing solutions (Q11) ($r_s = 0.705$) and between creativity in proposing solutions (Q11) and self-confidence (Q12) ($r_s = 0.648$).

To evaluate the validity of the use of the Exploratory Factorial Analysis (EFA) was applied the KMO criterion (Kaiser-Meyer-Olkin measure of sampling adequacy) with the criteria of classification defined in Maroco, 2014. Having observed a KMO = 0,803 the EFA was useful, because this value indicates that the use of this factorial model is adequate. More, the Bartlett's test of sphericity has associated a level of significance of 0.000 that led to the rejection of the hypothesis that the correlation matrix is an identity matrix, reinforcing the existence, already verified, of correlation between the variables.

Based on these results, the option was based on a multivariate analysis with the aim of identifying which skills contribute most to the curricular evaluation of internship advisor, and how these variables are associated with each other. A relational structure of the 12 variables relating to questions regarding the evaluation carried out by curricular internship advisor was assessed by EFA, based on correlation matrix, with extraction of the factors by Principal Component Analysis with orthogonal Quartimax rotation Revealed as the most appropriate), which allowed for an easier and more evident interpretation of the factorial structure. The finding of the factors potentiated to identify structural relations among the variables, structural relations that would otherwise go unnoticed in the set of the original variables. The application of EFA allowed to retain two common factors that explained approximately 66% of the total variance. Table 3 summarize the factorial weights of each variable in their factors and their eigenvalues.



Table 3- Exploratory factorial analysis results

	Components	
	1	2
Q1- Motivation and interest in the activities developed	,617	,050
Q2- Interpersonal relationship	,784	,115
Q3- Cooperation in the activities of the company	,442	,784
Q4- Assiduity	,157	,877
Q5- Ease of knowledge apprehension	,322	,820
Q6- Compliance with norms	,623	,075
Q7- Insertion into the work environment	,326	,830
Q8- Productivity	,798	,309
Q9- Initiative	,765	-,068
Q10- Ability to take on responsibilities	,843	-,026
Q11- Creativity in proposing solutions	,820	,217
Q12- Self-confidence	,741	,181
Eigenvalues	5,912	2,004

The first factor (component 1) shows high factorial weights on the variables "Interpersonal relationship" (Q2), "Productivity" (Q8), "Initiative" (Q9), "Ability to take on responsibilities" (Q10) and "Self-confidence" (Q12). The second factor (component 2) shows high factorial weights on the variables "Cooperation in the activities of the company" (Q3), "Assiduity" (Q4), "Ease of knowledge apprehension" (Q5), "Insertion into the work environment" (Q7). Figure 1 shows Component plot in rotated space, with map of factorial weights obtained display.

It is emphasized that, in relation to the 1st factor, factor defined by the variables Q2 and Q8 to Q12, all of them have positive weights which justifies their positioning on the same side of the axis, allowing to conclude that, the greater the student's creativity in the proposal of Solutions, the greater the productivity, the initiative, the self-confidence, the ability to take on higher responsibilities is the quality of the interpersonal relationship. As for the 2nd factor, a factor defined by variables Q3 to Q5 and Q7, the high weights allow us to conclude that the more easily the student is able to apprehend knowledge, the better the student is inserted in the work environment, being more cooperative in company activities and being more assiduous.

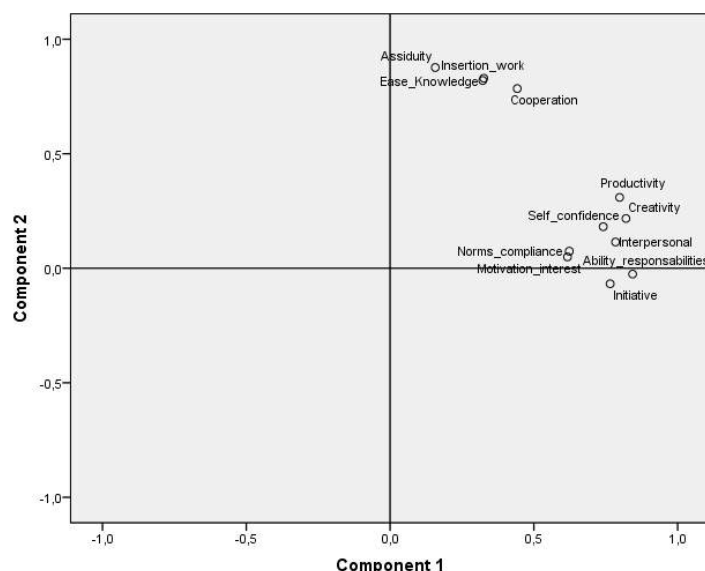


Figure 2. Component plot in rotated space

Looking at Figure 2, the 1st factor (component 1) defines human relations skills, and explains 49.3% of total variance, and the 2nd factor (component 2) defines organizational skills and competences, and explains 16.7% of total variance. Finally, with the objective of grouping the variables into homogeneous groups and



reinforcing the conclusions obtained by EFA, was used Hierarchical Cluster Analysis (exploratory multivariate data analysis).

The dendrogram obtained (see Fig. 3) suggests that there are two distinct clusters of variables: the clusters formed by the variables Q3, Q4, Q5, Q7 and the other formed by the remaining variables Q1, Q2, Q6, Q8, Q9, Q10, Q11, Q12.

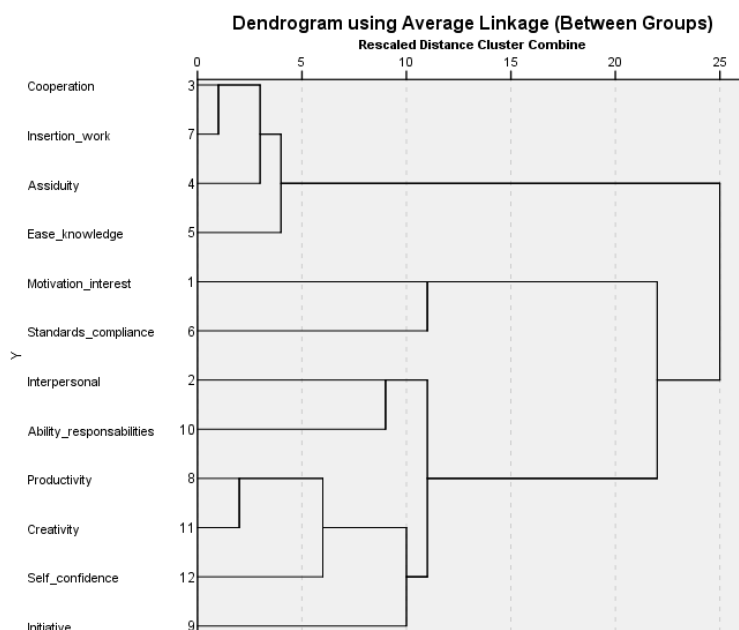


Figure 3- Dendrogram for questions Q1 to Q12

It is interesting to note that this clustering in two clusters justifies the retention of two factors in EFA.

As for the first cluster, the most similar variables are Q3 (cooperation in company activities) and Q7 (insertion in the work environment), which reveals that the better the student enters the work environment, the more he participates in the company's activities. However, for the last cluster, the division between the variables (Q1, Q6) and the remaining ones (Q2, Q8, Q9, Q10, Q11, Q12) seems clear. In this last cluster, the closest variables are Q8 (productivity) and Q11 (creativity in proposing solutions), which reveals that the more creative the students are in proposing solutions, the more productive they are. It should be noted that these conclusions are similar to those obtained in the EFA, with respect to the two retained factors.

Results, conclusions and recommendations

These students, once they finish their degree, initiate remunerated work functions, mainly by invitation of the institutions in which they perform Information Technology Internships. The greater these students are in proposing solutions, the greater will be their productivity, initiative, self-confidence, as well as ability to take responsibility and good interpersonal relationship, and the more easily the student is able to apprehend knowledge, the better is inserted in the work environment, thus being more cooperative in the company's activities, and consequently more assiduous.

The results show that these undergraduate courses promote the development of Human Interaction Skills, and in this study human relations skills explains 49.3% of total variance, and organizational skills and competences



explains 16.7% of total variance. Through these results, in the curricular units attended prior to the beginning of the internship, and during the supervision of the internship practices, training strategies in the fields of human relations skills and organizational skills and competences are of interest.

These are undergraduate courses predominantly attended by boys, while performances (in both sexes) are equivalent. It is noteworthy that girls, compared to boys, are more assiduous, less productive and have less initiative. It is mainly significant to involve boys in the training and valuation of attendance, signaling with the girls, at formative contexts, both learner and non-learner contexts, behavioral options that increase the levels of productivity and initiative. The average grade in the internship is, higher than the average final grade of all the activities of the degree, which shows the good performance in the companies by the students as well as the recognition and appreciation of the trainees' competences by them. In the classifications issued by trainee supervisors, there are high scores (level 4 and level 5, in the scale of 1 to 5) for all 12 questions that assess students' competences in companies.

Findings provided strong evidence of Human Interaction Skills advantages contribute to widen the analysis of its effectiveness in terms of future research and actions in regard to the transition from Higher Education pathways to the Labor Market. This article, following the work of Magalhães et al. (2017) presents information that reinforces that it is important to consider the following suggestions and intervention strategies to be implemented with higher education students: to improve communication between teachers and students in order to build more and better supports and academic resources; create psychoeducational interventions to boost academic self-efficacy and outcome expectations; psychological counseling centered in the training of relations skills and in the training of organizational skills and competences; increase the level of practical experiences provided to young people during their academic career (e.g. job shadowing programs); help to identify the strengths and weaknesses of each individual in order to implement skill development techniques directed towards the real and personal needs of young people; the implementation of programs with the purpose of mentoring, coaching and talent development, and personal and social skills supports within and outside the education system.

References

- Brennan, J. & Little, B. (2006). Towards a strategy for workplace learning. Milton Keynes: Open University Centre for Higher Education Research and Information.
- Costa-Lobo, C. & Ferreira, A. T. (2012). Educação para a Carreira: Contributos para a Tomada de Decisão nas Transições Profissionais. In: Alves, J. S. & Neto, A. M. S. (org.), *Decisão: Percursos e Contextos* (pp. 201–206). Vila Nova de Gaia: Eu Editó.
- Costa-Lobo, C. (2011). *Abordagem sócio-cognitiva do ajustamento à carreira no ensino superior: o papel das actividades em grupo, da auto-eficácia e dos interesses* (Tese de Doutoramento). Escola de Psicologia, Universidade do Minho, Braga, Portugal.
- Daniels, J. & Brooker, J. (2014). Student identity development in higher education: implications for graduate attributes and work-readiness. *Educational Research*, 56(1), 65-76. doi:10.1080/00131881.2013.874157
- Fugate, M. & Kinicki, A. J. (2008). A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change. *Journal of Occupational and Organizational Psychology*, 81, 503-527.



- Jesus-Silva, N., Medeiros, A. M., Caramelo-Gomes, J.; Costa- Lobo, C. (2016). Quality in higher education: analysis and discussion of evaluative standards internal consistency. Proceedings of ICERI 2016. ISBN: 978-84-617-5895.
- Lent, R. W., Taveira, M. C., & Costa-Lobo, C. (2012). Two tests of the social cognitive model of well-being in Portuguese college students. Original Research Article. *Journal of Vocational Behavior*, 80(2), 362-371.
- Magalhães, M., Morais, P., Lopes, F., Freitas, I., Fernandes, S., & Costa-Lobo, C. (2017). Transitions from higher education to labour market: Observatory of internships in business organizations. In *Proceedings of 11th annual International Technology, Education and Development Conference* (pp. 6451-6459). Valencia, Spain, 6-8 March 2017.
- Marôco, J. (2014a). *Análise estatística com SPSS (6ª ed.)*. Pêro Pinheiro, Portugal: Report Number.
- Marôco, J. (2014b). *Análise de equações estruturais: Fundamentos teóricos, software e aplicação (2ª ed.)*. Pêro Pinheiro, Portugal: Report Number.
- Pestana, M. G. & Gageiro, J. N. (2008). *Análise de Dados para Ciências Sociais. A complementaridade do SPSS, 5ª edição revista e corrigida*. Lisboa, Edições Sílabo.
- Taveira, M. C., Faria, L., Araújo, A., Pinto, J. C., Silva, A. D. S. C. S., Costa-Lobo, C., Ferreira, S., Carvalho, M., Konigstedt, M., Gonçalves, S., & Loureiro, N. (2010). *Integração e Bem-estar em Contextos de Trabalho*. Braga: APDC Edições. ISBN: 978-989-96700-3-7.
- Vieira, D. A. & Marques, A. P. (2014). *Preparados para trabalhar? - Um Estudo com Diplomados do Ensino Superior e Empregadores*. Edição: Fórum Estudante e Consórcio Maior Empregabilidade.
- Weible, R. (2009). Are universities reaping the available benefits internship programs offer? *Journal of Education for Business*, 85(2), 59-63.
- Yorke, M. & Knight, P. (2007). Evidence-informed pedagogy and the enhancement of student employability. *Teaching in Higher Education*, 12(2), 157-170.
- Zhao, H. & Liden, R. C. (2011). Intership: A recruitment and selection perspective. *Journal of Applied Psychology*, 96, 221-229.



The Justice Perceptions of Undergraduate Students about Classroom Management Practices

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Abstract

The aimed of this study is to explore the perceived justice of the undergraduates with regards to classroom management practices. Perceived justice is an important factor which allows for students to have a sense of belonging in the teaching and learning environment. The universe of this study consists of 1,892 undergraduates of the Sakarya University and students enrolled in the Formation Certificate Program of the Faculty of Education of Sakarya University during the spring quarter of the academic year of 2016-17. The sample of this study, on the other hand, consists of 320 undergraduates enrolled in pedagogical formation programs who participated in the study on a volunteering-basis using Simple Random Sampling Method. Simple Survey Model, one of the General Survey Models was used in this study. The data collected in this study was coded and analyzed using IBM SPSS Statistics V22.0 software. The results of this study show that students' perceived procedural justice differs depending on the variable of department type. In this context authors recommend future studies to focus on perceived justice in the classroom with respect to its many dimensions.

Keywords: Justice, Classroom Management, Pedagogic Formation, Perception, Teacher

INTRODUCTION

Justice, in general terms, refers to “the quality of being just, and being able to distinguish between right and wrong”. In this respect, one may suggest there is a relationship between justice and ethics and religious rules when justice is defined both in terms of a situation and people's behaviors. Justice, as a notion, also incorporates a view addressing, studying and criticizing human behavior with respect to the rules of ethics and morality. Organizational justice, on the other hand, can be explained with the need for adoption of justice in order to be able to efficiently manage the people who form a social system where the power of the people is coordinated in a voluntary and regular basis in order to achieve their goals. Therefore, organizational justice is a notion gained importance due to the effect of the perception people working in an organization about how just a working environment is and the impact of such a perception with individual and organizational consequences. “Considering the significance of satisfied employees with high working performance for both individuals and organizations”, it can be said that “organizational justice can be an important measure of employee behavior” and may be used accordingly (Irak, 2004: 40). A closer look into the literature showed that organizational justice is defined in terms of a number of dimensions.

Dimensions of Organizational Justice

Studies on organizational justice showed that the research most commonly focused on five dimensions of organizational justice.

Distributive justice: The concept of distributive justice builds on the Equity Theory developed by Adams (1965) and it posits being rewarded equally for equal effort (İşcan and Naktiyok, 2004:187). According to this theory, individuals tend to compare their inputs (education, experience, etc.) with the outputs (salary, fee, award, etc.) they obtain in return. If the result of such a comparison between input and output is perceived equitable and just by the employees, then it will lead to a sense of equality. However, if such a comparison results in a perception of inequality in the employees, then such inequality may lead to tension in many respects. In such cases, employees tend to act in a way to decrease their effort in the business in order to find a new balance (İçerli, 2010:79).

Procedural justice: Justice does not only concern the compensation of the employees, but it also concerns how the distributive decisions are made for the output. As a result, procedural justice emerged as the second type of organizational justice. Procedural justice involves the impartiality and objectivity of the decision-making process



with regards to reward distribution. Thibaut and Walker (1975) suggested two sub-dimensions of procedural justice. The first one, also known as formal procedure, concerns the structural characteristics of the procedures and practices used in the decision-making process. This dimension covers the practices such as giving a say to employees before making decisions and listening their input and suggestions. The second sub-dimension, transactional procedure, concerns the manner the policies and practices used in the decision-making process implemented by the decision-makers. Managers' behavior towards employees in the implementation of a process, and managers' sincerity and honesty in explaining the reasons behind a decision may have a positive or negative impact on the perception of employees about the impartiality of the process (Cit. İçerli, 2010:84)

Interactional justice: Interactional justice defines the opinion of individuals about the quality of the interpersonal interaction in the organizational process. Interactional justice is about 'how employees treat each other'. If an employee shares the information he/she obtains with his/her colleagues and if he/she avoids being rude and/or dishonest behaviors towards his/her colleagues (Cropanzano, Bowen and Gilliland, 2007:38), then it may lead to dishonest interaction. It was found that distributive and procedural justice is disregarded by employees in settings where interactional justice is at a high level. In other words, when employers are respectful towards their employees, it was found that employees show an increased tendency to disregard unjust salary distribution and unjust procedural transactions due to an elevated tolerance (Karademir and Çoban, 2010:57).

Interpersonal justice: Interpersonal justice focuses on group behavior and their respect towards the social identities of the members of that group. Interpersonal justice incorporates group-value model (Lind and Tyler, 1988) and relational model of authority.

Informational justice: Informational justice can be defined as just and honest information provision to the employees about the interest distribution and other events in the organization. In adverse cases such as declined work, providing more information about the process increases the possibility of a more just and positive perception. It may be more important to inform employees about processes than the salary they are paid in terms of employee satisfaction (Cropanzano and Greenberg, 1997; Eker, 2006; Folger and Cropanzano, 1998 Cit. Titrek, 2009).

Studies showed increased justice perception by the employees as the information level of employees was elevated. In this context, the communication channels between employees and the management are important antecedents in the formation of the perception of justice among the employees (Doğan, 2002: 72).

Justice in Classroom Management

Among the dimensions of classroom management are management of physical environment, education management, time management, relationship management and management of student behavior. Classroom climate is addressed under the dimension of management of student behavior (Çelik, 2012). The ability of the teacher to build a sound teacher-student relationship in the classroom depends on a better communication and warm classroom climate (Ağca, 2009). As the facilitator of an effective classroom management, the teacher's ability to create a warm classroom climate is important in terms of achieving the goals of education in an efficient and effective manner. And this is only possible through an effective classroom management. A positive classroom climate is a result of trust and a sense of belonging, socializing, engagement in decision-making, peer support, dynamism and morality of the teachers and other school personnel, sincerity, justness and communication between teachers, other school personnel and students, clear expectations and learning outputs

It is shown that schools have been focusing more on identifying their level of organizational justice especially in the last decade. Most of the studies available in the Turkish literature focusing on organizational justice in educational organizations are commonly performed at an primary school level (Atalay, 2005) Studies focusing on secondary school level such as Polat (2007) and Polat and Celep (2008), on the other hand, attempted to identify the perception of secondary school teachers with regards to organizational justice, organizational trust and organizational citizenship behavior. Cömert et al. (2008) studied the organizational justice perception of high



school teachers employed in the city of Malatya. Cömert et al. (2008) attempted to see if the perception of the participants on organizational justice differed depending on variables such as “gender, field, occupational experience, type of high school and the number of teachers employed in a school”. The authors tried to define the organizational justice perception with regards to the sub-dimensions such as interpersonal relationships and relationship with managers. However, the authors did not assess organizational justice perception in general terms. Other studies available in Turkish literature are found to analyze organizational justice perception in terms of its sub-dimensions. Yılmaz and Taşdan (2009) suggested that further studies must focus on the variable of “type of school” when analyzing organizational justice in primary school setting. In the light of the predecessors available in the literature, this study aims to analyze “the perception of justice of the undergraduates with regards to the classroom management practices of their teachers”. In this context, the following are the sub-problems of this study:

1. Is the perception of justice of the undergraduates studying in the Hendek district of the city of Sakarya with regards to the classroom management practices of their teachers vary;
 - 1) with regards to gender,
 - 2) with regards to the department,
 - 3) with regards to the economic status,
 - 4) with regards to the education level of parents,
 - 5) academic success of the student?

METHOD

This study aims to uncover the characteristics of a population collecting data form the same population. Therefore, the model used in this study was descriptive review model (Büyüköztürk, 2012).

Universe and Sample

The original universe of this study consists of approx. 1900 undergraduates studying in Sakarya University during the academic year of 2016-17 as part of a pedagogical formation program. The sample of this study, on the other hand, consists of 320 students enrolled in pedagogical formation programs who participated in the study on a volunteering-basis using Simple Random Sampling Method. According to the sampling formula, 320 out of 1900 students were selected (Balçı:112). Having reached this figure, it was regarded as the minimum acceptable number and due to factors such as time invested and budget, the survey was completed. Using this sampling method, each unit in the universe has an equal and independent probability of being included in the sample. In other words, it is a sampling methods which applies equiprobability rule. Such equiprobability rule suggests that any possible sample of varying size can be extracted from the universe (Balçı,2005:6).

Table 1. Demographics of the participants

Variables	Category	Frequency	Percent
Gender	Female	237	74.1
	Male	81	25.3
Family's economic status	TL1000 or less	17	5.3
	1001-2000	85	26.6
	2001-3500	139	43.4
	3501-4000	41	12.8
	TL4001 or more	38	11.9
Education Status of Family	Illiterate	13	4.1
	Primary	178	55.6
	Secondary	53	16.6
	High School	51	15.9
	University	24	7.5
	Post Graduate	1	.3
Education Status of Father	Illiterate	2	.6
	Primary	102	31.9



	Secondary	78	24.4
	High School	92	28.8
	University	42	13.1
	Post Graduate	4	1.3
Academic Progress Rate	2.5 or less	86	26.9
	2.51-3.00	150	46.9
	3.01-3.50	63	19.7
	3.51-4.00	20	6.3
Department	Faculty of Science and Letters	135	42.2
	Faculty of Theology	92	28.8
	Other	93	29.1

A closer look into the demographics of the participants, it was found that 74.1% are female while 25.3% are male. With respect to the economic status of the family, it was found that the majority (43.4%) was earning between TL2001 and TL3500.

Education level of the mothers showed that 55.6% are graduated from primary school. Education level of the fathers showed that 31.9% are graduated from primary school.

Data Collection and Data Analysis

The data collection tool used in this study was the “Perception of Justice in Classroom Management Scale” developed by Nural (2015). The data collected were analyzed using ‘IBM SPSS Statistics 22’ suite. First, the distribution of data was checked for being in a normal range. For this purpose, Kolmogorov-Smirnov test was performed using the SPSS suite and kurtosis and skewness coefficients were observed with respect to data distribution.

Table 2. Reliability analysis

Variable	Cronbach’s Alpha	Number of items
Perception of justice	0,941	16

The reliability of the 16-item justice measure used in this study in order to measure the perceived justice of students was found to be 0.941 (Cronbach’s alpha internal consistency coefficient) which indicates a rather high confidence in the scale. This value showed that the scale is very reliable.

FINDINGS

Table 3. Main statistics of the variables

Variables	Average	Standard dev.	Skewness	Kurtosis
Total justice	2.94	0.76	-.051	.072
Procedural justice	3.10	0.925	-.219	-.510
Reward justice	2.95	1.04	-.130	-.666
Interactional justice	3.00	0,895	-.050	-.367
Distributive justice	2.68	0.85	.068	-.423

According to Büyüköztürk (2011), a normal distribution can be identified and parametric tests may be applied if the arithmetic mean, median, and mode values of the dataset are similar, and if Skewness and Kurtosis values range between -1 and +1. Normal distribution of the dataset was observed according to the normality tests and parametric statistical methods were employed for analyses. Having defined the students’ perception of classroom management of the teachers with the data obtained, the results were compared to a number of variables. Independent sample t-test was used in the analysis of gender-related differences, while one-way ANOVA was



used in the analysis of variables with more than two subgroups. A significance level of 0.05 was expected to be obtained in all the analyses performed.

ANOVA analysis was performed in order to find if the perception of justice varies depending on department, gender, family's economic status, mother's education level, father's education level, and academic progress rate. According to the results of the analysis, it was found that the perception of justice was significantly different for only the department and there were no statistically significant difference for other variables ($p > 0.05$).

With respect to the variable of gender, there was no statistically significant difference in their opinions about distributive justice ($p = .411$, $t_{(315)} = -1.64$), interactive justice ($p = .118$, $t_{(316)} = 0.24$), procedural justice ($p = .805$, $t_{(316)} = -1.65$), reward justice ($p = .784$, $t_{(316)} = -1.32$) and total perceived justice ($p = .652$, $t_{(315)} = -1.03$).

With respect to the variable of family's economic status, there was no statistically significant difference in their opinions about distributive justice ($p = .667$, $F_{(4-314)} = .594$), interactive justice ($p = .328$, $F_{(4-315)} = 1.162$), procedural justice ($p = .473$, $F_{(4-315)} = .885$), reward justice ($p = .481$, $F_{(4-315)} = .872$) and total perceived justice ($p = .486$, $F_{(4-314)} = .864$).

With respect to the variable of mother's education level, there was no statistically significant difference in their opinions about distributive justice ($p = .816$, $F_{(4-314)} = .389$), interactive justice ($p = .214$, $F_{(4-315)} = 1.460$), procedural justice ($p = .107$, $F_{(4-315)} = 1.917$), reward justice ($p = .330$, $F_{(4-315)} = 1.156$) and total perceived justice ($p = .272$, $F_{(4-314)} = 1.296$).

With respect to the variable of father's education level, there was no statistically significant difference in their opinions about distributive justice ($p = .734$, $F_{(3-315)} = .426$), interactive justice ($p = .831$, $F_{(3-316)} = .292$), procedural justice ($p = .315$, $F_{(3-316)} = 1.187$), reward justice ($p = .664$, $F_{(3-316)} = .527$) and total perceived justice ($p = .962$, $F_{(3-315)} = .096$).

With respect to the variable of academic progress rate, there was no statistically significant difference in their opinions about distributive justice ($p = .901$, $F_{(3-314)} = .193$), interactive justice ($p = .233$, $F_{(3-315)} = 1.435$), procedural justice ($p = .363$, $F_{(3-315)} = 1.067$), reward justice ($p = .269$, $F_{(3-315)} = 1.316$) and total perceived justice ($p = .327$, $F_{(3-315)} = 1.157$).

Table 4. Results of the One Way ANOVA exploring if the perceived organizational justice varies depending on the variable of Department

Dimensions	Variable	N	$\bar{X}$	SS	sd	Average Squares	Total Squares	F	p
Distribution	Fac. of Sci.	134	10.87	3.37	2	4.68	9.37	.402	.670
	& Lit.	92	10.80	3.02	316	11.67	3688.50		
	Fac. of	93	10.47	2.81	318		3697.88		
	Theo.	319	10.73	3.41					
	Other								
Interaction	Total								
	Fac. of Sci.	135	18.20	5.23	2	10.35	20.70	.356	.700
	& Lit.	92	18.22	4.73	317	29.04	9207.38		
	Fac. of	93	17.65	6.17	319		9228.09		
	Theo.	320	18.05	5.37					
	Other								
	Total								



Procedural	Fac. of Sci.	135	12.14	3.66	2	65.06	130.13	4.84	.008
	& Lit.	92	13.42	3.33	317	13.43	4258.49		
	Fac. of	93	11.88	3.96	319		4388.62		
	Theo.	320	12.43	3.70					
	Other Total								
Reward	Fac. of Sci.	135	6.02	2.01	2	2.33	4.67	.538	.584
	& Lit.	92	5.86	1.97	317	4.24	1378.12		
	Fac. of	93	5.74	2.28	319		1382.80		
	Theo.	320	5.90	2.08					
	Other Total								
Total Justice	Fac. of Sci.	134	47.24	12.05	2	154.95	309.83	1.03	.358
	& Lit.	92	48.32	10.07	316	150.33	47506.40		
	Fac. of	93	45.75	14.34	318		47816.23		
	Theo.	319	47.12	12.26					
	Other Total								

A closer look into Table 4 showed that, with respect to the variable of department, there was no statistically significant difference in their opinions about distributive justice ($p=.670$, $F_{(2-316)}=.402$), interactive justice ($p=.700$, $F_{(2-317)}=.356$), reward justice ($p=.584$, $F_{(2-317)}=.538$) and total perceived justice ($p=.358$, $F_{(2-316)}=1.03$) with the exception of procedural justice ($p=.008$, $F_{(2-317)}=4.84$). With respect to the variable of department, students' perceived organizational justice varies significantly only in terms of procedural justice ($p=.008$, $F_{(2-317)}=4.84$). Undergraduates of the Faculty of Theology displayed a significantly higher level of perceived organizational justice in the management of educational processes when compared to their counterparts studying in the Faculty of Science and Literature and other faculties.

RESULT AND RECOMMENDATIONS

This study aimed to define the level of perceived justice of undergraduates of Sakarya University with respect to classroom management. The perceived justice of the students was then explored in a way to account for the level of justice in classroom management. It was further aimed to analyze the differences in the perceived justice with respect to variables such as department, gender, academic success, family's educational status, and family's economic status. The findings of this study showed that the perceived justice differs with respect to the department. It was found that the perception of the undergraduates of the Faculty of Theology were significantly different when compared to others. The perceived organizational justice of the students differed only in procedural justice; and no significant difference was found for the other dimensions of organizational justice. Procedural justice is about managing the educational processes and efficient teacher-student relationship. Tomul, Çelik and Taş (2012) suggested that there is an elevated interaction between teacher and student in the classroom and that teacher needs to serve both as a manager, a teacher and a guide for the student in this setting. It can be concluded that perceived justice of classroom activities are important in terms of effectiveness if these roles are to be used effectively. It is recommended that the studies in this field are expanded to compare private and public universities with a larger sample size.



REFERENCES

- Adams, J. S. (1965). Inequity In Social Exchange. In L. Berkowitz (Ed.) *Advances In Experimental Social Psychology*, (Vol. 2pp. 267_299). San Diego, CA : Academic Press.
- Ağca, G. (2009). *İlköğretim Okulu Sınıf Öğretmenlerinin Sınıfta İletişimi Sağlama Becerileri (Bolu İli Örneği)*. Yayınlanmamış Yüksek Lisans Tezi, Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü, Bolu.
- Atalay, D. D. (2007). *Denklik Duyarlılığı Açısından Algılanan Örgütsel Adalet – Örgütsel Bağlanma İlişkisi*. (Doktora Tezi). Ankara: Ankara Üniversitesi Sosyal Bilimler Enstitüsü.
- Atalay, G. (2005). *Örgütsel Vatandaşlık ve Örgütsel Adalet*. (Yüksek Lisans Tezi) Afyon Kocatepe Üniversitesi Sosyal Bilimler Enstitüsü.
- Balcı, A. (2005). *Sosyal Bilimlerde Araştırma Yöntem Teknik ve İlkeleri*, Ankara: Pegem Yayıncılık.
- Büyüköztürk, Ş. (2012). *Sosyal Bilimler için Veri Analizi El Kitabı*. Ankara, PegemA Yayıncılık.
- Cropanzano, R., Bowen, D. E. ve Gilliland, S.W. (2007). The management of organizational justice. *Academy of Management Perspectives*, 21(4), 34-48.
- Çelik, V. (2012). *Sınıf Yönetimi*. (Altıncı Baskı) Ankara: Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic.Ltd.Şti.
- Doğan, H. (2002). İşgörenlerin Adalet Algılamalarında Örgüt İçi İletişim ve İşlemsel Bilgilendirmenin Rolü. *Ege Akademik Bakış* 2(2), 71-78.
- Irak, D. U. (2004). “ Örgütsel Adalet: Ortaya Çıkışı, Kuramsal Yaklaşımlar ve Bugünkü Durumu”. *Türk Psikoloji Yazıları*, 7(13), 25-43.
- İçerli, L. (2010). Örgütsel Adalet: Kuramsal Bir Yaklaşım. *Girişimcilik ve Kalkınma Dergisi*, 5 (1), 67-92.
- İşcan, Ö. F ve Nakıtok, A. (2004). Çalışanların Örgütsel Bağdaşımalarının Belirleyicileri Olarak Örgütsel Bağlılık Ve Örgütsel Adalet Algıları. *Ankara Üniversitesi S.B.F. Dergisi*, Cilt: 59, Sayı:1, 182–201.
- Karademir, T., Çoban, B. (2010). “Sporun Yönetel Yapısında Örgütsel Adalet Kuramına Bakış”. *Niğde Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, 4 (1), 48-62.
- Lind, E. A., Tyler, T. R. (1988). *The Social Psychology of Procedural Justice*. New York: Plenum Publishing Corporation.
- Polat, S., Celep, C. (2008). “Ortaöğretim Öğretmenlerinin Örgütsel Adalet, Örgütsel Güven, Örgütsel Vatandaşlık Davranışlarına Etkin Algıları”. *Kuram ve Uygulamada Eğitim Yönetimi*, 54, 307-331.
- Thibaut, J. ve Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Titrek, O. (2009a). Employees’ organizational justice perceptions in turkish schools. *Social Behavior and Personality*, 37(5), 605-620, DOI: 10.2224/sbp.2009.37.5.605.
- Titrek, O. (2009b). Okul türüne göre okullardaki örgütsel adalet düzeyi. *Uluslararası İnsan Bilimleri Dergisi*. 6(2), 552-573.
- Titrek, O. (2010). The change of school employees’ organizational justice(OJ) perceptions concerning geography according to socio-culture. *Eurasian Journal of Educational Research*, 38, 179-197.
- Tomul, E., Celik, K., ve Tas, A. (2012). Justice In The Classroom: Evaluation of Teacher Behaviours According To Students’ Perceptions. *Egitim Arastirmalari - Eurasian Journal of Educational Research*, 48, 59-72.



Reasons of Exchanges of Teachers Work in Primary Schools and The Role of Principals

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Abstract

In this study, we tried to determine the exchanges of teachers work in formal primary schools and the roles of directors in requests of their exchanges of place. Reasons of teachers' exchange of place and the role of the director in these exchanges; gender, professional level, type of school, branch of the teacher and exchange situation according to the number of change of place are searched as factors. In our research, we used screening model. Surveys are applied to 150 teachers who work in formal primary schools in Kandıra states in İzmit and in Karapürçek states in Sakarya in 2016- 2017 Education Year.

The survey method conducted on this research is developed by Candaş (2012). The survey is composed of 3 parts. The first part includes teachers' personal information; the second part includes questions that measure the reasons of exchange related to school, private reasons and reasons related to the director. In the third part, teachers are enabled to express their reasons except from the reasons mentioned. Likert type four-item scale is used. Participants are asked to evaluate their views about exchange using one of 4 options: (1) Very Effective, (2) Mostly Effective, (3) Rarely Effective, (4) Not Effective. In the analysis of data SPSS 20.0 pack program is used and frequencies and percentages of demographic qualities are examined, and average and standard deviation of points taken from scales are calculated. To determine whether points taken from Teachers' Exchange Reasons Scale vary according to their gender, branch and the type if their school, we used Mann- Whitney U test, and Kruskal- Wallis H test to determine whether the points vary according to their professional level and exchange number. According to the results of the research, while teachers' exchange reasons doesn't vary according to their gender, school type, branch, their professional level and exchange numbers, the city which is worked is significant variable that leads teachers to request an Exchange.

Key words: Exchange schools, Teacher, Principal, Reasons

Introduction

Schools, the building blocks of education, and administrators, teachers and other employees, whom play an important role in the working of schools, hold organizational qualities. Any and each factor involved in this process is significant in terms of the efficiency of school administration (Bursalıoğlu, 2015). In this respect, what are the reasons behind the preference of teachers, one of the factors involved in the school administration, to relocate? This question is what this study tries to answer in general. The correlation between a countries education level and its development level is based on the fact that education is a service spanning over an extended period of time with a larger reach when compared to other fields in terms of its corporate structure and employment potential (Ulug, 1998: 153). Primary education which is devised to bring up a standard type of citizen sharing the values of the society they live in at least to an extent, having socialized the individual, plays an important role in the sustainability of the society (Erdem, 2005: 1).

Education is recognized as one of the most important factors in the development of a nation in the necessary direction in line with the development of the world at that time (Öztürk, 2002: 14). With such awareness, teachers desire to educate their students in line with these ideals. The correlation between the development levels of nations in varying aspects and their education level increases every other decade (Demirtaş, 2002: 362).

The main purpose of personnel mobility is to use the resources at hand in the best way possible (Kaya and Göçen, 2012). In this context, the Ministry of education may relocate its employees in or out of the city based on their demand or excuse, due to promotion, vocational necessity, ongoing investigation, return to work during retirement, etc.(Candaş, 2015).



Today, any in and out of city re-appointment request of teachers employed in government schools is governed by the Ministry of Education's Teacher Appointment and Re-appointment Regulation announced in the Official Gazette dated 17/04/2015 and numbered 29329 (ikgm.meb.gov.tr/2017).

Any teacher who request re-appointment are now able to log in to their personnel profile on Mebbis (Ministry of Education IT System) and arrange a ranked list of schools they want to be transferred to using the application module. After submitting their applications, they need to declare such application to the principle of the school they are currently stationed in order to receive their approval. Thus, the teacher will need to have a printout of his/her application and submit this printout to their manager having signed it, in return, the manager will need to have a copy of this printout handed back to teacher having signed, sealed and approved it. This is followed by a waiting period until the re-appointments are announced in accordance with the re-appointment calendar once the application is approved (Candaş,2015).

A closer look into the reasons for local re-appointment requests of the teachers show that teachers often request to be relocated to schools with better funding from schools with poor funding. The setting of the school and the negative attitude of the administrators are among the other reasons for requests of re-appointment (Candaş,2015).

A number of issues are known to pester the schools in Turkey due to their physical conditions. The insufficient number of primary and secondary education institutions leads to crowded classes in schools (Öğülmüş and Özdemir, 1995).

It is also found that the management skills of the school administration can be another source of problem. It is possible to use the material and human resources of a school efficiently and effectively only if the administrators of a school has managerial skills. Results of a number of studies show that school managements have some shortcomings in this respect. An example of this finding was reported in the research named "Organizational and Managerial Problems of Turkish Education Management" which assessed the sufficiency of managerial know-how of educational administrators of principles and vice-principles employed in the Ministry of Education, principles and vice-principles employed in educational institutions, and principles employed in primary schools resulting in 35.8% inadequacy (Kaya,1993).

This study was conducted in order to define the reasons behind the re-appointment of teachers employed in state schools operating under Ministry of Education and the role managerial staff plays in such re-appointments. The correlation between the reasons behind the re-appointment requests of teachers and relevant variables was found. It was observed that the working/living condition of the spouse is most influential in requests to relocate. Moreover, funding level of schools and the attitude of school managers are factors driving in and out of city re-appointment of teachers.

Teachers as the practitioners of education have a position which may touch the lives of many adults of the future. Nevertheless, the generations brought up in these schools will provide and represent the future of our nation. In order to ensure a bright future, first we need to ensure the existence of efficient educational organizations. And this is only possible with sufficient number of managers, teachers, and personnel employed in educational institutions and the creation of a positive organizational culture and climate. An efficient education is possible only when there is no teacher shortage and when the commissioned teachers are willing to occupy their existing positions for a reasonable period of time (Candaş, 2015). Therefore, a study was conducted covering the districts of Karapürçek and Kandıra in order to reveal the factors affecting the re-appointment of teachers.



Problem Sentence

The problem sentence of this study is “What are the reasons behind the re-appointment of teachers employed in primary schools and what is the role their managers play in such re-appointment decisions?”

Sub-problems

1. Are reasons behind the re-appointment of teachers employed in primary schools...
 - differ significantly depending on gender?
 - differ significantly depending on professional seniority?
 - differ significantly depending on the level of the school?
 - differ significantly depending on the field?
 - differ significantly depending on the total number of re-appointments?
 - What are the reasons arising from the school?
2. What are the personal reasons behind the re-appointment of teachers employed in primary schools?
3. What is the correlation between the reasons behind the re-appointment of teachers employed in primary schools and the attitude of school’s administrator(s)?

METHOD

This section of the study involves the research model, universe and sample, data collection tools, and data collection and analysis.

Research Model

This study follows the descriptive review model. Review models, in general, are research approaches which are suitable to describe a past situation or an ongoing one as it is Karasar (2008). This study was built on descriptive review model with the purpose to identify the reasons behind the re-appointment of teachers working in public schools and the role school administrators play in such re-appointment decisions. Descriptive review model tries to describe events, objects, assets, institutions, groups and several others. Using this model, it is possible to better understand these aspects, to group and classify them and to identify the relationships between them (Kaptan, 1998).

Universe and Sample

The universe of this study consists of 100 teachers and administrators working in the Karapüçek district of the city of Sakarya and 200 teachers and administrators working in the Kandıra district of the city of Kocaeli during the academic year of 2016-17. The sample was randomly selected from the pool of 5 primary schools operating in the Karapüçek district of the city of Sakarya and 20 primary schools operating in the Kandıra district of the city of Kocaeli in January, 2017 and a total number of 150 subjects participated in the survey. The number of applicable surveys included in the study was 150.

Data Collection Tools

The data collection tool developed in order to collect relevant data from the primary school teachers and administrators participating in this study consist of 3 sections.

The Section 1 of the survey included demographic questions such as gender, professional seniority, type of school, field, number of past re-appointments, and the current district/city of the teacher and administrator. Section 2 of this survey included a total number of 32 questions, of which 11 questions aiming to identify the school-related reasons behind the re-appointment request, 11 questions aiming to identify the personal reasons behind the re-appointment request, and 15 questions aiming to identify the role of administrator(s) in the re-appointment request. Section 3 of this survey asked for the remarks of the participants elaborating their experience regarding this subject.

Confidence/Reliability



Cronbach's Alpha value of this study aiming to identify the "Reasons Behind Re-appointment of Teachers" was found to be 0.820.

Analysis Techniques

Data was collected from teachers commissioned in 5 schools operating in Karapürçek district of the city of Sakarya and 20 schools operating in Kandıra district of the city of Kocaeli. All the measuring tools were applied by the author.

Findings & Remarks

This section includes the findings obtained from the statistical analysis of the data collected in line with the purposes of the study and relevant remarks. The findings section offers frequency and percent distribution data in order to represent the general structure of the sample. Other findings were then listed in accordance with the purposes of the study.

This section of the study offers descriptive frequency and percentage distributions of the demographic qualities (gender, age, years of experience, field, number of students, number of teachers, number of administrators) of teachers and schools forming the sample.

Table 1. Frequency Table for the Reasons behind Re-appointment of Teachers

Item	Range	F	%	Item	Range	f	%
Gender	Female	72	48	Number of Re-appointments	Never	47	31.3
	Male	78	52		1-3 times	87	58
Commissioned	Kandıra / Kocaeli	92	61.3		4-6 times	15	10
					Other	1	0.7
In	Karapürçek / Sakarya	58	38.7	Type of School	Primary	51	34
					Secondary	99	66
Years Of Experience	0-5 Years	77	51.3	Field	Form Teacher	40	26.7
	6-10 Years	50	33.3		In-Field Teacher	110	73.3
	11-15 Years	15	10.0				
	16 And More	8	5,3				

As shown in Table 1, 72 individuals (48%) in the sample were female while 78 individuals (52%) were male, hence the total sample size was 150 teachers. 77 (51.3%) of the teachers in the sample had 0-5 years of experience, 50 (33.3%) had 6-10 years of experience, 15 (10%) had 11-15 years of experience, and 8 (5.3%) had 16 years of experience or more. 51 (34%) of the teachers in the sample were commissioned in primary school group, while 99 (66%) were commissioned in secondary school group. 40 (26.7%) of the teachers in the sample were form teachers, while 110 (73.3%) were in-field teachers. 47 (31.3%) of the teachers in the sample answered 'never' to the question of 'How Many Times You have Relocated in Your Career?', while 87 (58%) answered '1-3 times', 15 (10%) answered '4-6 times', and 1 (0.7%) answered 'other'. 92 of the teachers in the sample answered 'Kandıra/KOCAELİ' to the item regarding the city/district they are commissioned in, while 58 (38.7%) answered 'Karapürçek/Sakarya'.



Findings Regarding the Hypotheses of the Study

Mann-Whitney U-test was used in order to define if the scores of the teachers in the sample differ by their gender, type of school, and the city they are commissioned in; and Kruskal-Wallis H-test was used in order to define if the scores of the teachers in the sample differ by their age, education level, years of experience.

Table 2. Normal Distribution Table

				Statistic	Std. Error	
Total	Mean			926.200	155.719	
	95% Confidence Interval For Mean		Lower Bound	895.430		
			Upper Bound	956.970		
	5% Trimmed Mean			935.556		
	Median			950.000		
	Variance			363.727		
	Std. Deviation			1.907.163		
	Minimum			38.00		
	Maximum			128.00		
	Range			90.00		
	Interquartile Range			23.50		
	Skewness			-.750	.198	
	Kurtosis			.430	.394	
		Cases				
Valid		Missing		Total		
	N	Percent	N	Percent	N	Percent
Total	150	100.0%	0	0.0%	150	100.0%
					Kolmogorov-Smirnov ^a	
	Statistic	Df	Sig.	Statistic	Df	Sig.
Total	.106	150	.000	.957	150	.000
Shapiro-Wilk						

As shown in Table 2, it was observed that the research scores did not have a normal distribution (Sig.=0.000;Sig.< 0,05)

Table 3. Cronbach's Alpha Table for the Reliability Test Results of the Survey

Mean	Variance	Std. Deviation	N Of Items
1.852.400	1.454.908	3.814.326	4
School-Related	Mean	Std. Deviation	N
	305.733	652.136	150



Personal Reason	157.067	433.427	150
Administration	463.400	1.162.607	150
Total	926.200	1.907.163	150
Cronbach's Alpha	N Of Items		
.820	4		

As shown in Table 3, Cronbach's Alpha value of this study aiming to identify the "Reasons Behind Re-appointment of Teachers" was found to be sufficient.

Mann-Whitney U-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the 'type of school' variable did not give statistically significant difference between groups included (Sig.=0,143; Sig. > 0,05).

Mann-Whitney U-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the 'gender' variable did not give statistically significant difference between groups included (Sig.=0,13; Sig. > 0,05).

Kruskal-Wallis H-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the 'years of experience' variable did not give statistically significant difference between groups included (Sig.=0.291; Sig. > 0,05).

Mann-Whitney U-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the 'field' variable did not give statistically significant difference between groups included (Sig.=0.663; Sig. > 0,05)

As shown in Table 8, Kruskal-Wallis H-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the 're-appointment history' variable did not give statistically significant difference between groups included (Sig.=0.695 ; Sig. > 0,05).

Table 4. Results of the Mann-Whitney U-test which Aims to Define If Scores of the Teachers Differ Depending on the District of School

	N	Mean	Std. Deviation	Minimum	Maximum
School-related	150	305.733	652.136	11.00	44.00
Personal Reason	150	Oca.39	.489	1	2
Administrator	150	463.400	1.162.607	15.00	60.00
Total	150	926.200	1.907.163	38.00	128.00
	District of School		N	Mean Rank	Sum of Ranks
	Kandıra/KOCAELİ		92	67.88	6244.50
School-related	Karapürçek/SAKARYA		58	87.59	5080.50
	Total		150		
	Kandıra/KOCAELİ		92	64.38	5923.00
Personal Reason	Karapürçek/SAKARYA		58	93.14	5402.00
	Total		150		
	Kandıra/KOCAELİ		92	66.88	6152.50
Administrator	Karapürçek/SAKARYA		58	89.18	5172.50



Total	Total	150		
	Kandıra/KOCAELİ	92	64.90	5970.50
	Karapürçek/SAKARYA	58	92.32	5354.50
	Total	150		
	School-related	Personal Reason	Administrator	Total
Mann-Whitney U	1966,5	1645	1874,5	1692,5
Wilcoxon W	6244,5	5923	6152,5	5970,5
Z	-2,713	-3,958	-3,068	-3,766
Asymp. Sig. (2-tailed)	0,007	0	0,002	0

As shown in Table 4, Mann-Whitney U-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the ‘district of school’ variable gave statistically significant difference between groups included (Sig.=0.000; Sig. < 0,05).



Table 5. Results of the Mann-Whitney U-test which Aims to Define If Scores of the Teachers Differ Depending on the Personal Reasons Resulting in Re-appointment Request

	N	Mean	Std. Deviation			
Personal Reason	150	1,39	0,489			
	District of School	N	Mean Rank		Sum of Ranks	
	Kandıra/KOCAELİ	92	64,38		5923	
	Karapürçek/SAKARYA	58	93,14		5402	
Personal Reason	Total	150				
	District of School	N	Mean Rank		Sum of Ranks	
	Kandıra/KOCAELİ	92	66.24		6094.00	
Workload being too heavy	Karapürçek/SAKARYA	58	90.19		5231.00	
	Total	150				
	Kandıra/KOCAELİ	92	63.72		5862.00	
Constantly being criticized	Karapürçek/SAKARYA	58	94.19		5463.00	
	Total	150				
			Damaged Relationships (Reduced Occupational Respect) Due to Working as Colleagues for Long-term	End of Contract Term at the Institution (Rotation/Mandatory Re-appointment/ Mandatory Service, etc.)	Constantly Being Criticized	Personal Reasons
	Workload Being too Heavy	Personal Problems w/ My Colleagues				
Mann-Whitney U	1.816.000	2.034.500	2.106.000	2.130.000	1.584.000	2.087.000
Wilcoxon W	6.094.000	6.312.500	6.384.000	6.408.000	5.862.000	6.365.000
Z	-3.455	-2.542	-2.266	-2.161	-4.364	-2.353
Asymp. Sig. (2-tailed)	.001	.011	.023	.031	.000	.019

As shown in Table 5, Mann-Whitney U-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the ‘Workload Being Too Heavy’, and ‘Constantly Being Criticized’ variables, as subfactors of ‘Personal Reasons Behind Re-appointment Request’ gave statistically significant difference between groups included (Sig.=0.000; Sig. It can be observed that this statistically significant difference favors Karapürçek/Sakarya sample (Sig=0.001; Sig.<.05), (Sig=0.000 ; Sig. <.05).



Table 6. Results of the Mann-Whitney U-test which Aims to Define If Scores of the Teachers Differ Depending on the Subfactors of Managerial Reasons Resulting in Re-appointment Request

			N	Mean	Std. Deviation	
Administrator			150	463.400	1162607	
District of school			150	1.39	.489	
				Mean		
District of school			N	Rank	Sum of Ranks	
Personal Reason			Kandıra/KOCAELİ	92	64.38	5923.00
			Karapürçek/SAKARYA	58	93.14	5402.00
			Total	150		
			N	Mean Rank	Sum of Ranks	
Administrator Pitting You Against Your Colleagues	Kandıra/KOCAELİ	92	67.05	6168.50		
	Karapürçek/SAKARYA	58	88.91	5156.50		
	Total	150				
Unfair Attitude of Administrator	Kandıra/KOCAELİ	92	67.09	6172.00		
	Karapürçek/SAKARYA	58	88.84	5153.00		
	Total	150				
Tension/Unrest Between Administrator and Teacher	Kandıra/KOCAELİ	92	67.64	6222.50		
	Karapürçek/SAKARYA	58	87.97	5102.50		
	Total	150				
Administrator Pitting You Against Your Colleagues			Unfair Attitude of Administrator	Tension/Unrest Between Administrator and Teacher		
Mann-Whitney U	1.890.500	1.894.000	1.944.500			
Wilcoxon W	6.168.500	6.172.000	6.222.500			
Z	-3.188	-3.281	-3.014			
Asymp. Sig. (2-tailed)	.001	.001	.003			

As shown in Table 6, Mann-Whitney U-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the ‘Administrator Pitting You Against Your Colleagues’, ‘Unfair Attitude of Administrator’, and ‘Tension/Unrest Between Administrator and Teacher’ variables, as subfactors of ‘Managerial Reasons Behind Re-appointment Request’ gave statistically significant difference between groups included. It can be observed that this statistically significant difference favors Karapürçek/Sakarya sample (Sig=0.001; Sig.<.05), (Sig=0.000 ; Sig.<.05).



Table 7. Results of the Mann-Whitney U-test which Aims to Define If Scores of the Teachers Differ Depending on the Subfactors of School-Related Reasons Resulting in Re-appointment Request

	N	Mean	Std. Deviation	Minimum	Maximum
School-related	150	30,5733	6,52136	11	44
District of School	150	1,39	0,489	1	2
				Mean Rank	Sum of Ranks
District of School		N			
Kandıra/KOCAELİ		92		67,88	6244,5
Karapürçek/SAKARYA		58		87,59	5080,5
Total		150			
			Mean Rank		Sum of Ranks
District of School		N			
Kandıra/KOCAELİ		92	67,14		6177
Karapürçek/SAKARYA		58	88,76		5148
Total		150			
Low Socioeconomic Level of the District of School/the Parents					
					Low Socioeconomic Level of the District of School/the Parents
Mann-Whitney U				1.899.000	
Wilcoxon W				6.177.000	
Z				-3.123	
Asymp. Sig. (2-tailed)				.002	

As shown in Table 7, Mann-Whitney U-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the ‘Low Socioeconomic Level of the District of School/the Parents’ variable, as subfactor of ‘School-Related Reasons Behind Re-appointment Request’ gave statistically significant difference between groups included (Sig.=0.000; Sig. It can be observed that this statistically significant difference favors Karapürçek/Sakarya sample (Sig=0.002; Sig.<.05).

Result and Recommendations

The employee group which is influenced the most by the attitudes of school administrators consists of teachers they work with. Teachers are the most strategic elements of a school (Bursalıoğlu, 1987:69). *The purpose of this study was motivated by the interest of the authors to explore the reasons behind re-appointment of teachers. The purpose of this study was to identify the reasons behind re-appointment of teachers working in schools located in the districts of Kandıra and Karapürçek.*

Further purposes of this study include identifying the role of administrators in re-appointment processes and the most important reasons, reducing the number of re-appointments identifying the general and common factors in addition to personal reasons resulting in re-appointment and satisfying the teachers with teacher appointment and re-appointment system also including the administrators’ attitudes (Candaş, 2015: 2).

Similarly, Yazıcı (2006) suggested that administrators need to be trained in communication skills, physical structure of the schools needs to be improved, teachers’ opinions must be taken with regards to re-appointment



regulations, activities must be planned in public schools to improve the cooperation between teachers and administrators if it is to reduce the requests for re-appointment.

According to Yazıcı (2006), the rules governing the appointment and re-appointment of teachers should be developed continuously and be adapted to emerging necessities. Service score in addition to occupational success and performance of the teacher can be considered when evaluating a request for re-appointment.

Candaş (2015) suggested that schools need to be institutions which produce, generalize, protect, communicate information while meeting the human expectations in order to be able to meet the needs of the century. And this is only possible if the educational institutions offer a positive teaching environment with sufficient amount of personnel. Motivation, job satisfaction, and efficiency of those employed in educational institutions, and organizational climate is closely correlated with the know-how, skills, attitudes and behavior, and the leadership role administrators have to offer. All these factors affect both the years of experience in one school and therefore being sufficiently staffed. An efficient education is only possible when there is no teacher shortage and when the commissioned teachers are willing to occupy their existing positions for a reasonable period of time.

According to Candaş (2015), among the most important reasons behind a teacher's request for re-appointment are working/living condition of the spouse and the mandatory service in the city/district of the school. After being appointed to mandatory service locations as their first appointment, teachers tend to request for re-appointment at the end of this mandatory service term, moving back to where their families live. The second most influential factor in re-appointment requests, on the other hand, involves the working/living conditions of the spouse.

Using one-way ANOVA, data obtained on the factors such as type of school, professional seniority, gender and field as part of the study on “the reasons behind the re-appointment of teachers employed in primary schools and the role their managers play in such decisions”. As all the relevant p-values were found to be higher than .05, there was no statistically significant difference between the reasons behind re-appointment and the type of school, professional seniority, gender and field.

Statistically significant differences were found between the two districts included in this study when exploring the administration-related aspects of the re-appointment request as part of the study on “the reasons behind the re-appointment of teachers employed in primary schools and the role their managers play in such decisions”.

A statistically significant difference was found between the two districts in terms of ‘Workload Being Too Heavy’ and ‘Being Constantly Criticized’ as the subfactors of personal reasons behind re-appointment request and such difference favored the district of Karapürçek.

A statistically significant difference was found between the two districts in terms of As shown in Table 11, Mann-Whitney U-test performed with the aim to define if the total score of the teachers in the sample differs significantly depending on the ‘Administrator Pitting You Against Your Colleagues’, ‘Unfair Attitude of Administrator’, and ‘Tension/Unrest Between Administrator and Teacher’ as the subfactors of managerial reasons behind re-appointment request and such difference favored the district of Karapürçek.

A statistically significant difference was found between the two districts in terms of ‘Low Socioeconomic Level of the District of School/the Parents’ as the subfactor of school-related reasons behind re-appointment request and such difference favored the district of Karapürçek.

The following recommendations are developed for future research and for practitioners in the light of the findings of this study. Recommendations for practitioners:



- It is recommended to provide training on conflict management and communication skills to administrators in order to reduce the number of re-appointment requests.
- It is recommended to improve self-development opportunities at schools in order to reduce the number of re-appointment requests.
- It is recommended to reduce the number of re-appointment requests through improvements in the physical structure of schools.
- It is recommended to publish regulations on re-appointment of teachers upon consulting also to their opinions.

REFERENCES

- Akbulut, Y. (2010). SPSS applications in social sciences. Commonly used statistical analyses and explained SPSS solutions. İdeal Kültür Yayıncılık.
- Ağaoğlu, E., Altinkurt, Y., Yılmaz, K., Karaköse, T. (2012). The opinions of school administrators and teachers on the competence of school administrators (city of Kütahya), Education and Science, 37, (164), 159- 175.
- Balcı, A. (1997). A study in social sciences: Method, technique and principles. Ankara: 72 TDFO Bilgisayar ve Yayıncılık.
- Bursalıoğlu, Ziya (2015). New Structure and Attitude in School Management. Ankara: Pegem Akademi.
- Büyüköztürk, Ş. (2007). Data Analysis Handbook for Social Sciences, Ankara: Pegem A Yayıncılık.
- Candaş B.(2015). “The Reasons Behind Re-Appointment of Teachers Working in Primary Schools and the Role of Administrator” Unpublished Master’s Thesis, Yeditepe University Institute of Educational Sciences, Istanbul.
- Can N. (2002). “Education Management in the Process of Change”. National Education Magazine 155-Vol:156, pp.89-98, Ankara
- Demir, M. K. ve Arı, E. (2013). Problems of Teachers (sample of the city of Çanakkale), Ondokuz Mayıs University Faculty of Education, 32(1), 107-126.
- Ekiz, D. (2009). Scientific research methods: Approach, method and techniques. Ankara: Anı Yayıncılık.
- Kaplan, İ. (1999). National education ideology in Turkey (2nd edition). İstanbul: İletişim.
- Kalaycı, Ş. (Ed.) (2006). Multivariate Statistics Techniques Using SPSS. Ankara: Asil Yayın Dağıtım.
- Kaya, Ahmet ve Göçen, Ahmet (2012). A Qualitative Study on the Rotation of School Administrators. Malatya: İnönü University Faculty of Education Magazine.
- Kilmen,S.,(2015). Statistics Using SPSS for Educational Research. Edge Academy, Ankara.
- Özdemir, A. (2008). Advanced Research Methods and Applications in Management Sciences. Beta Yayınları, İstanbul.
- Peker R. (2002-a). Factors affecting the occupational burnout of teachers employed in elementary schools. Uludağ University Faculty of Education Magazine, 15 (1), 305-318.
- Tekışık H. (1986). “Being a Teacher in Turkey and the Relevant Issues”, Modern Education Magazine, 11(116), pp. 1-9.
- Ulug, F. (1998) “The Issue of Structural Adaptation to the Changes in Education System”, Education Management Magazine, volume: 14, Ankara.
- Uygun, S. (2012). Problems of teachers in the press, National Education Quarterly Education and Social Sciences Magazine, 194, 72-90.
- Ünal, S. (2009). Activities of elementary school administrators aimed at increasing motivation, Pamukkale University Faculty of Education Magazine, (7), 1-8.



Subjective well-being, emotional regulation and motivational guidance in high sport competition

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Abstract

The sports context has been characterized as intense on emotional experiences. Emotional responses and the ability to regulate them, seem to be a central competence for sports success and can have impact on well-being and motivation. To study the relationship between subjective well-being, emotional regulation, motivational orientation, and sports performance, was carried out an exploratory study with 50 male athletes, aged between 14 and 15 years old, of a Portuguese soccer club. For that, the Subjective Happiness Scale, the Emotion Regulation Index for Children and Adolescents, and the Motivational Guidance Questionnaire for Sports were used. The results suggest that the motivational orientation, specifically, the ego orientation seems to be associated with high sport performance. Significant differences in terms of emotional regulation were also founded. The discussion of the results is accompanied by the signaling of implications for the psychological practices and the analysis of scenarios of future research in the field of excellence in sport.

Keywords: Sports performance, subjective well-being, emotional regulation, motivational orientation.

Introduction

The excellent performance in sport have been asking for attention to the scientific community, mainly in the psychology area and the sport sciences, generating a research growing in this domain, in the last decade (Matos, Cruz, & Almeida, 2011). According to the literature in this domain, the excellent performance is the result of a multiple internal and external elements interacting between them (Gagné, 2004, 2007; Serpa, 2016; Sternberg, 2001). An athlete is considered excellent when he achieves the exceptional performance during a long period of time (Sá, Gomes, Saavedra & Fernandez, 2015). The research (Duda & Treasure, 2006; Duraud-Rush & Salmela, 2002; Gould, Dieffenbach, & Moffett, 2002; Holt & Dunn, 2004) about athletes with great performance results have demonstrate that certain characteristics, psychological and emotional, are associated to these people. Mahoney, Gabriel and Perkins (1987) in a study developed with 713 athletes from different competitive levels, concluding that those who have exceptional performance results presented lower anxiety levels, more concentration, being more self-belief and motivated to the success, maintaining the focus in the individual performance despite the group results.

In the portuguese context, different studies (Amaral & Cruz, 2013; Barbosa & Cruz, 1997; Bodas, Lázaro, & Fernandes, 2007; Cruz, 1994, 1996; Dias, Cruz & Fonseca, 2009; Vasconcelos-Raposo, 1993) concluded that athletes with excellent results present higher motivation levels, self-confident and concentration, define the objective aims, adding value and interest in the individual performance, using frequently the imagination and the mental visualization, presenting good capacity in the anxiety control, having capacity to lead efficiently with the unexpected situations, developing and using competitive mental plans and routines.

However, and despite the evolution verified in the research, seems there isn't an athletic personality, assuming the elements by psychological order in a crucial role in the sport success (Andrade, 2013). In this context, the literature has signed (Durand-Bush & Salmela, 2002; Holt & Dunn, 2004; Oliver, Hardy, & Markland, 2010) that the psychological profile to the excellence in the sport is associated to the higher levels of motivation, involvement, concentration, emotional regulation, competences of self-regulation, resilience, self-confidence and self-concept. Different authors (Serpa, 2016; Weinberg & Gould, 2011) have looking to understand the motivation process in the sport justifying the reasons to the personal elements (e.g. interests, aims, personality) and situational (e.g. attractive tasks, social influences, coach leader. The study of the motivation in the sportive practice has adopted a research line oriented by the theory social-cognitive (Tenenbaum & Bar-Eli, 1995). The



theory of self-determination (Deci & Ryan, 1985) and the theory of the achieve the objectives (Nicholls, 1984, 1989) are focused specially in the involvement study and the adoption of certain behaviors, including the sport practice. The self-determination theory defends internal and outer the motivation elements, considering the personality variables in social context, as well as the caused and consequences of the behavior (Deci & Ryan, 1985). The authors defend the motivation is related with the satisfaction of autonomy, competence and the relationship, defined as the three basic psychological needs (Deci & Ryan, 1985, 2000). The realization objectives theory (Nicholls, 1984, 1989) advocate the behavior in the realization context is influenced by personal and motivational factors. According Nicholls (1984, 1989), the people orient their motivation based in two orientation types, the orientation to the task and the orientation to the ego. The orientation to the task is related with the success in the task domain, but the orientation to the ego assume the higher demonstration of the competence in front of others (Álvarez, Castillo, Duda, & Balaguer, 2009). In accordance with Winterstein (2002), the success expectative is associated to the athletes with motivational orientation to the task, while the failure fear is related with the athletes motivation oriented to the ego. The author defends that the probability of the athlete achieves the success or the failure depends on the past similar situations. The orientation to the task has been frequently associated with the master experiences, and the orientation to the ego concerned to the social approval (Saies, Arribas-Galarrag, Cecchini, Luis-De-Cos & Otaegi, 2014). However, these definitions haven't been consensual in the literature. Different authors (White & Duda, 1994; Cecchine, González, & Montero, 2007) have demonstrated that orientation to the ego presents superior (best) results in the athletes who ate in higher levels of competition and performance results. According to the research (Ahmadi, Namazizadeh, & Mokhtari, 2012; Álvarez et al., 2009; Gómez-López, Granero-Gallegos, Abralles, & Rodríguez-Suaréz, 2013; Monteiro et al., 2014; Vansteenkiste, Mouratidis, Van Riet, & Lens, 2014), the realization objectives are associated with different levels of self-determination, putting evidence that the promotion of motivation oriented to the task promote the self-determined motivation. The way as the athletes guide the motivation seems to be related with the individual determinants, as well as the context where the coach assuming the fundamental role considering the influence relation given (Serpa, 2016).

Simultaneously with the motivation, the emotions have a central role in the research concerning the sport success. The sportive context has been characterized as a rich and intense context concerning the emotional experiences, the positive and negative ones. Shepard and Golby (2009) evaluated the emotions of the rugby professional players in different competitive levels. The authors concluded that in the middle level present higher levels to the positive emotions when compared with the superior level players. In the same research line, Vasconcelos-Raposo, Coelho, Mahl, Fernandes (2007) and Almeida (2013), concluded that professional soccer players demonstrate lower negativism and more self-confidence comparing with the amateurs. However, Vast, Young e Thomas (2011), in a study developed with the basketball players, achieved to the result that the efficiency of hit in the basket grows when the positive emotions expressed in the experienced players. The emotional answers of a specific athlete and his capacity to regulate in order to be possible to experience the correct emotions, seems to be a crucial competence to the sportive success (Amaral & Cruz, 2013; Sagar, Lava-lhe & Spary, 2009). The emotional study associated to athlete performance result have been gaining the interest of different authors (Cruz, 1996; Cruz & Barbosa, 1998; Dias, Cruz & Fonseca, 2009; Folkman & Lazarus, 1985; Jones, Meijen, McCarthy & Sheffield, 2009; Lazarus, 2000) aiming invest in the scientific knowledge to understand better this phenomenon. Based in this premise, the research has developed the efforts to the positive emotional study in sport, in contrast to what was verified in previous studies, where the point was in the negative emotional study (Matos te al., 2011). So, it has been pointed out that positive emotional neutralize the negative emotions effects, promoting the stress adaptation (Fredrickson & Branigan, 2005) and helping the coping strategies acquirement (Folkman & Moskowitz, 2000). The coping strategies (e.g. concentration in the task, thinking stop, re-evaluation positive) have assumed the relevant role, demonstrating its efficiency in sportive success (Nicholls, Holt, Polman, & Bloomfield, 2006; Dias et al., 2009). The interpretation and the evaluation of the situations influenced the cognitive processes, physiologic and emotional, and consequently their own performance (Folkman & Lazarus, 1985; Dias et al., 2009). The athlete capacity to understand the emotions



during the competition, the vulnerability, their emotions as the way as they manage them, presented as fundamental aspects to the sportive success (Lazarus, 2000). Although the intrapersonal elements, the more recent research have pointed out that emotional regulation is a social and interpersonal (Friesen, Lane, Devonport, Sellars, Stanley, & Beedie, 2013).

As it has been confirmed in the literature review, the sport is frequently associated to the motivational and emotional elements, giving importance to the positive and to the negative emotions. Considering this conceptual board, it's important to verify the role of the Subjective Well-Being (SWB), mainly concerning the positive and negative emotions. According with Diener (2000), the persons who present higher levels of SWB when experienced more positive emotions than negatives, as when develop activities that they consider interesting and satisfying. In accordance with Coleta, Lopes and Coleta (2012) the happiness is related with the satisfaction of life in general with the more different aspects, in particular, the friendships and the popularity sentiments. Concerning the demographic variables, the authors (Coleta, Lopes, & Coleta, 2012) presents the youth, the feminine sex and the higher socioeconomic level, as determinants facilitating to the subjective well-being and the happiness. So, it's expected that SWB suffer influenced by the person emotions experienced. By other side, Rosa (2016) in a youth research has concluded that physical exercise enhances the well-being, including the presence of a positive effect in the school performance. In a study developed by Jones and Sheffield (2008) with hockey and soccer players, the authors had evaluated the result effect in a game of well-being of themselves, so they concluded that after the failure, the players presented more anxiety, anger and depression, as well as there are somatic symptoms stronger. The emotions appear after the evaluation done to the person about the significance given to each situation, with positive and negative consequences to the well-being (Lazarus, 2000). Whenever there is a positive evaluation, in general, the person achieves the goals considered important, experienced feelings of satisfaction and positive affection (Lazarus, 1991). Nevertheless, the negative emotional answer is experienced whenever the person understand how incompatible is to achieve a specific task. (Hanin, 2004).

Based on the above assumptions, the present research/study aims to verify the relation existing between the motivational orientation, the emotional regulation and the subjective well-being, as well as evaluate the levels of distinction depending on the sportive results of the young athletes. So, the objective is contributing to the scientific enrichment in the domain area, as well to promote a better understanding of the psychological and emotional elements that seems to influence the behavior of the higher competition athletes.

Method

Although the study of the relationship between the variables of the study, aiming evaluate the differentiation levels in the SWB, the emotional regulation in the motivational orientation depending the results, the research sample was organized according to their behavior. So, it was constructed two analyze group, the A group associated to the performance in higher levels, and the B group related with the lower performance.

Participants

The study sample is constructed by 50 athletes of masculine gender with age 14-15 years old, from the formation schools of the Portuguese soccer club from the premier league. The participants were distributed by 2 groups according to their sportive performance and results. So, the 30 participants had constituted the group A, associated to the sub-15 level, presenting the merit sportive more elevated. The results were categorized according to the system structures of the soccer leagues where both teams act. The A group elements are included in the junior national championship, corresponding to the superior exigence level, and the B group participate in the district championships where the exigence is inferior when compared with the previous.



Instruments

The instruments of measure used to evaluate the variables in study were the subjective happiness scale (Pais-Ribeiro, 2012) to analyze the SWB. The emotional regulation was measured through the *Emotion Regulation Index for Children and Adolescents* (ERICA) (MacDermott, Gullone, Allen, King & Tong, 2010) translated and adapted to the Portuguese population by Reverendo and Machado (2010). Finally, it was used the Sport Motivational Orientation Survey (SPOS) (Fernandes & Serpa, 1997) translated and adapted to the Portuguese Population of Task and Ego Orientation in Sport Questionnaire (TEOSQ) (Massuça, Fragoso & Rosado, 2011).

The subjective happiness scale (Pais-Ribeiro, 2012) including 4 items and the answers were given in a similar visual scale with seven positions. The internal consistence of the scale was acceptable in this study, presented in a value of *alpha Cronbach* de 0.64 (Marôco, 2011). The value was slightly lower than the result obtained by Pais-Ribeiro (2012) when the transcultural validation of the scale ($\alpha = 0.76$) that was also inferior to the obtained value in the original study ($\alpha = 0.86$). It was observed coefficients of satisfied correlation in spite of there were lower values comparing to the study of Pais-Ribeiro (2012), with values between 0.44 e 0.66. By the other side, the values of extraction were clearly positive between 0.538 e 0.97 (Marôco, 2011) concluding that in the possible situation of elimination of any item there is an internal consistence scale decrease. So, despite the results being a little bit lowers than the study of the transcultural validation, the values achieved in the present research allow the assumption that the scale presents good properties psychometrics generating the possibility of using it to evaluate the subjective happiness of the participants in this study. The ERICA (MacDermott et al., 2010; Reverendo & Machado, 2010) is measure of the self-report composed by 16 items, coted in a scale *Likert* with five points, with inverse quotation of the item 14 and 16, permitting evaluate the emotional regulation of children and youngers, from 9 to 16 years old. This instrument is composed by tree sub-scales that allow the evaluation of the subscale of emotional control and that it's composed by seven items enabling the evaluation of the non-regulation of the negative affection as the emotional answers socially unappropriated. (e.g. "When the things aren't going as I want, I stay bored easily), the sub-scale emotional self-conscience is concerned to the emotional flexibility and figure five items (e.g. "I'm a happy person"), and finally, the sub-scale situational responsivity that is related with the social sensibility and with the emotional answers socially adapted, composed by the four items. In this study, concerning the psychometric characteristics, the factorial analysis presents the structure in tree elements that explain the 56.8% of the total variance, assuming this way the tree sub-scales defined by the authors. The internal consistence of ERICA, in this study, was in favor with the values of *alpha Cronbach* that change between 0.62 e 0.75 to the tree elements obtained though the factorial analysis (Marôco, 2011). The scales concluded sensibility to the items elimination, verifying the internal consistence reduce, so there is a maintenance of the initial structure.

The Enquiry of the Sport Motivational Orientation (QOMD – TEOSQ) is a version of the Task and Ego Orientation in Sport Questionnaire (TEOSQ), translated and adapted to the Portuguese language by Fernandes and Serpa (1997) (Massuça, Fragoso & Rosado, 2011). This instrument enhances the evaluation to the motivational orientation concerned to the task and/or to the ego in the sportive context. This is composed by 13 items distributed by two sub-scales. The first is concerned to the orientation to the task, composed to the seven items (2, 5, 7, 8, 10, 12, 13), and the second one measures the orientation to the ego composed by six items (1, 3, 4, 6, 9, 11). To evaluate each item is used to the scale of 5 points, in each 1 correspond to "completely disagree" and 5 "totally agree" (Massuça, Fragoso & Rosado, 2011). In this study, the internal consistence of the subscales proved beneficial presenting values of *alpha Cronbach* variating between 0.70 e 0.84. In its totality, the items present a coefficient of satisfactory correlation (Marôco, 2011) with the total of the scale, with values situated between 0.44 e 0.51.

Proceedings

To be possible to realize this study it was achieved all need ethic proceedings guaranteeing the privacy and confidentially of the collecting data. It was obtained the authorization to collect the data with the soccer



institution responsible where this study was developed. The data collect was implemented with youth (formation classes) of a Portuguese soccer institution, in Oporto city, competing in the first league. The instruments were applied individually and the time given to collect the data was approximately of 15 minutes. In order to treat the data, it was used the Statistical Package for the Social Sciences (versão 22.0). It was made described statistical analysis including measures of central tendency (media), the dispersion measures (minimum value, maximum value and standard deviation). It was analyzed the normality of the distribution of the data through the test of Kolmogorov-Smirnov e Shapiro-Wilk. There was an inferential statistical analysis, namely, corrections of Pearson, and the test t-Student to compare the averages of both groups depending the variables in study. It was fixed the level of significance of 0.05 ($p \leq 0.05$) to be considered the significant statistical data. (Marôco, 2011).

Findings

Aiming evaluate the differences in the subjective happiness levels in both groups, we proceed comparing them depending their sportive results. The reading of Table 1 allows understand that group A ($M = 21.2$, $DP = 3.28$), associated to a superior performance, present an average slightly superior to B group ($M = 21.0$, $DP = 2.27$), however, the difference verified hasn't significance statistic ($t = 0.237$, $p = 0.81$). So, in present research, the subjective happiness seems doesn't have variation depending the athletes' performance levels.

Table 1. Analysis of the subjective happiness differences according to the sportive results: Test t-Student

	Sportive Results	N	M	DP	t	p
Subjective Happiness	Group A (Higher Results)	30	21.2	3.28	0.24	0.81
	Group B (Lower Results)	20	21.0	2.27		

**** $p \leq 0.01$; * $p \leq 0.05$**

In the Table 2 is presented the significant statistic differences in the emotional regulation levels of group A (superior results) comparing to the group B (lower results). The results state the existence of differences statistically in the sub-scale emotional control ($t = 2.99$, $p = 0.004$), presented as superior in the group B ($M = 79.0$, $DP = 7.92$). And in the emotional self-conscience sub-scale, the results present significant statistic differences ($t = -2.07$, $p = 0.04$) endorsing the group B ($M = 92.3$, $DP = 9.74$) when compared to the group A ($M = 86.2$, $DP = 10.49$). Concerning the situational responsivity, it's demonstrated that group B presents a superior average ($M = 88.3$, $DP = 10.17$), however, the results aren't statistically significant ($t = -0.39$, $p = 0.69$). The results conclude that athletes with inferior sportive performance present superior emotional regulation levels, comparing with the group of athletes with superior sportive results.

Table 2. Analysis of the emotional regulation differences according to the sportive results: Test t-Student

	Sportive Results	N	M	DP	t	p
Emotional Regulation						
Emotional Control	Group A (Higher Results)	30	71.9	8.39	-2.99	0.00**
	Group B (Lower Results)	20	79.0	7.92		
Emotional Self-Conscience	Group A (Higher Results)	30	86.2	10.49	-2.07	0.04*
	Group B (Lower Results)	20	92.3	9.74		
Situational Responsivity	Group A (Higher Results)	30	87.0	11.42	-0.39	0.69
	Group B (Lower Results)	20	88.3	10.17		

**** $p \leq 0.01$; * $p \leq 0.05$**



The Table 3 presents the results of the significant statistic differences of the motivational orientation depending the sportive performance. It's possible to see that group B presents a higher average ($M = 23.0$, $DP = 2.41$) in the motivational orientation to the task, but it's not verified the statistical significance ($t = -1.60$, $p = 0.11$). Concerning the motivational orientation to the ego, the results are statistically significant ($t = 2.12$, $p = 0.04$), beneficial to the group A. The results suggest that the athletes with superior performance present higher levels of motivational orientation to the ego.

Table 3. Motivational Orientation Differences according to the sportive results: Test t-Student

	Sportive Results	N	M	DP	t	p
Motivational Orientation						
Motivational Orientation to the Task	Group A (Higher Results)	30	21.9	2.47	-1.60	0.11
	Group B (Lower Results)	20	23.0	2.41		
Motivational Orientation to the Ego.	Group A (Higher Results)	30	15.8	3.06	2.12	0.04*
	Group B (Lower Results)	20	14.0	2.96		

** $p \leq 0.01$; * $p \leq 0.05$

Aiming evaluate the correlation between the emotional regulation and the motivational orientation the study was supported by the coefficient of correlation of *Pearson*. Through the reading of Table 4 we verify that sub-scales are composed by an emotional regulation scale, being linked with the sub-scales of the motivational orientation. The sub-scale orientation to the task presents a significant and positive relation with the sub-scales of emotional self-conscience ($r = 0.48$, $p = 0.00$) and the situational responsivity sub-scale ($r = 0.59$, $p = 0.00$). The results permit considerer that emotional self-conscience and the situational responsivity are higher in athletes with an orientation to the task. The subscale referent to the emotional control doesn't present significant statistical relation ($r = 0.17$, $p = 0.23$) with the orientation to the task. However, the emotional control presents a significant and negative relation ($r = -0.280$, $p = 0.05$) with the sub-scale orientation to the ego. These results seem to indicate that the athletes who invest in a motivational orientation to the ego have a lower emotional control. However, it's important to state that the two other sub-scales that compose the emotional regulation scale are not significantly linked with the orientation to the ego.

Table 4. Correlations between the Emotional Regulation and the motivational orientation: Correlation of Pearson

Emotional Regulation	Motivational Orientation	
	Orientation to the Task	Orientation to the Ego
Emotional Control	0.17	-0.28*
Emotional Self-Conscience	0.48**	-0.17
Situational Responsivity	0.59**	0.06

** $p \leq 0.01$; * $p \leq 0.05$



Conclusions and Recommendations

The excellence in the sport has been associated to the higher motivational levels, commitment, concentration, emotional regulation, self-regulation competences, resilience, self-confident and self-concept (Durand-Bush & Salmela, 2002; Holt & Dunn, 2004; Oliver et al., 2010), as well as the strategies development, the formulation of the aims clearly and specifics, and, appraising and demonstrate interest in the individual performance (Barbosa & Cruz, 1997; Bodas et al., 2007; Cruz, 1994, 1996; Dias et al., 2009; Vasconcelos-Raposo, 1993).

However, and despite the higher interest by the scientific community to the sport excellence study, it's not assumed an explicative and integrative theory. This difficulty can be connected with the complexity of the excellence that, as pointed out in the literature, the excellent performance is result of a multiplicity of elements – internal and external – interacting (Gagné, 2004, 2007; Serpa, 2016; Sternberg, 2001). In this context, different authors (e.g., Friesen et al., 2013; Matos et al., 2011; Monteiro et al., 2014) have been trying to understand this phenomenon through the study of different sentimental, emotional, motivational, social and contextual psychologic variables.

In this study, there is a special attention to the sentimental and emotional variables, and motivational as in the literature (e.g., Amaral & Cruz, 2013; Deci & Ryan, 1985; Dias et al., 2009; Nicholls, 1984, 1989; Sagar, Lavalle & Spary, 2009) has assumed the crucial role to the understanding the associated happenings to the higher performance.

According to the results of the present study, the emotional regulation and the motivational orientation seem to be associated to the sportive results. It was concluded that emotional regulation, specifically, the dimensions of emotional control and self-conscience change according to the results of the athletes, showing the higher results in the athletes with the inferior sportive performance.

The research (e.g., Amaral & Cruz, 2013; Dias et al., 2009; Lazarus, 2000; Matos et al., 2011) realized in this domain have occurred by suggestion by the emotions that assume the essential role in the sportive context, giving particular attention to the strategies of the coping and the role of the emotions management. As said, the results of this study state that athletes with sportive results lower seem have a better control to their emotions, so we can consider that athletes probably have more frequently the coping strategies. This emotional adjustment can be due elements extrinsically, as the family, the coach, as mentioned in the literature as enable elements to the sportive performance (Serpa, 2016). At the same time of these results, the motivational orientation presents significant relations as the emotional regulation dimension. Upon these results and considering the scientific research (e.g., Amaral & Cruz, 2013), the way as the athletes guide their motivation seem present a relation in the way how they regulate their emotions.

Giving focus to the motivational orientation according to the sportive results, as different authors present (e.g., Cecchine et al., 2007; White & Duda, 1994), in this research it was possible to achieve the result that as a motivational orientation to the ego, it is presented different superior levels of sportive performance. However, in this data is not consensual in the scientific community, as there are authors (e.g., Nicholls, 1984; Winterstein, 2002) who defend that higher performances are associated to a orientation to the task. Concerning to the subjective well-being and considering the literature (Diener, 2000; Jones & Sheffield, 2008; Lazarus, 2000; Hanin, 2004), it would be expectable that athletes with superior results would experience higher happiness levels, but this phenomenon was not verified. The results of the present study prove that the happiness levels are not variable according to the sportive results. This fact can be due to the involvement of the emotions, as according to Lazarus (2000) the emotions are result of evaluation about the significant given to each situation, with positive and negative implications to the well-being. Based in this explanation and considering the above text related to the emotional regulation, the athletes with a good capacity to manage the emotions cannot present significant implications at happiness level and their well-being.



In this context, it's not important to think about the coping strategies and the role that they can have in the happiness perception. Hanin (2004) says that there is a negative emotional answer experienced whenever the person realize how incompatible is to achieve a task. It's important to considerer that the possible influence of other variables in these results, as demographic and context variables that through this research (Coleta, Lopes & Coleta, 2012; Rosa, 2016) have demonstrate their influence in the well-being and the happiness.

It's important to point out to the study investment of the strategies used to the promotion of the excellent sportive performance in order to reinforce the knowledge about the efficacy and the implications in these elements of psychological nature.

So, it's important to potentiate the research in this domain featuring the mixt methodologies aiming to deep the knowledge about the perceptions of this public according to their performance, to their needs, as well as the used strategies. Finally, it's important to considerer that the longitudinal studies realization with representative samples of the population, allowing a behavior analysis over time during the different periods of the competition they are exposed. There is a reflection about the importance of the investment in psychological competences promotion programs adjusted to this public as well as other significant.

References

- Ahmadi, M., Namazizadeh, M., & Mokhtari, P. (2012). Perceived motivacional climate, basic psychological needs and self-determination motivation in youth athletes. *World Applied Sciences Journal*, 16(9), 1189-1195.
- Álvarez, M., Castillo, I., Duda, J., & Balaguer, I. (2009). Clima motivacional, metas de logro y motivación autodeterminada en futbolistas cadetes. *Revista de Psicología General y Aplicada*, 62(1), 35-44.
- Amaral, M., & Cruz, J. (2013). Natureza da percepção de ameaça e preditores das estratégias de regulação emocional na competição: Um estudo com atletas talentosos do futebol. *Revista Portuguesa de ciências do desporto*, 13(3), 45-59.
- Andrade, R. (2013). A importância dos fatores psicológicos no rendimento desportivo. Retirado de http://www.fpciclismo.pt/pagina_blocohome.php?id_pagina_blocohome_new=169&id_modalidade_new=9#
- Almeida, L. (2013). *Perfil psicológico de prestação, orientações cognitivas e negativismo do futebolista português: estudo comparativo entre jogadores profissionais e amadores* (Tese de Mestrado). Faculdade de Desporto da Universidade do Porto, Porto, Portugal.
- Barbosa, L. G., & Cruz, J. F. (1997). Estudo do stress, da ansiedade e das estratégias de confronto psicológico no andebol de alta competição. *Psicologia: Teoria, Investigação e Prática*, 2, 523-548.
- Bodas, A., Lázaro, J., & Fernandes, H. (2007). Perfil psicológico de prestação dos atletas paralímpicos Atenas 2004. *Motricidade*, 3(3), 33-43.
- Cecchini, J.A., González, C., & Montero, J. (2007). Participación en el deporte y fair play. *Psicothema*, 19, 57-64.
- Cruz, J. F. (1994). *Stress, ansiedade e rendimento na competição desportiva: A importância das competências e processos psicológicos* (Dissertação de doutoramento não publicada). Instituto de Educação e Psicologia, Universidade do Minho, Braga, Portugal.
- Cruz, J. F. (1996). *Stress, ansiedade e rendimento na competição desportiva*. Braga: Edições do Centro de Estudos em Educação e Psicologia, Universidade do Minho.
- Cruz, J. F., & Barbosa, L. G. (1998). Stress, ansiedade e confronto psicológico na competição desportiva: Uma nova abordagem de natureza cognitiva, motivacional e relacional. *Psicologia: Teoria, Investigação e Prática*, 3, 21-70.
- Coleta, J., Lopes, J., & Coleta, M. (2012). Felicidade, bem-estar subjetivo e variáveis sociodemográficos, em grupos de estudantes universitários. *Psico-USF*, 17(1), 129-139.
- Deci, E., & Ryan, R. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Press.
- Deci, E. & Ryan, R. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.



- Dias, C., Cruz, J., & Fonseca, A. (2009). Emoções, stress, ansiedade e coping: Estudo qualitativo com atletas de elite. *Revista Portuguesa de Ciências do Desporto*, 9(1), 9-23.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55, 34-43. doi: 10.1037//0003-066X.55.1.34
- Duda, J. L., & Treasure, D. C. (2006). Toward optimal motivation in sport: Fostering athletes' competence and sense of control. In J. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (5th ed.) (pp. 57-82). New York: McGraw-Hill.
- Durand-Bush, N., & Salmela, J. (2002). The development and maintenance of expert athletic performance: Perceptions of world and olympic champions. *Journal of Applied Sport Psychology*, 14(3), 154-171. doi: 10.1080/10413200290103473
- Fernandes, A., & Serpa, S. (1997). *Orientação motivacional em jovens praticantes de hóquei em patins*. Lisboa: Instituto Superior de Psicologia Aplicada.
- Folkman, S., & Lazarus, R. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48, 150-170. doi:10.1037/0022-3514.48.1.150
- Folkman, S., & Moskowitz, J. (2000). Positive affect and the other side of coping. *American Psychologist*, 55, 647-654.
- Friesen, A., Lane, A., Devonport, T., Sellars, C., Stanley, D., & Beedie, C. (2013). Emotion in sport: Considering interpersonal regulation strategies. *International Review of Sport and Exercise Psychology*, 6(1), 139-154. doi: 10.1080/1750984X.2012.742921
- Fredrickson, B., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought actions repertoires. *Cognition and Emotion*, 19, 313-332. doi: 10.1080/02699930441000238
- Gagné, F. (2004). Transforming gifts into talents: The DMGT as a developmental theory. *High Ability Studies*, 15, 119-147.
- Gagné, F. (2007). Ten commandments for academic talent development. *Gifted Child Quarterly*, 51, 93-118.
- Gómez-López, M., Granero-Gallegos, A., Abalde, J., & Rodríguez-Suárez, N. (2013). Analysis of self-determined motivation in basketball players through goal orientations. *Collegium Antropologicum*, 37(3), 707-715.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in olympic champions. *Journal of Applied Sport Psychology*, 14(3), 172-204.
- Hanin, Y. (2004). Emotions in sport: An individualized approach. In C. Spielberger (Ed.), *Encyclopaedia of Applied Psychology* (pp. 739-750). Oxford: Elsevier Academic Press.
- Holt, N., & Dunn, J. (2004). Longitudinal idiographic analyses of appraisal and coping responses in sport. *Psychology of Sport and Exercise*, 5, 213-222. doi:10.1016/S1469-0292(02)00040-7
- Jones, M., Meijen, C., McCarthy, P., & Sheffield, D. (2009). A theory of challenge and threat states in athletes. *International Review of Sport and Exercise Psychology*, 2, 161-180.
- Jones, M., & Sheffield, D. (2008). The impact of game outcome on the well-being of athletes. *International Journal of Sport and Exercise Psychology*, 5(1), 54-65. doi: 10.1080/1612197
- Lazarus, R. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American psychologist*, 46, 819-834.
- Lazarus, R. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist*, 14, 229-252.
- MacDermott, S. T., Gullone, E., Allen, J. S. King, N. J., & Tong, B. (2010) The Emotion regulation index for children and adolescents (ERICA): A Psychometric investigation. *Journal of Psychology and Behavioral Assessment*, 32, 301-314.
- Mahoney, M. J., Gabriel, T. J., & Perkins, R. S. (1987). Psychological skills and exceptional athletic performance. *The Sport Psychologist*, 1, 135-141.
- Marôco, J. (2011). *Análise estatística com o spss statistics* (5ª ed.). Pero Pinheiro: ReportNumber.
- Massuca, L., Frago, I., & Rosado, A. (2011). Teste à validade do questionário de orientação motivacional no desporto (QOMD-TEOSQ) em atletas de andebol. *Laboratório de psicologia*, 9(2), 125-132.
- Matos, D., Cruz, J., & Almeida, L. (2011). Excelência no desporto: Para uma compreensão da “arquitectura” psicológica dos atletas de elite. *Motricidade* 7(4), 27-41.
- Monteiro, D., Moutão, J., Baptista, P., & Cid, L. (2014). Clima motivacional, regulação da motivação e percepção de esforço dos atletas no futebol. *Motricidade*, 10(14), 94-104. doi: 10.6063/3453
- Nicholls, J. (1984). Achievement Motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, 91(3), 328-346. doi: 10.1037/0033-295x.91.3. 328



- Nicholls, J. (1989). *The competitive ethos and democratic education*. Cambridge, Massachusetts: Harvard University Press.
- Nicholls, A., Holt, N., Polman R., & Bloomfield, J. (2006). Stressors, coping, and coping effectiveness among professional rugby union players. *The Sport Psychologist*, 20, 314-329.
- Oliver, E., Hardy, J., & Markland, D. (2010). Identifying important practice behaviors for the development of high-level youth athletes: Exploring the perspectives of elite coaches. *Psychology of Sport and Exercise*, 11, 433-443. doi:10.1016/j.psychsport.2010.05.004
- Pais-Ribeiro, L. J. (2012). Validação transcultural da escala de felicidade subjetiva de Lyubomirsky e Lepper. *Psicologia, Saúde & Doenças*, 13(2) 157-168.
- Reverendo, I. (2011). *Regulações emocional, satisfação com a vida & percepção da aceitação-rejeição parental: Estudo de adaptação e validação da versão portuguesa do ERICA* (Tese de Mestrado). Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra, Coimbra, Portugal.
- Reverendo, I., & Machado, T. (2010). Emotion Regulation Index for Children and Adolescents (ERICA): Tradução e adaptação da versão portuguesa. Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra, Coimbra, Portugal.
- Rosa, V. (2016). *Impacto da prática de exercício físico em adolescentes: Bem-estar, autoestima e rendimento escolar* (Dissertação de Doutoramento). Escola de Ciências Sociais da Universidade de Évora, Évora, Portugal.
- Sá, P., Gomes, R., Saavedra, M., & Fernandez, J. (2015). Percepción de los porteros expertos en balonmano de los factores determinantes para el éxito desportivo. *Revista de Psicología del*, 24(1), 21-27.
- Sagar, S., Laval, D., & Spary, C. (2009). Coping with the effects of fear of failure: A preliminary Investigation of young elite athletes. *Journal of Clinical Sport Psychology*, 3(1), 73-98.
- Saies, E., Arribas-Galarrag, S., Cecchini, J. A., Luis-De-Cos, I., & Otaegi, O. (2014). Diferencias en orientación de meta: Motivación autodeterminada, inteligência emocional y satisfacción com los resultados desportivos entre piragistas expertos y novatos. *Cadernos de Psicología del Deporte*, 14(3), 21-30.
- Serpa, S. (2016). Psicologia do desporto. Retirado de http://www.idesporto.pt/ficheiros/file/Manuais/GrauI/GrauI-02_Psicologia.pdf
- Sternberg, R. J. (2001). Giftedness as developing expertise: A theory of the interface between high abilities and achieved excellence. *High Ability Studies*, 12, 159-179.
- Sheard, M. & Golby, J. (2009). Investigating the rigid persistence paradox in professional rugby union football. *International Journal of Sport and Exercise Psychology*, 7(1), 101-114.
- Tenenbaum, G., & Bar-Eli, M. (1995). Personality and intellectual capabilities in sport psychology. In D. Sakulufske & M. Zeidner (Eds.), *International handbook of personality and intelligence* (pp. 687-710). New York: Plenum.
- Vasconcelos-Raposo, J. V. (1993). *Os factores psico- socio-culturais que influenciam e determinam a busca da excelência pelos atletas de elite desportiva portuguesa* (Dissertação de Doutoramento). Universidade de Trás-os-Montes e Alto Douro, Vila Real, Portugal.
- Vasconcelos-Raposo, J., Coelho, E., Mahl, A., & Fernandes, H. (2007). Intensidade e negativismo e autoconfiança em jogadores de futebol profissionais brasileiros. *Motricidade* 3(3), 7-15.
- Vast, R., Young, R., & Thomas, P. (2011). Emotion and automaticity: Impact of positive and negative emotions on novice and experienced performance of a sensorimotor skill. *International Journal of Sport and Exercise Psychology*, 9(3), 227-237. doi:10.1080/1612197X.2011.614848
- Vansteenkiste, M., Mouratidis, A., Van Riet, T., & Lens, W. (2014). Examining correlates of game-to-game variation in volleyball players' achievement goal pursuit and underlying autonomous and controlling reasons. *Journal of Sport and Exercise Psychology*, 36(2), 131-145. doi: 10.1123/jsep.2012-0271
- Weinberg, R., & Gould, D. (2011). *Foundations of sport and exercise psychology* (5th ed.). Champaign, IL, US: Human Kinetics.
- White, S., & Duda, J. (1994). The relationship of gender, level of sport involvement, and participation motivation to task and ego orientation. *International Journal of Sport Psychology*, 25, 4-18.
- Winterstein, P. J. (2002). Motivação para a atividade física e para o esporte. In D. De Rose Jr, (Org.) *Esporte e atividade física na infância e na adolescência: uma abordagem multidisciplinar* (pp. 77-87). Porto Alegre: Artmed.



Leadership Proficiency of School Administrators from the Perceptions of Teachers

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Abstract

The aim of this study is to determine the opinions of teachers and school administrators about the competences of school administrators. A survey model was used with a sample of 110 teachers working in Palandöken town in Erzurum. The data were gathered through “Bass Multidimensional Leadership Behavior Determination Scale”. Data analysis was conducted through descriptive statistics, such as t-test and ANOVA analysis. According to the obtained findings, although school administrators perceived themselves more proficient than teachers perceived them to be in all dimensions, the opinions of school administrators and teachers differentiated in the dimensions “Interacting with People–Working Efficiently” and “Service to Profession”. The opinions of school administrators didn’t differentiate according to school type, having in-service training and having training of administration, but differentiated according to seniority. The opinions of teachers about school administrators differentiated according to school type and seniority, but didn’t differentiate according to whether they had administrative experience.

Keywords: Proficiency of school administrators, School administrators, Teachers

1. Introduction

‘Leadership’ comes first among the most frequently studied and interesting topics that emerged in the early 20th century in business, management and school management fields. Only the number of serious studies on leadership is more than 3,000. For this reason, there is a diversity in the definition of leadership in the literature. When Warren Bennis and Burt Nanus examined more than 1,000 studies, they found that there were more than 350 different definitions of leadership (Bennis and Nanus, 1985, 21).

Leadership is an organization that develops ethical standards to guide the behavior of its employees, integrates ethical standards with values and enforces these ethical standards effectively. If we accept that school leaders are also leaders, we can measure how sufficient or insufficient their attitudes and behaviors towards leadership are from the perspective of teachers.

The topic of leadership and motivation has become very important in today's competitive environment. Leadership and motivation topics are assumed among the most important factors affecting the success of organizations. In addition to the success of organizations, business owners and top management need to give importance to leadership and motivation in order to make their employees happy and to make more contribution to business. Workers and / or managers who are not satisfied with the work place are exposed to physical and mental problems after a while. Therefore, they are not committed to business and they may feel unsatisfied and exhausted. The method to be used by the people who cannot use their potential and are not satisfied with the job is to leave the job as soon as possible.

Leadership can be described as an energetic process that provides adopting and realizing common goals willingly in which individuals come together in the framework of the vision created jointly.

Leadership is usually defined in terms of process and feature. In terms of process, a leader is a person who directs the activities of the members of the organization in line with the aims of the organization. As a means of



feature, a leader should have characteristics that can successfully affect group members.

According to Alkin and Ünsar (2007), leadership is the process of supporting and influencing employees in an enthusiastic way to achieve business goals. Leadership constitutes a significant part of the management process, but not all. A leader's primary role is to influence his or her followers to act on their own in the direction of the defined goals. A leader is the person who can affect his/her followers more than they affect him/her. Leadership is extremely important from the angles of organizations in order to achieve certain common goals. Because leadership has a strong influence on the behavior and performance of individuals and groups. However, the goals that group efforts are directed are the targets being adopted or desired by the leader.

The concept of leadership is for the future. Leaders are responsible for ensuring that the institution remains viable, determining how things are done and what values are valued, creating a vision and adopting that vision within the organization. When evaluated in this respect, it is only possible for the company to gain corporate identity, give pride and happiness to its employees, maintain its profitability in the long run and maintain its existence by being managed by people who have leadership qualities (Baltaş, 2000: 109-113).

Business life is a competition all over the world. In order to be productive in this competitive environment, all production factors need to be managed wisely. Among the factors of production, human resource is of the greatest challenge. Because the management requires that thoughts, feelings and emotions be managed wisely. At this point, organization communication has a significant role. Effective management requires collaboration and teamwork among employees. Hence, effective communication to motivate employees has become even more important (Rajhans, 2012, 81).

The school administrator is responsible for the productivity of the staff, the procurement of all sorts of resources and the achievement of the intended output through these resources. However, the overall productivity of the school is mainly obtained through the active working of the staff. For this reason, the principal must meet the needs of the teachers and ensure that their motivation is high. In a school, the various roles and functions of the school administrator can be mentioned, which are providing resources, planning, coordination, guidance and leadership. Managers must also possess some skills and competences in terms of human, technical and conceptual aspects in order to be able to perform these roles.

2. Method

In this part of the study; the research model, the universe and the sample, the data collection tools, the collection of data and the analysis of data are presented.

2.1. Model of Study

This research is in the screening model. Screening models are research theories that aim to describe the past or present situation without affecting it (Karasar, 2002, 77).

General screening models are screening arrangements on a group, sample or sample taken from all or the universe in order to arrive at a general judgment about the universe in a phase consisting of a large number of elements (Karasar, 2004, 79).

2.2. Universe and Sample

The universe of the research was formed by the teachers who were working in the secondary school institutions in Erzurum, Palandöken, affiliated to the Ministry of National Education in 2016-2017 Academic Year.

Within this universe, all secondary schools and sampling groups were involved. The researcher applied to 110 secondary school teachers included in the sample group of the study.

2.3. Data collection tool

In this study, personal information form and Bass versatile leadership behavior scoring scale were used.

2.3.1. Personal Information Form

Before the personal information form was prepared, the subject experts were asked and similar samples were checked. In personal information form, intended for the purposes of the study, the teachers were directed nine questions interrogating; their gender, seniority, education branches, type of educational institution of the



teachers, gender of principals, working hours of the teachers with the same director, educational background and faculty status of the director, with working hours of the teachers at the same school with opportunities of institution. According to the information obtained in the form, the situation of differentiation was examined in the perception of leadership competences among the teachers.

2.3.2. Bass Multi-Directional Leadership Behavior Identification Scale

It is a measure prepared by Bernard BASS in 1985 to reveal leadership styles according to multifaceted factors. The scale was translated from English into Turkish by Akdoğan (2002) by three English language instructors who were subject experts. In the measurement items; a five-point Likert type was used, with "never, rarely, sometimes, usually, always". The scale consists of 36 items and examines leadership qualifications.

As a result of the explanatory and confirmatory factor analysis, the scale was calculated as one factor.

2.3.3. Gathering of Data

The conceptual framework of the research whose literature review will be searched from the domestic and foreign sources about the research topic was established. The questionnaire was applied with the prepared personal information form and the Bass multi directional leadership behavior scoring scale. After receiving the necessary permission and approval for this survey application, in 2016-2017 academic year Palandöken District, it was applied to all the teachers who work in the secondary school institutions separately. The duration of the questionnaire is approximately 5 minutes for each teacher.

2.3.4. Analysis of the results

The data collected for the sub-problems, which were searched for the answers without going out of the research purpose, were recorded on the computer and the SPSS 23.0 program was used for statistical analysis.

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
How many year	,397	110	,000	,652	110	,000
Edu.background	,453	110	,000	,564	110	,000
Gender	,368	110	,000	,632	110	,000
Graduation	,339	110	,000	,750	110	,000
s_situation	,388	110	,000	,649	110	,000
s_years	,510	110	,000	,338	110	,000
s_branch	,278	110	,000	,821	110	,000
Working year	,525	110	,000	,233	110	,000
Variation	,204	110	,000	,905	110	,000



Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
average_scale	,074	110	,173	,988	110	,457

a. Lilliefors Significance Correction

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
p1	,211	110	,000	,892	110	,000
p2	,255	110	,000	,878	110	,000
p3	,184	110	,000	,911	110	,000
p4	,242	110	,000	,888	110	,000
p5	,260	110	,000	,830	110	,000
p6	,242	110	,000	,874	110	,000
p7	,199	110	,000	,872	110	,000
p8	,238	110	,000	,890	110	,000
p9	,256	110	,000	,863	110	,000
p10	,257	110	,000	,878	110	,000
p11	,260	110	,000	,881	110	,000
p12	,227	110	,000	,833	110	,000
p13	,188	110	,000	,897	110	,000
p14	,263	110	,000	,863	110	,000
p15	,233	110	,000	,891	110	,000
p16	,314	110	,000	,824	110	,000
p17	,188	110	,000	,887	110	,000
p18	,175	110	,000	,912	110	,000
p19	,228	110	,000	,901	110	,000
p20	,196	110	,000	,895	110	,000
p21	,217	110	,000	,897	110	,000
p22	,166	110	,000	,906	110	,000
p23	,277	110	,000	,860	110	,000
p24	,226	110	,000	,894	110	,000
p25	,302	110	,000	,844	110	,000
p26	,307	110	,000	,838	110	,000
p27	,278	110	,000	,867	110	,000
p28	,214	110	,000	,878	110	,000
p29	,262	110	,000	,874	110	,000
p30	,270	110	,000	,879	110	,000
p31	,284	110	,000	,860	110	,000
p32	,221	110	,000	,902	110	,000
p33	,193	110	,000	,899	110	,000
p34	,247	110	,000	,871	110	,000
p35	,222	110	,000	,882	110	,000
p36	,278	110	,000	,873	110	,000
ortalama_olcek	,074	110	,173	,988	110	,457



a. Lilliefors Significance Correction

3. Findings

3.1. Findings related to demographic variables

Table 3.1.1 Distribution Variable Frequency and Percent Distribution by Gender

Gender	<i>f</i>	%	% validity	% accu.
Female	49	44,5	44,5	44,5
Male	61	55,5	55,5	100,0
Total	110	100,0	100,0	

45% of the teachers who participated in the survey were female, 55% of them were male.

Table 3.1.2. How Long Have You Been a Teacher? Frequency and Percent Distribution

How Long Have You Been a Teacher	<i>f</i>	%	% validity	% accu.
1-5 years	73	66,4	66,4	66,4
6-10 years	15	13,6	13,6	80,0
11-15 years	11	10,0	10,0	90,0
16 years and over	11	10,0	10,0	100,0
Total	110	100,0	100,0	

Of the teachers who participated in the survey, 66% of them are in the 1-5 year seniority group, 14% of them are in the 6-10 year seniority group, 10% of them are in the 11-15 year seniority group and 10% of them are in the seniority group over 16 years.

Table 3.1.3. Learning State Variable Frequency and Percent Distribution

Learning State	<i>f</i>	%	% validity	% accu.
Educational Institute	4	3,6	3,6	3,6
Vocational school	5	4,5	4,5	8,2
Faculty	83	75,5	75,5	83,6
Masters	18	16,4	16,4	100,0
Total	110	100,0	100,0	

4% of the teachers participating in the research are education institute graduates, 5% of them are high school graduates, 76% of them are faculty graduates and 16% of them are master program graduates.

Table 3.1.4. Branch Variable Frequency and Percent Distribution

Branch	<i>f</i>	%	% validity	% accu.
Science	34	30,9	30,9	30,9
Social	54	49,1	49,1	80,0
Private talent	15	13,6	13,6	93,6
Total	7	6,4	6,4	100,0

31% of the teachers participating in the research are in science field, 50% of them are in social areas and 14% of them are in the special ability branches.

Table 3.1.5. Variance Frequency and Percent Distribution of Working Time with the Same Director

Working Time with the Same Director	<i>f</i>	%	% validity	% accu.
1-3	103	93,6	93,6	93,6
4-6	5	4,5	4,5	98,2
10 and over	2	1,8	1,8	100,0
Total	110	100,0	100,0	

The proportion of the teachers who worked in the survey with the same manager was between 1 and 3 years (94%), between 4 and 6 years (4%) and over 10 years (2%).



Table 3.1.6. Frequency and Percent Distribution of Faculty Variety Frequency in which the Master Graduated

Faculty Variety Frequency in which the Master Graduated	<i>f</i>	%	% <i>validity</i>	% <i>accu.</i>
Education	59	53,6	53,6	53,6
Science-literature	9	8,2	8,2	61,8
Theology	29	26,4	26,4	88,2
Engineering	13	11,8	11,8	100,0
Total	110	100,0	100,0	

Regarding educational background of Institutional directors of the teachers who participated in the research, 54% of them graduated from faculty of education, 8% of them science and literature faculty graduates, 27% of them theology faculty graduates and 12% of them engineering faculty graduates.

Table 3.1.7. Variable Frequency and Percent Distribution of Your Missing Years in this School

Your Missing Years in this School	<i>f</i>	%	% <i>validity</i>	% <i>accu.</i>
1-4	98	89,1	89,1	89,1
5-8	9	8,2	8,2	97,3
9-12	1	,9	,9	98,2
12 and over	2	1,8	1,8	100,0
Total	110	100,0	100,0	

54% of the faculty distributions of the directors of the participating teachers are education faculty, 8% of them from faculty of science and literature, 26% is faculty of theology, and 12% is engineering-technical education.

Table 3.1.8. Institution Facilities Variable Frequency and Percentage Distribution

Institution Facilities	<i>f</i>	%	% <i>validity</i>	% <i>accu.</i>
very low	7	6,4	6,4	6,4
low	17	15,5	15,5	21,8
average	43	39,1	39,1	60,9
good	33	30,0	30,0	90,9
Very good	10	9,1	9,1	100,0

The opinions of teachers participating in the research about institution opportunities are as follows: very low 6%, low 16%, middle 39%, good 30% and very good 9%.

Table 3.1.9. Descriptive Statistics Results

	N	Min	Max	X_{ort}	sh_x	SS	Conceptual meaning
Bass Multidimensional Leadership Behavior Discovery Scale	110	2	4	2,74	,403	110	

3.2. Difference Tests

No statistically significant difference was found in any of the leadership style sub-dimensions according to result of the independent groups t-test conducted to test the difference of school principals' leadership styles according to the gender of the teachers.

Table 3.2.1. Independent Groups for Discrimination of Gender Variance T Test

Statistic Factor	Gender	N	X_{ort}	SS	sh_x	F	p	T	sd	p
Bass Multidimensional Leadership Behavior Discovery Scale	Male	49	2,73	,425	0,61	,011	,916	-,180	108	,011
	Female	61	2,75	,387	,050					

Accordingly, it can be said that the gender of the teachers is not a factor that makes difference in the perception of the leadership style of school principals.



Table 3.2.2 How Long Have You Been Teaching? Anova Test for Your Variety

ANOVA RESULTS											
	Year	N	X _{ort}	SS	sh _x	Var.K	KT	Sd	KO	F	P
Bass Multidimensional Behavioral Leadership Discovery Scale	1-5 years	73	2,76	,418	,049	In-group	,148	3	,049	,298	,827
	6-10 years	15	2,72	,351	,091	Non Group	17,543	106	,166		
	11-15 years	11	2,65	,433	,131	Total	17,691				
	16 years and over	11	2,71	,370	,111						
	Total	110	2,74	,403	,038						

Independent group test was applied to test the differentiation of school principals' leadership styles according to the occupational seniority, no significant difference was found in all of the scale due to occupational seniority.

Table 3.2.3. ANOVA Test for Learning Status Variable

ANOVA RESULTS											
	Graduation	N	X _{ort}	SS	sh _x	Var.K	KT	Sd	KO	F	P
Bass Multidimensional Behavioral Leadership Discovery Scale	Education Institute	6	2,90	,365	,149	In-group	,403	3	,134	,823	,484
	Vocational school	6	2,72	,391	,160	Non Group	17,288	106	,163		
	Faculty	90	2,72	,408	,043	Total	17,691	109			
	Masters	8	2,90	,382	,135						

No statistically significant difference was found in any of the leadership style sub-dimensions as a result of the ANOVA test applied to test the difference of school principals' leadership styles according to the education status (graduation) of the teachers. According to this, it can be said that the educational background of the teachers is not a factor that makes difference in the perception of the leadership style of the managers.

Table 3.2.4 ANOVA Test for Branch Variable

ANOVA RESULTS											
	Branch	N	X _{ort}	SS	sh _x	Var.K	KT	Sd	KO	F	P
Bass Multidimensional Behavioral Leadership Discovery Scale	Science	34	2,76	,409	,070	In-group	,480	3	,160	,986	,402
	Social	54	2,76	,392	,053	Non Group	17,211	106	,162		
	Vocational	15	2,59	,405	,105	Total	17,691	109			
	Flair	7	2,85	,456	,173						

No statistically significant difference was found in any of the leadership style sub-dimensions as a result of the ANOVA test to test the difference of school principals' leadership styles according to the branch variable of the teachers.



Table 3.2.5. ANOVA Test for Variance of Working Time with the Manager

ANOVA RESULTS											
	Year	N	X _{ort}	SS	sh _x	Var.K	KT	Sd	KO	F	P
Bass Multidimensional Behavioral Leadership Discovery Scale	1-3 year	103	2,75	,394	,039	In-group	,276	2	,138	,847	,432
	4-6 year	5	2,76	,618	,276	Non Group	17,415	107	,163		
	10-more	2	2,38	,177	,125	Total	17,691	109			
	Total	110	2,74	,403	,038						

As a result of the ANOVA test, which was applied to test the difference of school principals' leadership styles according to the variable of working time with the same manager, there aren't any significant differences statistically found.

Table 3.2.6. ANOVA Test for Style Sub-dimensions in the Leadership

ANOVA RESULTS											
	Graduation	N	X _{ort}	SS	sh _x	Var.K	KT	Sd	KO	F	P
Bass Multidimensional Behavioral Leadership Discovery Scale	Education Institute	4	2,90	,372	,186	In-group	,547	3	,182	1,127	,342
	Vocational school	5	2,76	,424	,190	Non Group	17,145	106	,162		
	Faculty	83	2,70	,421	,046	Total	17,691	109			
	Masters	18	2,88	,297	,070						
	Total	110	2,74	,403	,038						

No statistically significant differences were found in the leadership style sub-dimensions as a result of the ANOVA test conducted to test the difference between the teachers' perception of leadership styles of school principals and their learning status (graduation). According to this, it can be said that the educational background of the principals is not a factor that makes the difference between the leadership styles of the principals and the teachers.

Table 3.2.7. ANOVA Test for the Faculty Type Variant in which the Master Graduated

ANOVA RESULTS											
	faculty	N	X _{ort}	SS	sh _x	Var.K	KT	Sd	KO	F	P
Bass Multidimensional Behavioral Leadership Discovery Scale	education	59	2,78	,437	,057	In-group	,659	3	,220	1,368	,257
	Science-letters	9	2,60	,402	,134	Non Group	17,032	106	,161		
	theology	29	2,66	,327	,061	Total	17,691	109			
	Engineering-technical edu.	13	2,87	,376	,104						
	Total	110	2,74	,403	,038						

As a result of the ANOVA test conducted to test the differentiation of the faculty type variable that the principals graduated to teachers' perceptions of the school principals' leadership style, there is no statistically significant difference for the whole scale.



Table 3.2.8 ANOVA Test for the Faculty Type Variant in which the Master Graduated

ANOVA RESULTS											
	Year	N	X _{ort}	SS	sh _x	Var.K	KT	Sd	KO	F	P
Bass Multidimensional Behavioral Leadership Discovery Scale	1-4 year	98	2,75	,417	,042	In-group	,361	3	,120	,735	,533
	5-8 year	9	2,78	,235	,078	Non Group	17,330	106	,163		
	9-12 year	1	2,47	.	.	Total	17,691	109			
	12-more	2	2,38	,177	,125						
	Total	110	2,74	,403	,038						

As a result of the ANOVA test to test the difference of the leadership styles of the school principals according to the variation of the working time of the teachers in the same school, no statistically significant difference was found.

Table 3.2.9. ANOVA Test for Institutional Facilities Variable

ANOVA RESULTS											
	Opportuniy	N	X _{ort}	SS	sh _x	Var.K	KT	Sd	KO	F	P
Bass Multidimensional Behavioral Leadership Discovery Scale	very low	7	3,12	,549	,207	In-group	3,135	4	,784	5,654	,000
	low	17	2,94	,407	,099	Non Group	14,556	105	,139		
	average	43	2,74	,381	,058	Total	17,691	109			
	good	33	2,68	,333	,058						
	very good	10	2,37	,226	,071						
	Total	110	2,74	,403	,038						

As a result of the ANOVA test applied to test the differentiation of school principals' leadership styles in the perceptions of teachers according to the variable of institutional possibilities,

A post hoc Tukey test was performed to determine which sub-dimensions were significant differences.

Tukey HSD

(I) variation	(J) variation	Mean Difference (I-J)	Std. Error	Sig.
very low	low	,179	,167	,822
	average	,378	,152	,100
	good	,431*	,155	,049
	very good	,748*	,183	,001
Low	very low	-,179	,167	,822
	average	,199	,107	,341
	good	,252	,111	,164
	very good	,570*	,148	,002
Average	very low	-,378	,152	,100
	low	-,199	,107	,341
		,053	,086	,973



	good	,370*	,131	,043
Good	very good			
	very low	-,431*	,155	,049
	low	-,252	,111	,164
	average	-,053	,086	,973
very good	very good	,318	,134	,134
	very low	-,748*	,183	,001
	low	-,570*	,148	,002
	average	-,370*	,131	,043
	good	-,318	,134	,134

A statistically significant difference of at least $p < 0.05$ was found in favor of those with very good school facilities and those with low school facilities and those with very low school facilities.

4. Conclusion and Suggestions

The gender factor is not an effective variable on the teachers' perceptions of the school administrators according to the results obtained without working. Similarly, according to Çetin (2009), Kaya (2002), Tahaoğlu and Gedikoglu (2009), the gender of teachers does not cause any difference in the perception of the leadership qualities of the managers. However, according to Özen and Kılıç (2012), gender variables reveal significant differences in teachers' perception of leadership qualities of managers.

When the results obtained according to the seniority of the teachers are evaluated, the teachers who have 16-20 years of seniority in the leadership sub-dimension that gives freedom are emerging. In other leadership sub-dimensions, the seniority factor does not cause any significant difference. According to the results obtained without working, the educational background does not cause any difference in the perception of the leadership styles of the teachers of the administrators.

According to the views of the teachers participating in the study, the branch change does not cause any difference in the perception of the school principals' leadership styles of the teachers. There are significant differences between teachers' perceived leadership and the duration of working with the same manager. According to these differences, in the charismatic - inspiring transformational leadership sub - dimension, there are significant differences in favor of the same manager and the same manager for 1-3 years between the teachers who work between 1-3 years and 4-6 years. Similarly, in the intellectual stimulation transformer leadership sub-dimension, there is a positive difference between 1-3 years in the positive direction compared to the same manager in 4-6 years with the same manager.

The educational background of managers does not have a significant influence on leadership perceived by participants. Proposals for results obtained without working can be ordered as follows. In order for the concept of educational administration to function well, it is necessary to establish bilateral relations that enable the governed and ruled to express their wishes easily. It is necessary to take into account the criteria for determining and comparing the management skills of candidates, rather than criteria that are not related to seniority or managerialism in the selection of managers in state schools.

Among the most important responsibilities of the manager, the authority to exercise initiative in the case of momentary decisions is not given to the managers who manage in state institutions. Given the ability to use initiative as an initiative in terms of flexibility in the case of instantaneous decisions, it may provide better management. Keeping the relationship of school administrators with teachers at a certain level can have an important facilitating effect on the work of managers and teachers.

The faculty to which graduates are admitted has an influence in the perception of the managerial characteristics of the teachers according to the results obtained in the study result. From these results, choosing candidates who graduated from the faculty of education in the election of administrators has an effect which may cause the teachers to approach the managers more positively. There is also a relationship between the possibilities of



schools offered by teachers and the perceptions of teachers' management. Thus, as opportunities increase, teachers have a more positive perception of managers. This will in turn positively affect teachers' attitudes towards managers of meeting managerial requests for the improvement of school facilities by the Ministry.

References

- Ağıroğlu Bakır, A. (2013). Öğretmenlerin Paylaşılan Liderlik ve Örgütsel Bağlılık Algıları Arasındaki İlişkinin Analizi, İnönü Üniversitesi, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Eğitim Yönetimi Ve Denetimi Bilim Dalı, *Doktora Tezi*.
- Akyüz, M.Y. (2002). Çağdaş Okulda Etkili Liderlik, *Ege Eğitim Dergisi* (1), 2: 109-119 Ankara.
- Alganer, Y.İ. (2002). Liderlik analizi ve Türk silahlı kuvvetlerinde liderlik. *Afyon: Yayınlanmamış Yüksek Lisans Tezi*, Afyon Kocatepe Üniversitesi Sosyal Bilimler Enstitüsü, İşletme Anabilim Dalı.
- Ataman, G. (2009). *İşletme Yönetimi*. 3.basım, Türkmen kitabevi, İstanbul.
- Balcı, A. (2002). *Etkili Okul, Okul Geliştirme. Kuram, Uygulama ve Araştırma*. 3. Baskı. Ankara: Pegem A Yayınları
- Balyer, A. (2013). Okul Müdürlerinin Öğretimin Kalitesi Üzerindeki Etkileri. *Kuram ve Uygulamada Eğitim Yönetimi [Educational Administration: Theory and Practice]*, 19(2), 181-214.
- Bass, B.M and B.J Avolio. (1994). *Manual for the Multifactor Leadership Questionnaire*. Palo Alto, CA, Consulting Psychologist Press
- Baş, G. (2009). Küreselleşme ve Bilgi Toplumu. *Eğitim Dergisi*. Sayı: 24
- Başaran, İ.E. (2000). *Yönetim*, Feryal Matbaası, Ankara.
- Başaran, İ.E. (1996). *Eğitim Yönetimi*, Feryal Matbaası, Ankara.
- Bennis and Burt Nanus (1985). *Leaders: The Strategies For Taking Change*. Harper and Row.
- Buluç, B. and Serin, M. K. (2012). İlköğretim okul müdürlerine öğretim liderliği davranışları ile öğretmenlere örgütsel bağlılıkları arasındaki ilişki, *Yayınlanmamış yüksek lisans tezi*.
- Bursalıoğlu, Z. (2002). *Okul Yönetiminde Yeni Yapı Ve Davranış*, Pegem Yayıncılık, Ankara.
- Can, H. (2006). *Örgütsel Davranış*, Arıkan Basım Yayım Dağıtım LTD. ŞTİ., İstanbul.
- Can, H. (1999). *Organizasyon ve Yönetim*, Siyasal Kitabevi, Ankara.
- Chavez Jr, F. C. (2012). Organizational Commitment As Influenced by Leadership Behavior Of Administrators, Job Satisfaction and Burnout of Teachers: A Structural Equation Modeling. *UIC Research Journals*, 18(1).
- Çakar, U. ve Arbak, Y. (2003), Dönüşümcü Liderlik Duygusal Zekâ Gerekir Mi? Yöneticiler Üzerinde Örnek Bir Çalışma Kocatepe Üniversitesi, Sosyal Bilimler Enstitüsü, *Yüksek Lisans Tezi*, Afyon.
- Çimendereli S. (1994), Liderlik Kuramları ve Bir Araştırma. *Yayınlanmamış Yüksek Lisans Tezi*, İstanbul Üniversitesi S.B.E., İstanbul.
- Çoban, D. and Demirtaş, H. (2011). Okulların Akademik İyimserlik Düzeyi İle Öğretmenlerin Örgütsel Bağlılığı Arasındaki İlişki. *Kuram ve Uygulamada Eğitim Yönetimi [Educational Administration: Theory and Practice]*, 17(3), 317-348.
- Erdoğan, İ. (2000), *Okul Yönetimi Ve Öğretim Liderliği*, Sistem Yayıncılık, İstanbul.
- Eren, E. (1993). *Yönetim Psikolojisi*, İstanbul: Beta Yayınevi.
- Eren, E. (2000). *Örgütsel Davranış Ve Yönetim Psikolojisi*, Beta Yayınları, 6. Baskı İstanbul.
- Erzurum, K. (2007). Liderlik Eğitimi Ve Hizmet İçi Eğitimdeki Rolü (Mersin İli Cam Sanayisi İşletmeleri Yöneticilerine Yönelik Bir Uygulama). *Yüksek Lisans Tezi*, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Fiedler, F. E. (1967). *A Theory of Leadership Effectiveness*. New York: McGraw-Hill.
- Güllü, E. (2009). Sınıf öğretmenlerinin algılarına göre ilköğretim okulu yöneticilerinin liderlik stilleri ile öğretmenlerin iş doyumları düzeyleri arasındaki ilişki. *Yüksek Lisans Tezi*, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Gürsel, M. (2007). *Türk Eğitim Sistemi Ve Okul Yönetimi*, Eğitim Kitabevi Yayınları, Konya.
- İlgar, L. (2005). *Eğitim Yönetimi, Okul Yönetimi, Sınıf Yönetimi*, Beta Basım Dağıtım A.Ş., İstanbul.
- Johns, T. (1995), *Ethical Leadership*, IPD.
- Karasar, N. (2002). *Bilimsel Araştırma Yöntemi*. Ankara: Nobel Yayın Dağıtım.
- Karasar, N. (2004). *Bilimsel Araştırma Yöntemi*. 10. Basım, Ankara: Nobel Yayın Dağıtım.
- Karlı, M. D. (2006). *Etkili Okul Yöneticiliği*, Yayıncılık Matbaası, İstanbul.
- Keskinkılıç, K. (2007). *Türk Eğitim Sistemi Ve Okul Yönetimi*, Pegem Yayıncılık, Ankara.
- Kılınçarslan, S. (2013). Okul Yöneticilerinin Liderlik Stilleri İle Öğretmenlerin Örgütsel Bağlılık Düzeyleri Arasındaki İlişkinin İncelenmesi (İzmir İli Karabağlar İlçesi Örneği), Okan Üniversitesi Sosyal Bilimler Enstitüsü, Türkçe İşletme Ana Bilim Dalı, İstanbul.
- Koçel, T. (1998). *İşletme Yöneticiliği*, Beta Yayınları, İstanbul. Koçel, T. (2010) *İşletme Yöneticiliği*, Beta Basım A.Ş., İstanbul.
- Kul, M. ve Güllü, M. (2010). Okul Yöneticilerinin Liderlik Stilleri İle Beden Eğitimi Öğretmenlerinin Örgütsel



- Bağılılıkları Arasındaki İlişki. *Uluslararası İnsan Bilimleri Dergisi*, Cilt:7 Sayı:2, 1021-1038.
- Milli Eğitim Dergisi, (2003). T.C. MEB Yayınlar Dairesi Başkanlığı, Teknikokullar, Ankara.
- Munkhgerel, B. (2011). Liderlik Tarzları İle Örgütsel Bağlılık ve Örgütsel Sessizlik Arasındaki İlişkiye Bir araştırma. Marmara Üniversitesi Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı Yönetim ve Organizasyon Bilim Dalı *Yüksek Lisans Tezi*.
- Naktiyok, A. (2006). E-Liderlik Özelliklerinin İncelenmesine Yönelik Bir Araştırma, Atatürk Üniversitesi *İşletme Fakültesi Dergisi*, Cilt:7, Sayı:1.
- Nartgün, Ş., Menep, İ. (2010). İlköğretim okullarında görev yapan öğretmenlerin örgütsel bağlılığa ilişkin algı düzeylerinin incelenmesi: Şırnak/İdil örneği. *Uluslararası İnsan Bilimleri Dergisi*.
- Özden, Y. (1998). *Eğitimde Dönüşüm*, Pegem Yayıncılık, Ankara 1998.
- Özden, Y. (1998). *Eğitimde Dönüşüm*, Pegem Yayıncılık, Ankara.
- Öztop İ. (2008). Liderlik Tarzları ve Örgüt Kültürü Tipleri Arasındaki İlişki Ve Bu İlişkinin Nitel Performans Üzerine Etkileri, Gebze Yüksek Teknoloji Enstitüsü Yüksek Lisans Tezi.
- Serinkan, C. (2008), *Liderlik ve Motivasyon Geleneksel ve Güncel Kuramlar*. Nobel Yayın Dağıtım, Ankara.
- Sezgül, İ. (2010), Liderlik ve Etik: Geleneksel, Modern Ve Postmodern Liderlik Tanımları Bağlamında Bir Değerlendirme. *Toplum Bilimleri*, Haziran 2010, 4 (7) : 239-251.
- Soydan, S. (1973). Klasik ve Psiko-Sosyal Kuramlar Açısından Önderlik ve Uygulamaya Ait Bir Örnek. *Yayınlanmamış Doktora Tezi*, İstanbul Üniversitesi İşletme Fakültesi, İstanbul.
- Şişman, M. (2010). *Eğitim ve Okul Yönetimi*. Pegem Akademi Yayıncılık.
- Tabak, A., Yalçınkaya, H. and Erkuş A. (2007). Liderlik kavramına Tarihsel Bir Bakış. *21nci Yüzyılda Rusya, AB ve Türkiye'den Yansımalar*, Kaymakçı(Ed), Türkmen Yayıncılık, İstanbul, 2007
- Taymaz, H. (1995). Okul Yönetimi, Ankara, Saypa Yayınevi.
- Tengilimoğlu, D. (2005). Kamu ve Özel Sektör Örgütlerinde Liderlik Davranışı Özelliklerinin Belirlenmesine Yönelik Bir Alan Çalışması. *Elektronik Sosyal Bilimler Dergisi*, 4(14), 1-16.
- Teyfur, M.,B., O.F., Yalçınkaya, M. (2013). İlköğretim Okul Yöneticilerinin Etik Liderlik Özellikleri İle Okullardaki Örgütsel Güven Düzeyinin İncelenmesi(İzmir İl Örneği). *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, 21 (2013) 84-106.
- Türkmen, Ş.(2003). *Okullarda Yönetim Etkinlikleri*, Alp Yayınları, Ankara.
- Uzun, G. (2005); Kadın ve Erkek Yöneticilerin Liderlik Davranışları Arasındaki Farklılıklar ve Bankacılık Sektöründe Uygulama, *Yüksek Lisans Tezi*, Adana
- Yeşilyurt, P.(1997), Türk Ve İtalyan Yöneticilerinin Liderlik Tarzları:Türkiye'de Faaliyet Gösteren Türk-İtalyan Ortak Girişimlerinde Bir Uygulama, *Yüksek Lisans Tezi*, Çukurova Üniversitesi, Sosyal Bilimler Enstitüsü İşletme Anabilim Dalı,Adana.
- Zel, U. (2001). *Kişilik ve liderlik: evrensel boyutlarıyla yönetsel açıdan araştırmalar, teoriler ve yorumlar*. Seçkin yayıncılık.



Teacher training: the relevance of creativity in school

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Abstract

Some social and educational dissatisfaction occurs when the school focuses almost exclusively on the development of the convergent thinking of the students, forgetting the creativity in a divergent and contextual sense. In this debate there is always some tension that occurs under the difficulties of the experts to reach consensus on a definition of creativity, and then to point out guidelines for their evaluation and training. The controversy that surrounds the evaluation of the construct of creativity has justified the search for alternatives, by some authors, to the similar tests of Torrance, in the fluidity, flexibility, originality and elaboration, resorting to stimuli essentially unfamiliar to the individuals (Lubbart, Besançon, and Barbot, 2011). It is assumed a theory of evaluation of the creative potential of the students of basic education, based on verbal and graphic subtests that evaluate the main forms of creative cognition: - Divergent exploratory and convergent integrative thinking. Assuming that creativity is a phenomenon that involves higher levels of consciousness and complexity (Cabrera, 2009); considering the work of Sternberg and Lubart as a theoretical foundation and arguing the results of Costa-Lobo, Coimbra and Almeida (2017), are addressed and epistemologically based didactic options for the pedagogical training of teachers and for the organization of curricular and extracurricular activities of the school, in order to develop creativity in educational contexts.

Keywords: Teacher training, Creativity, Creative potential, educational contexts

Introduction

The study of creativity as a complex phenomenon is proposed in a broader sense than what has been traditionally studied. This makes more sense in the educational field, given the new pedagogical trends that require an approach that integrates the new requirements in the educational institutions, their management teams and teaching staff, and the public policies that respond to a demand that not only deals with the Creative thinking and their possibilities of stimulation and evaluation, but also, consider the advances of knowledge, new technologies and educational improvements that involve contextualized innovations. In this sense, we propose to base the application of creativity in educational contexts, and at school in particular, with an epistemology that integrates the different approaches based on awareness, complexity and transdisciplinarity (Cabrera, 2011) and recent research that addresses some Forms of evaluation and teacher training (Costa-Lobo, Coimbra and Almeida, 2017). For this, the objectives of the shared studies are: to identify how the creativity is understood; to describe an epistemological model that integrates the different fields of knowledge in its field; describe the main guidelines in the evaluation of creative thinking; elaborate a proposal of basic guidelines to develop creativity in educational contexts.

According to Costa-Lobo, Sousa, Campina, Vestena, and Cabrera-Cuevas (2016) the implementation of specific strategies and promoting an appropriate educational environment for the development of creativity signals the importance of the construct to be increased in psychoeducational practices, challenging and multifaceted environments. Almeida et al. (2017) report the need to pay attention to the cognitive and learning processes of gifted children through the identification of measures that allow effective support for their psychological development and school learning; these authors characterize the cognitive abilities of gifted children and their particular forms of learning, evidencing how the current emphasis is no longer placed on quantity but on the functionality of cognitive abilities. Costa-Lobo et al (2016) and Costa-Lobo et al (2017) signaled harmony promotion practices between educational research and psychological intervention, with regard to the development of skills and attitudes that encourage thinking and creative potential.



Complex and transdisciplinary approach to pedagogical training in creativity

The transdisciplinary approach is a characteristic of knowledge, since, as it raises of Herran, "when investigating in a discipline, it ends up in the transdisciplinary" (2010, p.166). Regarding the study of creativity, it is necessary to consider a transdisciplinary and complex approach, since in order to approach its field, diverse disciplines are required, diverse material, spatial, technological resources, diverse methodologies and approaches to define and evaluate it. The complexity as a paradigm, intervenes in the educational task at the epistemological, ontological and methodological level given the multidimensional character of reality that, in Morin's words, forms a joint fabric (2004). Therefore, educational priority should not only be directed to processes of knowledge construction and learning, but also to "issues related to ecological sustainability, planetary citizenship, as a consequence of evolution, intelligence and human consciousness In an integrated perspective "(Moraes, 2007, p.6). The author herself offers us a proposal of possible educational purposes in the following dimensions and their respective indicators: a) Ontological, anthropological and eco-spiritual dimension (Learning to recognize, acquire and commit to aesthetic and spiritual values), b) Cognitive, emotional and Psychophysics dimension (Learning to think, to feel and to know, to learn to take care of the body), c) Ecological and planetary dimension (Learning to take care of the environment, of the planet and to live / to live), Creative and aesthetic dimension And creatively, learning to innovate, think and produce aesthetic and artistic objects), (Moraes, 2015, p 111). To consider, therefore, a complex and transdisciplinary approach, implies a greater adaptation to the particular contexts of this globalized era, where the proposals arise from the pooling with the values that each institution has for purpose, with an adaptive, flexible and open sense to the updates of the educational center itself. On the other hand, it is not only a question of focusing on a part of the system and what should be improved, but also, as Morin (2015) puts it in what must be preserved. In this respect, all changes will be understood in the vision, attitudes and cultural relations of those who make up the educational center, giving meaning to new projects, strategies and new contributions to evaluate creative thinking (Costa-Lobo, Coimbra and Almeida, 2017).

It is urgent to attend to the essential themes of perennial pedagogy, to promote reflective, critical and complex thinking, in order to be better prepared, among other topics, for new ways of perceiving reality and relating to each other that are causing the increase of digital technologies, as proposed by Ken Robinson (2015) regarding to the growing problems, for example, with cyberbullying (Ortega, Calmaestra, & Mora, 2008) and studies that explain how it affects students' emotions (Caetano, A., Freire I., Veiga A., Martin, M. & Pessoa, T., 2016). A teacher with a transdisciplinary and creative vision, will be able to respond better to the new challenges, and in agreement with de la Torre (2006) "to contribute to the knowledge of the qualities and potentialities of his students" (p.692). Considering the study of creativity, from this transdisciplinary perspective, is especially important because it is observed that in the advances of research in its field, there has been an expansion of studies beyond the definitions of the types of individuals with creative characteristics, and beyond researchers dedicated to stimulating creative thinking, or to link it to certain areas, such as artistic or advertising. We attend to the phenomenon that occurs at the transpersonal level, that is, collective, systemic and with repercussions on ecological sustainability. According to the study carried out in this sense, we have found that both theories of creativity, the different approaches and the most emerging trends have transdisciplinary attributes (Cabrera, 2009).

In the research carried out with the specific objectives of deducing transdisciplinary references and valuing these transdisciplinary references for training in creativity, (Cabrera, 2016), these are resolved in a favorable way. These transdisciplinary references are those that have to do with principles of personal improvement, formative and with a sustainable ecological relation. The specific referents of transdisciplinarity for training in creativity have to do with a teacher who facilitates learning processes, with the flexible use of the resources they have, with adaptation in the organization of time and space and the number of students, a teacher attentive to the motivations of the students, as well as situations that emerge from the context and social, political, economic and cultural contingency, an attentive teacher in generating a climate of respect, participation and collaboration, both



in the classroom and Outside of it, a teacher who values content, such as attitudes, participation, skills and competencies and adapts their assessments with different strategies in a permanent feedback process. Given the growing demand to incorporate creativity in different areas of society, and in the educational field in particular, we base the present proposal on a research that contributes to the epistemology of creativity, as a field of study, which has had two international awards (Cabrera, 2011): The Model of tendencies in creativity from a complex-evolutionary consciousness CCC, or Model of tendencies in creativity.

Epistemology of Creativity

The physicist David Bohm (2002), points out that "creativity is something impossible to define with words" (p.31). According to our disciplinary field and the way we perceive, understand and apply creativity in our field, it can be presented in different categories and approximations, as happened in a congress where more than four hundred meanings were collected (Sikora, 1979). For the researcher M. Romo (2006) "Creativity is a way of thinking whose results are things that have both novelty and value" (p.23) and as a special form of problem solving supported by other non-cognitive traits. For other authors, such as de la Herran (2006) is not enough a way of thinking, or respond to what or how, or who or what. For this author, creativity goes through levels according to its orientation and purpose. First, that which is produced as something isolated, that can be produced by discovery, then that which refers to an achievement for a given system (personal, ideological, institutional) where its basic process is productivity, and that creativity that interests to the formative sphere, which is that creativity that favors human evolution, individually and collectively.

In an exploratory study carried out in the course of research, as we approach the term of creativity, we find that some myths persist about this phenomenon, as they may be the subject of a few chosen persons with this gift or talent; which are attributes of those who have artistic skills; that it is about having very original ideas; that is to handle a number of important techniques that stimulate creative thinking, or that is linked to better spaces, material or technological resources (Cabrera, 2011). Creativity seen in this way is a biased proposal. On the other hand, several authors (De la Torre, 2006, Gervilla, 2003, Landau, 2002, MacKinnon, 1975, Money, 1957, Runko, 2009, Sternberg, 1977, in Cabrera, 2011) have been recurrent in categorizing the Creativity in separate qualities responding to the Who, the How, the What and the Where. These referents have to do with: a) creative person: has to do with personality traits, intrinsic and extrinsic motivation, creativity associated with certain pathologies, self-realization, stimulation of thought, measurement of creative thinking, b) creative process: involves seeking information, transforming, evaluating, executing, intuitive or analytical processes, preparation phases, incubation, enlightenment and verification, didactic processes such as problematizing, acclimatization, stimulation, estimation-valorization, orientation, c) creative product: It refers to if it has novelty, value, new implications, originality, complexity d) creative environment: Concerning the environment, psychosocial, didactic environment, physical environment; Climate, humor, game, material conditions, communication, respect, freedom.

We agree with the difficulty of defining creativity, first because it cannot be classified only in profiles or personality types, excluding other ways of being and communicating individual talents, even less of a way of thinking or 'creative thinking' (Romo, 1997), as the same author agrees subsequently (2006); second, because from Pedagogy, products cannot be categorized as creative without the context where they are used, and many products would be left out because of their lack of constructive input, a matter inherent in a creativity that contributes to the common good; third, because the advances in knowledge and studies on creativity show that the divergent thought not the only way of reaching creative processes and results as an example, and fourth, because there is a current of thinking that is working on the theme of the creative adversity for years (de la Torre, 2009, 2010), which indicates that not only adequate spaces and climates favor creativity, but adversity and resilience also constitute a great reference and potential of the same. On the other hand, several authors (Amabile, 1996, Csickszentmilhalyi, 1998 and Sternberg, 1999) include the system as an annex to all of the aforementioned, which are called componential models, however, other researches in the creativity subject



(Alfonso, 2006, Landau, 2002, López, 1995) point out that what they offer, is not only to add the motivation nor the relevance of the context, since this responds to an insufficient understanding of the creativity. Faced with this, we broaden the field of study toward studies that link creativity as a potential and a transformative, social and ethical human value, all accompanied by awareness (de la Torre 2006, de la Herran, 2008), and other areas as varied as 'Creative Nature' (Moraes, 2007) or 'The Creative Cosmos' (Laszlo, 1997).

From the known models to explain the field of creativity we find: a) Process, Result, Personality, Development, Creativometry (de la Torre, 1984) b) P-creativity, H-creativity (Boden, 1994), (d) Intrapersonal, logical, mathematical, spatial visual, musical, kinesthetic-bodily, interpersonal intelligence (Gardner, 1997) e) Relevant skills for the countryside; Skills relevant to creativity and Motivation for the task (Amabile, 1996) f) Educational creativity or first order, Outstanding or second order creativity, Extraordinary creativity or third order (de la Herran, 1997) g) Mystical, Psychodynamic, Psychometric, Pragmatic, Cognitive-social, Social-person, Confluence. (Sternberg, 1999), h) Individual, Field, Scope. (Csikszentmihalyi, 1998), i) Creativity as imagination; as mental capacity, as problem solving; as self-realization; as an investment; Such as psychosocial interaction and paradoxical creativity. (S. de la Torre, 2008), l) Punctual or spontaneous creativity or action for an achievement, systemic or partial creativity or achievement for a system, Evolutionary or total or systemic creativity for human evolution (A. de la Herrán, 2008). These theoretical proposals are interpreted globally as a set of rich models, which are based on complementary criteria.

Creative trends model CCC

When we speak of creativity evolving in complexity of consciousness, we are referring to the development of its theory encompassing, every time, new fields of study in a process that goes from the most particular to the most general. Based on the development of the consciousness studied by many authors (Freud, Jung, Piaget, Freire, Montessori, Rogers, Maslow, Erickson) synthesized in a study by Dr. González-Garza (2006) Wilber (2005, 2006) reveal an evolution corresponding to a dimension that conforms biological, psychological, organismic-social and transpersonal or spiritual human nature. The Model of tendencies in creativity from a complex-evolutionary consciousness or 'Model of Tendencies in creativity CCC' covers the different fields of study as well as their more extensive and deep applied fields considering in a first subdivision, the approaches and theories known and consensual by Researchers (a type of individuals, all people, system), to the most emergent (complexity). We present a summary for each referent, with its theories, authors and force ideas. It should be noted that the theories and authors were elaborated from primary and secondary sources and reviewed several times by experts in creativity.

Consensus Approaches

Category: A sort of individuals

These studies contributed to clear myths about artistic genius to advance research on creativity and talent in all people.

Table 1. Category one sort of individuals

REFERENT	Theories and Models	Outstanding Authors reference works YEAR	FORCE IDEAS KEYWORDS
INDIVIDUAL	Theory of genius Anthropometric Study	F. Galton, 1869	The genius individual is cataloged as creative. People are born with that gift, feature Innate and hereditary.
INDIVIDUAL	Theory of the Giftedness	L. Terman, 1925. Sh. Blumen, 2013	Characteristics and development of the trajectory of The gifted individuals. High performance talents and learning styles

Source: Own elaboration from Cabrera (2011, p.163)



Category: All People

In this category it is where the greatest contribution is received, especially from Gardner's denunciation in 1950, regarding the need to study creativity as a capacity other than intelligence (Sternberg, 1999).

We propose to associate theories with those that focus creativity in impulses (picodynamics and studies from pathology), measurement (psychometric tests), stimulation (pragmatic approach and its different techniques of stimulation of creative thinking), evaluation (The indicators of creative products), human development (humanist approach and creativity from self-realization).

Table 2. Category of all people

REFERENT	Theories and Models	Outstanding Authors reference works YEAR	FORCE IDEAS KEYWORDS
IMPULSES	Psychodynamics Approach	Freud. 1908/1959 Rank, 1932; Kris, 1952; Kubie, 1958; Vernon, 1970 Jung, 1959 1964	Tension between real consciousness and unconscious impulses. Sublimation of conflicts. Art and creativity. Adaptive regression and elaboration. Preconscious. Express unconscious desires. Collective unconscious and archetypes.
THOUGHT	Associations Cognitivism Theory; Classic; Trait and Personality Theory; Intelig. Multiple; Gestalt model; Simulations with Computer; Other	Dewey 1910; Wallas 1926, Wertheimer, 1945; Newell y Simon 1972, Gardner, 1973, Mackinnon 1975; Weisberg, 1986, Finke 1990; Boden 1992. Romo 2003, Runko, 2007.	Creative problem solving. Specific intellectual processes. Problem space. Perception of problems as a whole. Troubleshooting in an original way. Creativity carries ordinary cognitive processes. 20,000 hrs. Seven types of intelligences. Solve problems or create relevant products. Play creative thinking on computer. P creativ. And H creativ. Provides novelty and Value in addition to relying on non-cognitive traits. Creativity as Potential.
MEASUREME NT	Psychometric Approach	Guilford, 1950; Torrance, 1962 Costa-Lobo, Coimbra, & Almeida, 2017; Lubart, T.I., Besançon, M. & Barbot, B. (2011)	Creativity is the key to education. Criteria: fluidity, flexibility, elaboration and originality Creative potential Creative cognition EPoC - Evaluation of Potencial Creativity Divergent exploratory thinking and integrative convergent thinking.
STIMULATIO N	Pragmatic Approach	Crawford, 1931; Osborn 1953; Gordon 1961; De Bono 1977	Technique to form new combinations. Brainstorming. Synthetic Method; Lateral Thinking. 6 hats for thinking technique
EVALUATION	Enfocado al Producto	Newell, Shaw & Simon 1958 Mc Pherson Brodgen & Sprecher, 1964, Gutman 1967; Taylor 1972	Some criteria: Novelty and personal, social, scientific value; New implications; Surprise; Existential, social, artistic, symbolic and operative structures. Originality and complexity
HUMAN DEVELOPME NT	Humanist Focus	Fromm 1941; Murphy 1947; Riesman 1950; May 1959; Maslow 1973; Rogers 1980; Blay, 1980; Marin 1984; Goleman, 1996.	Productive orientation Biosocial interaction with Culture Autonomous person To be existential Creativity as health, self-realized person, Open to experience, happy; be yourself; Valuable innovation, intuition, wisdom of the unconscious. Spiritual realization. Transcendent consciousness.

Source: Own elaboration from Cabrera (2011, p.163)



Category: System

Creativity present both in people and at the level of social-cultural system. In these studies, although they integrate contextual elements, aspects related to transdisciplinarity are not yet mentioned.

Table 3. Category system

REFERENT	Theories and Models	Outstanding Authors reference works YEAR	FORCE IDEAS KEYWORDS
From Confluence	Socialcultural Theory	H. Gruber, 1974 Simonton, 1981	Scientific creation as a result of a working life. Creative productions as adaptive adjustment variations. Creativity needs psychosocial, individual and social articulation. . Future and creativity with a prospective social view
From Confluence	Social theory. Model Component	T. Amabile, 1983 a la Act.	It integrates different processes; Highlights the environment Socio-cultural, personal, creative, Intrinsic motivation.
From Confluence	Theory of Investment	R. Sternberg, 1977 a la Act.	Integrate 6 resources: Intellectual skills, knowledge, thinking styles, personality, motivation, environment.
From Confluence	Ecological Theory	M. Csikszentmihalyi, 1988 a la Act.	It highlights the historical and social environment of creative works. Flow state as a high level of creativity. Individual - Field - Scope.
From Confluence	Total Applied Creativity Theory	D. de Prado 1988 a la Act.	Socio-humanistic techno - create . Humanistic vision Integral part of creativity in practice. Multilingualism. Self-conscious creative teaching.

Source: Own elaboration from Cabrera (2011, p.163)

Emerging approach

Category: Complexity

In this category creativity considers the particular types of individuals, all people, society, nature, integrating cognitive, corporative, emotional, spiritual and ethical components. (Megatrends, Transpersonal Approach to Consciousness, Complex Approach, Ecosystem Approach, Interactive and Psychosocial Theory, Complex-Evolutionist Theory) (Cabrera, 2009). In this emerging approach, we have considered two researchers who have been incorporating the transdisciplinary and complexity references in their research around creativity. In turn, and after an in-depth interview with each of them, it was considered pertinent to highlight the authors who are most significant for them, and in which they lay the foundations that make them committed to creativity from the complexity.



Table 4. Category Complexity

REFERENT	Theories and Models	Outstanding Authors reference works YEAR	FORCE IDEAS KEYWORDS
Transdisciplinary	Interactive and Psychosocial Theory.	S. de la Torre, 1982 a la Act. References: Osho, E. Morin; 1981 a la Act. Maturana, Varela, Binnig, Laszlo, Lorenz, Prigogine, Moraes, Capra, Briggs, Pribram, Wilber, Bohm, Roger Ciurana, D'Ambrosio, Nicolescu, Zukav, May, Damasio, Lipton, Servan-Schreiber, Others.	To know how to educate in the complexity of the planetary era. Ecological sustainability. Eco-systemic paradigm. Creativity as part of a personal, social and cosmic whole that manifests as energy flows. It integrates emotion, thought and action. Character dynamic, interactive, systemic and complex. Creativity rather than generation of ideas, as fields of vibration. Quantum creativity. To train in creativity is to bet on a future of progress, justice, tolerance and coexistence.
Transdisciplinary	Complex Evolutionist Focus	A. de la Herrán, 1998 – a la Act. References: Lao Tse, Confucio, Buda, Sócrates, Zhuang zi, Kant, Herder, Hegel, Fröebel, Martí, Eucken, Nietzsche, Teilhard de Chardin, Montessori, Maslow, Dürckheim, Krishnamurti, Deshimaru, Fromm, Blay, Morin, García-Bermejo, González- Jiménez, and Anyone.	Overcoming self-centeredness. Complexity of consciousness. Noosphere. Human evolution. Knowledge. Increase. Consciousness. Education for Death. Self Realisation. Evolutionary or total creativity. It is defined beyond its action, product and system or reference ism. It has two destinations: personal growth and social improvement, formation and evolution of consciousness. Education for Universality. Education on Humanity.

Source: Own elaboration from Cabrera (2011, p.163)

This model is an open and flexible proposal that can be expanded and renewed constantly incorporating new research in each category. Some authors could, for example, be in more than one category.

What is intended is to give a panorama, as a general map of the field of knowledge of creativity, so that it can be understood, not only in a linear, chronological and separate way in certain specific fields of study, but in an integral way, with a sense that the researchers themselves have been weaving in history. In this sense, there are no lower or higher levels, but each professional, from his disciplinary field, will contribute to the larger context of the phenomenon.

CONCLUSIONS

There is a need for more training in Creativity for the educational field in particular and in other dimensions that have to do with greater social, cultural and ecological responsibility. Although cognitive studies of creativity have been predominantly understood, the way of understanding it has an increasing tendency towards transdisciplinarity and complexity, integrating other social and personal domains. The trends in Creativity reflect that Creativity is related to ethical implications and social improvement, as well as self-training. The references of complexity and transdisciplinarity have valuable implications in contexts of didactic innovation, methodologies and evaluation. Regarding the conclusions with the new ways of evaluating, stands out the EPoC battery, battery that allows creative giftedness to be measured, in elementary and middle-school students, in several fields of expression. This battery aims to evaluate the creative potential of school-age children. Measurement relates to two fields of expression, graphic and verbal, and implies two ways of thinking: divergent-exploratory (find numerous original responses based on a given stimulus) and convergent-integrative (produce an original work integrating several elements in a creative synthesis).

This complex and transdisciplinary vision of creativity, we can apply it in different areas on a personal and social-cultural level. From the astounding talents that increasingly appear every day in children and adolescents



from different countries, small inventors, scientists and artists with extraordinary qualities and with whom pedagogy has a great responsibility, as well as with all children empowering Their abilities and competences to express their uniqueness and their relationships with others, to generate an inclusive and respectful environment, and of course not, also considering the environment of which it is part, to generate more contextualized learning in a system that integrates local heritage, Artistic and cultural, in the neighborhoods, the city, and consider as part of the principles, a conscience and ethics that contributes to the care needs of the ecosystem and the planet. With this model of trends in creativity, we can promote a favorable impact in educational communities, whenever a system-wide renovation is proposed: its mission and vision, its community (managers, students, families and other members), their methodological strategies (project-based learning, others), their resources (space, technology, materials), their activities, their network connections, etc. This requires the participation of the entire community, both in training, and in the design and implementation of innovative projects.

References

- Alfonso, V. (2006). Creatividad en la psicología. Creatividad como fenómeno complejo y multidimensional. En S. de la Torre y V. Violant (Coord.), *Comprender y Evaluar la Creatividad*, Vol. I., Málaga: Aljibe. 323-333
- Almeida, L. S., Costa-Lobo, C., Almeida, A. I. S, Rocha, R. S., & Piske, F. H. R. (2017). Processos cognitivos e de aprendizagem em crianças sobredotadas: atenção dos pais e professores. In F. H. R. Piske, C. L. B. Vestena, J. M. M., A. A. de O. M. Barby, T. Stoltz, S. Bahia, & S. P de Freitas (Eds.). *Processos afetivos e cognitivos de superdotados e talentosos*: Curitiba : Editora Prismas, 15-39.
- Amabile, Teresa. (1996). *The Social Psychology of Creativity*. Editor, Westview Press.
- Boden, M. (1994). *La mente creativa. Mitos y mecanismos*. Barcelona: Gedisa.
- Bohm, D. (2002). *Sobre la creatividad*. Barcelona: Kairós.
- Cabrera, J. (2009). Creatividad hoy. Una evolución hacia mayores niveles de conciencia y complejidad. *Revista Educación y Futuro* (21) 15-42, Madrid.
- Cabrera, J. (2011). Creatividad, conciencia y complejidad. Una contribución a la epistemología de la creatividad para la formación. Tesis doctoral. Universidad Autónoma de Madrid.
- Cabrera, J. (2014). Creatividad y Educación. Implicaciones educativas desde una creatividad con conciencia compleja-evolutiva. . Educadores. Espacio de ideas y proyectos educativos. *Revista Escuelas Católicas*. N° 249. 9-22.
- Cabrera, J. (2015). Creatividad, complejidad y formación: un enfoque transdisciplinar. *Revista Complutense de Educación*, 26(3), 505-526.
- Cabrera, J. (2016). Tendência transdisciplinares: um enfoque favorável para a formação em criatividade e a criatividade para a formação. En *Inovação e Educação. Formação docente e experiências criativas*. Santos, Lorenzo & Regina (Orgs.) Editora Unijuí. Ijuí, Brasil
- Caetano, A., Freire I., Veiga A., Martin, M. & Pessoa, T. (2016). Emoções no cyberbullying: um estudo com adolescentes portugueses. *Educ. Pesqui.*, São Paulo, v. 42, n. 1, p. 199-212, jan./mar. 2016. <http://dx.doi.org/10.1590/S1517-9702201603138125>
- Csikszentmihalyi, M. (1998). *Creatividad: El flujo y la psicología del descubrimiento y la invención*. Barcelona: Paidós.



- Costa-Lobo, Coimbra, & Almeida (2017). La pertinencia de la creatividad en la escuela: evaluar el potencial creativo de los alumnos *Libro de Actas del 5th International Congress of Educational Sciences and Development* (p 666). 25-27 de Mayo de 2017, Santander, Spain, ISBN: 978-84-697-2780-5.
- Costa- Lobo, C., Pérez- Nieto, M.A., Castillo- Parra, G.; Carvalho, T., Sousa, M., Medeiros, A. M., & Vázquez- Justo, E. (2017). Creatividad en los centros educativos: ¿cómo promover? *Edupsyké*, 15(1), 109-139.
- Costa-Lobo, C., Sousa, M., Campina, A., Vestena, C., & Cabrera- Cuevas, J. (2016). Potencial criativo e processos cognitivos em crianças: da identificação precoce às intervenções futuras. *Diálogos Possíveis*, 15(2), 65-93.
- García, J.L. (2003). *Métodos de Investigación en Educación. Vol II. Investigación Cualitativa y Evaluativo*. Madrid: UNED
- Gardner, H. (1997). *Arte, mente y cerebro. Una aproximación cognitiva a la creatividad*. Barcelona: Paidós.
- González-Garza, A. M^a. (2006). El desarrollo de la consciencia desde la óptica transpersonal. En M. Almendro (Ed.), *La consciencia transpersonal* (2^a ed.) 315-351. Barcelona: Kairós.
- Hernández, R. et. Al. (1994). *Metodología de la Investigación*. México: Mc Graw Hill.
- Herrán, A. de la (1997). *Cómo estudiar en la universidad*. Madrid: Universitas
- Herrán, A. de la (2006). “Hacia una creatividad complejo-evolucionista. Redefinición del concepto de creatividad desde una educación de la conciencia”. En S. de la Torre y V. Violant (Coords.), *Comprender y Evaluar la Creatividad*, Vol. I. Málaga: Aljibe. 61-68.
- Herrán, A. de la (2008). Didáctica de la creatividad. En A. de la Herrán y J. Paredes (Coord.) *Didáctica General. La práctica de la enseñanza en Educación Infantil, Primaria y Secundaria*. Madrid. Mc Graw Hill. 151-176.
- Herrán, A. de la (2010). Contribución al Concepto de Creatividad: Un Enfoque Paquidérmico (3^a parte). *Educación y Futuro. Revista de Investigación Aplicada y Experiencias Educativas*, nº 23, 129-169.
- Mc Millan, J. y Schumacher, S. (2005). *Investigación Educativa* (5^a ed.). Madrid: Pearson.
- Moraes, M^a C. (2007). Complejidad, Transdisciplinariedad y Educación: Algunas Reflexiones. *Encuentros Multidisciplinares* 9(25), 4-13.
- Moraes, M.C. (2015). *Transdisciplinaridade, criatividade e educação. Fundamento ontológicos e epistemológicos*. Campinas, S.P. Papirus (Coleção Práxis).
- Morin, E. (2015). *Enseñar a vivir. Manifiesto para cambiar la educación*. Buenos Aires: Nueva Visión
- Morin, E. (2004). Introducción al pensamiento complejo. Barcelona: Gedisa.
- Laszlo, E. (1997). El cosmos creativo. Hacia una ciencia unificada de la materia, la vida y la mente. Barcelona: Kairós.
- Landau, E. (2002). *El vivir creativo. Teoría y práctica de la creatividad*. Barcelona: Herder (e.o.: 1987).
- López Pérez, R. (1995). Desarrollos conceptuales y operacionales acerca de la creatividad. Chile. *Cuadernos de Trabajo* n° 1. Universidad Central. Escuela de Ciencias de la Educación.
- Lubart, T.I., Besançon, M. & Barbot, B. (2011). EPoC: Evaluation du potentiel créatif (Test et manuel). Paris: Hogrefe.



- Ortega, R., Calmaestra, J., & Mora Merchán, J. (2008). Cyberbullying. *International Journal of Psychology and Psychological Therapy*, 8(2).
- Pessoa, T. (2003). A Educação Reflexiva do Professor – Razões e Implicações ao Nível da Formação Inicial”. *Revista Galego-Portuguesa de Psicoloxía e Educación*, 8 (10). Actas VII Congreso Galego-Portugués de Psicopedagogía (edición em CD-Rom)
- Robinson, K. (2015). *Escuelas creativas. La revolución que está transformando la educación*. Barcelona: Grijalbo
- Romo, M. (1997). Psicología de la creatividad. Barcelona: Paidós
- Romo, M. (2006). “Cognición y creatividad”. En S. de la Torre y V. Violant (Coords.), *Comprender y Evaluar la Creatividad*, Vol. I. Málaga: Aljibe. 23-30.
- Sikora, J. (1979). *Manual de Métodos Creativos*. Buenos Aires: Kapelusz
- Sternberg, R. (1988). The nature of creativity. Contemporary psychological perspectives. Cambridge: Cambridge University Press.
- Sternberg, R. y Lubart, T. (1999). El concepto de creatividad. Perspectiva y paradigma”. En *Handbook of Creativity*. Cambridge: Cambridge University Press
- Torre, S. de la (1984). Creatividad plural. *Sendas para indagar sus múltiples perspectivas*. Barcelona: Promoción Publicaciones Universitarias.
- Torre, S. de la. (2006). “Evaluar la creatividad docente. El profesorado creativo”. En S. de la Torre y V. Violant (Coords.), *Comprender y Evaluar la Creatividad*, Vol. I. Málaga: Aljibe. 683-692.
- Torre, S. de la, y Moraes, M.C. (2008). Decálogo del Docente Transdisciplinar y Creativo”. *Red Internacional de Escuelas Creativas*, 152-153.
- Torre, S. de la (2009). Adversidad Creadora. Teoría y Práctica del Rescate de Potencialidades Latentes. *Encuentros Multidisciplinares*, 9(31), 6-20.
- Torre, S. de la (2010). Adversidad Creadora. Desarrollando otra Conciencia. En S. de la Torre y M Pujol (Coords.), *Creatividad e innovación. Enseñar e investigar con otra conciencia*. Madrid: Universitas. 19-34.
- Wilber, K. (2005). *El espectro de la conciencia*. Barcelona: Kairós (e.o.: 1990).
- Wilber, K. (2006). *La conciencia sin fronteras*. Barcelona, Ed. Kairós. (e.o.: 1985).



Reading competence in primary school: speed and effectiveness training in digital education

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Abstract

Reading comprehension is the cornerstone of much scientific research and, as a fundamental axis that converts reading competence, a reason for generation of theories, methodologies and computer tools that evaluate and train in a specific or generic way.

The main objective of this study is to demonstrate the effectiveness of the digital tool LeoBien Supertics to improve reading competence by training the speed and effectiveness of reading in primary education in Spain in 2017, taking into account constructs such as attention, memory and reading speed.

In a total of 3,000 students at the primary education level, the first 500 students enrolled of each grade in the primary stage were selected, with 250 boys and 250 girls from grades 1 to 6. A pretest and a post-test were performed, with an interval of six months in which a training, without control group, was conducted for reading, memory and attention skills as elements for improvement in reading comprehension. The results point to a significant improvement, especially in the first year of primary education, and, in general, to an improved performance with more favorable scores for girls.

Keywords: comprensión lectora, competencia lectora, velocidad lectora, memoria y atención.

1.- Introducción

Reading comprehension, understood as the ability of a human being to understand as objectively as possible what an author meant by a text and as an essential part of reading competence (Jiménez-Pérez, 2014), implies both intrinsic factors (self-motivation, absence or not of disorders) and extrinsic (learning process, training). Within extrinsics, reading speed, as part of training, influences “cognitive processing that needs fluency at the time of reading” (Areces et al., 2017; Holguin, Cerquín, & Rodríguez, 2015, p. 131), as speed is a structural part of reading fluency (Calero, 2003, p. 33) and this fluidity, as the cornerstone of reading skill, focuses mainly on the text (Escurra, 2003, p. 100). Thus, reading speed can be trained using activities (González, Cuetos, López-Larrosa, & Vilar, 2017; Miguel, 2017) and stands as a fundamental element of the comprehension of a text (Gómez, 2011; Aguilar, Navarro, Menacho, Alcalé, Marchena, & Ramiro, 2010), as shown by, among other things, the fact that readers who need to spend more reading time than others for the same text feel frustrated and reduce their reading habits. (Escurra, 2003, p. 105).

Likewise, memory plays a fundamental role in cognitive processes that converge in an optimal reading competence. According to specialists (Bull & Lee, 2014; Alloway & Copello, 2013; Alloway & Passolunghi, 2011), working memory, especially verbal (González, Otero, Castro, 2016, 4), unequivocally influences the acquisition of reading ability and its development. It also operates as a buffer for recently read words or sentences, allowing them to be integrated to establish coherence and, in turn, maintains information retrieved from long-term memory to facilitate its integration with the currently active text (Vernucci, Canet-Juric, Andrés, & Burin, 2017, p. 3).

So memory maintains an active role in the understanding of written texts. In addition, feedback is bidirectional since, if memory influences the comprehension of texts, reading comprehension influences the expansion of memory “by forming new connections in the brain and strengthening existing ones” (Galindo & Martínez, 2014, p. 14). This translates to the fact that readers with a low reading

comprehension profile exhibit difficulties in the use of memory (Canet-Juric, Burin, Andrés, & Urquijo, 2013, p. 997). For this reason, training memory will improve reading competence, just as training reading skills will improve memory.

On the other hand, attention is another of the constructs of reading comprehension and is intimately related to an individual's ability to understand a written text (Rojas & Cruzata, 2016; Canet-Juric, Burin, Andrés, & Urquijo, 2013; Valera, Rueda, Pelayes, Reinoso, Muñoz, & Quiroga, 2010). In addition, it is a variable that, together with concentration, persistence and tolerance for frustration, helps the acquisition of reading competence (Tapia, 2016; Aguilar & Portilla, 2013; Alcaraz, 2014; Corners, 2009). Thus, attention is defined "as a cognitive control function responsible for the hierarchical organization of the processes in charge of elaborating the information" [Ison & Korzeniowski, 2016; Posner & Rothbart, 2014; Petersen & Posner, 2012; Portellano Pérez, 2005], enabling the understanding of the perceived" (Merchan-Price & Henao-Calderón, 2011) in reading a written text.

Therefore, a tool that combines reading speed training (as the basis of reading fluency), memory (involved in the process of understanding), and attention (understood as a cognitive process that favors the acquisition of skills as a reader) should be able to objectively train for reading comprehension at fundamental levels.

The purpose of this research is to demonstrate the effectiveness or not of the computer program, LeoBien de Supertics, which is based mainly on the training of memory, attention, and reading speed, to improve reading effectiveness as a basis for reading comprehension, in the target group, which includes the primary education level in Spain, that is, for children between 6 and 12 years. Thus it is anticipated that, in general, test results before the intervention will show lower scores than those obtained after training, and that this will hold true in particular for students in the first course, as it is the most mechanical stage where readers take a quantitative leap in speed.

2.- Method

2.1.- Participants

This transversal study involved 3,000 pupils aged between 6 and 12 years, of which 50% were boys and 50% girls. Of these, 500 students belonged to each of the primary education levels, of which 250 were boys and 250 girls. Students were selected from different educational centers across Spain.

2.2.- Design and process

The study used a quasi-experimental design of pretest–posttest repeated measures without control group. Before and after implementing the intervention program, an evaluation test was applied to the participants in order to measure the variables of both speed and effectiveness in reading on which it was hypothesized that the program would have an effect by offering an increase of reading comprehension for students.

3.- Results

In order to analyze change in the variables under study, descriptive analyses (means and standard deviations) were performed with scores obtained from administration of the pretest and posttest, as well as analyses of the posttest-pretest differences for the variables measured before and after the intervention.

Tables 1 and 2 show the data obtained in each of the sub-abilities that integrate the facets of reading comprehension evaluated: speed and effectiveness, before and after six months of intervention using the LeoBien program in first grade level of Education, differentiated by gender.

Tabla 1

Results obtained by first-year students of Primary Education in speed at the end of the training period in boys and girls in a differentiated manner.

SPEED	Letter + phrase	Syllable + text	Word	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.345*	.264	.174**	.472*	.623*	.521*
<i>Boys after 6 month intervention</i>	.723*	.324*	.284*	.376*	.452*	.382

* $p < .05$ ** $p < .01$ *** $p < .001$

Tabla 2

Results obtained by primary school students in effectiveness at the end of the training period in boys and girls in a differentiated manner.

EFFECTIVENESS	Letter + phrase	Syllable + text	Word	Comprensión	Velocidad	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.461*	.321***	.731**	.535***	.354***	.632**	.541**	.632**
<i>Boys after 6 month intervention</i>	.427***	.368***	.546**	.428**	.583**	.742***	.642***	.546*

* $p < .05$ ** $p < .01$ *** $p < .001$

As can be seen in Tables 1 and 2, through the Leobien program, students progress in comprehension, although in a differentiated way, the improvement in effectiveness rather than speed being much more prominent. Improvements occur in a similar way in the case of boys and girls, in terms of speed and effectiveness at the first grade level of primary education.

Tabla 3

Results obtained by the second-graders of Primary Education in speed at the end of the training period in boys and girls in a differentiated manner.

SPEED	Letter + phrase	Syllable + text	Word	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.534*	.362	.268	.241	.734	.243
<i>Boys after 6 month intervention</i>	.646**	.283	.582	.534*	.672	.472

* $p < .05$ ** $p < .01$ *** $p < .001$

Tabla 4

Results obtained by the students of the second year of Primary Education in effectiveness at the end of the training period in boys and girls in a differentiated manner.

EFFECTIVENESS	Letter + phrase	Syllable + text	Word	Comprensión	Velocidad	Attention	Memory	Sequencing
Girls after 6 month intervention	.352**	.524***	.218***	.632**	.582**	.243*	.546***	.253***
Boys after 6 month intervention	.263**	.582***	.265***	.483***	.346**	.448**	.524***	.622**

* $p < .05$ ** $p < .01$ *** $p < .001$

Tables 3 and 4 show the data obtained in each of the sub-abilities that integrate the facets of reading comprehension evaluated: speed and effectiveness, before and after the application of the Leobien program at the second grade level of primary education, differentiated by gender. As shown, in second-year primary education pupils there is a very outstanding improvement in the facet of effectiveness, similar to what happened in the previous course, which is not observed in the facet of speed/dexterity, where progress is limited to the letter + phrase (see tables). with the first graders, there are no substantial differences in students' progress with respect to gender.

Tabla 5

Results obtained by third-graders of Primary Education in speed at the end of the training period in boys and girls in a differentiated manner.

SPEED	Letter + phrase	Syllable + text	Word	Attention	Memory	Sequencing
Girls after 6 month intervention	.325*	.437	.523	.334	.634	.452
Boys after 6 month intervention	.635	.361	.428	.342	.685	.375

* $p < .05$ ** $p < .01$ *** $p < .001$

Tabla 6

Results obtained by third-graders of Primary Education in effectiveness at the end of the training period in boys and girls in a differentiated manner.

EFFECTIVENESS	Letter + phrase	Syllable + text	Word	Comprensión	Velocidad	Attention	Memory	Sequencing
Girls after 6 month intervention	.435***	.327**	.546*	.481*	.417**	.472*	.461*	.487*
Boys after 6 month intervention	.516***	.254*	.634***	.512**	.365**	.534**	.387*	.502**

* $p < .05$ ** $p < .01$ *** $p < .001$

Tables 5 and 6 show the data obtained after the application of the Leobien program in the third year of primary education. As in previous grades, the improvement that the program provokes in speed is not significant, as opposed to what happens with effectiveness, where progress is relevant in all sub-abilities. Equally important are the lack of differences in terms of gender.

Tabla 7

Results obtained by the students of Primary Education room in speed at the end of the training period in boys and girls in a differentiated way.

SPEED	Letter + phrase	Syllable + text	Word	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.253	.354*	.645*	.364	.324*	.534
<i>Boys after 6 month intervention</i>	.328	.534*	.423*	.435	.445	.423

* $p < .05$ ** $p < .01$ *** $p < .001$

Tabla 8

Results obtained by the students of Primary Education room in effectiveness at the end of the training period in boys and girls in a differentiated manner.

EFFECTIVENESS	Letter + phrase	Syllable + text	Word	Comprensión	Velocidad	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.342***	.623**	.354*	.443*	.523***	.472**	.634*	.527**
<i>Boys after 6 month intervention</i>	.434**	.524**	.622*	.402**	.607**	.535*	.522**	.503**

* $p < .05$ ** $p < .01$ *** $p < .001$

Tables 7 and 8 show the data obtained after the application of the Leobien program classroom. They show a similar trend to that of the two previous courses: little relevance in speed and high influence on effectiveness. Neither do they denote gender differences.

Tabla 9

Results obtained by the fifth graders of Primary Education in speed at the end of the training period in boys and girls in a differentiated manner.

SPEED	Letter + phrase	Syllable + text	Word	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.314	.254*	.402**	.532*	.522*	.514
<i>Boys after 6 month intervention</i>	.425	.326	.411*	.433	.623	.467*

* $p < .05$ ** $p < .01$ *** $p < .001$

Tabla 10

Results obtained by the fifth graders of Elementary Education in effectiveness at the end of the training period in boys and girls in a differentiated manner.

EFFECTIVENESS	Letter + phrase	Syllable + text	Word	Comprensión	Velocidad	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.624***	.425**	.543**	.622**	.234**	.352***	.543**	.427***
<i>Boys after 6 month intervention</i>	.523**	.432**	.425***	.734*	.344***	.344**	.634*	.534**

* $p < .05$ ** $p < .01$ *** $p < .001$

Tables 9 and 10 show the data obtained after the application of the Leobien program in fifth year of primary education. They indicate that the trend of the previous courses is maintained, although this time the effectiveness of the program partially increases the results in the fifth grade students compared to the previous levels. In the same way, the effectiveness of the training is confirmed. There are no differences in this course regarding gender either. Both, fifth grade and the others, face at the same time these proofs.

Tabla 11

Results obtained by sixth graders of Primary Education in speed at the end of the training period in boys and girls in a differentiated manner.

SPEED	Letter + phrase	Syllable + text	Word	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.412	.534	.452	.235	.471	.472
<i>Boys after 6 month intervention</i>	.352	.545	.521*	.326	.528	.525*

* $p < .05$ ** $p < .01$ *** $p < .001$

Tabla 12

Results obtained by the students of sixth grade of Primary Education in effectiveness at the end of the training period in boys and girls in a differentiated way.

EFFECTIVENESS	Letter + phrase	Syllable + text	Word	Comprensión	Velocidad	Attention	Memory	Sequencing
<i>Girls after 6 month intervention</i>	.452***	.461*	.623***	.402*	.553**	.502*	.553**	.492***
<i>Boys after 6 month intervention</i>	.534***	.376*	.634**	.506**	.634**	.431**	.635*	.539***

* $p < .05$ ** $p < .01$ *** $p < .001$

Tables 11 and 12 show the data obtained after the application of the Leobien program in the sixth grade of primary education. They confirm the tendency of little relevance in the component of speed and a high influence on improvement in effectiveness on this occasion for students in the sixth grade. Also note the continued lack of substantial differences in gender at this educational level.

4.- Discussion and Conclusions

The objective of this study was to verify the effects of intervention using the LeoBien training program, oriented to the improvement of reading comprehension. This software program, published in the Supertics platform, has been created to focus on development of the sub-abilities that comprise the speed and effectiveness of reading as pivotal in the improvement of comprehension capacity throughout the stage of primary education. The results obtained show that instruction through this program affects students differently in different facets of reading. It has been verified that the program has a very significant influence on improvement of the facets that comprise reading effectiveness, sustained along all the levels that compose this educational stage. Such influence has not been equally confirmed with respect to abilities that favor reading speed except at the first grade level, where improvements have been greater, probably caused by the qualitative leap that leads to an irruption in the reading process before consolidation in the higher grades. These data coincide with the contributions of other studies that have demonstrated the importance of mastery of the skills involved in learning written language from the earliest ages to improve reading acquisition (Gutiérrez & Díez, 2015; Gutiérrez, 2016).

The experience would be enriched in future research by providing a control group that would allow establishment of a correlation, or lack thereof, in the learning processes of reading between the groups and to estimate the extent to which gains in skill may be attributed to the intervention.

In summary, this work helps to facilitate understanding of the processes involved in the acquisition of reading comprehension during the first school years, to assist in selecting educational activities that will have a positive impact on building the skills identified as relevant to these processes.

References

- Aguilar, M., Navarro, J., Menacho, I., Alcale, C., Marchena, E. y Ramiro, P. (2010). Velocidad de nombrar y conciencia fonológica en el aprendizaje inicial de la lectura. *Psicothema*, 22(3), 436-442.
- Aguilar, M. & Portilla, F. (2013). *La atención y la comprensión lectora en los estudiantes del 2º grado de primaria de la institución educativa*. (Tesis de Maestría). Universidad Cesar Vallejo: Perú.
- Alcaraz, C. (2014). Cómo motivas a nuestros alumnos a través de la evaluación. En M. Ibarra, J. Ballester, M. L. Carrió, Romero, F. (eds.). *Retos en la adquisición de las literaturas y de las lenguas en la era digital*. Alicante: Universidad de Alicante.
- Alloway, T. P. & Copello, E. (2013). Working memory: The what, the why, and the how. *The Educational and Developmental Psychologist*, 30, 105-118. <https://doi.org/10.1017/edp.2013.13>
- Alloway, T. P. & Passolunghi, M. C. (2011). The relationship between working memory, IQ, and mathematical skills in children. *Learning and Individual Differences*, 21, 133-137. <https://doi.org/10.1016/j.lindif.2010.09.013>
- Anthony, J.L., Williams, J.M., Durán, L.K., Gillam, S. L., Liang, L, Aghara, R., Swank, P. R., Assel, M. A. & Landry, S. H., (2011). Spanish phonological awareness: Dimensionality and sequence of development during the preschool and kindergarten years. *Journal of Educational Psychology*, 103(4), 857-876.
- Areces, D., Rodríguez, C., González, P., García, T, Cueli, M. (2017). Naming Speed and its effect on attentional variables and reading errors depending on the diagnosis. *Anales De Psicología*, 33(2), 301-310
- Bull, R. & Lee, K. (2014). Executive functioning and mathematics achievement. *Child Development Perspectives*, 8, 36-41. <https://doi.org/10.1111/cdep.12059>
- Calero, A. (2014). Fluidez Lectora y Evaluación Formativa. *Investigaciones sobre Lectura*, 1, 33-48.
- Canet-Juric, L., Burin, D., Andrés, M. L., Urquijo, S. (2013). Perfil cognitivo de niños con rendimientos bajos en comprensión lectora. *Anales de Psicología*, 29(3), 995-1005.

- Connors, F. (2009). Attentional control and the simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 22(5), 591-613.
- Escurre, M. (2003). Comprensión de lectura y velocidad lectora en alumnos de sexto grado de primaria de centros educativos estatales y no estatales de Lima. *Persona*, 6, 99-134.
- Galindo, J., Martínez, I. (2014). Fortaleciendo la Motivación Mediante Estrategias de Comprensión Lectora en Estudiantes de Educación Primaria. *Innovare*, 3 (2), 11-25.
- Gómez, M. (2016). Fluidez lectora oral en inglés como lengua extranjera. *Tonos digital*, 31, 1-24.
- González, R. S., Cuetos, F., López-Larrosa, S., Vilar, J. (2017). *Estudios Sobre Educación*, 32, 155-177.
- González, K., Otero, L., Castro, A. M. (2016). Reading comprehension v/s working memory, fluency, and vocabulary In cuban students. *Actualidades Investigativas en Educación*, 16(1), 1-18.
- Gutiérrez, R. y Díez, A. (2015). Aprendizaje de la escritura y habilidades de conciencia fonológica en las primeras edades. *Bordón*, 67(4), 43-59. doi: 10.13042/bordon.2015.67405
- Herrera, E., Valera, I. R., Rueda, I., Pelayes, S., Reinoso, M. V., Muñoz, S. y Quiroga, V. (2010). Factores que inciden en la comprensión lectora. En *Evaluación de la Educación: Congreso Iberoamericano de Educación*: Argentina.
- Holguín J. A., Cerquín K., Rodríguez, M. (2015). Development of inferences, cognitive processes and reading speed of texts written in three school districts in Lima, Peru. *Eduser*, 2(1), 128-149.
- Ison, M., Korzeniowski, C. (2016). El Rol de la Atención y Percepción Viso-Espacial en el Desempeño Lector en la Mediana Infancia. *PSYKHE*, 25(1), 1-13.
- Jiménez-Pérez, E. (2014). Comprensión lectora Vs Competencia lectora: qué son y qué relación existe entre ellas. *ISL*, 1, 65-74.
- Merchán Price, M. S. & Henao Calderón, J. L. (2011). Influencia de la percepción visual en el aprendizaje. *Ciencia & Tecnología Para la Salud Visual y Ocular*, 9(1), 93-101. Extraído de <http://revistas.lasalle.edu.co/index.php/sv/article/view/221/162>
- Miguel, V. (2017). *Funcionalidad visual y programa de entrenamiento óculo motor para la mejora de la velocidad y comprensión de lectura*. Madrid: (CNIIE) MECED.
- Liao, C. H., Deng, C., Hamilton, J., Lee, C. S. C., Wei, W., & Georgiou, G. K. (2015). The role of rapid naming in reading development and dyslexia in Chinese. *Journal of experimental child psychology*, 130, 106-122.
- Onochie-Quintanilla, E. (2016). Precursores cognitivos de la Adquisición de la Velocidad Lectora en español. Universidad de Granada: Tesis doctoral.
- Rojas, M. Cruzata, A. (2016). La comprensión lectora en estudiantes de educación primaria en Perú. *Revista de Educación*, 7(9), 337-356.
- Tapia, M. (2016). ¿Es “simple” la concepción simple de lectura? En J. L. Castejón, *Psicología y Educación: presente y futuro*. ACIPE: Alicante.
- Vernucci, S., Canet-Juric, L., Andrés, M. L., Burin, D. I. (2017). Comprensión Lectora y Cálculo Matemático: El Rol de la Memoria de Trabajo en Niños de Edad Escolar. *PSYKHE*, 26(2), 1-13.



The Mathematics Teaching Efficacy Belief Instrument Applied to Pre-service Elementary School Math Teachers

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Abstract

Teacher efficacy is the degree of teachers' beliefs that they can control student achievement and motivation. It is not sufficient to prepare pre-service teachers of mathematics only in areas of content and pedagogy. The purpose of this paper is to determine mathematics teaching efficacy beliefs among pre-service elementary students of mathematics at the Faculty of Education Palacký University Olomouc in Czech Republic. We used for pre-service teachers Mathematics Teaching Efficacy Beliefs Instrument (MTEBI) that has been developed by modifying the original Science Teaching Efficacy Beliefs Instrument (STEBI-B). Items were changed to reflect future mathematics teaching beliefs. We collected data from 53 pre-service elementary school teachers. The present survey was only one of the many parallel researches and surveys the objective of which is to comprehensively map the perception of the self-efficacy and preparedness of students of Teaching at the 1st Level of Elementary School for teaching mathematics.

Keywords: teacher, training, mathematics, efficacy, beliefs

Introduction

From the didactic point of view teaching mathematics is a challenge mainly due to the fact that this subject is difficult for many students, and thus for teachers, too. This has given rise to an urgent need to find effective ways how to help children acquire the necessary knowledge and skills in order to teach them to apply the things they learn. In compliance with the principles of so-called realistic teaching of mathematics, which ensues from the historical understanding of mathematics as a human activity based on the reality of the surrounding world, it is necessary to put an emphasis on the practical use of mathematics, research and reflection, on group work and practical activities (Korthagen, 2011). According to Hans Freudenthal (1991) the resulting process of teaching is then understood as a process of guided reinvention.

Mathematical literacy is a term that is now more commonly used in similar contexts in the Czech Republic. It is obvious that such a teaching style requires a lot from the teacher's personality. Were we to apply the principles of realistic teaching of mathematics in the preparation of prospective math teachers, we would probably get the closest to the model proposed by the editors Atkinson and Glaxton (2001), the so-called *intuitive practitioner*. The authors put it in opposition to the model of so-called *craft-knowledge*, whose goal is to pass on only theoretical scientific knowledge to be applied in school practice (Lukášová-Kantorková, 2003).

It is important for prospective math teachers to feel completely prepared for their future profession, and to gain a positive attitude to it (Dofková, 2016; Dofková, Kvintová, 2017). Not only do they need to feel prepared in terms of their expertise, education and didactics, but to feel secure also in terms of their personality traits. Based on our experience with pre-gradual preparation of elementary school math teachers, however, these two aspects are closely related. A student not secure for whatever reason in terms of his/her expertise (for example having a negative attitude to mathematics due to bad memories regarding a teacher at any stage of education) feels insecure in terms of didactics (if someone does not understand fractions, he will hardly feel prepared to effectively teach this to his students). Thus the goal of our research was to identify the perception of own preparedness of prospective elementary school math teachers to teach mathematics effectively.

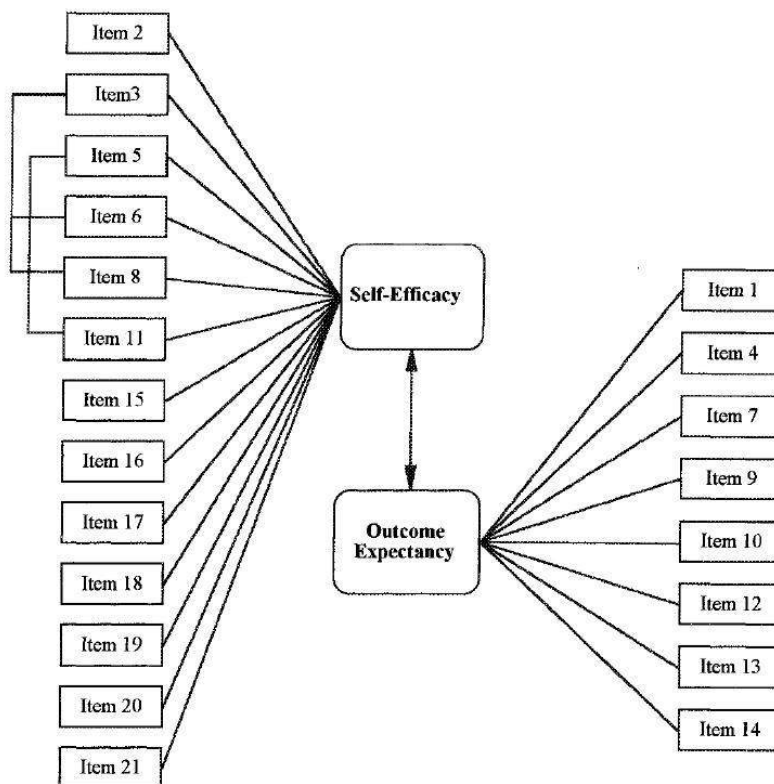


Method

The research tool used in our research project was the Czech version of the *Mathematics Teaching Efficacy Belief Instrument* (MTEBI). This questionnaire was created as a modification of the more general version *Science Teaching Efficacy Belief Instrument* (STEBI-B). The Science Teaching Efficacy Belief Instrument (STEBI) is used in many studies to measure science teaching self-efficacy and outcome expectancy in pre-service elementary school teachers. This 25-item instrument uses a 5-point Likert scale. The STEBI-A is the version recommended for use with in-service teachers; the STEBI-B is the version recommended for use with pre-service teachers.¹

Several adaptations of the STEBI questionnaire have been created in the past few years. We used its math form created by the authors Enochs, Smith & Huinker (2000). The MTEBI is composed of 21 items, out of which 13 deal with *Personal Mathematics Teaching Efficacy* (PMTE), and eight deal with the *Mathematics Teaching Outcome Expectancy* (MTOE). Figure 1 shows the division of items according to the respective categories.

Picture 1. Factor structure of MTEBI Scale Items (Enochs, Smith, Huinker, 2000)



53 full-time elementary school teacher program students (ESTP - 39) and elementary school and special education teacher program students (ESSETP - 14) took part in the pilot research project in April 2017. Answers were supposed to be made on the following scale: *strongly agree, agree, uncertain, disagree, strongly disagree*. The following work hypotheses were set:

1. There is no statistically significant difference among the students within the study groups.
2. Individual answers are mutually independent.

¹ Dostupné z: <http://stelar.edc.org/instruments/science-teaching-efficacy-belief-instrument-stebi>



Findings

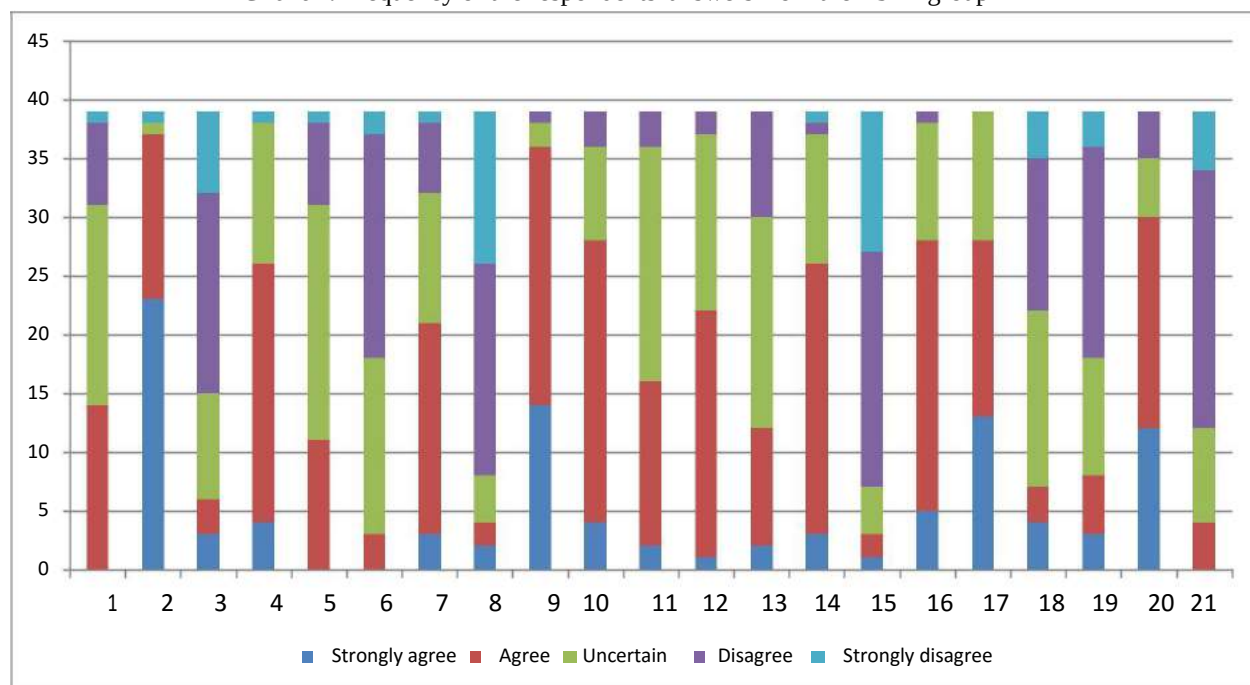
Zero and alternative hypotheses were set in order to verify the first work hypothesis:

H₀: Students' answers do not vary based on the study group where they belong.

H_A: Students' answers vary based on the study group where they belong.

First, a frequency table was created for the individual groups. At first sight it was apparent that in case of both groups the answers would revolve around the mean value (Chart 1). The most positively assessed item in the ESTP group (the sum of the possibilities of strongly agree and agree) is in item 9: *The inadequacy of a student's mathematics background can be overcome by good teaching*, which was positively assessed by 97% of the respondents. The most negatively assessed item was item 15: *I will find it difficult to use manipulatives to explain to students why mathematics works* (82% of the answers).

Chart 1. Frequency of the respondents' answers from the ESTP group

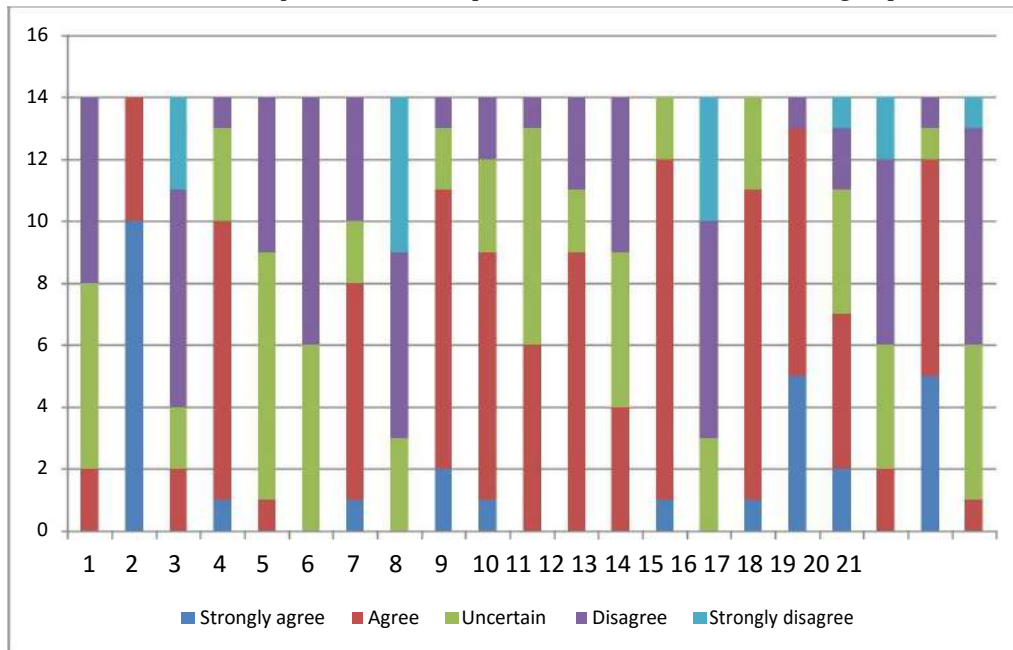


In the ESSETP group (chart 2) the most positively assessed item was item No. 2: *I will continually find better ways to teach mathematics* (100% of the answers). The two most negatively assessed items (79% of the answers) were: *I will generally teach mathematics ineffectively* (No. 8) and *I will find it difficult to use manipulatives to explain to students why mathematics works* (No. 15). However, it is necessary to point out the fact that item 8 was one of those that had to be reversed scored in order to produce consistent values between positively and negatively worded items.

Zero value very often appeared in the acquired frequencies, that is why the Fisher factorial test was used instead of Pearson's chi-square test. In case of all the tested items the calculated p-value was greater than 0.05, therefore zero hypothesis was always rejected, i.e. the answers made by the ESTP and ESSETP respondents did not differ.



Chart 2. Frequencies of the respondents' answers in the ESSETP group



Only in case of item 18: *Given a choice, I will not invite the principal to evaluate my mathematics teaching* the p-value = 0.054, therefore a closer analysis was carried out.

Table 1. Answers of both groups to item 18

Variables	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Total
ESTP	4	3	15	13	4	39
ESSETP	2	5	4	2	1	14

It was apparent from the original table (Table 1) that the values also revolved around the mean value so that it was necessary to create a new four-field contingency table summing the values in the positive items, negative items, and the answer *uncertain* was left out completely (Table 2). Unfortunately, due to this necessary reduction in all the resulting tables we lost a large number of answers – here, for example, 38% in the ESTP group, and 29% in the ESSETP group).

Table 2. Answers of both groups to item 18 (modified table)

Variables	Agree	Disagree	Total
ESTP	7	17	24
ESSETP	7	3	10

With a certain reserve we can say that the answers to this item varied slightly based on the particular group. Once this difference had been specified, the odds ratio of 5.35 was calculated, from which it is clear that the chances for a positive answer were approximately 5 times greater in the ESTP group than in the ESSETP one.

Zero and alternative hypotheses were set in order to look into the pair dependency of items:

H₀: Answers to individual items are independent.

H_A: Answers to individual items are not independent.



In all the tested pairs of items the p-value was greater than 0.05, thus it was necessary to reject zero hypothesis. Only in the following pairs did we get a different result:

- In items 5: *I know how to teach mathematics concepts effectively* and 11: *I understand mathematics concepts well enough to be effective in teaching elementary mathematics* the p-value was calculated to be = 0.027, and zero hypothesis was not rejected, i.e. that there is a dependency between the students' answers to the items.
- p-value = 0.021 while testing item 7: *If students are underachieving in mathematics, it is most likely due to ineffective mathematics teaching* and item 13: *Students' achievement in mathematics is directly related to their teachers' effectiveness in mathematics teaching*. Again, we cannot reject zero hypothesis, i.e. that the answers to the given items are dependent. Here it was possible to determine the odds ratio value (the contingency table did not contain zero value). This chance ratio was 13.74, which can be interpreted as an almost 14 times greater chance for a positive answer than in item 13.
- The last pair of items that showed a dependency were item 1: *When a student does better than usual in mathematics, it is often because the teacher exerted a little extra effort* and item 10: *When a low-achieving child progresses in mathematics, it is usually due to extra attention given by the teacher*.

Conclusions and Recommendations

Based on the achieved results we can say that the assessment of preparedness for teaching mathematics does not differ between the ESTP and ESSETP groups of students, despite a different amount of time allocated for the didactics of mathematics in these groups (due to the specification of the ESSETP studies math didactics lessons are reduced in favor of other disciplines of special education).

If the students' answers already were in pair dependency, those were always items from two previously determined areas of PMTE and MTOE. Into the first area falls the conclusion that if students feel prepared to effectively teach mathematics terms, then they simultaneously feel that they understand them enough. Respondents in the other group believe that teachers are fully responsible for the success or failure of their students in mathematics, and that the teachers' special attention paid to the students leads to an improvement of their results.

We believe that the above conclusions may significantly contribute to improving the quality of preparation of prospective elementary school math teachers. In both of the areas that were the subject of our research (PMTE and MTOE) it was apparent that the students understood the significance of both the scientific preparation (adequate math preparation), and the educational preparation (teaching strategies). The most difficult task remains for the educators of prospective math teachers – to develop in them the necessary *self-efficacy* in order for them to consider themselves prepared also in terms of psychology and didactics.

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References

- Atkinson, T., Glaxton, G. (ed.). (2001). *The Intuitive Practitioner on the value of not always knowing what one is doing*. Buckingham-Philadelphia: Open University Press.
- Dofková, R. (2016). *Přesvědčení o připravenosti budoucích učitelů matematiky jako didaktická výzva primárního vzdělávání* [Beliefs Concerning the Preparedness of Future Mathematics Teachers as a Didactic Challenge of Primary Education]. Olomouc: VUP.



- Dofková, R., Kvintová, J. (2017). The Perception of Self-Efficacy of Prospective Math Teachers at Elementary Schools. In: CHOVA, L. G., A. Lopéz a TORRES, I. C., eds. *INTED2017 Proceedings*. Valencia: IATED Academy, s. 4063 – 4068.
- Enoch, G. L., Smith, P. L., Huinker, D. (2000). Establishing Factorial Validity of the Mathematics Teaching Efficacy Beliefs Instrument. *School Science and Mathematics*, vol. 100(4), 194 -202.
- Freudenthal, H. (2002). *Revisiting Mathematics Education*. Mathematics Education Library, vol. 9. Korthagen, F. (2011). *Jak spojit praxi s teorií: didaktika realistického vzdělávání učitelů*. Brno: Paido. Lukášová-Kantorková, H. (2003). *Učitelská profese v primárním vzdělávání a pedagogická příprava učitelů (teorie, výzkum, praxe) [Teaching Profession in Primary Teacher Education and Training (Theory, Research, Practice)]*. Ostrava: PdF OU.



The External Control Scale Applied to Pre-service Elementary School Math Teachers

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Abstract

The quality of the pre-service training of mathematics teachers is affected by multiple factors. We believe that in the Czech environment, there is a lack of focus on pre-service teachers of the primary school, a lack of interconnection of the field-specific didactics and psychology. One of most important issue is locus of control. Teachers with a high external locus of control believe that control over events during the teaching and what pupils do is outside them, and that they personally have little or no control over mathematics lesson. Therefore they should have been instructed during their pre-service to build positive attitude for their future teaching of mathematics. The aim of this paper is introduce the results of the survey among pre-service elementary teachers about degree how they are able to influence pupils achievement in mathematics. We used the short Norwegian External Control Scale which consists of five items. Responses were given on a six-point scale.

Keywords: external control scale, teacher, mathematics, training

Introduction

Locus of control is a concept that affects the subjective feeling of an individual's control over the impact of their behavior, with internality and externality being found at either end of the continuum (Rotter, 1966). Levenson (1981, pp. 15) states that “*the internal-external control construct was conceived as a generalized expectancy to perceive reinforcement either as contingent upon one's own behaviors (internal control) or as the result of forces beyond one's control and due to chance, fate, or powerful others (external control).*” Persons with an internal locus of control (so-called internalists) believe that their life develops mainly based on their abilities and effort, and that their lives rest firmly in their hands. Individuals with an external locus of control (so-called externalists) perceive the strengthening that results from their behavior and is independent of their own deeds. They ascribe the reward or punishment to outer circumstances that they cannot influence – e.g. chance, the power of other people, luck or fate (Rotter, 1966).

If we wanted to apply these characteristics on the personality of a math teacher, we could say that the teacher – internalist, feels that he has adequate abilities to influence the course of a math lesson based on his knowledge and his own initiative. These teachers are usually happier in their profession and handle stressful situations better. On the other hand, a teacher – externalist often thinks that he cannot (and is not adequately able to) influence the course of a math lesson. These teachers then often use passive strategies of coping with problematic situations during their lessons. They often feel helpless and feel like quitting (Výrost, 1989).

The goal of this article was to map external *locus of control* in prospective elementary school math teachers. This article freely ensues from the fact that *locus of control* is one of the psycho-didactic aspects, just like e.g. *self-efficacy*, which is a topic the author has spent years dealing with (Dofková, 2016, Dofková, Kvintová, 2017). However, here it is necessary to point out that these terms are not absolutely identical. As Veselská states in her diploma work (2016), according to Bandura (1997) there is a difference between these constructs mainly in the way behavior is activated. The belief as to how much situations around a teacher unravel from his own behavior might either be weakening or strengthening. Then we speak of *locus of control*. However, this depends on the level of his belief that he will handle the required activities (*self-efficacy*).



Method

At the start of the research the following work hypotheses were set:

1. There is no statistically significant difference between the students' answers within the individual groups.
2. There is no statistically significant difference between the ESTP students' answers before and after their teaching practice.

A total of 63 daily program students partook in our research (Table 1). The questionnaire was handed out to all the students once they had completed the subject of Didactics of mathematics for elementary school teacher program students (ESTP). At the same time the questionnaire was handed out to students of the 4th (ESTP4) and 5th (ESTP5) years. That means the students had had continual teaching practice by that time. Elementary school and special education teacher program students (ESSETP) were in their third year, which means before their teaching practice.

Table 1. The division of the participating students based on their field of study

Variables	Frequency
ESTP4	36
ESTP5	9
ESSETP	18

Two tools are normally used for measuring *locus of control*. The most frequently used one is the “I – E Scale “ (Rotter, 1966), which consists of 23 items. There are two statements with each item that correspond to the two poles of *locus of control* – the internal one and the external one. The resulting value sets the placement of an individual between these two extreme points. This tool is modified using the *Internality, Powerful Others and Chance Scale* (IPC) (Levenson, 1983). The questionnaire consists of 24 items where the participant states on a scale of -3 to +3 the extent of his/her approval or disapproval, resulting in three areas: internal *locus of control*, external *locus of control* in connection to chance, and external *locus of control* in connection to powerful others (Veselská, 2016).

In our research we wanted to focus only on *external locus of control* so that we only used the Czech version of a *five-item scale* (Skaalvik & Skaalvik, 2007). Each item stated a limitation to what can be achieved through education concerning students' learning, achievement, motivation, or behavior. The limitations were described as students' abilities or home environment. Responses were given on a 6-point scale from *false* (1) to *true* (6) (Skaalvik & Skaalvik, 2007):

1. *How much pupils can learn in school is primarily determined by their abilities.*
2. *If the pupils have not learned discipline at home, there is not much the school can do.*
3. *A teacher cannot do much to improve students' achievements if they have low abilities for schoolwork.*
4. *It is practically impossible for a teacher to motivate a student for academic work if he or she lacks support and stimulation at home.*

Good teaching is more important to students' engagement in schoolwork than is their home environment.

Findings

First we created tables of frequencies for the individual groups. Due to the fact that the respondents in this test could not make their answers near the mean value, we wondered which items in both groups were assessed the most and which the least positively. The item that was assessed the most positively (Chart 1) in the ESTP group (the sum of possibilities *more true than false, mostly true and true*) was item 5: *Good teaching is more important to students' engagement in schoolwork than is their home environment*, which was positively assessed by 84% of respondents. The two most negatively assessed items were item 2: *If the pupils have not learned discipline at home, there is not much the school can do* and item 3: *A teacher cannot do much to improve students' achievements if they have low abilities for schoolwork* (80% of the answers).

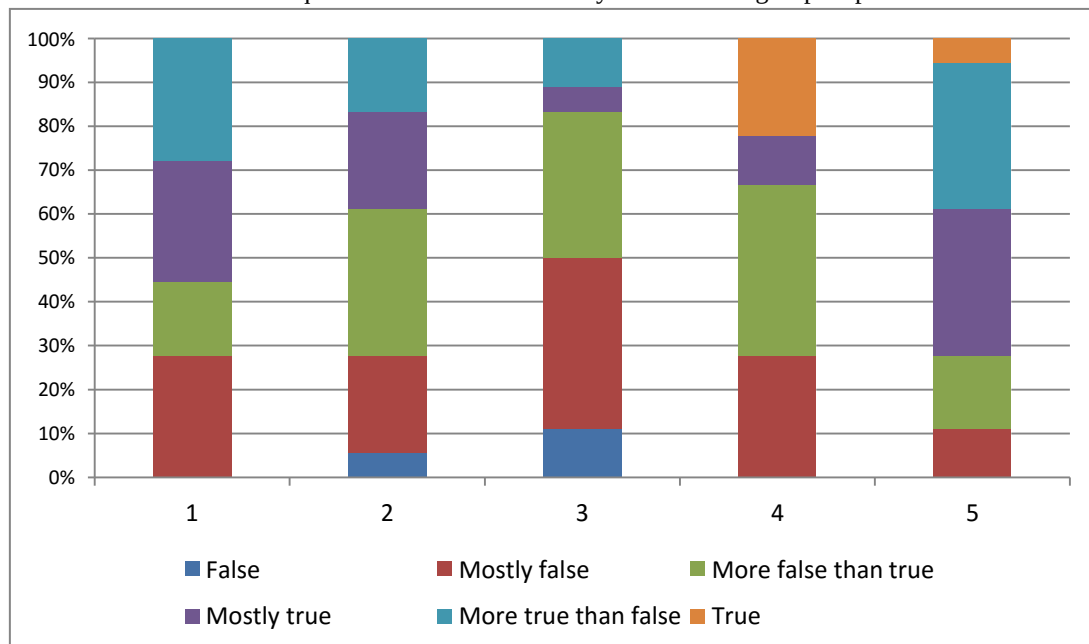


Chart 1. Frequencies of answers made by the ESTP group respondents



In the ESSETP group (Chart 2) the most positively assessed item was also item 5 (67% of all answers). The most negatively assessed item was item 3 (84% of the answers).

Chart 2. Frequencies of answers made by the ESSETP group respondents



Thus it was apparent at first sight that the students' answers in both groups did not differ. To verify this we used the Fisher factorial test. In case of all the items the resulting p-value was greater than 0.05, i.e. there is no dependency between the respondents' answers from both groups.

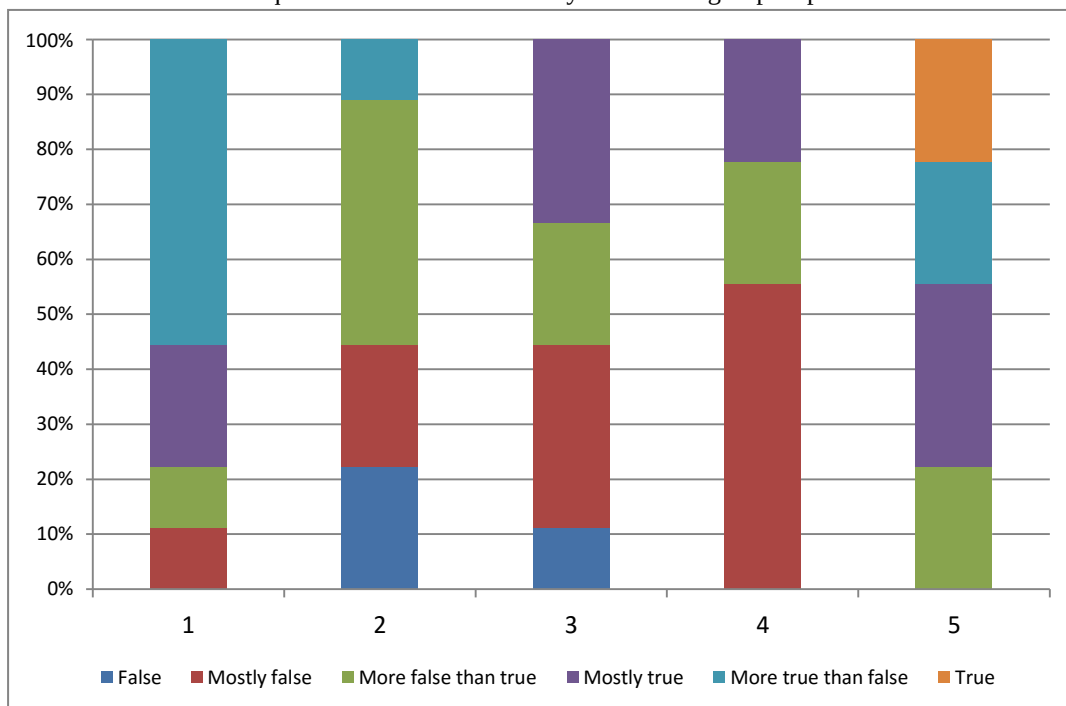


Chart 3. Frequencies of answers made by the ESTP4 group respondents



While scrutinizing the other hypothesis – whether there is a difference in the perception of *external locus of control* by the ESTP students before and after undertaking their teaching practice – frequency charts were made first. Chart 3 shows that the ESTP4 students assessed item 5 the most positively (86%), and they most disagreed with items 2 and 3 (in both cases 83%).

Chart 4. Frequencies of answers made by the ESTP5 group respondents





The ESTP5 students after undertaking their teaching practice also assessed item 5 the most positively (89%), and they most strongly disagreed with item 2 (89%) (Chart 4).

After applying the Fisher factorial test the resulting p-value was less than 0.05 only in case of item 5, i.e. that there is a statistically significant difference between answers to this item before and after undertaking the teaching practice.

Conclusions and Recommendations

The only statement that turned out to be statistically significant in our research was the one in which the students expressed their view of the connection between the teacher's teaching style and the students' home preparation. Despite the fact that most of them assumed that a suitable chosen educational strategy was the most important thing for the motivation of students, there were differences in the measure of agreement before and after undertaking their teaching practice. Those students that had acquired only theoretical preparation in math didactics did not consider this influence as important as those who had already undertaken their practice.

We assume that this conclusion agrees with those who call for an increased amount of time for students' teaching practice. In general, prospective math teachers understand the importance of theory as a means of support for practice, however, our research has made it clear that their psycho-didactic dispositions vary after undertaking their practice. Therefore we suggest that teaching math didactics be conceived in such a way that it reflects the real environment as much as possible.

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References

- Bandura, A. (1997). *Self-efficacy. The Exercise of Control*. New York: W. H. Freeman and Company.
- Dofková, R. (2016). *Beliefs of Prospective Mathematics Teachers about their Preparedness for Teaching Mathematic*. ICLEL2016 Proceedings, 488 – 493.
- Dofková, R., Kvintová, J. (2017). Development of the Attitude to Mathematics in Future Primary School Teachers as a Determinant of their Self-Efficacy. . In: CHOVA, L. G., A. Lopéz a TORRES, I. C., eds. *EDULEARN17 Proceedings*, Valencia: IATED Academy, 3360 – 3365.
- Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. Lefcourt (Ed.), *Research with the Locus of Control Construct*, vol. 1, New York: Academic Press, 15 - 63.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80, 1-28.
- Skaalvik, E. M., Skaalvik, S. (2007). Dimensions of Teacher Self-Efficacy and Relations With Strain Factors, Perceived Collective Teacher Efficacy, and Teacher Burnout. *Journal of Educational Psychology*, 99 (3), 611 – 625.
- Veselská, K. (2016). *Souvislost self-efficacy, locus of control a syndromu vyhoření u asistentů pedagoga*, diploma thesis, Brno: MU.
- Výrost, J. (1989). *Sociálno-psychologický výskum postojov*. Bratislava: VEDA.



The effectiveness of creative procedures when listening to popular music at school¹

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Abstract

Listening is one of the four elementary activities during music education. Modern popular music forms an important part of the teaching material for music education and continues to be a current topic for students. There is sufficient opportunity to include creative procedures when listening during music education. Application of creative procedures in connection with listening activities is represented by utilisation of a set of motivational games with music facts. Motivational games with music facts are formulated for students of the 2nd level of primary school (hereinafter “PS”). The goal of the specific research was to apply the aforementioned creative procedures by means of a set of motivational games with music facts in connection with listening, and to experimentally verify the effectiveness of creative procedures on parallel classes at the 2nd level of PS using the technique of working with an experimental and control group of students.

Keywords: Music, Education, Listening, Popular, Creativity

Introduction

Modern popular music (non-artificial music) forms a significant part of music education at schools in the Czech Republic (hereinafter the “CR”) and is currently no less important than classic music (artificial music). The importance of modern popular music (hereinafter “MPM”) in primary schools, primary art schools and comprehensive schools, continues to grow. In spite of the fact that MPM is a part of the educational system for music education in the CR, and is reflected in all music activities the same as classic music (hereinafter “CM”), its inclusion in music education classes frequently remains imbalanced and problematic.

Listening is defined as *“an active thought process in which sensory information is processed and evaluated”* (Herden, 1998, p. 27).

Listening is one element of the complex of elementary components of music education at schools, together with vocal, instrumental and motoric activities. Use of creative procedures in connection with listening is represented by utilisation of a set of motivational games with music facts. The motivational games with music facts specified below develop the musical thought processes of students, they can be applied in individual or group versions and can be used with students of various ages at adequate skill levels. Motivational games with music facts include: “The memory game”, “Domino”, “3+1”, “Risk!” and “The musicians want to go home”. The purpose of this article is not a detailed description of the progress of motivational games with music facts (Švoncová, 2016, p. 189 - 194), but submission of the results of the first phase of specific research, which concerns the effectiveness of creative procedures when listening to modern popular music in parallel classes at the 2nd level of PS using the technique of working with an experimental and a control group of students. Motivational games with music facts are valuable and easily utilisable particularly due to their motivational, playful and competitive character. The game element continues to be current at school and makes music education of all age categories of students more attractive.

Method

The formational experiment method, which monitored the changes that use of creative procedures utilising a set of motivational games with music facts made to traditional teaching conditions, was chosen for the research.



The purpose of the specific research was to apply the above-mentioned creative procedures by means of a set of motivational games with music facts in connection with listening activities, and to experimentally verify the effectiveness of creative procedures on parallel classes at the 2nd level of primary school using the technique of working with an experimental and a control group of students. In the experimental group, listening was realised in connection with creative procedures. In the control group, listening took place without creative procedures.

The key work hypothesis of the specific research was that the experimental group, in which creative procedures are applied during listening, would understand modern popular music better and would be capable of utilising the learned knowledge in other musical activities.

The first phase of specific research took place in two 9th year classes in the parallel year of primary school over a period of four months. In the experimental group, which consisted of 16 students, listening to MPM took place with utilisation of creative procedures. In the control group, which had 19 Students, listening to MPM was realised without application of creative procedures.

The experiment in parallel classes enabled comparison of the results of both classes, comparison of creative procedures to classic teaching procedures and derivation of the effectiveness of creative procedures. A questionnaire, a semantic differential, quantitative analysis, contingency table and graphs were used to compile and process the research results.

Findings

Students in both groups were engaged in musical portraits of performers, music bands, they discussed styles of music or compared differences in music, musical styles and periods.

In the experimental group, “The memory game”, “Domino” and “3+1” were motivational games with music facts used as creative procedures. In the control group classic filling in, linking and allocation procedures were used while listening to MPM. In both groups, listening to MPM was linked to elementary music activities (vocal, instrumental, motoric) or took place independently.

I give the results of two classes and the overall final listening retest of the first phase of specific research in both groups below.

During this class the students compared the characteristic style elements of reggae and rock music (reggae: the Bob Marley song “Buffalo Solider”, rock: the Rolling Stones song “Satisfaction”). In the experimental group, “Domino” was the motivational game with music facts utilised as a creative procedure and, in the control group, the classic procedure of filling in was chosen.

At the end of the class students were required to answer questions directed towards the characteristic style elements of reggae and rock music. Contingency tables show that the experimental group, in which a creative procedure was used during the class, achieved a higher point rating in relation to both music examples.

Contingency table 1 a - reggae			
Experimental group	boys	girls	total
total	0.75	0.75	0.75%

Contingency table 1 b - reggae			
Control group	boys	girls	total
total	0.71	0.50	0.61%



Contingency table 2 a - rock			
Experimental group	boys	girls	total
total	1.00	0.95	0.98%

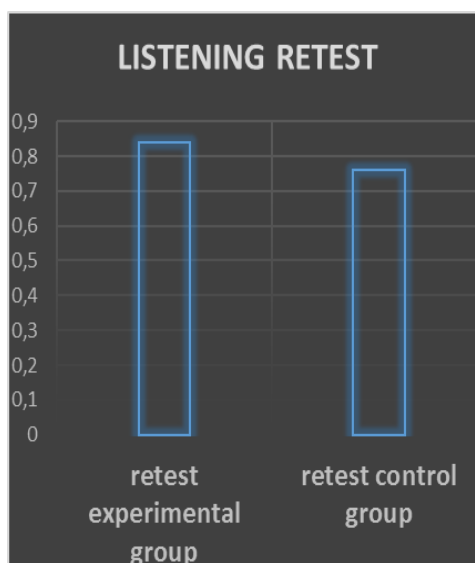
Contingency table 2 b - rock			
Control group	boys	girls	total
total	0.81	0.67	0.74%

In the following class, the *semantic differential* was chosen as the research technique. When listening to samples of music, students marked their choice from the offer of precisely set polarity adjectives with a cross in order to identify how the music affected them at the specific time. The class focused on world music from the 1980s (music samples: the Enya song “Only time”). The “3+1” motivational game was the creative procedure applied in the experimental group, whereas, in the control group, classic filling in concerning the topic of the class was repeated. It is clear from the contingency tables that the experimental group, with a creative procedure applied during teaching, was again more successful in this class.

Contingency table - 3 a			
Experimental group	boys	girls	total
total	0.58	0.92	0.75%

Contingency table - 3 b			
Control group	boys	girls	total
total	0.38	0.53	0.45%

The final listening retest, which took place at the end of the first phase of the specific research, shows that the overall success rate was slightly higher in the experimental group.





Results, Conclusions and Recommendations

The purpose of this article was submission of the results of the first phase of specific research concerning the effectiveness of creative procedures when listening to modern popular music in parallel classes at the 2nd level of PS, using the technique of working with an experimental and a control group of students.

The abovementioned results of the first phase of specific research indicate that the experimental group, in which creative procedures were applied when listening to MPM by means of motivational games with music facts, has a better understanding of modern popular music and is better capable of utilising facts in other elementary music activities - vocal, instrumental and motoric.

Creative procedures by means of motivational games with music facts cannot only help achieve better results during the teaching process, but certainly make the teaching of music more attractive.

References

- Herden, J. & Jenčková, E., & Kolář, J. (1992). *Hudba pro děti*. Praha, Karolinum, (pp.172-177).
- Herden, J. (1998). Modelové situace v přípravě na poslech. In: *Poslech hudby. Sborník příspěvků z konference konané ve dnech 27. a 28. dubna 1998 na Pedagogické fakultě UK v Praze*. Praha: Pedagogická fakulta Univerzity Karlovy, (p. 39).
- Herden, J. (1994). *My pozor dáme a posloucháme: Posloucháme hudbu se žáky I. stupně základní školy*. Praha, Scientia.
- Herden, J. (1997). *My pozor dáme a nejen posloucháme: Posloucháme hudbu se žáky 2. stupně ZŠ a nižších ročníků osmiletých gymnázií*. Praha, Scientia.
- Herden, J. (1998). Realizace poslechu v podmínkách současné HV. In: *Musica viva in schola XIV.*. Brno, Masarykova univerzita v Brně, Pedagogická fakulta, (p. 26 – 31).
- Chrástka, M. (2003). *Úvod do výzkumu v pedagogice: Základy kvantitativně orientovaného výzkumu*. Univerzita Palackého v Olomouci. Olomouc, Tiskservis.
- Jenčková, E. (1997). Aktuální problematika didaktiky hudební výchovy. In *Musica viva in schola XIII*. Brno, PdF MU.
- Pelíkán, J. (2011). *Základy empirického výzkumu pedagogických jevů*. Univerzita Karlova v Praze. Praha, Karolinum, (p. 105).
- Poledňák, I. (2002). Hudební výchova a strašák populární hudby I. In: *Hudební výchova*, roč. 10, 2002, č. 1., p. 1 - 2).
- Prchal, J. (1998). *Populární hudba ve škole*. Praha, Muzikservis.
- Průcha, J. (1995). *Pedagogický výzkum: Uvedení do teorie a praxe*. Praha, Karolinum, 1195.
- Sedlák, F., & Siebr, F. (1985). *Didaktika hudební výchovy I: Na prvním stupni základní školy*. Praha, SPN.
- Sedlák, F. (1984). *Didaktika hudební výchovy 2: Na druhém stupni základní školy*. 2. Praha, SPN, 1984.
- Skalková, J. (1985). *Úvod do metodologie a metod pedagogického výzkumu*. Praha, SPN.
- Švoncová, V. (2016). Prezentace populární hudby ve škole - modelové příklady. In: *Teorie a praxe hudební výchovy IV: Sborník příspěvků z konference studentů doktorandských a magisterských studií a pedagogů hudebního vzdělávání zemí V4 v roce 2015 v Praze*. Praha: Univerzita Karlova v Praze, (p s. 189 – 194).
- Váňová, H., & Skopal, J. (2007). *Metodologie a logika výzkumu v hudební pedagogice*. Univerzita Karlova v Praze. Praha: Karolinum, (p. 171).



Identity of Psychology: First Results of Systematic Review

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Abstract

The thinking about the Psychology Identity is the background of this study, that helps to the answer of this question: Which is the exclusive aim of the psychologig intervention, that changes into singular when compared with any other profession or intervention? This statement, first research process stage more plural, disclose the process and the first products of a qualitative systematic literature review, grounded, explaining and describing all stages of the data collection and the synthesis. It is expose the first results obtained after the review of 202 studies, based on the qualification categories: published date, document typology, editor nationality, methodologic perspective, research method, sample size, publication impact factor and the citations quantity in the primary study.

Keywords: Psychology Identity, Roadmap, Systematic Review

Introduction

This research was developed from questions and thinking about the intervention paper recognizing of the psychological intervention in the nowadays societies. Considering the importance, the great psychological science development and the emergency of the activities associated in the same, it's urgent the delimitation of a professional identity of this class, as well as their action area. As there is a growing of the relevance of the understanding of the psychologist and the psychologig intervention.

Considering the major mediatization of the activities in the titled field of parapsychology, frequently as a try of logical association and the wanted psychological science, being more and more urgent a profession identification, being clear their proceedings and the objectives, avoiding confusion by the general public (Costa-Lobo et al. 2017; Ricou, 2014). These considerations take us to the thinking about the psychologist professional identity in the actuality and, consequently, about the identity of the psychology. The professional identity is an important cognitive mechanism that affects the attitudes, the emotions and the behavior of the professionals in their workplaces. So, understand as the professionals think about themselves have been the focus of different past researchs (e.g., Ashforth, Kreiner, Clark, & Fugate, 2007; Ibarra, 1999; Kreiner, Ashforth, & Sluss, 2006; Kreiner, Hollensbe, & Sheep, 2006; Pratt, Rockmann, & Kaufmann, 2006).

The analysis of the main theorists of the professional identity allows recognize that this identity is defined as an professional auto-concept based on the attributes, in the values, in the motivations and in the people experiences (Ibarra, 1999; Schein, 1978). According to the review made by Valle (1997), the profession exercise assumes the domain of the disciplinary theoretical body and the acquisition of the technical and professional competences, directly related with the professional practice in a certain society. So, both presented as necessary to achieve the professional authority.

So, seems to be acceptable, according the Wenger (2001) research, state that professional identity is faced as the conscience and the evaluated significance that the person presents in the membership, involving a set of cultural rages interiorized, namely the elaborated significances that put in action the person daily where there is a permanent



participation in the future construction. This way, according with Dubar (2002), the professional identity is defined as a social category that can be part of the person. So, the professional identity, faced as a subjective construction, embody the personal compromise, the believes and the values associated to the profession, defined culturally (Lasky, 2005). In conclusion, the main literature assumes that professional identity changes according with the importance given to their profession in their auto-concept and, to quantify this importance, there is a possible help in the understanding of the individual attitudes and in their labor behaviors.

The present research aims to obtain the answer to the central question – Which is the exclusive objective of the psychological intervention, that be singular when compared with any other profession or intervention? This aims to achieve the following secondary objectives: study how the psychologists define themselves; how these are defined by the other professionals and by the general public; identify which are the difficulties of the psychologists in their professional tasks and identify how the psychologists understand and describe their functions.

Method

Research Design

The present research concludes a synthesis of the scientific production in the sub-domain of the psychology. So, it's defined as the objective to elaborate a literature systematic qualitative review aiming to collect and synthesize relevant information.

The definition of literature systematic qualitative review to this work in course was "A literature systematic qualitative review is the process to collect data, know, understand, analyze, synthesize and evaluate the group of scientific articles with the aim to create a art state about certain topic of research" (Levy & Ellis, 2006). This way, the literature systematic qualitative review is within the review studies, especially in the evaluation and synthesis category (Depaepe, Verschaffel, & Kelchtermans, 2013) and makes the difference through the formulation of the research question, definition of critical diagnostic strategies and exigence in the transparency to define the inclusion criteria and studies of exclusion (Davies, 2007). Literature systematic qualitative review groups the study's results, considering the proximities and the differences existent between the research growing the possibilities of interpretation, constructing and reconstructing the readings (Galvão, Sawada, & Trevisan, 2004; Hoefelmann, Santos, & Moretti-Pires, 2012) ensuring the descriptive validity, concerning the relevant studies identification, the interpretative validity concerning the correspondence between the synthesis made by the reviewers and the study matter, the theoretical validity, concerning the credibility methods developed, the pragmatic validity, concerning the utility, the applicability and to the transparence of the knowledge generated to the practice (De-la-Torre-Ugarte-Guanilo, Takahashi, & Bertolozzi, 2011).

Method: Selected Data Sources

The data composing the present literature systematic qualitative review were extracted from the database of the bibliography references, the database of the periodical publications, the database of the thesis and dissertations and the online library of the knowledge. In the database of the bibliography references it's included the *Web of Science* and *ELSEVIER Scopus*; in the database of the periodical publications it's included *Scientific Electronic Library Online – SciELO*, the *American Psychological Association PsycNet – APA PsycNet* and the *Newspapers in Psychology – Pepsic*; in the thesis and dissertations database it's included the *CAPEs*; and the online library of the knowledge - *b-on*. Facing the specificity of the selected sources of the data, it was decided to start the process of the "advanced research" in order to be possible to be delimited the best possible way the study object, without changing the sense and the defined the presupposes.

The inclusion criteria of the present research were the follow: published between 2007 and 2017; published in English, Portuguese and Spanish; indexed in database: *Web of Science*, *ELSEVIER Scopus*, *SciELO*, *APA PsycNet*,



Pepsic, *CAPEs* and *b-on*. The exclusion criteria was the topic of the work context doesn't be connected with the Psychology Identity.

Method: Materials

After exporting the studies of the different databases, assumed as parts of the present research, it was made the adjustment to the results through the software of the management of the bibliography references *Medley Desktop*. So, the results were consolidated in a single list, being excluded the double situations. After words, it was made the redefinition of the studies and it was made the appointments in the free space given by the software what allows organize the presented approaches presented to each study to posterior critical analysis.

The *Mendeley Desktop* selection allowed the automatic insertion of the bibliographic data from the documents in PDF format, the categorization and extraction of the references, the bibliography management according to the specific styles to publish and the share of the results with the other project researchers. In the next stage, after the extensive and intensive reading of the obtained studies, these were imported to the database of the software and qualitative data analyze *NVivo11*, as internal sources. The *NVivo11* is considered as a helpful instrument in the qualitative analysis, as the content study and the speech, as well as gives instruments to categorize the data, make notes, etc. (Lage, 2011). Nowadays there is a variety of the support varieties to the qualitative analyze. It was chosed the *NVivo11*, as it is an instrument to help the qualitative analyze of the data recognized in the scientific community, allowing importing, analyze and export the data obtained from the studies. So, this software supported the understanding and analysis, demonstrating their flexibility to follow all reformulations occurred during the process.

Method: Proceedings

The main point of the research was constructed in a clear and detailed way in accordance to all researchers. This way, the study aims to reply to the main research answer, Which are the exclusive objective of the psychological intervention that changes singular when compared to any other profession or intervention? In the aims definition, those to the literature systematic qualitative review were according to the project. So, with th methodology assumed was intention to achieve the following secondary objectives: analyze how the psychologists define themselves; how these are defined by the other professional and by the general public; identify which are the difficulties that psychologists have in their professional tasks; and identify how psychologists understand and describe their functions.

In the identification of the primary sources – that were articles and chapters published in the database of the bibliography references, in the database of periodic publications, in the database of the thesis and dissertations and in the *B-on*. In the strings of the research construction, it was followed the definition process – the test and the adaptation. It was necessary testing the combination of the terms referents to the research theme, as well as the way of operators *booleanos*, *and*, *or*, *not*, have been used. So, the research strings elaborated were the “identity *and* psychology”; identity *and* psychologists paper *or* psychologist functions”; “identity *and* dilemas *and* psychology”. Consequently, it was made the translation and the reverse translation of the research *strings* selected to English and Spanish. The reverse translation is concerned to the translation of the research *strings* that were already translated in the language in the original language. The objective of this translation was evaluate in which measure the translated version to English and to Spanish was in accordance to the linguistic coherence to original language. In the criteria definition of the inclusion and exclusion, having in consideration the selected objectives, were selected to the present research in the following inclusion criteria: published works between 2007 and 2017; published works in English, Portuguese and Spanish; and indexed in the database: *Web of Science*, *ELSEVIER Scopus*, *Scielo*, *APA PsycNet*, *Pepsic*, *CAPEs* and *b-on*. The exclusion criteria was the following: the topic and context of the work don't take us to the identity of psychology. In the qualification of the categories it was signalized and systematized the characteristics distinctive of the articles and the chapters included in the literature systematic review. The categories



of the qualifications profitable were: the indexed sources, the work date, the document of the publication, the perspective methodologic used, the perspective methodological used, the research methodology adopted, the citations quantity that primary study obtained, the sample size. Concerning the indexed sources capitalized: *Web of Science*, *ELSEVIER SCOPUS*, *Scielo*, *APA PsycNet*, *Pepsic*, *CAPES* and *b-on*. Concerning the work date, it was included published works from 2007 and 2017, having been achieved the research inclusion criteria. About the selected publication documents, the typology of the articles, it is related exclusively the magazines and the scientific events abstract books. concerning the used methodology, there were the following categories: quantitative, qualitative and mixt.

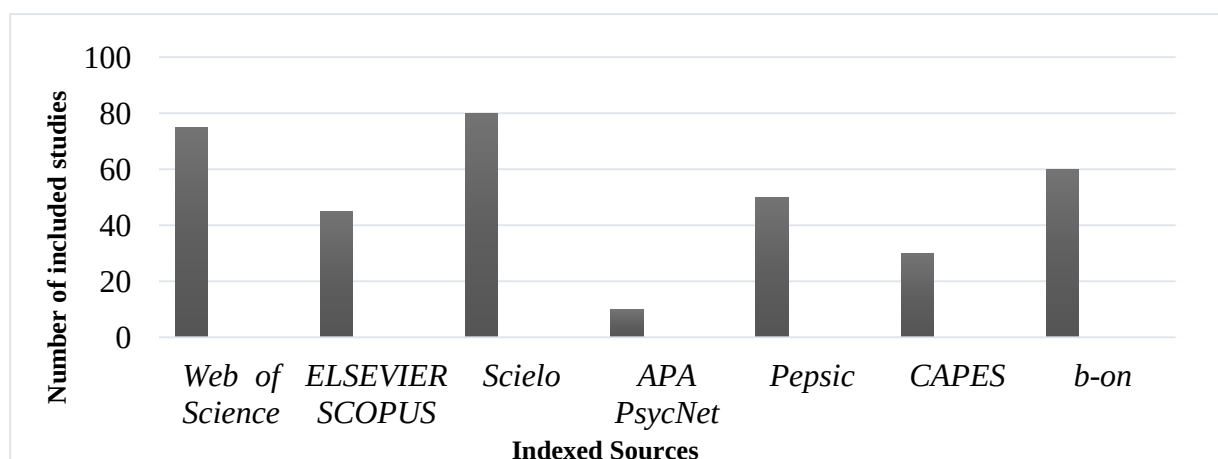
The systematization of the research methods adopted implied the used technics of the data collect, having emerged, the following categories: documental analysis, descriptive, exploratory, field research and experimental. In the definition of the method and instruments, the research method was defined as interactive, allowing refine the research. On the other hand, the instruments definition, it was opted by the software of management of bibliographic references *Mendeley Desktop* by the software of qualitative data analysis of qualitative data *NVivo11*. In the schedule construction, having in mind the defined objectives, it was avoided that literature systematic review should have the duration between 10 to 12 mouths, since the planning to their conclusion.

In the reading and analysis was realized the lecture of the primary studies and these were submitted to 3 filters of reading. The first filter of reading corresponds to the title and to the summary and to the keywords. In the circumstances, there was doubt concerning the studies, submitting these studies to the second filter. This reading filter included the introduction and the studies, to the following parameter was already analyzed in the first filter. The studies that don't attend the research objectives and the inclusion criteria were excluded in this stage. The third stage applied when the second was not enough, corresponds to the integral lecture of the studies. From this reading result the studies attending to the inclusion criteria defined initially what allowed to their inclusion in this literature systematic review. In the catalogation and storage the studies were included in the bibliograpy references management *Mendeley Desktop* and in the software of analysis qualitative *NVivo11*. In the bibliometric analysis of the studies, were evaluated scientific impact factors of the works and the sources impact indicators selected. Finally, in the synthesis and results stage, it was made the elaboration a critical synthesis of the bibliography studied, based on the qualification categories, specially, the publication work date, the typology of the document of the publication, the editor nationality, the methodologic perspective used, the adopted research method, the sample size, the magazine impact factor that are indexed in the *Web of Science*, in the *ELSEVIER Scopus* and indexed in *CAPES* as the citations quantity of the primary study.

Findings

The research developed in the different indexed sourced, according to the inclusion requirements, criteria referenced before, signalized a total of 350 studies, being 75 indexed by *Web of Science*, 45 by *Pepsic*, 30 indexed by *CAPES* and 60 indexed by *b-on* (cf. Figure 1).

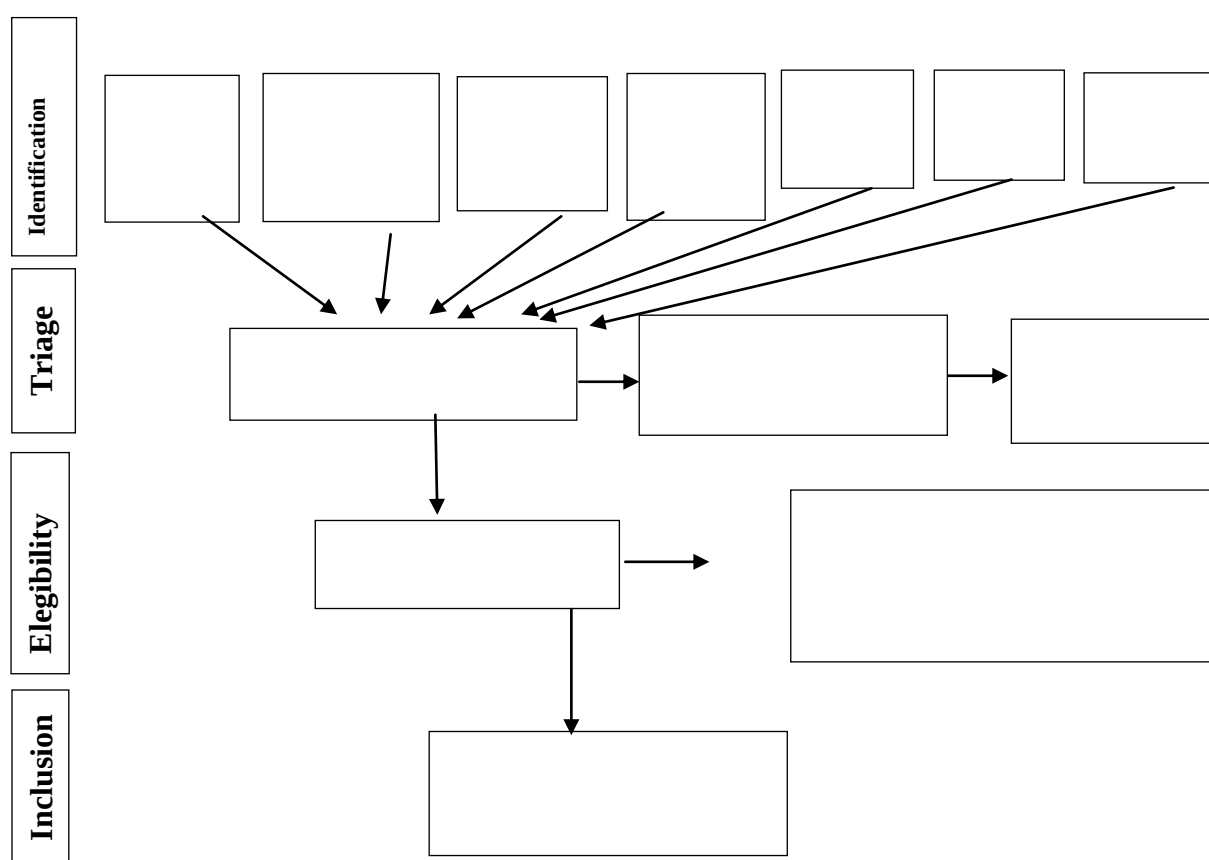
Figure 1. Number of studies included by indexed sources.





After the studies being submitted to the three filters of lecture defined before, excluded 120 studies, being selected 230 studies concerning the inclusion and the exclusion standard by the present literature qualitative systematic review. Within 230 studies, it were excluded 28 as they presented as doubled in several sources of the considered indexation. This means that 202 studies presented as being full papers accessed and eligible to the present research literature qualitative systematic review, where 37 indexed in *Web of Science*, 20 were indexed in the *ELSEVIER SCOPUS*, 66 were indexed in *Scielo*, five are indexed in *APA PsycNet*, 34 are indexed in *Pepsic*, 8 are indexed in *CAPES* and 32 are indexed in *b-on*.

Figure 2. Studies selection scheme to the literature systematic review



Afterword's it was made a critical synthesis of the bibliography selected based on the categories of qualification, namely: the work published date, the published document typology, the editorial nationality, the used methodology perspective, the adopted research method, the sample size, the Web of Science indexed magazine impact factor, ELSEVIER Scopus magazine impact factor and the CAPES impact factor, as the citations quantity that the primary study obtained.

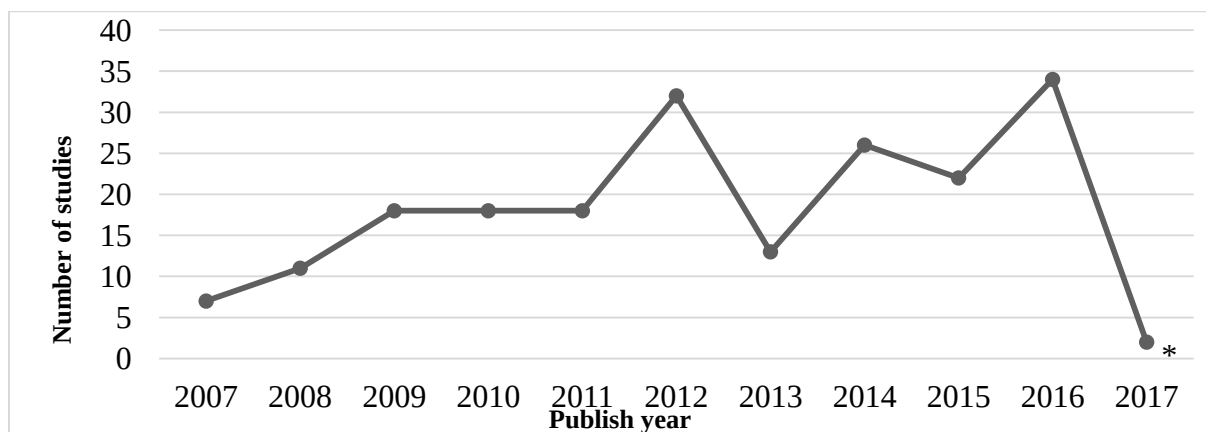
Concerning the work published date and, considering the defined inclusion criteria, it was considered the studies after 2007 year. This way, it was possible to state that the number of the publications was not following the linear standard all over the years.

It was important to evidence that on the last 5 years there was a significant growing of the publications number, comparing the period of 2007 and 2012. So, let's concentrate the attention to the element of obtaining the major number of annual publications about the theme "psychology identity" in 2016 and 2017, the lower number of the



publications. However, the fact that in 2017 being considered the year when there was a lower number of the publications cannot be considered as an full pointer of the productivity in this year, as the both data are related with the obtained information in the first semester of this year. So, the complete year with a lower number of publications is the 2007, and the complete year with the higher number of publications is the 2016 year (cf. Figure 3).

Figure 3. Flouchart of the Studies Seleccion by Published year. *Year in course.



Concerning the typology of the document of publication, the 202 studies analyzed were published exclusively in magazines and scientific events abstracts books. So, from the 202 studies 199 presented as publication document typology, scientific magazines, and three presented as publication document typology, scientific events abstract books. The 199 studies that presented as publication document typology, scientific magazines, were published in 116 journals, from 19 different nationalities. The nationality of the editorial more frequently Brazilian (n=41), the nationality of the editorials with immediately frequency to follow is American (n=34).

According to the used methodological perspective, it was possible identify three different perspectives, mixt (n=10), qualitative (n=154) e quantitative (n=38). This way, it's possible to state that 4.95% of the studies presented a mixt methodology, 76,24% a qualitative methodology and 18,81% a quantitative methodology. The 154 studies with qualitative methodology presented the research method, the documental analysis (n=104), descriptive (n=16), exploratory (n=7) e field research (n=27). On the other hand, the ten studies with mixt methodology, the research methods were the descriptive (n=2), exploratory (n=2) and field research (n=6).

In the same line, from the 38 studies with a quantitative methodology, the research methods were the documental analysis (n=2), descriptive (n=19), exploratory (n=12), field research (n=3) and experimental (n=2).

Concerning the sample size, it was possible to verify that 55,9% of the studies don't present the sample (n=113), 29,3% of the studies presents the inferior sample to 100 (n=59), 6,5% of the studies presents a superior sample to 100 and lower to 200 (n=13) and 8,5% presents a superior sample to 200 (n=17). Finally, it was considered the indexed factor magazine in *Web of Science*, *ELSEVIER Scopus* indexed magazines and *CAPES* indexed magazines. So, it was possible to verigy that *Web of Science*, the magazine with higher index JCR is the *Personality and Social Psychology Review* (JCR=7.571) as the scientific magazine that presents a lower impact factor is *Educational & Child Psychology* (JCR=0.204) (cf. Table 1).



Table 1. Number of the published studies by Magazine, with evaluation according to the JCR da Web of Science Index

Magazine/Book of records of scientific events	Number of Studies	Index JCR
<i>Advances in Health Sciences Education</i>	1	2,462
<i>American psychologist</i>	1	5,880
<i>British Journal of Guidance and Counselling</i>	1	0,530
<i>Canadian Journal of School Psychology</i>	1	1,020
<i>Counselling Psychology Quarterly</i>	6	0,690
<i>Educational & Child Psychology</i>	1	0,204
<i>Educational Psychologist</i>	1	5,688
<i>European Journal of Psychology of Education</i>	1	1,008
<i>Industrial and Organizational Psychology</i>	1	1,080
<i>Integrative Psychological and Behavioral Science</i>	1	1,088
<i>Journal Ethics & Behavior</i>	1	0,897
<i>Journal Reflective Practice</i>	1	0,651
<i>Journal of Career Development</i>	1	1,036
<i>Journal of Humanistic Psychology</i>	1	0,622
<i>Journal of Medicine and Philosophy</i>	1	1,293
<i>Personality and Social Psychology Review</i>	1	7,571
<i>Proceedings of the 30th International Congress of Psychology</i>	1	1,276
<i>Procedia - Social and Behavioral Sciences</i>	10	0,400
<i>Psychotherapy research</i>	2	2,570
<i>Psicologia: teoria e prática</i>	1	0,098
<i>Review of European Studies</i>	1	0,460
<i>The Australian journal of rural health</i>	1	0,764
<i>The Counseling Psychologist</i>	4	1,167
<i>The Educational and Developmental Psychologist</i>	1	0,724
<i>The European Proceedings of Social and Behavioural Sciences EpSBS</i>	1	0,400

On the other hand, according to the indexed source *ELSEVIER Scopus*, the magazine that presents the higher impact factor is the *Counselling Psychology Review* (SJR=8,146), and the one that presents the lower impact factor is *Revista Iberoamericana de Educación Superior* (SJR=0,057). (cf. Table 2).



Table 2. Number of the Studies published by Magazine, with evaluation as the Index SJR of *ELSEVIER Scopus*

Review/Scientific events abstract books	Number of studies	Index SJR
<i>Canadian Journal of Counselling and Psychotherapy</i>	1	0,297
<i>Clínica y Salud</i>	1	0,150
<i>Counselling Psychology Review</i>	5	8,146
<i>Journal of interprofessional care</i>	1	1,645
<i>Medicina Paliativa</i>	1	0,144
<i>Psychology in the Schools</i>	1	1,035
<i>Revista Iberoamericana de Educación Superior</i>	1	0,057
<i>Sexuality and Disability</i>	1	0,771

Concerning the scientific production of Brazilian programs of post-graduation studies, there is a stratification of the quality of that production by the *Qualis*, system of the *CAPES* responsibility. The quality stratification of the production is signed by alphabetical indicators ordered corresponding to the classification in the A extract to the more quality publications. In this system the stratification of the production quality, the C letter corresponds to the indication of less quality. According to the last annual evaluation, the index magazines at *CAPES* selected to the present quality systematic review of literature, are classified exclusively in the extract A and B (cf. Table 3).

Table 3. Number of the Published Articles by Magazine with Evaluation according to *Qualis da CAPES*

Magazine (Qualis)	Number of Articles	Author (data)
<i>Estudios Pedagógicos</i> (B1)	1	Costa, C., Sanhueza, G., Barra, M., & Villalobos, C. (2012)
<i>Estudos e Pesquisas em Psicologia</i> (B1)	1	Trindade, M. & Serpa, M. (2013)
<i>Psico USF</i> (A2)	1	Oliveira, M., Pereira, R., Peixoto, A., Rocha, M., Oliveira-Monteiro, N., Macedo, M., & Silveiras, E. (2014)
<i>Psicologia: Ciência e Profissão</i> (A2)	3	Gauy, F., Fernandes, L., Silveiras, E., Marinho-Casanova, M., & Löhr, S. (2015); Mazer, S. & Melo-Silva, L. (2010); Sá, M. (2012)
<i>Psicologia em Estudo</i> (A2)	1	Bisinoto, C & Marinho-Araújo, C. (2011)
<i>Psicologia: Reflexão e Crítica</i> (A1)	1	Carvalho, R. (2008)

Finally, according to the last qualification categories consigned, the quality of citations that the primary study obtained was verified that the study that had the major number of citations was “*Narrative and the Cultural Psychology of Identity*”, with 359 citations. By other side, 61 studies didn’t have any citation, and between 70 and 358 citations were not identified any studies (cf. Table 4).



Table 4. Number of studies by quantity of the obtained citations

Citations Obtained Quantity	Number of the Studies
0	61
1 a 10	87
11 a 20	26
21 a 30	13
31 a 40	4
41 a 50	2
51 a 60	3
61 a 69	2
70 a 358	0
359	1

Results, Conclusions and Recommendations

Discussion

Due to the growing significance of the psychological professionals in the last years and due to the existent inconsistent in the professional identity in this class, it's essential the existence of the universal ethical principles that could be responsible by the professional regulation (Ricou, Sá, & Nunes, 2017). The present research had as objective to collect, organize and analyze the published studies in the last decade, studies connected with the psychology identity theme. The majority of the studies analyzed presents qualitative methodology. So, according with the different studies analyzed, the research method more used was the documental analysis. It's important to state that by the conceptual point of view, the central study object more represented in the studies group is the group of the intentions of those who practiced the psychological act. In the group of the 202 articles included in these first stages of the literature systematic review concerning the last decade, the main analysis, with great influence: (a) the ideas and the significances existing within the exclusivity of psychological intervention, (b) the assumed functions by the psychologists in their different contexts of the professional insertion, in the different stages of their careers, (c) the recognized role, by the psychologists and by all the professionals, to the psychological intervention and (d) the users perspective, and the citizens less directly involved in this process, face to the psychological intervention need. It was possible to obtain the main conclusions of the original studies, what will be helpful to identify the gaps existents in the literature. This way, it was possible to state that there was a significant growing of publications about the professional identity of the psychologists in the last 5 years. In this context, this work is in line with Ricou, Sá e Nunes (2017) opinion. In the next stage of this research will be identified the relationships, the contradictions, the gaps and the existents inconsistencies in the psychology identity studies. Being the identity a construct non-physical, it's possible to considerer essential the existence of a bigger number of studies around the psychologist identity, in particular in the discussion of the exclusivity of the psychological intervention, with the psychologists' perceptions.



References

- Ashforth, B.E., Kreiner, G.E., Clark, M.A. & Fugate, M. (2007). Normalizing dirty work: Managerial tactics for countering occupational taint. *Academy of Management Journal*, 50, 149-174.
- Costa-Lobo, C., Esteves, T., Ricou, M. & Almeida, L. S. (2017). Roadmap for a systematic review of literature: the identity of psychology. In Proceedings of 11th annual International Technology, Education and Development Conference, Valencia, Spain, 6-8 March 2017 (pp. 819-826). ISBN: 978-84-617-8491-2. Valencia: IATED Academy.
- Davies, P. (2007). Revisões sistemáticas e Campbell Collaboration. In G. Thomas & R. Pring (Eds.), *Educação baseada em evidências: A utilização dos achados científicos para a qualificação da prática pedagógica* (pp. 31-43). Porto Alegre: Artmed.
- De-la-Torre-Ugarte-Guanilo, M., Takahashi, R., & Bertolozzi, M. (2011). Revisão Sistemática: Noções gerais. *Revista da Escola de Enfermagem da USP*, 45(5), 1260-1266.
- Depaepe, F., Verschaffel, L., & Kelchtermans, G. (2013). Pedagogical content knowledge: a systematic review of the way in which the concept has pervaded mathematics educational research. *Teaching and Teacher Education*, 34, 12-25.
- Dubar, C. (2002). *La crisis de las identidades: La interpretación de una mutación*. Barcelona: Bellaterra.
- Galvão, C., Sawada, N., & Trevizan, M. (2004). Revisão sistemática: recurso que proporciona a incorporação das evidências na prática da enfermagem. *Revista Latino-americana de enfermagem*, 12(3), 549-556.
- Hoefelmann, C.P., Santos, T.C., & Moretti-Pires, R.O. (2012). Revisões de artigos qualitativos por meta-síntese. In: G. Saray & R. Moretti-Pires (Eds.), *Métodos e técnicas de Pesquisa Quantitativa Aplicada à Educação Física* (pp. 149-155). Florianópolis: Tribo da Ilha.
- Ibarra, H. (1999). Provisional selves: Experimenting with image and identity in professional adaptation. *Administrative Science Quarterly*, 44(4), 764-791.
- Kreiner, G.E., Ashforth, B.E., & Sluss, D.M. (2006). Identity dynamics in occupational dirty work: Integrating social identity and system justification perspectives. *Organization Science*, 17, 619-636.
- Kreiner, G.E., Hollensbe, E.C., & Sheep, M.L. (2006). Where is the 'Me' among the 'We'? Identity work and the search for optimal balance. *Academy of Management Journal*, 49, 1031-1057.
- Lage, M. C. (2011). Utilização do software NVivo em pesquisa qualitativa: Uma experiência em EAD. *ETD: Educação Temática Digital*, 12, 198-226.
- Lasky, S. (2005). A sociocultural approach to understanding teacher identity, agency and professional vulnerability in a context of secondary school reform. *Teaching and Teacher Education*, 21, 899-916.
- Levy, Y., & Ellis, T. J. (2006). A systems approach to conduct an effective literature review in support of information systems research. *Informing Science: International Journal of an Emerging Transdiscipline*, 9(1), 181-212.
- Pratt, M.G., Rockmann, K.W., & Kaufmann, J.B. (2006). Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. *Academy of Management Journal*, 49(2), 235-262.
- Ricou, M. (2014). *A Ética e a Deontologia no exercício da Psicologia*. Coimbra: Ordem dos Psicólogos Portugueses.
- Ricou, M., Sá, E., & Nunes, R. (2017). The ethical principles of the Portuguese Psychologists: A universal dimension. *Journal of Medicine and Philosophy*, 42, 199-213.
- Schein, E.H. (1978). *Career Dynamics: Matching Individual and Organizational Needs*. Reading: Addison-Wesley.
- Valle, A. (1997). Sobre las practicas profesionales y los retos de la transformación económica. In T. Pacheco & A. Barriga (Eds.), *La profesión: Su condición social e institucional* (pp. 173-197). México: CESU-UNAM.
- Wenger, E. (2001). *Comunidades de prática: Aprendizaje, significado e identidade*. Madrid: Paidós.



Education of military professionals: A case of operational art

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Abstract

A goal of this article is to reveal opinions and arguments of senior military staff about the role and significance of operational art, which serves as a bridge between the military strategy and the tactics to plan and conduct the military operations. Participants of the research are officers in an active military service, contemporarily studying the career courses at the University of Defense, Czech Republic. The data were obtained using the method of the structural questionnaire; including 13 questions related to the theoretical and practical application of operational art. The research comprised 50 officers from different military units and services of the Czech Armed Forces. The result showed that there is a considerable difference in understanding of the role and importance of operational art by the officers, depending on their experience from operations, the nature of the job position and the possibilities of its application in the practice. The findings of the study are as follows: 1. There are considerable differences in perception of the subject between the beginning and at the end of the study. 2. A self-study is a powerful tool to gain knowledge, experience, skills and competencies in the subject. 3. Understanding the importance of operational theory is beneficial for officers participating in planning and conduct of military operations. 4. The operational art is fully applicable at all levels of operations; strategic, operational and tactical level. 5. A theory of operational art, as a part of doctrinal publications and training manuals, is useful for an operational practice.

Keywords: Operational art, Questionnaire, Education, Career courses

Introduction

Education of military personnel is one of critical aspects that contribute to successful execution of military operations. Military professionals need knowledge, skills and competences necessary for solid and responsible performance of their duties. There are general trends focused on development of military education stemming from the Czech White Paper on Defense, stipulated by Ministry of Defense for the period of years 2012-2018. This document identifies the education of the officers as one of the priorities for their experience, practice and career growth. The Czech University of Defense plays the role the most important educational facility and the bearer of capabilities to prepare the military personnel within the accredited and non-accredited forms of education. The Centre for Security and Military Strategic Studies (CSMSS), as one of the core parts of this institution, educates the senior military staff of the Czech Armed Forces to be capable of critical and creative thinking for a purpose of solving the complex problems at all military levels.

Looking at the subject of operational art, which is from the theoretical and practical viewpoint placed between the domains of military strategy and the tactics, is necessary. Operational art is doctrinally defined as “The employment of forces to attain strategic and/or operational objectives through the design, organization, integration and conduct of strategies, campaigns, major operations and battles” (AAP-06). The other doctrinal publications define the operational art as “The application of creative imagination by commanders and staffs—supported by their skill, knowledge, and experience” (FM 3-0, 2008), “The cognitive approach supported by skill, knowledge, experience, creativity, and judgment of commanders and staffs” (JP 5-0, 2011), or “The use of critical and creative thinking exploited by commanders and staffs to design strategies, campaigns, and major operations” (JP 3-0, 2011). As simply visible, such documents add specific human characteristics to “the employment of forces” which made this subject much more complex and sensitive in terms of the human endeavor.

A broad debate on all the aspects related to the operational art should become a typical part of the preparation of higher ranked military professionals, both in peace and time of their deployment in military operations. There are unstoppable questions floating around to be answered; what is the role of operational art and what the balance between theory and practice is? What can be drawn from doctrines and how the officers look at the subject from their practical perspective? How and where are they familiar with the theory and practice of operational art? Do



they obtain basic information about the subject in units, during their self-study, or they receive the information discussed only in the career courses? These questions are very important and sensitive, not only for the officials at the General Staff and the headquarters of services and tactical commands but they are also crucial for academics at the military educational institutions.

There is a hypothesis that there are considerable differences in the views of the participants in the career courses on the importance of the operational art before its study and upon completion of the study of this subject. With regard to these aspects, the aim of this paper is to summarize the views of military officers about the role, importance, and applicability of operational art which they experienced during their study in the career courses in the academic year 2016-2017. Information from this research offers a suitable source for recommendations to a sophisticated approach to officers' education and also recommendations which may be utilized by unit commanders during the training of the staffs and units.

Method

Results generalizing opinions of students about the significance and applicability of operational art come from the questionnaire survey that students completed in two phases. The first phase of this survey was performed at the beginning of the study block "Operational art" during the first introductory lesson focused on the subject. At this stage, students had "no relevant information" dedicated to real doctrinal viewpoint or notion focused on the theory of operational art (presented during the later study). The second phase of the research followed after three weeks of the study, lessons, presentations, discussions and an exercise during which the core content of the education was aimed at historical background and contemporary understanding of the operational art, aspects of the planning, conduct and sustainability of military operations and the theory and application of operations design concepts which holistically completed the basic theoretical issues of the subject.

For the research, students had to determine the level of positive or negative opinion – statement, attached to the specific question in the questionnaire. A range of six consistent, disagreeable or vague statements was established. The research comprised 50 students attending the higher officer's course for senior officers in two stages (semesters), belonging to different services, with diverse professional focus, specializations, experience and length of the service in the Armed Forces.

Students could answer the questions by selecting the level of agreement, disagreement or vague proclamation, according to the rating scale. The scale defined six basic statements:

- a) Strictly Yes (SY)
- b) Yes (Y)
- c) Neither Yes Nor No (NYNN)
- d) No (N)
- e) Strictly No (SN)
- f) Don't Know (DK)

Findings

Information from the questionnaire survey provided a wide scale of different statements, based on experience, skills, knowledge acquired, professional specialization, and other characteristics of the students. Overall results of the survey are placed in the tables and the text below.

Table 1. Results of the questionnaire survey at the beginning of the study

Statement no.	The results of responses (%)						f (%)
	SY	Y	NYNN	N	SN	DK	
1. I have a clear idea about the subject of operational art	0	16	40	40	0	4	100
2. I acquired knowledge about the operational art	4	20	16	52	8	0	100



	during a self-study	0	8	12	52	28	0	100
3.	I acquired knowledge about the operational art at the unit/department I have worked in	0	16	16	56	12	0	100
4.	I applied the theory of the operational art during exercise or my operational deployment I have worked in development of the standing	12	32	4	40	12	0	100
5.	operating procedures for the operations planning	8	24	4	40	24	0	100
6.	I participate in preparation and conduct of military operations at my job position	16	44	32	4	0	4	100
7.	Knowledge of the theory of operational art is necessary for planning and conduct of military operations	12	56	32	0	0	0	100
8.	I agree that the theory of operational art should be part of the training of commanders and staffs I	4	24	12	48	12	0	100
9.	you use doctrines, manuals and other publications dealing with the theory of operational art	4	52	12	12	4	16	100
10.	Dealing with the theory of operational art is necessary regardless of the size of the Armed Forces	8	40	20	24	0	8	100
11.	The operational art is applicable at the tactical level	0	4	36	28	12	20	100
12.	The theory of operational art described in doctrines is usable in my practice	8	28	28	20	0	16	100
13.	My knowledge about the issue of operational art will be more applicable after the course							

Table 2: Results of the questionnaire survey at the end of the study

Table IV. Results of the questionnaire survey at the end of the study								
Statement no.		The results of responses (%)						
		SY	Y	NYNN	N	SN	DK	f (%)
1.	I have a clear idea about the subject of operational art	4	72	24	0	0	0	100
2.	I acquired knowledge about the operational art during a self-study	8	52	24	16	0	0	100
3.	I acquired knowledge about the operational art at the unit/department I have worked in	0	16	0	60	24	0	100
4.	I applied the theory of the operational art during exercise or my operational deployment	4	12	16	52	16	0	100
5.	I have worked in development of the standing operating procedures for the operations planning	16	24	8	28	24	0	100
6.	I participate in preparation and conduct of military operations at my job position	12	16	4	40	28	0	100
7.	Knowledge of the theory of operational art is necessary for planning and conduct of military operations	32	60	8	0	0	0	100
8.	I agree that the theory of operational art should be part of the training of commanders and staffs	28	56	12	4	0	0	100
9.	I you use doctrines, manuals and other publications dealing with the theory of operational art	4	20	4	56	16	0	100
10.	Dealing with the theory of operational art is necessary regardless of the size of the Armed Forces	16	56	16	8	4	0	100
11.	The operational art is applicable at the tactical level	12	64	16	4	0	4	100
12.	The theory of operational art described in doctrines is usable in my practice	0	32	32	20	4	12	100
13.	My knowledge about the issue of operational art will be more applicable after the course	12	40	16	20	4	8	100



Results, Conclusion and Recommendations

They were 48 men and 2 women in two career courses who completed the research. A majority of officers were in the ranks of captains and majors. The length of the service varied from 9 to 29 years, the average age was 38, 4 years and the average length of the service was 18, 2 years. 56 percent of officers had experience with deployment to military operations abroad. This colorful pattern provided a sufficient set of information that may denote the need for changes in both approaches; education in the career courses focused on the theory and practice of operational art and approach to officer's military training in units.

The results of the questionnaire showed several important facts. They revealed general views on the role of operational art in terms of its theoretical significance and, at the same time, practical application in the activities of commanders and staffs during a training, preparation, and participation in military operations. As far as the individual claims are concerned, they can be divided into two basic groups. The first group of statements or opinions is closely related to the theory of operational art itself, with which officers could get acquainted within previous courses or self-study, and thus gained the necessary knowledge, skill, and information. Therefore, it is important to compare and assess the students' view of operational art before the beginning of the study block, and then at the end, taking into account the lectures, seminars, and exercises already carried out. As demonstrated by the results of the questionnaire survey, a significant percentage increase of consenting opinions after the study block was found in this first group (statements no. 1, 2, 7, 8, 10, 11 and 13). As the result of teachers' discussions with students showed, the main reason for this increase was the intensive study of operational art theory from military doctrines, study texts, scientific books, scientific works and also conducting seminars and exercises. This is particularly the case in opinion no. 1, where the percentage of consent opinions rose from 16% to 76%. According to the students, they have sufficient space for their self-study, for which there is usually a lack of time in practice at units. This is particularly true in statement no. 2, where the percentage of consent opinions rose from 24% to 76%. Also the statement no. 7 has the very positive result; a percentage rose from 60 to the respectable 92 percent. It makes sense in a conviction of the lecturers that it is necessary to provide students with a doctrinal theoretical view on the theory, focused on the problem of the operations planning process, later applied during practical exercises. This approach can be called pushing information into the brains of students and convincing them that without the necessary knowledge of the planning process, they cannot handle the complexity that this process requires in practice.

Teaching and persuading students about the importance of operational art has also brought other positive results. Students have simply realized that knowledge of the subject increases their credit, self-esteem, and the belief that in practice they can better apply what they had learned during their studies. As seen from the tables, this is also confirmed by a positive percentage increase in other statements; statements no. 8 and 10 (an increase of 18 percent), statement no. 11 (28 percent) and statement no. 13 (16 percent).

The second group of statements in the questionnaire is more related to the practical application of operational art, closely connected to the routine training activities of the units such the issues of planning, preparation, and participation in military operations. As demonstrated in the questionnaire survey, related statements cover a significant percentage increase of consenting opinions (statements no. 1, 2, 7, 8, 10, 11 and 13). The opinion in the statement no. 3 confirmed that officers, in the context of his/her professional practice, are not sufficiently concerned with the theory of operational art. While the value achieved only 8 percent of the positive proclamations at the beginning of the course, the value was also very low at the end of the course; only 16 percent.

On the question, whether the students applied knowledge of the theory of operational art during their operational deployment, they answered in the statement no. 4. Even though 56 percent of them were deployed in military operations before, only 16 percent students claim they used some knowledge related to the theory of operational art.



Similarly, the low value was reached in the response to the statement no. 6. Only 28 percent of respondents are engaged with issues of preparation and conduct of military operations in their daily routines. Nevertheless, the results correspond to the professional focus of individual officers.

This research paper examined opinions about the significance of operational art, submitted by military officers who studied the career courses at the Czech University of Defense in the academic year 2016-2017. The overall findings from the research show following:

- There are considerable differences in perception of the subject between the beginning and the end of the study; a long-lasting study of the subject is more than necessary.
- A self-study is a powerful tool to gain knowledge, experience, skills and competencies in the subject; a self-study must be a part of the officers' training at units.
- Understanding the importance of operational theory is beneficial for officers participating in planning and conduct of military operations; good knowledge and skill of the subject help officers to overcome a severe operational reality.
- The operational art is fully applicable at all levels of operations; strategic, operational and tactical level; officers may recognize which elements of the operational art is useful to exploit, based on the level he or she works at.
- A theory of operational art, as a part of doctrinal publications and training manuals, is useful for operational practice; studying the publications should become a daily routine.

The application of the operational art theory and practice is necessary for the most of the officers in the Czech Armed Forces. It is recommended, that information from this research may serve as a suitable source to a sophisticated approach to officers' education during their studies at the University of Defense and also they may be utilized by unit commanders during the daily training of the staffs and units.

References

- AAP-06. (2016). *NATO Glossary of Terms and Definitions*. Brussels, Belgium: NATO Standardization Agency, NATO Headquarters B 1110.
- NATO Standardization Agency. (2013). *AJP-5 Allied Joint Doctrine For Operational-Level Planning*. Brussels, Belgium; NATO Headquarters B 1110.
- Hardy, B. (2015). *Striking A Balance Between Operational Art And Operational Craftsmanship*. From: <http://taskandpurpose.com/striking-a-balance-between-operational-art-and-operational-craftsmanship/>. The address was obtained on 10.02.2017.
- Department of Defense. (2011). *JP 5-0 Joint Operation Planning*. Washington, USA.
- Department of Defense. (2011). *JP 3-0 Joint Operations*. Washington, USA.
- Elkus, A. (2012). A Critical Perspective on Operational Art and Design Theory. *Small War Journal*, Journal article. From: <http://smallwarsjournal.com/jrnl/art/a-critical-perspective-on-operational-art-and-design-theory>. The address was obtained on 15.03.2017.
- Kelly, M., Brennan, M. (2012). *Alien: How Operational Art Devoured Strategy*. Strategic Studies Institute, U. S. Army War College, 122 Forbes Ave, Carlisle, PA 17013-5244.
- Klingaman, J. J. (2003). *Teaching the Operational Art Using Reflective Practice*. School of Advanced Military Studies, United States, Army Command and General Staff College, Fort Leavenworth, Kansas.
- Němeček, V., Mičánek, F., Kolkus, J. (2014). Development of the Personnel of the Ministry of Defence in Career Courses., *Military Review*, 2014, 23(2), 117-127.
- Spišák, J., Pikner, I. (2016) *Significance Of Operational Art In The Lifelong Education Of Military Professionals*. In: 2nd International Conference on Lifelong Education and Leadership for ALL - ICLEL 2016. Sakarya, Turkey: ICLEL CONFERENCES, Sakarya University, Faculty of Education, Turkey, 2016, p. 180-188.



The Application of The Principles of Visual Hygiene as a Predictor of Joint Education of Visually Impaired and Intact Individuals

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Abstract

One of the principles and the key pillar of working with people with visual impairment is the consistent application of the principles of visual hygiene. The role of visual hygiene and adherence to its principles is accentuated within education, so the text of the paper and its research dimension are related to the reference framework of the educational process. Visual hygiene can be defined as a set of methods, principles, guidelines, and procedures that need to be followed to avoid damaging visual perception. The aim of the paper is to present partial aspects of visual hygiene research from the point of view of both actors of the educational process - from the viewpoint of educators, even pupils and students with visual impairment. The research is then framed by the theoretical input into the chosen issue.

Keywords: visual hygiene, visual impairment, inclusive education, quality of life

1 Introduction to the issue

Visual hygiene can be defined as ‘a set of methods, principles, regulations and procedures that need to be followed to avoid damage to preserved visual perception. If visual hygiene is observed, students with visual impairment can easily engage in the usual learning process without any other adjustments or modifications (Růžickov, 2006, p. 48).’ It is a set of principles of working with persons with severe visual impairment that support the use of preserved visual functions without overloading them; at the same time the functions need to be protected to prevent their deterioration or loss (Finkov, Růžickov, Stejskalov, 2011). The basic measures of visual hygiene relate to the following:

- Lighting climate;
- Location of the workplace;
- Characteristics of the environment, material and technical equipment;
- Conditions of working with text and pictures;
- Specifics of the graphical expression;
- Time dimensions of visual work, and
- Application of special visual and compensatory aids.

Specific consequences in relation to the principles of visual hygiene and their implementation in the educational process from the students’ perspective are mentioned for example by Hankov, Potmřil, Tylřarov, Urbanovsk (2015). In a typhlotechnic context the issue of visual hygiene is described by Regec (2012) or Majerov and Malinovsk (2015).

2 Visual hygiene in research

The purpose of the research study, which was of a quantitative design, was to explore and describe the conditions of visual hygiene from the perspective of students with visual impairment and their teachers. Is observance of the principles of visual hygiene a routine part of the educational process? Do students with visual impairment follow the principles of visual hygiene in everyday situations? Which generally applicable principles are suitable for students with visual impairment? Which contemporary children’s illustrations are best for students’ subjective perception? What is the teachers’ opinion about the principles of visual hygiene and their observance by students with visual impairment? Which of the principles are difficult to apply? Are the principles of visual hygiene included in the individual education plan of students with visual impairment? Which principles of visual hygiene do teachers consider most important? These questions and many other assumptions were tested by means of a questionnaire survey carried out in 2016.

The primary research sample was formed by means of deliberate sampling; the acceptance criteria were presence of visual impairment (low vision or residual vision) and attendance of elementary school or secondary school. The secondary research sample consisted of the teachers of the students with visual impairment. The respondents in both samples were presented with a questionnaire including open and closed items. In the primary research sample the questionnaire used larger font size and the respondents had more time to complete the questionnaire. In terms of their content, the questionnaires focused on the area of visual hygiene.

In accordance with the objective of the research the following research assumptions were formulated:

- It is assumed that students with visual impairment observe the principles of visual hygiene in the educational process.
- It is assumed that the teachers of students with visual impairment apply the principles of visual hygiene as part of direct educational work with the students.
- It is assumed that the generally applicable principles of visual hygiene will be suitable for the vast majority of the respondents.



- It is assumed that the principles of visual hygiene are inherently included in the individual education plan of students with visual impairment.
- It is assumed that students with visual impairment are aware of the principles of visual hygiene.

The data analysed were presented by means of illustrative data projection methods such as tables and graphs. Regarding the size of the research sample it was impossible to perform statistical testing; therefore, the interpretation is primarily of a descriptive nature.

2.1 Data analysis and interpretation - primary research sample

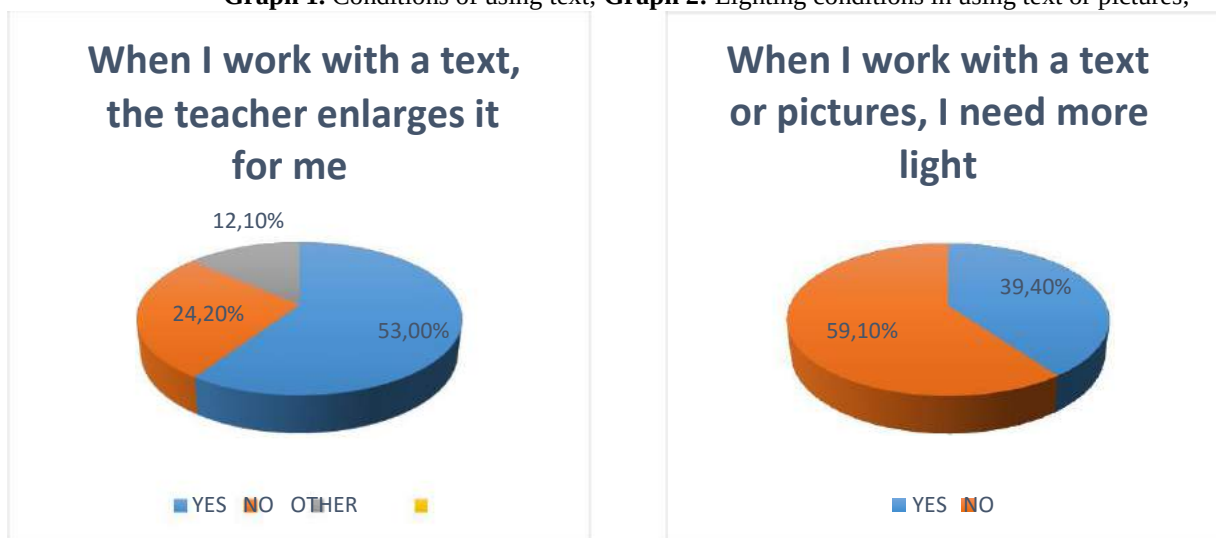
What are the needs and experiences of students with visual impairment concerning the principles of visual hygiene and their observance? These and other aspects of visual hygiene were covered by a total of 13 items of the questionnaire. The first item focused on the age structure of the primary research sample.

The most numerous age category included respondents aged 15 to 22 years, i.e. adolescents, who are assumed to have a certain ability to observe the principles of visual hygiene, which in our opinion increases the validity of the results.

The next two items focused on the use of glasses and other optical devices to correct vision. In accordance with one of the research assumptions, more than a half of the respondents use glasses to correct their vision, on the other hand, almost 29% of the respondents do not wear glasses. This might be due to various reasons including an unrectifiable visual defect, use of contact lenses instead of glasses, or intentional non-use of glasses. In any case, correct application and use of prescribed correction is a prerequisite for optimum visual performance and reduced visual stress.

Interesting findings resulted from an item focusing on the use of optical devices. It is surprising that over 54% of the respondents do not use these aids to improve their visual performance. Among the remaining 42%, the most frequent aids included magnifying glasses, TV magnifiers, monoculars, handheld camera magnifier, and also software magnifier (ZoomText) or voice output. Items 4 to 6 of the questionnaire focused on the conditions of using text. The main focus was on text enlargement, lighting conditions and the use of a magnifying glass.

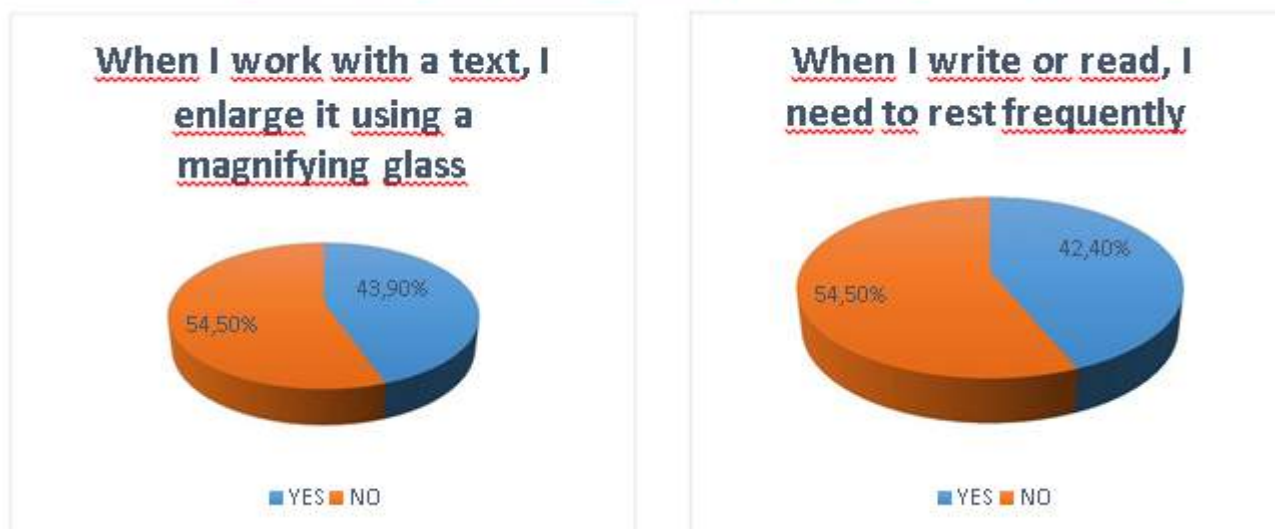
Graph 1. Conditions of using text; **Graph 2:** Lighting conditions in using text or pictures;



The question concerning text enlargement brought expected results; more than a half of the respondents use enlarged text. Negative responses or 'Other' might be explained by the use of compensatory devices. Students in the second stage of elementary school and in secondary school are assumed to use optical devices to enlarge texts; the use of large font in this age category is usual or desired.

More than 59% of the respondents did not confirm an increased need for light intensity in using text or pictures. This can be explained by photophobia or sufficient intensity of existing lighting. The remaining 39.4% of the respondents use a table lamp to provide additional local lighting; a suitable alternative is a fluorescent lamp.

Graph 3. Use of optical devices in working with texts; **Graph 4.** Level of fatigability



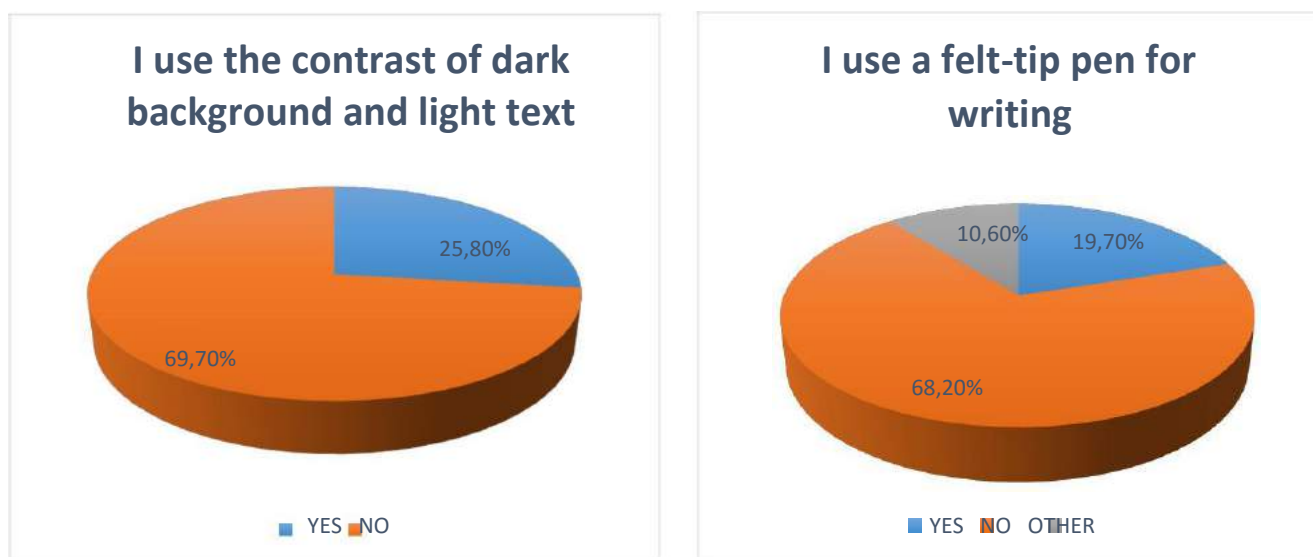
The usability of optical devices (magnifying glass) was investigated by item 6. Almost 44% of the students use a magnifying glass to enlarge text. In one of the previous items, a similar proportion of the respondents reported the use of optical devices.

The following item focused on the level of fatigability and the application of the principle of limited work at a short distance. Only 42.2% of the respondents reported an increased need for rest during visual work. In this context it should be noted that observing the principle of limited work at a short distance is one of the key principles of visual hygiene. It is assumed that almost 55% of the responses indicating 'No' will be reflected in the item relating to increased fatigability and asthenopic issues below. The eighth item of the questionnaire focused on working with a text from a different perspective – the question was whether the respondents work with texts or pictures under an angle using a tilting desk.

A tilting desk, which ensures better conditions for visual work, is used by only 18.2% of the respondents; 42.4% of the respondents do not adjust the angle of their desk. Such high proportion can be explained by either substandard material conditions and insufficient school equipment, or insufficient awareness about this possibility of improving visual performance.

The ninth item of the questionnaire focused on contrast conditions in working with texts. The main focus was on a combination of a light figure and dark background.

Graph 5: Contrast conditions in working with texts; **Graph 6:** Writing implements





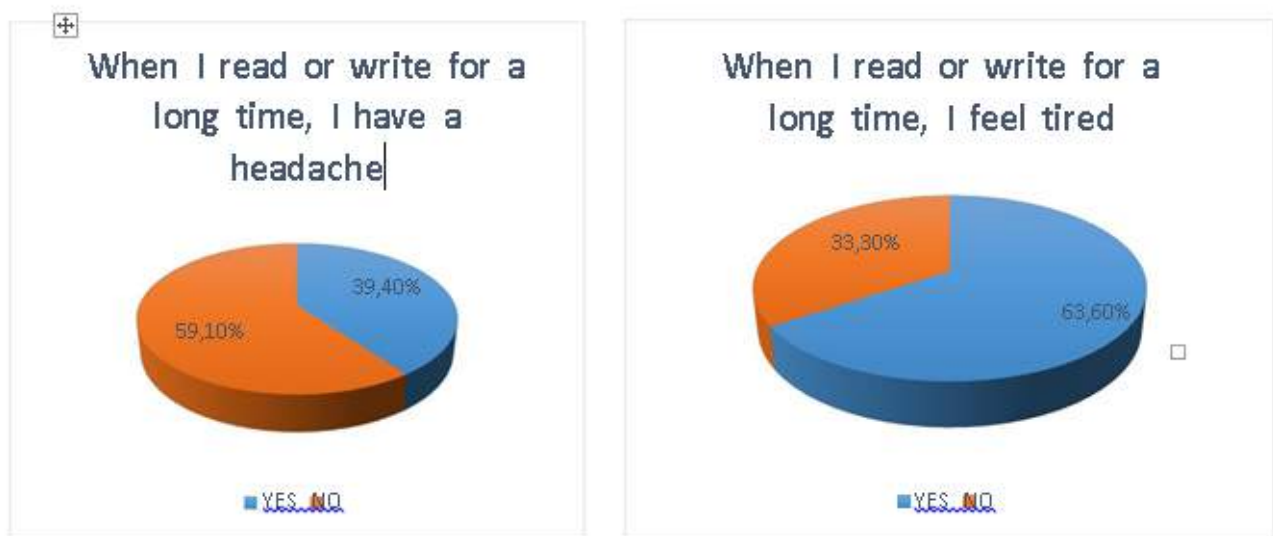
The commonly preferred contrast of a light figure and dark background is used by less than 26% of the respondents. It is assumed that these students use a software magnifying glass or television camera magnifying glass allowing these colour combinations. The remaining respondents (69.7%) either use a completely different contrast, or the usual black text on white background is sufficient.

The tenth item of the questionnaire focused on the type of writing implements used by the respondents.

Unfortunately, less than 20% of the respondents use writing implements that leave a wider line, which would facilitate visual perception. Unfortunately, the respondents did not make any comments in the item called 'Other'. The respondents might have misinterpreted the term 'felt-tip pen', which should have been specified in detail. However, it might be concluded that 68.2% of the respondents use usual writing implements not providing any special comfort for visual differentiation.

The penultimate and antepenultimate items focused on the area of visual fatigue and associated asthenopic difficulties.

Graph 7: Asthenopic difficulties in working at a short distance; **Graph 8:** Visual fatigue in working at a short distance



Asthenopic difficulties, which usually manifest as headache or eye pain, were reported by over 39% of the respondents. The remaining 59% of the respondents either do not suffer from any asthenopic problems or do not associate them with increased visual performance. This assumption is to some extent confirmed by the following item.

Increased fatigue associated with longer visual performance load is experienced by almost 64% of the respondents; however, more than 33% of the respondents do not report difficulties of this kind. Increased fatigability is of course dependent on the degree of visual impairment. Individuals with mild low vision need not experience any of these symptoms or do not associate them with visual perception.

1.2 Data analysis and interpretation - secondary research sample

In the introduction to this section it should be mentioned that in the case of the secondary sample of teachers who educate students with visual impairment the return rate was even lower than in the case of the primary research sample. The resulting number of respondents was 16. The outcomes and interpretations of these data are therefore of an informative nature and cannot be generalized. The teachers were asked about their professional experience, support provided to visually impaired students by the special educational centres, principles of visual hygiene - those that are applied most frequently and those that are difficult to observe, and a variety of other aspects related to the issue of observing the principles of visual hygiene in the process of education. In the first two items of the questionnaire the respondents indicated the length of their teaching experience and the level of school where they teach.



Table 1: Length of respondents' experience

Length of experience	Relative number	Absolute number (%)
Less than 5 years	3	18.75
5 – 10 years	1	6.25
10 – 20 years	2	12.50
More than 20 years	10	62.50
		Total: 16

In terms of the length of teaching experience, most of the respondents (62.5%) are in the category of over 20 years of experience. This aspect might be very significant in terms of data interpretation and conclusions, albeit not generalizable. It is assumed that the length of teaching experience causes a proportionate increase in the respondents' experience concerning students with visual impairment, which also improves the validity of our questions.

The following items focused on whether the respondents received some information about the principles of visual hygiene during their university study, and whether they were informed about the principles of visual hygiene by an educational counselling centre (special educational centre for the visually impaired).

Table 2: Information about visual hygiene from university

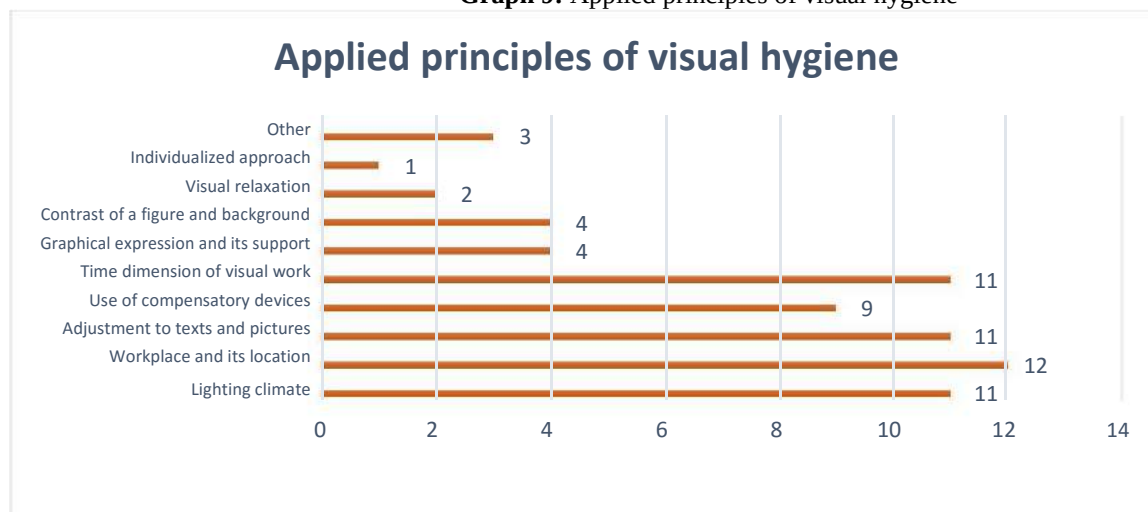
Information about visual hygiene from university	Relative number	Absolute number (%)
Yes	13	81.25
No	0	0
I do not remember	2	12.5
I have not taken a university degree	1	6.25

Table 3: Information about visual hygiene from special educational centre

Information about visual hygiene from special educational centre	Relative number	Absolute number (%)
Yes	10	62.5
No	2	12.5
I do not know	4	25.0

The fifth item focused on the principles of visual hygiene that are most applied by the respondents in the educational process. The structure and share of various principles of visual hygiene are shown in the following graph.

Graph 9: Applied principles of visual hygiene





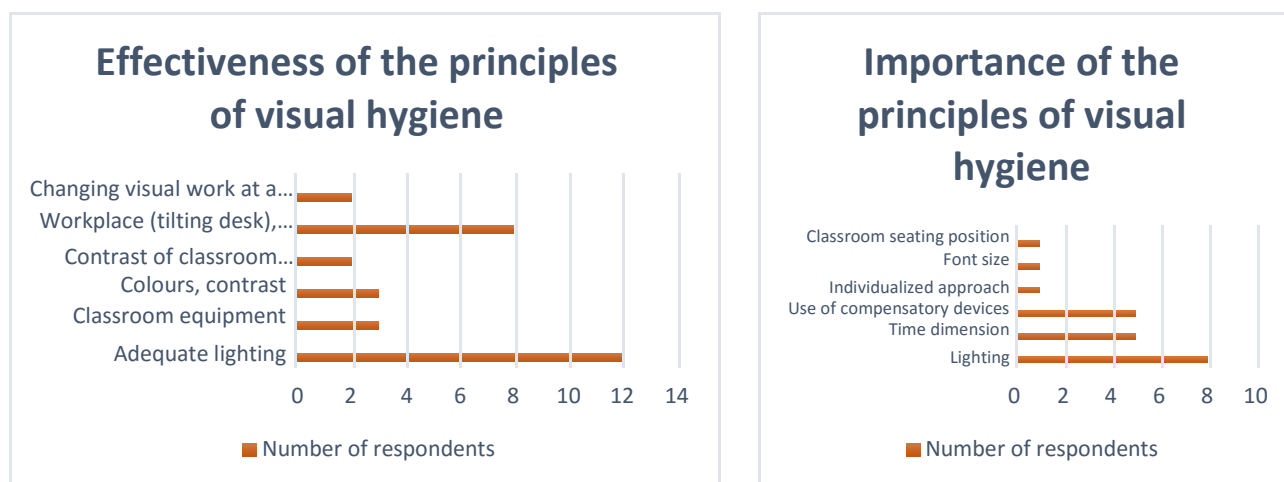
■ Number of respondents

Some of the principles of visual hygiene can be difficult for the teachers to apply in the educational process. According to the respondents, the principles that are difficult to apply surprisingly include for example cleanliness, wearing of appropriate glasses to correct vision. The respondents also have difficulty with the graphical expression of students with visual impairment, observing time limits for visual work at a short distance, application of the principles of using pictures, adjustment of the lighting climate or observance of an optimum working distance. Other problems included application of appropriate fine arts tools and materials or adaptation of visual hygiene to specific types of visual defect. Last but not least, the respondents mentioned the issue of using compensatory devices – very often the students avoid using them, they feel ashamed, using the devices is unacceptable and time consuming, they prefer excessive load on the visual analyser, etc.

The answers to whether the students are able to require or observe the principles of visual hygiene were almost identical – 13 out of 16 respondents believe that only some students are able to apply the principles of visual hygiene independently or to require their observance. According to the teachers, a prerequisite is independence, self-reliance, ambition, and awareness on the part of the student. These are usually students who have been taught to observe the principles of visual hygiene since their childhood in their family or in elementary school. In this respect, better results are usually achieved by students from schools for the visually impaired, but this is not always the case. A crucial aspect is guidance in the family and in previous school. Another precondition was adequate cognitive abilities.

The following graphs illustrate adjustments in terms of visual hygiene that are according to the teachers efficient and important.

Graph 10: Effectiveness of the principles of visual hygiene; **Graph 11:** Importance of the principles of visual hygiene



The first place is occupied by an optimum lighting climate. Other important principles include the principles of working time limits and the application of compensatory devices in the educational process.

The final item focuses on whether the teachers of students with visual impairment are able to find the required information about the principles of visual hygiene in the key student document – the individual education plan. The majority of positive responses (81.25%) is a satisfactory finding, especially with respect to the inclusive trend in education.

1.3 Results and discussion

Regarding the relatively low saturation of both research samples it is impossible to perform statistical testing of the research assumptions or generalize their validity. The outcomes are just informative and can only be generalized in relation to the theory. Therefore, the description of the results will be limited to a mere description of the data and their associations with the outlined theoretical framework.

During the stage of designing the project it was assumed that students with visual impairment observe the principles of visual hygiene in the educational process, both supported by their teachers and individually. To verify this assumption is not simple; a number of the questionnaire items require detailed specification and a deeper analysis. An example is wearing glasses to correct vision, where almost 30% of the respondents with visual impairment do not wear glasses. This can be supported by various explanations, but in the secondary research sample consisting of teachers a relatively frequent answer in this context was the students' reluctance to wear glasses, dirty or inappropriate glasses. Although the vast majority of the respondents in the primary



research sample were in the age category of adolescence and were assumed to have a degree of awareness about the principles of visual hygiene and possibilities of increasing their visual comfort, more than a half of the respondents do not use optical devices (various kinds of magnifying glasses, monoculars, turmons, etc.) However, this proportion could have been artificially increased by an insufficient definition of the category of optical devices – a number of the respondents might have excluded aids such as software magnifiers or screen readers. In this context, the issue of text enlargement should be mentioned. In accordance with theoretical knowledge, students from the second grade of elementary school should be able to work with normal-size print using appropriate compensatory devices. However, this assumption was not confirmed by the respondents in the present study as more than a half of them still use enlarged text. At the same time it should be noted that this aspect should not be assessed only in terms of negative consequences; a positive aspect is that the visual analyser is not subject to excessive load and the conditions for work at a short distance are individualized. The results of this item are also confirmed by a verification item focused on the use of the magnifying glass when working with text, where a similar percentage was achieved. According to the research sample of teachers, a crucial aspect is an adequate lighting climate. An analysis of the responses of the primary research sample suggest that increased light intensity is not a universal principle in this respect – 59% of the students do not require increased light intensity in their working environment. It is obvious that this area is also subject to individualization, especially with respect to photophobia. One of the key principles of visual hygiene is setting time limits for working at a short distance. This aspect was also supported by the teachers involved in the study. The application of time limits in the process of education brought positive results. A total of 42% of the students confirmed an increased need for rest. In an ideal case, the remaining 55% of the respondents do not feel this need, because they already apply this principle and receive adequate visual relaxation. However, 39% of the respondents suggest that they suffer from asthenopic difficulties, which manifest primarily as headache and might result from excessive load on the visual analyser. Increased fatigue associated with longer visual performance was confirmed by 6% of the respondents. According to the teachers, a significant aspect is to perform adjustments to the workplace, particularly by using contrast colours. However, only 18% of the students use a tilting desk to facilitate their visual performance, which might be attributed to insufficient material conditions but also low awareness about possible modifications of the working desk and measures to facilitate work with texts or pictures. Working with texts and pictures also depends on the use of the contrast of a figure and background. Individuals with visual impairment are generally recommended increased contrast of a light figure and dark background. Although the teachers believe that this aspect is of relatively great importance, the students did not confirm this need. Increased contrast is preferred by less than 26% of the respondents.

According to the principles of visual hygiene, the comfort of writing is inherently associated with writing implements leaving a wider, distinctive and sufficiently contrasting line. However, this assumption was confirmed by only 20% of the students. It should be noted though that the respondents might have misinterpreted the term felt-tip pen; unfortunately, they did not specify the writing implement in the ‘Other’ item.

One of the research premises assumes that the teachers of students with visual impairment apply the principles of visual hygiene as part of direct educational work with the students. The research sample of teachers did not confirm this assumption. A very positive finding is that the principles applied in the educational process also include the principle of an individualized approach or visual relaxation. At the same time it was assumed that the students with visual impairment have a degree of awareness about the principles of visual hygiene and are able to observe them or require their observance. The conclusions are not absolutely clear, but 81% of the teachers believe that students with visual impairment are able to observe or require observance of their specific needs in terms of visual hygiene depending on their personality and independence.

In designing the research it was also assumed that the principles of visual hygiene are inherently included in the individual education plan of students with visual impairment, which is the key document and source of information for the teacher. Although the results of the present research cannot be generalized, a positive fact is that the majority of the teachers refer to the individual education plan to search for any required information related to the principles of visual hygiene; alternatively, this information is provided by a special educational centre (60%).

A general assessment of the situation suggests that the principles of visual hygiene will always represent, as one of the teachers aptly described, ‘a completely individual package of measures’, which is also confirmed by frequent contradictory responses suggested by the primary research sample. However, a very positive finding is that the teachers involved in the research are aware of the principles of visual hygiene, apply the principles in the educational process, and understand their significance for efficient use of the preserved visual potential of students with visual impairment.

Conclusion and summary

Observance of the principles of visual hygiene is a key pillar in working with persons with visual impairment in order to ensure maximum protection of their preserved visual functions. The role of visual hygiene and observance of relevant principles is emphasised in the context of education. This text presents specific results of a quantitative research study among teachers and visually impaired students with a focus on visual hygiene and the application of relevant principles in the area of special education.



References

- Finková, D., Růžicková, V., Stejskalová, K. (2011). *Edukační proces u osob se zrakovým postižením*. Olomouc: Univerzita Palackého.
- Hanáková, A., Potměšil, M., Tylšarová, V., Urbanovská, E. (2015). *Vzdělání pohledem žáka se zdravotním postižením*. Olomouc: Univerzita Palackého.
- Majerová, H., Malinovská, O. (2015). Typhlotechnics for Persons with Visual Impairment and Quality of Life. *Procedia - Social and Behavioral Sciences*, 171 (1), 438–441.
- Regec, V. (2012). Asistenčné technológie pre žiakov so zrakovým postihnutím na báze informačných a komunikačných technológií. *Journal of Technology and Information Education*, 4 (1), 21-25.
- Růžicková, V. (2006). *Integrace zrakově postiženého žáka na základní školu*. Olomouc: Vydavatelství UP.

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Abilities Which Favour Learning To Write In The Process Of Child Literacy

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Abstract

There is much research on the learning of written language, especially in relation to reading, however, there are very few studies on the process of acquiring writing in early ages. One of the main reasons is usually because reading as well as writing are considered complementary skills and are developed jointly and interrelated as a consequence of the similarities and characteristics they share, since when reading we decode a message that comes from the spoken language and when writing we encode a message from the same language. In fact, it is usually common among teachers themselves to use the term literacy to refer to students' written language learning. However, it has been found that reading and writing involve different cognitive processes and that their learning does not occur identically in students. Initial literacy indicates that the acquisition of learning of writing takes place throughout an evolutionary process from the earliest ages, affirming that there is no clear moment when this learning is acquired. The purpose of this paper was to determine which variables facilitate the process of acquisition of writing in the first moments in which this learning is accessed, as well as to determine which moment is the most suitable for the development of this linguistic ability. A quasi-experimental design was used to compare groups with pre-test and post-test measurements. The study involved 224 students aged between 5 and 6 years of age. The results indicate that the development of oral language, phonological awareness and alphabetic knowledge are relevant variables in the acquisition of writing when students make contact with the written code and that the age of 5 years is the most appropriate time for the explicit stimulation of the skills that facilitate the learning of the writing system.

Keywords: writing, oral language, literacy, written language, text production.

Introduction

When analysing the process of acquisition of written language, we can observe that this is one of the most complex learnings and on which most of the school time is spent in the first school levels. So, it is not surprising that the study of reading and writing have become one of the priority facets in the field of research. Many years have been devoted to the study of these language skills.

As a result of recent studies, the relevance of the development of an adequate teaching model has been glimpsed, and the development of oral language as a basic premise to master the written code is very relevant (Gutiérrez- Fresneda & Díez, 2017).

Another of the characteristics that predominate in this learning is the conception of the concept of literacy as a unitary entity (Escotto, 2014), when it has been proven that reading and writing, although complementary skills, are equally domains that involve differentiated cognitive processes (Gutiérrez & Díez, 2016).

This work, unlike the numerous studies carried out concerning reading, focuses on the importance of writing for personal and social development, inasmuch as it constitutes an essential tool in personal communication which is characterized by making ideas, opinions, feelings, ... and ultimately, of promoting communicative exchange and the development of thought through the transcription of written messages.

However, learning to write does not occur naturally as it does with oral language; the individual, in the case of written language, has the skills which have to be developed to access the writing system. For many years, methodologies of diverse nature have been developed, all of them valid for access to writing acquisition, but not all have shown to be equally successful in this achievement. In order to develop effective methods, it must be supported by theories that explain the reasons for each action, and accompanied by joint reflection processes that allow analysing successes in a collegial and objective manner.

At the beginning of the process of teaching written language, we should indicate that the optimal development of oral language is a highly relevant factor and that shortcomings in this area will lead to difficulties in its acquisition. Similarly, when learners begin to have access to written language, they must be aware that the written system is based on the representation of oral language, so letters are graphic signs that correspond to the sound elements. However, understanding the link between spellings and sounds is not a simple task since children directly activate their meaning when listening to a known word, as if the sound form of the word did not exist. This difficulty resides in the spoken language since in pronouncing the words the sounds are articulated in a grouped way (Defior & Serrano, 2011, Gutiérrez & Díez, 2015).



The awareness of the elements that give rise to words is known as phonological awareness and the development of phonological awareness skills contribute to the interaction between oral and written language, which shows the close relationship between learning the written language and the development of the skills that lead to reflection and analysis on speech (Aguilar, Marchena, Navarro & Menacho, Defior, 2008; Feld, 2014).

In transparent alphabetic systems such as Spanish in which writing represents the phonological structure of speech, phonological development acquires a role of great relevance (Guarneros & Vega, 2014). However, it should not be forgotten that language is composed of a greater number of components: form (phonological and morph syntactic), content (semantic) and use (pragmatic), which act together in both oral and written language.

On the other hand, it has been proven that, as in the development of oral language and phonological knowledge, alphabetic knowledge is a highly important factor in the process of initial literacy, so it must also be taken into consideration between the variables (Diuk & Ferroni, 2012; Gutiérrez, 2017; Schatsneider, Fletcher, Francis, Carlson & Foorman, 2004). Consequently, in an alphabetical system, such as ours, one of the first requirements that children face when learning to write is to identify the letters that make up our alphabet and learn the sound that corresponds to each of them (Cuetos, 2009).

One problem with research devoted to the study of the learning of written language is that there is very little work dedicated to the study of writing in a specific way, since either they are oriented towards the acquisition of reading or are set within the term literacy, when curiously the greatest difficulties of learners occur specifically in the field of writing.

The purpose of this study was to analyse the effect that the intervention in phonological awareness along with oral language and literary knowledge jointly exercised present in the learning of the writing system.

To do this, we compare the acquisition of writing of two samples of children aged between 5 and 6, one group receives intervention in phonological awareness, stimulation of oral language and in learning the letters of our language code and another follows the traditional teaching program. Our hypothesis is that the students belonging to the group that is trained will obtain a better performance in the acquisition of writing.

Method

Participants

The study involved 224 students aged between 5 to 6 ($M = 5.42$, $SD = 0.38$), of whom 48.6% were boys and 51.4% were girls. These students belonged to four public and semi-private educational centres. Of these, two schools were assigned to the experimental group (114 students) and the other two to the control group (110 students). The contingency analysis (Pearson's chi-square) between condition and sex did not show statistically significant differences ($X^2 = 0.46$, $p > .05$). All of them shared the characteristic of being located in a middle- level sociocultural context.

Design and procedure

A quasi-experimental and longitudinal design with pre-test-post-test measures (four measurements) was performed with an experimental group (with intervention program applied) and a control group (following the official curriculum). For the analysis of the data the statistical program SPSS Statistics 20.0 was used. At first, descriptive statistics were obtained with the purpose of analysing the mean scores and standard deviations of the subjects in each of the measured variables. Subsequently, the main analyses of the study were carried out through a mixed ANOVA of repeated measures $4 \times (2 \times 2)$. The factors that were included in the model were the period of each evaluation (pre-test-post-test: E1, E2, E3, E4) and the group (experimental-control). Measurements were made at the beginning of the last stage of the Infant Education stage (E1) at the end of this course (E2), at the beginning of the first stage of Primary Education (E3) and at its conclusion (E4).

Evaluation instruments

In order to evaluate the dependent variables under study, three evaluation instruments with psychometric guarantees of reliability and validity were used.

. Test for the Assessment of Phonological Awareness (CEEC). (Ramos & Cuadrado, 2006). This test evaluates two levels of phonological knowledge (syllabic and phonemic), each of which consists of three distinct tasks: identification, addition and omission. It includes three subtests with syllables and phonemes (tasks of identification, addition and omission), with a total of 30 items (15 syllables and 15 phonemes). The maximum score that can be obtained is 30; 1 point for each correct answer and 0 for each error. The reliability, estimated through Cronbach's alpha coefficient, is 0.80.

. Revised Navarre Oral Language Test (PLON-R). (Aguinaga, Armentia, Fraile, Olanga & Úriz, 2005). For the evaluation of oral language, the PLON-R (2004) test was used, this is a standardized test for children between three and six years of age. Its purpose is to analyse the different components of language: form (phonology, morphology and syntax), content (semantics) and use (pragmatic), as well as to evaluate the three basic communicative functions: informational, regulatory or petitioning and



metalinguistic, which permits a total score on language development. This test presents a Cronbach coefficient of reliability of 0.87.

. Proesci-Primaria (Assessment Test of Cognitive Processes in Writing) (Artiles & Jiménez, 2007). For the evaluation of the degree of acquisition of writing, the tests related to the domain of the lexical processes were used, which include the tasks of: dictation of letters, generating words, dictation of words, dictation of words subject to orthographic rules and dictation of pseudo words. In each of these tests a point is awarded for each correct answer. According to the Cronbach procedure the coefficient of reliability is 0.85.

Results

Table 1 shows the descriptive statistics of the variables oral language, phonological knowledge and writing processes, with mean scores and standard deviations of the experimental group and the control group in the four evaluation periods. As can be seen, the same table includes the *F* statistics obtained from the mixed ANOVA of repeated measurements in the evaluation factor, group and the evaluation-group interaction.

Table 1. Descriptive statistics and mixed ANOVA of repeated measurements of comparisons evaluations and group

		Experimental		Control		Phase comparison		
						<i>F</i> (1,32)		
		<i>M</i>	<i>DT</i>	<i>M</i>	<i>DT</i>	Evaluation	Group	Evaluation*group
Oral Language	E ₁	2.11	0.32	2.14	0.62			
	E ₂	2.95	0.51	2.39	0.37			
	E ₃	3.04	0.54	2.43	0.27	23.27***	14.36**	6.81**
	E ₄	3.86	0.49	2.65	0.23			
Phonological Awareness	E ₁	1.14	0.42	1.16	0.53			
	E ₂	1.76	0.57	1.32	0.21			
	E ₃	1.77	0.38	1.42	0.63	12.53***	34.51***	9.12***
	E ₄	1.89	0.23	1.56	0.26			
Writing Process	E ₁	1.12	0.23	1.15	0.51			
	E ₂	1.79	0.14	1.34	0.26			
	E ₃	1.82	0.37	1.41	0.57	43.26***	41.05***	34.14***
	E ₄	2.06	0.14	1.62	0.52			

p* < .05. *p* < .01. ****p* < .001.

Discussion and Conclusions

The purpose of this work was to analyse the effect that joint intervention in oral language, along with phonological and alphabetic knowledge has in the learning of writing. The results obtained show that the instruction in these skills significantly improves the process of acquiring writing in the early ages. It is observed in the collected data that the implanted intervention contributed to improve the development of the different components of oral language (form, content and use), a fact highlighted since there are numerous studies that indicate that written language is based on the domain of oral language (Guarneros & Vega, 2014; Gutiérrez, 2017; Ouellette & Haley, 2013), so that the greater the domain of oral language, the easier it will be to access the segmental units of spoken language and the association of phoneme-grapheme correspondence.

The relationship between the learning of writing and phonological awareness is also observed in the results of this work, as has been collected in previous studies (Defior, 2008; Núñez & Santamaría, 2014; Gutiérrez & Díez, 2015).

In relation to the learning of writing, the data obtained indicate that alphabetic knowledge did contribute significantly to the improvement of the different variables involved in the writing of words. There were specifically significant improvements in the ability to generate words, write words of different lengths and familiarity, write words without misspellings and write corrected pseudo words, which indicates that the students participating in the program achieved a remarkable improvement that



has allowed access to the representation of words quickly and accurately.

This would be explained by the management of phoneme-grapheme correspondence rules along with the development of oral language and the ability to analyse and manage phonemic units of words. Thus, the greater the development of these three components: oral language, phonological awareness and alphabetic knowledge, the faster and more effective it is to learn to write.

On the other hand, it was observed that greatest progress was made during the last stage of pre-school, and considers this period as the most suitable to begin teaching the writing system by stimulating oral language and the development of phonological skills.

In conclusion, from the results found in this work, at a practical level we suggest the design of programs oriented to the joint development of phonological awareness, oral language and alphabetic knowledge in early ages to achieve better learning of the writing system. Likewise, the monetarization of the evolution of the writer process of the students participating in the program in higher courses is recommended in order to check if the effects of the program are maintained over time.

References

- Aguilar, M., Marchena, E., Navarro, J. I., & Menacho, I. (2011). Levels of difficulty of phonological awareness and reader learning. *Journal of Speech Therapy, Phonetics and Audiology*, 31(2), 96-105.
- Aguinaga, G., Armentia, M., Fraile, A., Olangua, P., & Úriz, N. (2005). *Proof of oral language of Navarra Revised (PLON) -R*. Madrid: TEA
- Artiles, C., & Jiménez, J.E. (2007): PROESCRI Elementary. *Proof of evaluation of cognitive processes in writing*. Ministry of Education, Culture and Sports of the Government of the Canary Islands.
- Cuetos, F. (2009). *Psychology of writing*. Madrid: Wolters Kluwer.
- Defior, S. (2008). How to facilitate the initial learning of the literacy. The role of phonological skills. *Childhood and Learning*, 31, 333-345.
- Defior, S., & Serrano, F. (2011). Phonemic awareness, allied to the acquisition of written language. *Journal of Speech Therapy, Phoniatrics and Audiology*, 31(1), 2-13.
- Diuk, B., & Ferroni, M. (2012). Reading difficulties in poverty contexts: A Matter Effect Case? *School and Educational Psychology Magazine*, 16 (2), 209-217.
- Escotto, E.A. (2014). Intervention of the literacy in a girl with dyslexia. *Psychological Thought*, 12(1), 55-69.
- Feld, V. (2014). Phonological skills, their neurophysiological organization and their application in education. *Psychological Thought*, 12(1), 71-82.
- Guarneros, E., & Vega, L. (2014). Oral and written linguistic skills for reading and writing in preschool children. *Advances in Latin American Psychology*, 32(1), 21-35.
- Gutiérrez, R., & Díez, A. (2015). Learning of writing and phonological awareness skills in early ages. *Bordon*, 67 (4), 43-59. doi: 10.13042/bordon.2015.67405
- Gutiérrez, R. & Díez, A. (2016). Skills that favour the learning of writing according to the age and the gender of the students. In R. Serrano, M. Gómez and C. Huertas (Ed.), *Education does matter in the XXI century* (pp. 55- 64). Madrid: Synthesis.
- Gutiérrez, R. (2017). Facilitators of the learning process in early ages. *Annals of Psychology*, 33(1), 32-39. doi: 10.6018/analesps.33.1.229611
- Gutiérrez-Fresneda, R., & Díez, A. (2017). Components of oral language and evolutionary development of writing in the early ages. *Álabe: Journal of research on reading and writing*, 16, 1-15. doi: 10.15645/Alabe2017.16.3
- Núñez, M. P., & Santamaría, M. (2014). Prerequisites for the learning process of reading and writing: phonological awareness and oral language skills. *Language and speech*, 18, 72-92.
- Ouellette, G., & Haley, A. (2013). One complicated extended family: the influence of alphabetic knowledge and vocabulary on phonemic awareness. *Journal of Research in Reading*, 2(36), 29-41.
- Ramos, J. L., & Cuadrado, I. (2006). *Test for the Evaluation of Phonological Knowledge*. PECO. Cambridge: Cambridge University Press.
- Schatschneider C., Fletcher J. M., Francis D.J., Carlson C.D., & Foorman B.R. (2004). Kindergarten prediction of reading skills: A longitudinal comparative analysis. *Journal of Educational Psychology*, 96 (2), 265-282.



Netcompetence – a sustainable need for the digitized working world and society

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Abstract:

Due to the effects of digitalization and globalization, as well as on- and offline networking, the working world and life are becoming more complex. The requirements on human learners of all ages and qualifications will rise. Basing on results of own scientific empiric researches on the day-to-day work of skilled workers (can be also named as specialised workers) and in the context of digitalization and the german-high-tech-strategy Industry 4.0 (ger.: Industrie 4.0) and cyber-physical systems, the construct of Netcompetence was further defined. Empiric observations and researches in the current and anticipated future working world makes it necessary to prepare humans to learn and reflect information of on- and offline networks, to enfold IT-competences as well for non-IT-qualified professions, to communicate interdisciplinary and international in on- and offline networks and to enlarge the operating with professional competences in on- and offline networks. Netcompetence is a human-centered need for the construction and didactisation for sustainable processes of education and lifelong learning.

Keywords: digitization, Industry 4.0, cyber-physical systems (CPS), future competence, Netcompetence, skilled work

1. Introduction

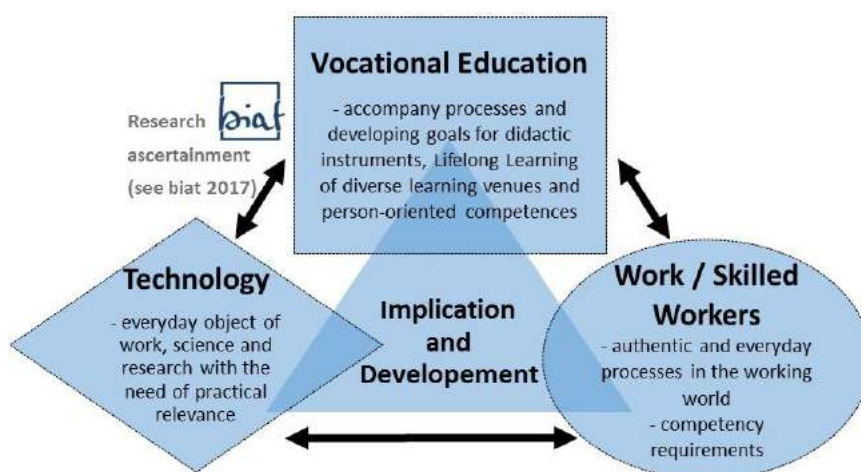
Internet of Things (IoT), Cyber-physical systems (CPS), Economy 4.0, Work 4.0 or Industry 4.0 (for a better reading the german term “Industrie 4.0” is translated to “Industry 4.0” in this article) are known as the abstract-looking superscripts of the high-tech visions of a digitally-networked working world and society. In the early days of the 4.0 debate, this kind of design was primarily based on a more technology-centric feasibility with still polarizing theses on the influence on the working world (BMW 2017). In the meantime, we increasingly need to focus more on the human-centered implementation and education possibilities. During times of an increasing complexity of access to information and academization, this contribution designs a perspective on requirements for future work 4.0, displays the effects on the sustainable strengthening of the vocational educated skilled workers in Germany in terms of businesses and the dual-system auf vocational-education (Gebhardt et. al. 2015, 119-120). Let me show you a scenario, that is created on the findings of own surveys and observations of the Institute of Vocational Education, Work and Technology (shortform: biat, at the Europa-Universität Flensburg (North-Germany at the boarder to Denmark and at the Baltic Sea), during the researches of the project “PROKOM 4.0 – Competencemanagement for the skilled workers in the high-tech-industry” (PROKOM 2017), that is financed by the German ministry of education and science (shortform: BMBF), from January 2015 until December 2017. Although it is designed to show the everyday future work life of a skilled worker:

With the company-owned smarttablet, the Industrial Electronics Technician (skilled worker, non-academic) puts an eye on the work process during commissioning during an assembly operation while she is working in the Ukraine. In addition to digital circuit diagrams, she reads the data from the logo-control, interprets it, responds to possible problems, and sends a real-time feedback to the IT-engineer at the main company headquarters in Germany via a messenger app. In this decentral and networked way they discuss possible actions, alternatives and the further proceeding. The Ukrainian colleague is also informed about the status of this working-case, in a reduced English language, sometimes supported by a translator. To the evening of the event in the hotel, the company server is logged on quickly, materials are ordered, and the status of operational safety instructions required by the company are checked. This can be done by the electronics engineer, if necessary, decentral and according to his own managed time-periods. Then he will still be with the family before he goes to dinner, to which her Ukrainian colleague has invited.

At its core, the scenario shows that profession-related work of skilled workers is an interaction that is constantly changing, especially in comparison to the pre-digital time. In privacy as well as in all-day business, interaction and communication becoming increasingly digitized via mobile data networks and ICT (information- and communication technology), notably in former non-classical IT-spheres. On the path of digital transformation, to



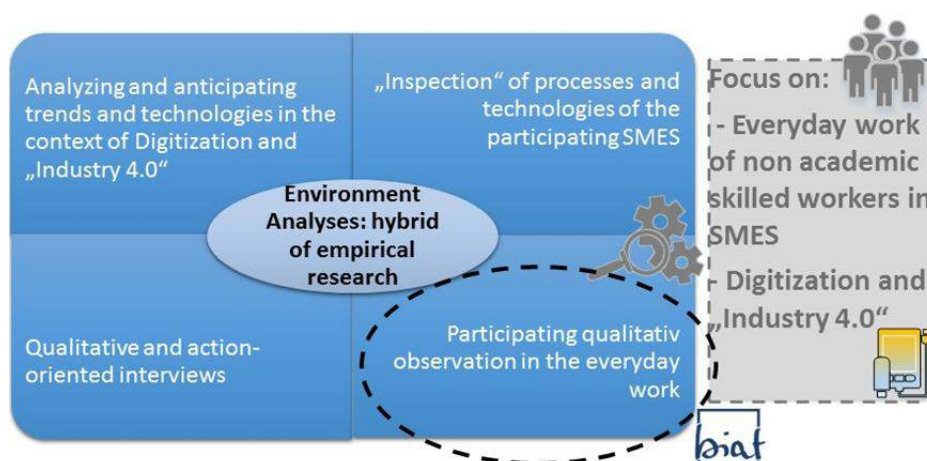
the Industry 4.0, this interaction will increasingly be not only a communication between humans, but also between human beings and machines, as well as between crosslinked machines themselves. The spatial boundaries will dissolve as well as working-contents, that have been once transparently defined. All processes and contents in work world and privacy will get more connected and may influence themselves in different ways. This fact will happen on- and offline by the means of IT-network-technologies and general effects of a globalized and internationalized world. A future-oriented change management of operational processes, with regard to the implementation and the reorganization of physical and virtual instruments and machines of the manufacturing and service industry, means to digitize, automate and network, in a particular and person-oriented way. What will be the requirements of the digitized world and what kind of impact will they have on the working world and society? And how can the non-academic skilled workers, all employees and students be strengthened, to keep and expand their competences. The main goal needs to be to ensure the working- and design-ability of humans in the context of digital-transformation and Industry 4.0. This contribution gives an compressed introduction of requirements of the future-work and digitization and the resultant necessity of system thinking (Netcompetence) to strengthen skilled workers and employees for the future (Pfeiffer 2015, 39).



2. Research Design and Method

1 Research Ascertainment

There is a big need to know about the current real work of skilled workers in small and mid-sized enterprises (SMES). While the project PROKOM4.0 the researchers of biat are working intensively on the technical-social challenges for the future professional work and, consequently, for the education and vocational practice. All research processes of the biat are linked to the institutes research ascertainment to mind the interrelationships between Vocational Education, Work and Skilled Workers and Technology. The world is becoming more

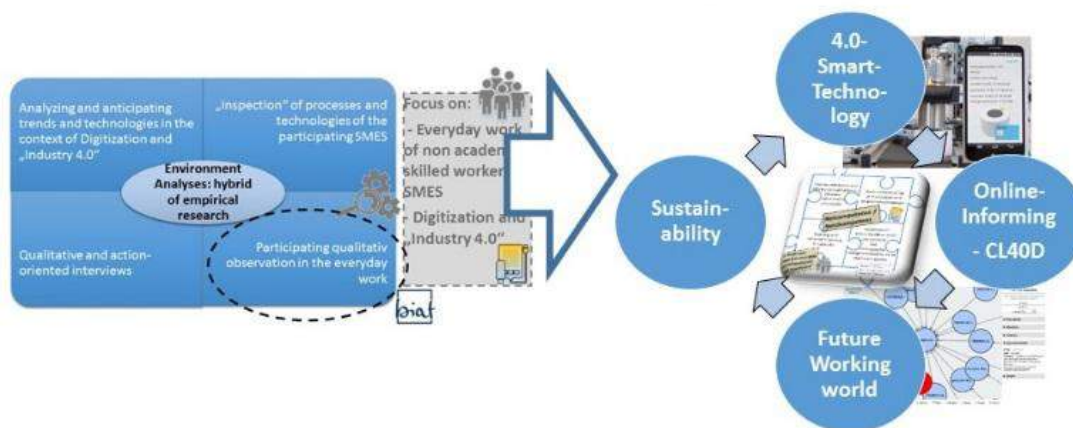




2 Hybrid research method 1

complex, so there is a need for hybrid-mixtures of different empirical research methods. The Flensburg subproject of the biat is aiming to document the performance of the skilled work in their everyday business as well as to recognize and assess the current and future demands of the working world (Drescher et al. 1995, 17; Becker und Spöttl 2008, 70ff.; Mayring 2000, 3ff.). The participatory work observations of the skilled workers at the operational implementation partners proved to be a promising instrument in the course of the project. The digitization, internationalization, developments of Industry 4.0, IoT, the current demographic evolution through escape-migration, as well as the respective operational context are included in the daily work observations of the working place. This hybrid qualitative survey form is particularly useful for gaining a practical insight view of the actual reality of the work processes, it's technology and professional skills of the employees. The intercourse is fostered by interpersonal communication during the work process of the skilled worker. The logging participation in everyday work tasks of the observed skilled work is to be evaluated by the direct proximity of authentic and more purposeful, in contrast to work-process "blank" -Online surveys of the employees or even only the management level. The fusion of megatrends, such as digitization, networking, energy development,

1. Empirical Research: environment analyses > 2. Prototype: Netcompetence-Learn-Unit



demographic

3 Hybrid research method 2

change or internationalization, is thus identified in the working day of the professional work (bpb 2015). In this way it is possible to link the observations and the resulting findings with the working people the skilled workers. Through this form of "participation" at the workplace, the insight into the work process of the employees is achieved. The gaps between everyday coping strategies, the future of changing development requirements and the need to meet the demands of the workforce, respectively the skilled work, can be filled by analyzing and interpreting the observed persons with their practical experiences. Linking to the scientific analyzes carried out in the subproject, based on the 4.0 developments envisaged, provides a holistic view of future requirements both with regard to technological innovations and technological rearrangements as well as the social influence of almost omnipresent on- and offline networking, The need for an innovative competence management, namely, human-centered response to current developments, should be met by a subsequent conception and implementation of sustainable measures in education and training. It's getting more essential to evolve and expand cross-sectional competences for the people and upcoming learning units. Basing on the findings of the interviews, observations and analyzes follows the concept, design and implementation of a person-centered vocational educational-prototype for the upcoming and current skilled workers. These arrangements should be a first step to sensitize for future developments in context of Industry 4.0 and digitization, conjunct to the main goal of PROKOM 4.0 to ensure the working- and design-ability of human workers. It's didactization and



learning-contents have to regard to the real working practice and society of the learners, to backup the motivation and evolving of cross-sectional competences. The prototype is going to be implemented with vocational educational students and will be evaluated with quantitatively and qualitatively surveys, by the backing use and interpretation of the survey-instruments MAXQDA and EvaSys.

3. Findings

Formerly and apparently clearly defined responsibilities for occupational and / or qualification-related work and professional contents and interests will be weakened. The content of various disciplines and vocational actions will be mutually dependent on the present and further developments of digitization and Industry 4.0. Those contents will diffuse into each other. Reconstructing and classifying these contextual overlaps of different subject and professional areas as well as reflecting their own handling and design options will be enhanced by the increased in-formation-technological fusion and networking of processes. Over many years, linear, hierarchically structured workflows with precisely defined work requirements and clearly defined task areas had proved themselves in many areas of the company's specialized work. The developments towards a digitized world of work are the result of cyclical, interdisciplinary, openly participatory work organizations and workflows. The fusion of individual and collective life-worlds with comprehensive ICT has long been a reality (Filk and Grimm 2015).

„I learned this while working, basic programming is explained at YouTube. [...] The process with the software provided by the manufacturer took too long and I developed something myself. Now everybody can access the query at the same time in the process. [...] I then presented my program and it was found by the team and factory management for good and then I gave even the instruction for the employees.“ (Skilled Worker; an Electronic Technician for Telecommunications Systems, but no IT-qualification; own surveys 2016 and freely translated)

The above statement by a skilled worker without IT-Qualifications represents the substitute for the weakening of traditional professional boundaries by self-responsible work and design in online networks at the workplace. In this case, "Do-it-Yourself at Work" autodidactic of programming-languages was provided to optimize existing business processes out of the problem-oriented by his own motivation. In biat's investigations and surveys, with the look through the technological "4.0-glasses", it can be seen that digitalization and networking have arrived in real-life work processes by skilled workers and skilled workers, but in different ways and not in a holistic way diffusion of operational processes. The use of digitally networked technologies is sometimes less the result of a trend reference or the operational intention of self-attribution by the labels "Internet of Things" or Industry 4.0. The communication form of man-machine and man-man are dominating still. A purely machine-based self-optimization or design via IP networks does not yet take place. The human workforce is increasingly benefiting from the demonstrated handling of digital and virtual user interfaces. In the observed labor practices, man is at present still the decisive agency - especially outside of routine work activities. In the case of problem solving, the non-documented or implicit experience of the skilled work is still successfully accessed, yet non-systematically but purpose-oriented. The operational use of IT technologies extends from IT-supported documentation systems, communication via mail programs on smartphones or computer workstations, software operation and programming, right down to the location-dependent decentralized control, maintenance and commissioning via IP networks of clients and PLCs.

The findings on the technological status quo in the investigated SMEs are extended by the fact that differences in the degree of IT-fusion and use of digital technologies and / or software in the working day are still to be determined by skilled workers from different professions. In some cases, the growing IT-Fusion has already been shifted into "new" occupational reference frameworks. Digital user interfaces for process control and optimization are going to get implemented in the current operating practice along the objectives and with aspects



of usability. Even skilled workers from the field of electrical engineering, during external work processes, are now using smart terminals, e.g. via the mobile network and VPN tunnels to the company server. The digital and decentral coordination and information procurement for the goal-oriented execution of their job assignment. In this way, they procure circuit diagrams or instructions from operating servers or via telephone in a problem-solving dialogue and professional exchange.

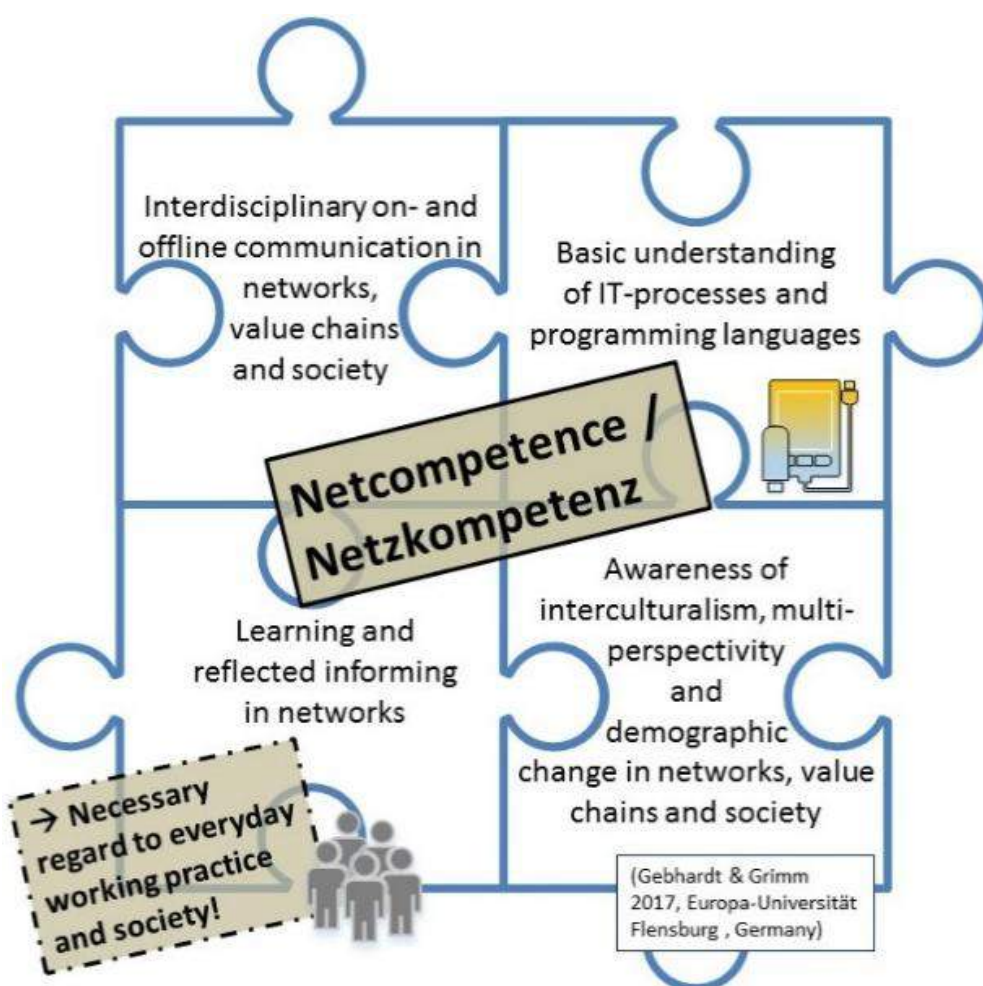
This communication is carried out in the investigated work groups via private smartphones of the skilled workers. In this case, safety-related concerns do not play a role for the users. The local operational infrastructure observed so far does not see any use of smartphones integrated in the work process, but the positive effects and experiences of the rapid exchange through the use of smartphones in the private sphere diffuse into the workplace. As a kind of coping strategy, its function is used to ultimately optimize the work process. With their own smartphones, for example, digital images of the current installations, in order to visualize and record the current state: free according to the specially interpreted motto "Bring your own device". These images then form the basis for a fixed, real-time communication, in order to exchange process and problem-oriented messages via messenger applications (such as WhatsApp), with company-internal as well as company-oriented colleagues, and to weigh up handling options in the work process.

In biat's surveys it was observed that skilled workers do work in self-government, auto didactically, high-level information technology during their working hours and favored through the opening from intranet to internet at the workplace. This is a singular observation, but its significance is sufficient. Because the increased IT fusion and presence in the workplace reinforce the assumption that a competent handling of IT also becomes a significant part of the future competency of non-"pure" IT-professionals. In the observed case, it is not a trained IT specialist and has no formalized IT qualifications. The frustration over the self-experienced faulty work process, served as a drive for the optimization of the same. In this case, a software-based logistic system was supplemented and optimized by specially programmed software. Self-paced learning took place via YouTube-tutorials. The results were communicated to the top and explained by the skilled worker and consequently also integrated into the process. The internationalization of value chains means that the introduction of new technologies or facilities in the observed factories is accompanied by further trainings and introductions in English language. Thus, English now avoids a former transport language of the international exchange of engineers and now also in isolation from the traffic language of the middle employment level and specifically from further education. In order to prevent communication and translation problems, some cases get support of a translator. In addition to the English courses in further vocational training, the employees also learn English instructions from international manufacturers or suppliers. It was observed in the SMEs that English manuals were translated into German by the present instructor. Online translation tools and technical dictionaries English-German were used in-house in addition to the growing interdisciplinary professional on-demanding and the internationalization of operating networks and corporate language, there is also a change and hence a need going round an awareness of different cultural and linguistic areas of future work and society designed. On the one hand against the background of work assignments of skilled workers and skilled workers abroad and on the current through the migration and integration of fugitives into society and through the training and in the workplace. In the latter field surveys of the biat also took place during teaching measures in the Chamber of Crafts with young fugitives. The aim of the measure is to provide young refugees with a technical and linguistic basis, with the aim of achieving the capability to train in the dual vocational education and training system. In this specific case, masters and training officers are thus confronted with new heterogeneous requirements of daily work, in terms of sensitization of other cultures and languages, as well as the difficulty of the lack of linguistic base-skills and the development of DAZ (German as a second language).

The construct of the Netcompetence (ger.: Netzkompetenz) is explained by examples from the observed working practice of the specialized work. These circumstances provide an orientation for the above-mentioned individual design of educational measures, in the course of a competence management for the training, further training and



operational personnel development, as basic prerequisites for innovations in the environment of 4.0. The concept and implementation of the prototype of the educational manual for the “Netcompetence-Learn-Unit and “4.0 Sensitization” are based on the findings of the PROKOM4.0 surveys of biat. These are subsequently made comprehensible by the necessary construct Netcompetence. The concept of Netcompetence was already marked in 2000 by Peter Wordelman. He used this in the context of the internationalization of the dual vocational training system and the growing challenges of internet use and globalization in working practice (Wordelmann 2000). The further development of this Netcompetence is based both on the findings from the scientific discourse, on the change in work through digitization, networking and demographic developments, as well as on the participating qualitative observation in the working practice of skilled workers in SMEs, in the course of PROKOM 4.0. The term “Net-“ refers to the networking of worlds, on the one hand in the working place and on the other in the whole of society and privacy. This networking takes place within and between organizations (divisions, departments) and



4 The construct of Netcompetence

systems, technical and social. The increasing interdisciplinary processes of ICT-use, which have been previously isolated from each other, are going to grow together during the work process now. Machines and products can be communicated on a physical or logical level, on- and offline, interpersonal, interdisciplinary, international and intercultural. This complex development of work and society leads to the need the Netcompetence. The construct of Netcompetence is open to developments and intended to develop an individual positioning, whereby people will find orientation and support in a digital-networked society and working world (Grimm 2017, p. 195). To



develop and establish this Netcompetence as a cross-sector competency is the core for the design of future-oriented and sustainable education and personnel development measures. It is intended to promote human capacity for action and development (Grimm et al. 2017, 150f.). These forms and actions of skilled workers and employees in general are also directly linked to the innovative and competitiveness of companies.

4. Results, Conclusions and Recommendations

For the Netcompetence can be categorized individually configurable content fields. The contents are not to be treated in isolation within a Netcompetence-teaching-learning-arrangement, but for the learners comprehensibly to each other. In this way, a sensitization can be achieved for the growing networking and requirements of the future working world and society - this fact applies to all person-centered education measures. The contents are oriented to the learners and thus practice-oriented in education and further training measures to integrate, with



regard to a competent lead to the requirements of the working environment of the future in the environment of Industry 4.0. In this case, four open-linkable content fields / categories of Netcompetence are mentioned:

- Evolve professional competence through interdisciplinary on- and offline communication in virtual and real networks and value-added networks
- Evolve learning and reflected information in networks
- Raising awareness of interculturality, multiperspectivity and demographic change
- Evolve a basic understanding for information technology processes (also for non-IT professions).

In order to establish Netcompetence through educational or personnel development measures for innovation processes, the aforementioned Netcompetence-Learn-Unit (4.0-teaching-learning arrangement) will be conceived and carried out as a short-term measure to prepare for the upcoming developments in the sphere of future megatrends and Industry 4.0. This measure is designed to further evolve Netcompetence. Netcompetence is intended to serve humans as a kind of compass for the human being and professional actions, in this case, the skilled workers. It strengthens the orientation for their own professional actions during the speed of digital-



transformation with the intention of securing their future action and design-ability. The stressed reference and instrumentalization of real technological elements and work placements are the bearers and multipliers of this practice-oriented framework of the Netcompetence-Learn-Unit developed by biat. The evaluation of this "4.0-Sensitization-Unit" points to a promising development of critical and innovative reflexively in context-adaptive contexts of one's own profession, operation and everyday life, with regard to the content of Industry 4.0.

5 Netcompetence-Learn-Unit

The implementation of this unit, as a PROKOM4.0 product of the Flensburg subproject at biat, is to be assessed as useful and purposeful. The basis for an innovative competence and change management can thus be created if



the idea of innovation of the 4.0 developments is thought by humans and an active participation of the participants is granted. The concept of a sensitization training in the environment of Industry 4.0, characterized by the "claim triangle" of vocational training, technology and (professional) work, is an adaptable instrument for the reflected preparation for the future change in the working world and society. Provided that the content of the content used is appropriately didactized and recognized and assessed as relevant by the participating learners and their perceptual milieu, the development of future-relevant network competence can be successful. This is additionally offered by a pass-accurate, short-term and low-threshold form, against alienated "technology voyeuristic" excursions and manufacturer qualifications in smart factories or 4.0 simulations in laboratory atmosphere. The participants learn a stationery on the subject of Industry 4.0 by dealing with the 4.0 context in groups independently. Two technological components, virtual and physical, of the "4.0-Sensitization-Measures" also enter the teaching-learning-arrangement of the Netcompetence-Learn-Unit. The virtual component is a web-based polyhierarchical ordering system. It is designed as a development-oriented information platform for the

6 "4.0 compact trainer" (Hofmann 2017)

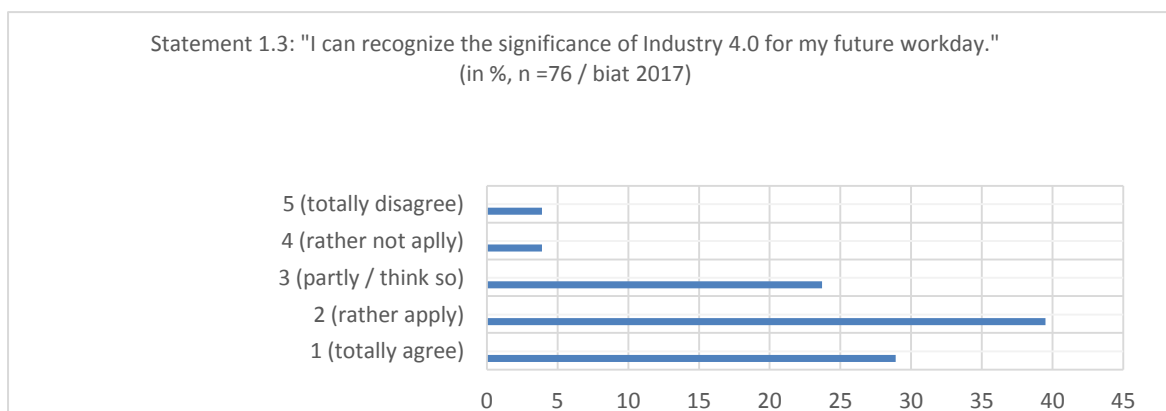
introduction into the networked context of terms and relations of Industry 4.0. This forms is a basic framework for an expandable ontology management. The learner can explore the virtual and graphical information platform with his or her private smartphones or the provided laptops or smart-tablets. In addition, they are dealing with a "4.0 compact trainer" from Festo-Didactic - this is the physiological component. This compact system presents the idea of an individualized Industry 4.0-production line with a lot size of one and practical technology components of all-day work. The 4.0 compact trainer, thanks to its technological rearrangement, the combination of the PLC, the RFID transponders and the smartphone control, provides an accessible insight into a possible operational situation of 4.0 implementation a hybrid of physical and virtual elements. The web-based



information platform and the "4.0 compact trainer" promote self-directed discussion and at the same time consolidate the role of the participants as acquiring customers in the context of networking in Industry 4.0.

The people in a democratic knowledge society and in the working world, which are increasingly influenced by shortened technological innovation cycles, must be able to empower and support competences sustainably. The development of Netcompetence is accompanied by effects that can strengthen the resilience of the human being. This resilience is achieved through the development of Netcompetence, in the sense of a safer and more secure location against the fast-paced nature of current and future innovations and the growing access to on- and offline information. The learning person has to be the focus of innovation measures and organizations. Its position can be maintained competently in conceivable and inconceivable scenarios of the work of tomorrow, as man-made mental relations are created and always renewed, so that networked processes can be comprehended.

There are evaluations of the surveys of over 100 participants (future skilled workers at vocational schools), in the exemplary case statement 1.3 with 76 entries, the mean value 2.1 and a standard deviation of 1 called. The evaluation took place following the described Netcompetence-Learn-Unit to sensitize for Industry 4.0 and digitization, which is successfully tested and evaluated. With 28.9% of the interviewers, it is true that a significance of Industry 4.0 is recognized for the future workplace. For 39.5%, it is more likely that a significance of Industry 4.0 is recognized for the future workplace; 23.7% say partly. Only 3.9% recognize rather no importance and only 3.9% do not recognize the importance of Industry 4.0 for their future workday at all. The negative nominations are comparatively low, respectively, of 3.9%, yet the reasons for this need to be investigated in order to optimize the



7 Part of Evaluation of the Netcompetence-Learn-Unit in April 2017

prototype of the Netcompetence-Learn-Unit. There could be several reasons why. For example, the possible technological "4.0-feasibilities" are projected directly onto the current state of technology of their company and workplace, which will not change in the direction of "4.0" from their assessment, and thus Industry 4.0 is less relevant. Further interpretative approaches to these negatives could be that these cumulative 7.8% assume that the classic manual human labor and production you know will always be preserved, or that perhaps a lack of imagination regarding the "4.0 developments" and their implementation in the working day prevails. However, it could also be assumed that these 7.8% were not activated within the teaching-learning-arrangement, or their current activities are now too far away from the familiar "4.0-developments". The success of this "4.0 sensitization measure" is dominated by the 92.2% of the positive nominations 1 -3. Within and in the aftermath of this unit, the participants recognize a relevance of the theme of Industrial 4.0 for their future workplace bound to their working and living environment. The observations during the measure and the qualitative statements of the skilled workers at the individual learning stations confirm the proactive discussion with the subject areas. A detailed description of the success of the learning unit can be found in the overall presentation of



the evaluation in the appendix of the "4.0-Sensitization Action" instrument for the development of Netcompetence.

The following subsuming hypotheses present summary findings of the overall evaluation of the teaching-learning arrangement / Netcompetence-Learn-Unit:

- 1) Participants call for ongoing practical and business-oriented education in the context of Industry 4.0 and future work.
- 2) Participants reflect the future viability of their company and their profession. (They have the design-desire for the innovation of business processes.)
- 3) "Digital Native" is not an integral quality feature for the competent handling of digitized and virtualized processes. (Using vs. Understanding)

The Netcompetence-Learn-Unit, as a product of the Flensburg biat, is to be assessed as useful and purposeful. It forms the basis for an innovative competence and change management in the sphere of lifelong-learning (Gebhardt 2017, 3). Thus can be created, if the idea of innovation of the 4.0-developements are going to be thought of by humans to guarantee their active participation. The concept of a sensitization training in the environment of Industry 4.0, characterized by the "claim triangle" of vocational training, technology and (skilled) work, is an adaptable instrument for the reflected preparation for future change in the working world and society. Provided that the used content is appropriately didactized and recognized and assessed as relevant by the participating learners and their perceptual milieu, the evolvement of the future-relevant Netcompetence can be successful. This is additionally offered by a pass-accurate, short-term and low-threshold form. The participants learn stationery on the subject of Industry 4.0 by dealing with the 4.0 context in groups independently.

The people in a democratic knowledge society and in the working world, which are increasingly influenced by shortened technological innovation cycles, must be able to empower and support competences sustainably during their whole life – at work and in privacy. The evolvement of Netcompetence is accompanied by effects that can strengthen the resilience of the human being. This resilience is achieved through the development of Netcompetence, in the sense of a safer and more secure self-location against the fast-paced nature of current and future innovations and the growing access to on- and offline information. The learning person has to be in the focus of all kinds of innovation measures and organizations and not the possible implementation of new technologies. Its position can be maintained competently in conceivable and inconceivable scenarios of the work of tomorrow, as man-made mental relations are created and always renewed, so that networked processes can be comprehended. The skilled work requires a holistic sensitization beyond the traditional idea of vocational professionalism. Such sensitization not takes place only through the imparting of knowledge of technological developments, but also by the reflection of politics, cultural spaces (also in front of the backdrop of current refugee-movements), languages, sources of information and, to an increasing extent, the Information assessment of digital sources.

"If all men had green glasses instead of the eyes, they would have to judge, the objects which they see thereby are green, and they would never be able to decide whether their eyes show them what they are, or whether they do not To add something to them which belongs not to them, but to the eye. So it is with the mind." (Kleist 1801; lyricist, writer, dramatist; freely translated)

Economic and rationalizing interests primarily promote innovative change management in companies and in politics. Ensuring sustained employability is increasingly based on the insight of educators and entrepreneurs to actively promote the development of cross-cutting competencies, such as Netcompetence from the regular school through vocational training to company HR. Most recently, to prepare the work for future innovations and crosslinked processes offline and online, and to strengthen skilled workers as the basis for the innovation and



competitiveness of companies and against the academization of the professions. The active implemented and people-oriented construct of Netcompetence could reach to be a base-competence for general education of humans, children and adults, in link to the need of an increasing reflexivity and lifelong learning in enlightened, democratic and crosslinked societies (Gebhardt 2016). Linked to the timeless quote of Kleist above, virtual and real networks in work and privacy and internationalization provides the need to be able to look out over glasses earlier formed by rigid and traditional frames of the professional and vocational system as well of culture and society.

References

- Becker, M., Spöttl, Ge.(2008): Berufswissenschaftliche Forschung. Ein Arbeitsbuch für Studium und Praxis. Frankfurt, M., Berlin, Bern, Bruxelles, New York, NY, Oxford, Wien: Lang (Berufliche Bildung in Forschung, Schule und Arbeitswelt, Bd. 2).
- BMW (2017): What is Industrie 4.0? Available: <http://www.plattform-i40.de/I40/Navigation/EN/Industrie40/WhatIsIndustrie40/what-is-industrie40.html>, last seen 31.07.17.
- Böhle, F. (2010): Arbeit als Handeln, In: Böhle, F.; Voß, G. & Wachtler, G. (Ed.) (2010) – Handbuch Arbeitssoziologie, Berlin, 156ff.
- bpb – Bundeszentrale für politische Bildung (2015): Megatrends?. In Aus Politik und Zeitgeschichte (APuZ), 65. Jg (Heft 31-33), Bonn. Available: http://www.bpb.de/system/files/dokument_pdf/APuZ_2015-31-32_online.pdf, last seen 31.07.17.
- Drescher, E., Müller, W., Petersen, A. W., Rauner, F., Schmidt, D. (Ed.) (1995): Neuordnung oder Weiterentwicklung: Evaluation der industriellen Elektroberufe. Bremen.
- Filk, C., Grimm, A. (2015): Digitale arbeitsprozessorientierte Kompetenzentwicklung in der höheren beruflichen Bildung. Ein situiert-partizipativ-adaptiver Forschungsansatz am Beispiel von Fachschulen für Technik. In: medienimpulse-online (1). Online: <http://www.medienimpulse.at/articles/view/781>, last seen 30.07.2017.
- Gebhardt, J. (2017): Über die zukunftsfähigere Positionierung der Facharbeit im digitalen Wandel. In: TAT (ed.): PROKOMpakt – Schriften des Verbundpartners TAT, Rheine. Available: <https://www.prokom-4-0.de/files/downloads/prokompakt-08-2017.pdf>, last seen 31.07.17.
- Gebhardt, J. (2016): Über die grüne Brille hinaus. In: Human Resources Manager, 7. Jg. (Heft 6), Berlin, 78-80.
- Gebhardt, J., Grimm, A., Neugebauer, L. (2015): Developments 4.0 - Prospects on future requirements and impacts on work and vocational education. In: Journal of Technical Education (JOTED), 3. Jg. (Heft 2), 117-133. Available: <http://www.journal-of-technical-education.de/index.php/joted/article/download/58/71>, last seen 30.07.2017.
- Grimm, A., Gebhardt, J., Heinrich, N. (2017): Herausforderung Digitalisierung – Impulse for eine nachhaltige Kompetenzentwicklung. In: Die berufsbildende Schule (BbSch), 69. JG (Heft. 4), Berlin, 148-153.
- Hofmann, S. (2017): Ausbildung an Industrie 4.0-Anlagen V02.00. Available: <https://vimeo.com/208508851/2c5e5ef1c9>, last seen 30.07.17.
- Pfeiffer, S. (2015): Effects of Industry 4.0 on vocational education and training, Wien. Available: http://epub.oeaw.ac.at/ita/ita-manuscript/ita_15_04.pdf, last seen 31.07.17.
- Kleist, H. v. (1801): Brief an Wilhelmine von Zenge vom 22.03.1801. Available: <http://gutenberg.spiegel.de/buch/briefe-7043/3>, last seen 31.07.17.
- Mayring, .P. A. E. (2000): Qualitative Inhaltsanalyse. 28 Absätze. Hg. v. Forum Qualitative Sozialforschung. Available: <http://www.qualitative-research.net/index.php/fqs/rt/printerFriendly/1089/2383>, last seen 30.07.2017.
- PROKOM 4.0 (2017): Das Projekt. Available: <https://www.prokom-4-0.de/>, last seen 31.07.2017.



Personal brand of scholars. Selected aspects

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Abstract

Personal brand is a set of associations and impressions in the heads and hearts of people, memories and past experiences that you have given them. It is what people say and think about you that you have some contact with. Each of us has a brand, but only a few of them manage it. And they do what they want. Brand building a personal reputation, affect the image, relationships and professional life. A good personal brand is desirable, valuable, credible, unique and indispensable. Caring for your personal brand is an effective competition with your own unique identity. Personal branding is about the long-term goals you want to achieve - for example, being a well-known expert in some field or establishing a personal branding business.

Keywords: Scholars, Image, Public Relations, Personal Brand

Introduction

Alina Wheeler (2010: 2) points out, marketing itself is an attempt to tighten ties between customers and brands. Through marketing activities, the brand values the timelessness and uniqueness of the crowded market - the author uses the word "crowded" - the market. Offering these two elements ensures a strong attachment to the brand and its prioritization in the process of consumer choice. Brand is not only the domain of commercial products such as Apple, Google or Coca Cola, but also the brand covers a definitional units such as human. Doctor Brand, Brand car mechanic and scientist. In the literature, the image is defined in different ways. Firstly as someone's likeness in a picture, a photograph, a drawing, etc., and - in a second shot - as a way in which a person is presented and perceived by other people. The image is very broad. It refers to many subjects - one can talk about the image of a person, but also about the image of the community, state, institution or company image. More and more often used in the modern language is the return image with the suffix: media, political, business. It has become fashionable to take action towards building an appropriate image in the aforementioned areas. (Białopiotrowicz 2006) Most often, the image is identified with the external appearance of the person. This is - in the opinion of the author of this paper - a very narrow understanding of the notion of image. Such understanding of this notion does not reflect its total importance and importance. On the image of - seen today - by several factors, described below:

- (1) *Image* - the image, the perception of a person
- (2) Behavior - behavior with respect to a particular environment
- (3) Manners - Characteristic behavior of a person
- (4) Ability to make contacts - easy to communicate with others
- (5) Relationships with people - relationships between people
- (6) Communicating with others - keeping in touch with others
- (7) Professional qualification - knowledge and skills required to perform professional tasks
- (8) Experience - the knowledge gained while doing certain activities

E. Sampson (1996) defines the image as an advertisement of self. This is an external image that tells you what's inside. Image is also a commitment that what outside corresponds to the ability, ability and value that it advertises. Sampson also points to the fact that not only clothing is an element of an image that the author considers a precise mixture of external and internal factors that define one's own image, both visible and desirable. The image is valued because it can be both positive and negative. A person with a *positive image* inspires confidence in others. It is gaining the sympathy of consumers and it is easier for her to persuade



their supporters to take action in order to achieve specific objectives. A person with a *negative image of the* causes anxiety among consumers. Instead of gaining sympathy, they lose it. (Białopiotrowicz 2006)

P. Martineau has spread the image in relation to business entities. Paying attention to the importance of the image, he points out several groups of audience that are his audience. These are: shareholders, customers, prospective customers, distribution channel distributors, suppliers, local communities, and employees. SH Britt pointed out that the image is a public stereotype, and when it comes to shape, people are more influenced by it than by what is actually hidden under it. Treating the image in a stereotypical way assumes its social character. However, it is more individual than social, which is due to the elements of the image. (Dąbrowski 2010: 3)

M. Lebkowski (2009) defines image as "the image of the subject in the eyes of the people who judge him. It is created on the basis of the individual judgment and experience of the audience. "The image can be formed consciously or unconsciously. All actions affect how the subject perceives the image. Age shaping becomes more effective, the more conscious the image is affected by both the real and the false image. The image depends on the individual experiences, observations and desires of the person assessing it. It follows that even a deliberately created image will not be taken exactly as the subject wants it to. There are four types of images:

- (1) Ordinary - as the subject is perceived by the audience
- (2) Target - how the subject would like to be perceived by the audience
- (3) Mirror - the subject sees himself
- (4) Optimal - an image that can be achieved through the action of the subject.

In terms of understanding by a researcher, it is important to describe the phenomenon of *identity*. Identity is the characteristics and values that are represented by the subject. An image is the way in which this identity is perceived by the recipient. It also points to the elements of the image by which the subject has a chance to draw his attention by shaping his image:

- 1) Birth - origin, parents, social class
- 2) Childhood - school times, style of behavior
- 3) Environment - in which it rotates (eg political)
- 4) Appearance - the more beautiful a person is, the better they are received by the bouncers
- 5) Character traits - a set of characteristics distinguishing a person from others
- 6) View (fixed switch ne)
- 7) The level of openness to the media - this media element determines the popularity of the created image

It is worth mentioning also *email the image*. *E image* is a presentation of his own person using electronic media. It is a suitable and desired image created by the Internet. The Internet allows you to create an image among any group of people who use it.

Rules of effective creation of e-image according to M. Lebkowski (2009):

- 1) Analysis - When planning to create a web page, for example, you need to analyze what role this site will play, who the target group will be and how the group will use the Internet. Specify who will be updating the page.
- 2) Time - e-images work on the Internet is relatively cheap, but takes a lot of time. It should be managed so that the actions are effective.
- 3) Spotlight - creating an image on the web is based on the display of a feature, that is, the feature that the subject has and not visible to the competition. Dean and him, the image is clear and more effective.
- 4) Consistency - messages that are sent to recipients must be consistent. A large number of different messages introduce chaos rather than building an image. Remember to be consistent on both the coloring of the subject and his behavior. At the moment when the image carries a promise, it must be fulfilled.
- 5) Repeatability - e-image messages should be repeated so that the recipient can fix them. In the e-image message can not appear a lie, because at the moment it comes to light, completely discredited image.
- 6) Internet law - the network is governed by its laws, and in the foreground there is the right to two-way communication. An entity that creates an image on the web can find the target audience more easily and connect with it and receive a reply to the message.

Dimensions of media image



According to Małgorzata Gruchoły and Ewelina Kruczek (2013), the following image dimensions can be distinguished today:

- 1) Psychological - it tells how the image is built and how it exists in the mind of the recipient. Pay attention to the processes and mechanisms of understanding and data processing such as:
 - a) Perception - whether content that influences the image will be noticed by the audience
 - b) Identification - will the observed content be attributed as affecting the image of a particular object, and if so, within which cognitive schema will be processed?
 - c) Evaluation - whether the content recognized will qualify as credible or credible enough to be able to influence the mental representation of the subject matter
 - d) Interaction - how the previously fixed mindset will affect the build-up image
 - e) Memory - whether a particular image is fixed, will be pushed out of consciousness by new emerging content
- 2) Sociological - indicates the group and institutional affiliation of people in whose minds the image of the subject, typologies of these groups and institutions, As well as the types of interaction between these groups, institutions and individuals
- 3) Marketing - implies creating an image of measurable value for the person or company whose image already exists; also applies to procedures actively create an image with the help of promotional and advertising activities and to protect their own wizerun crisis
- 4) Communication - accepts communication channels, which information reaches the recipient (Gackowski, Łaczyński 2009)

According to Beata Ociepka (2003), a properly prepared image should be:

- 1) Synthetic - its purpose is to exert a certain impression
- 2) Credible - becomes pointless when people do not believe in it, should not cross the borders of common sense
- 3) Passive - must be adapted to reality, as it is a public image
- 4) Alive - should be bright and concrete, to draw attention
- 5) Simplified - simpler than the object to represent
- 6) Ambiguous - it is between imagination and sense, between expectation
And reality can not insult anyone

The image is the overall and subjective image of the individual

About a particular object. This imagery arises as a result of intentional communication activities involving a particular object that take into account its actual characteristics but also the desired image. The previously conceived image is also influenced by unintentional actions, from various sources of transmissions, and from the direct experience of the individual as a result of the direct contact of the individual to the particular object. The shaping of the image follows As a result of interactions between the three groups of related factors with: object, message and receiver unit.

Transfers are focused n intentional creation and assumed the image, which is derived from a person and are activities that have an impact on the audience. Unintentional transmissions are those which, from the viewpoint of the assumed image, are neutral and may even contradict it. These statements take the form of gossip or rumors. They may also provide an opinion about a non-source object. The impact of unintentional transmissions on an image is significant because they are generally viewed more reliably than intentional messages.(Dąbrowski 2010)

The image is shaped not only by the messages conveyed in the aforementioned messages reaching the recipients. No less important role is played by direct contacts of recipients with a particular object. The importance of these experiences is important because they affect the perception of a given subject more strongly than the messages contained in the communications. The messages that reach the recipients are individually interpreted by them, depending on the characteristics of the recipient (ability of perception, beliefs, attitudes, value systems or cognitive schemas, etc.) and his or her earlier imaginings. As a result of these relationships, messages can be ignored and modified by the recipients. The image does not necessarily reflect reality. It can only be her credible outline. This is mainly due to the fact that shaping the image is based primarily on communication. However, it can not be completely modified, because no one is able to completely control their messages. These transmissions come from many sources, and the media plays an important role in their



dissemination and creation. When shaping the image, the media plays a vital role. They reach a wide audience by disseminating information. At the same time, they have the ability to attract and focus public opinion on the people who have become the object of media coverage. (Dąbrowski 2010)

The media not only affect the perception of a particular object by placing it in the message and the manner in which it is presented, but also describing the object by placing more weight on one feature of the object and less on the other. Apart from the hierarchy of objects, there is also a hierarchy of its characteristics, through which a given category is characterized in the media message.

The impact of the media on the hierarchy of characteristics, through the prism of which an object is perceived, is the strongest in the spheres considered to be the most important for the audience. In the irrelevant or unknown spheres the influence of the media is weaker, as is the case when the audience themselves draw conclusions about the phenomenon based on their own observations and direct experience.

The image of people influences not only the presence of the object in the media, the intensity of the exposure, or the characteristics by which they are characterized. The context in which they are presented is also important. This context is created by using metaphors, phrases, underlines, image characteristics and titles, headings, images in the description. Depending on the context given by the media to a particular object, it may have a positive or negative effect on shaping the image of the object.

Scientists personal brand

Personal brand is a set of associations and impressions in the heads and hearts of people, memories and past experiences that you have given them. It is what people say and think about you that you have some contact with. Each of us has a brand, but only a few of them manage it. And they do what they want. Brand building a personal reputation, affect the image, relationships and professional life. A good personal brand is desirable, valuable, credible, unique and indispensable. Caring for personal brand is an effective competition with your own unique identity. Personal branding is about the long-term goals you want to achieve - for example, being a well-known expert in some field or establishing a personal branding business.

And the most common p ojawiającą the definition of the brand is to define it as: name, logo, symbol, design or a combination of these three elements, designed to identify the goods or services and to differentiate their offerings from the competition (Kotler 2013)

In the case of personal brands, the name will be the name and the sign, the symbol will be, for example, a personal signature, a paraphrase, in turn the figure can be a personal image.

Accepting such a brand definition would mean that each branded product would be branded and each person would have a personal brand. On the other hand, when we look deeper, however, it is different. To ensure that products and people are not only identified by name, but above all because of value or quality, attention should be paid to the other features the brand should perform. (Nitkiewicz-Janowska 2016)

Expanded the definition proposed by Jacek Kall, who defines it as "a combination of physical product, brand names, packaging, advertising and accompanying activities in the field of distribution and price" (Kall, 2011: 11). . This combination has the task not only of different products the marketer (Nitkiewicz-Janowska 2011) from competitive offerings, but also provide the consumer with outstanding benefits of functional and / or symbolic, so you create a loyal group of buyers and allow thereby achieving the offer / producer Kt leading market position (Kall 2011). In the case of researchers, the following personal brand elements may be distinguished:

- A) name and surname
- B) place of employment
- C) academic achievements
- D) Alma mater

The name of the scientist, often also the initials of the second name, is an inescapable feature, in which both positive and negative characteristics, such as supervisors' opinions, work reviews, student opinions, accumulate. The personal brand ecosystem of a researcher includes both media publications, such as interviews or expert articles as well as opinions expressed on the internet. The second element of a researcher's promotion is the

place of employment, the more prestigious a university the higher the position of a researcher in a professional environment. The third preferred by the author of a scientific output, which today is referred to the following indicators: (1) impact factor journals in which the scientist published (2) h-index (3) the number of monographs. In today's world more and more quantitative criteria (number of publications) are replaced by qualitative criteria (quality and place of publication). Thanks to the implementation of the Open Access paradigm, the researcher's brand is being developed transparently.

The need to use new communication platforms both as a tool to promote scientific achievements and a strengthening exchange of experiences posted Gustav Frohlich in his article *The (Surplus) Value of Scientific Communication* published in 1996 in the Review of Information Science pointing to the stagnation and repetition of the subject matter of scientific publications resulting from the lack of sufficiently open and fluid scientific communication (Frohlich 1996)

Today, the postulate of a model for the exchange of scientific knowledge is possible thanks to dynamically expanding Internet access and new technologies for the development and publication of content. The creation of a group of Open Access researchers (OA) aims to contribute to the development of this new way of scientific communication by making free scientific publications available to every interested reader.

Conclusion

The image of a scientist is a component of many factors: character traits, place in the university hierarchy, the type and type of university, the country of origin, and the country in which the University employs it. Increasing chances of breaking the standard division of the scientific world on the core and periphery (Rykiel 2013) gives the opportunity to present and publish on the Internet. This is, however, an operation that requires a great deal of both human and time factor. It is important to consciously build your personal brand, both through publication in Open Access journals but also by exposing your person and accomplishments on specialized social media platforms such as researchgate or academia.edu. It is also worthwhile in the branding process to include the pdf files of your work in university repositories so that they are available to students and researchers.

References

- Białogłowicz G., (2011) Komunikacja, autoprezentacja i panowanie nad stresem -czyli tajniki kreowania własnego wizerunku. <http://docplayer.pl/1593851-Komunikacja-autoprezentacja-i-panowanie-nad-stresem-czyli-tajniki-kreowania-wlasnego-wizerunku-ramowy-program-konferencji.html>
- Dąbrowski T. (2013), Rola mediów w kształtowaniu wizerunku. http://www.pwe.com.pl/files/1276809751/file/dabrowski_mir9_2013.pdf
- Frohlich G. (2006), *The (Surplus) Value of Scientific Communication*. <http://www.iwp.jku.at/lxe/wt2k/02ws/pdf/SurPlusValueScienComm.pdf>
- Gackowski T., Łaczyński M. (2009), *Metody badania wizerunku w mediach*, Warszawa: PWN.
- Gruchola M., Kuczek E. (2013), Elementy wizerunku medialnego w internetowych serwisach plotkarskich, w *światle badań ankietowych. Rozprawy społeczne*. http://rozprawy-spoeczne.pswbp.pl/pdf/10gruchola_kruczek_elementy_wizerunku_medialnego_tom_vii_nr_1_2013_art1_0.pdf
- Kall J (2011) *Silna marka. Istota i kreowanie*. Polskie Wydawnictwo Ekonomiczne. Warszawa
- Kotler P. (2013) *Marketing*. PWN: Warszawa
- Łebkowski M., *E-wizerunek. Internet jako narzędzie kreowania image'u w biznesie*, Gliwice 2009.
- Nitkiewicz-Janowska A. (2011). Dwa oblicza marki. <http://annanitkiewiczjanowska.pl/dwa-rozne-spojrzenia-na-marke/>
- Rykiel Z. (2013), Norms and dilemmas of the semi-periphery: the society of ignorance and the post-ministerial desert. *Przestrzeń Społeczna (Social Space)* 2/2013, http://issuu.com/socialspacejournal/docs/social_space_journal_22013_6_
- Sampson E., *Jak tworzyć własny wizerunek*, Warszawa 1996.
- Wheeler A., (2015) *Kreowanie Marki*, Wydawnictwo Naukowe PWN Warszawa



New Types of Writing Developed Via New Media

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Abstract:

In this study, new types of writing that emerged with new media after 2000s will be discussed. Since the second half of the twentieth century, there have been rapid developments in mass media with transistor television and radio. From the eighties, with the progress and expansion of computer and the internet world and the increasing individualization of communication tools, it seems that the people's participation in sharing increases. As it is known, it started to be written and printed much more in the electronic media which appeared in 2000s and which developed very fast and especially in network environments. Blog writing, social media, chat rooms and so on can be just a few examples. Thanks to Android systems, mobile applications have emerged as well as many applications expected from a computer in a purely mobile environment and the computers have become comparable. Application, and shortly called Apps, offers many conveniences and innovations in almost every area and as an alternative to social sharing sites on the internet, WhatsApp chat / messaging application has emerged. This means that social networking networks are moved to mobile phones, which means that people cannot live without their mobile phones. All these technological developments have started to be used in education. In the context of this study, it will be mentioned about new and emerging types of writing and reading in terms of writing and reading activities we have discussed above. This includes apps that include a variety of writing and reading activities will be mentioned. In this frame, the literary-social movement named "Poem in Street" in the world of writing will be mentioned and the controversy of poetry will be discussed through the examples of rebirth in the new era. The basic viewpoint in this study is the new writing and reading activities and the emergence of a new understanding of literature or the reflections of technological developments to the world of literature and the readers.

Keywords: Writing, reading and writing, the Internet, mobile applications, new media.

1.Introduction

We live in a time when mass media, which we call new media, are highly diversified and technologies are developing very much. Therefore, all these technological tools, which have become very effective in almost every area of life, have entered the world of materials, culture, arts and literature and are also used very effectively. The most striking and up-to-date examples of this are the smartphone, PC-tablet, Android, iPhone systems and applications that we can use through these systems. Diversifications can be seen in the applications (Apps) lately. They also have many forms that are used in the world of literature. The debate here is what is present as novelty in terms of writing. In fact, there is not much new development in the context of writing. It is technological tools and technological tools that are close to existing innovations. All of this is in the world of writing, storing, archiving and most importantly sharing. The concept of globalization is actually expanding directly to all these technological tools. As a matter of fact, it seems that the accessibility to the world of writing and the sharing of the writings seems to have become very easy. The innovation that needs to be emphasized here is the fact that new types of writing have emerged in the world of literature. The application of Wattpad (Free books - Wattpad) which is a free story, poem, novel etc. reading and publishing activity is becoming increasingly prevalent. This change process, which begins with electronic mail, continues today as text messages. The subject that will be discussed in this study is the general discussion of the literature world shared with new technologies.

These developments in the world of literature have attracted attention of literature and naturally have been included in research fields and they have been subject as research object. In this context, it can be said that the methods of science, which is called as the name of literature, changed the methods and adapted itself to the age. Michael Hofmann (2006) for the field of literary science that includes such works as the concept of intercultural



literature¹. Matthias Luserke-Jakui, on the other hand, treats philosophies as a new literary science, indicating that their work now benefits from the use of communication sciences (Luserke-Jakui 2002).

2. Paradigm Shift in the World of Literature

It can be said that the reading culture began to occur from the time when the first person tried to understand the nature in which he was living and tried to understand a number of natural phenomena and the living creatures' traces. In this context, if the existence of the first manuscript can be described as the first literary revolution, the second will undoubtedly be the invention of the printing press. The third revolution is the online networks called the internet. Fourth, smartphones with operating systems like Android, iPhone (smartphone) should not be mistaken. All of these things should be considered only in terms of literacy and reading culture. Of course, there are technological inventions and developments which are so many that can not be counted, and each of them is a revolution in its own right; transistor², radio-television, computer, smart mobile phone, etc....

There have been many developments in the twentieth century regarding the mass media after the Second World War. 1970's years are shown as a radical and significant change in the writing world (Ewers 2002). In those years when student movements were heavily lived, radio and later through TV that developed more, the issue of sharing became more important in cultures and mass media became culture-carriers. This intellectual process of change has been very influential in TV culture, which has been widespread in the eighties, and change has continued to evolve with TV focus. In the nineties, it is possible that the real change has taken place when the computer and internet world begins to penetrate every aspect of life. With the online networking, which is called the Internet, it can be said that unlike the mass media, the form of individual communication has emerged. This is a way for individuals to access the masses, or social networks, thanks to the network, which is the greatest innovation. Thus, it is possible to say that not only the types of reading and the culture of reading but also fundamental changes in our writing culture have been realized. We read and write much more than the old. But no longer with the pen but by typing on the keyboard or touching the screen. This can be also said touch typing as a new typing activity. The above-mentioned Android and iPhone & smartphone software are already operating systems developed for touch devices.

3. Writing Through the New Media

The second half is actually much larger and widespread than the paradigm shift in the seventies that Ewers points to in years. It is online social media through the internet. Facebook, Instagram, Twitter etc. are the most popular social networks among youth cultures. When WhatsApp is added to mobile phones, an incredible sharing culture has emerged. Most of the society, and most of the youth, has started to share almost everything he sees, and the writing world took advantage of it. Short stories and poetry are especially preferred because they are among the literary genres and are the types of texts that can be easiest to share. Moreover, these kinds of literary texts are also being sent / shared as text messages via mobile phones. All these technical details lead to the use of a different and technological language as well as the touch-writing action. The everyday language used by adding symbols and short "msg" is now the new language we use in today's electronic devices and new media.

¹ interkulturelle Literaturwissenschaft (Hofmann 2006)

² One of the most important discoveries of the 20th century was the transistor, which was considered the vital part of electronic circuits in 1947. The team, made up of the world's largest telephone company Bell's research laboratories, chaired by William Shockley and John Bardeen and Walter Brattain, shared the Nobel Prize in 1956 for their new breakthrough in technology (wikipedia)



In the field of education, the aforementioned developments have started to be utilized and almost every technology has been tried to be applied in the field of education and it is observed that there is a certain increase in the studies carried out in this area (Göçerler, Yücel, Demir 2015). As a simple example of this, smart boards have been developed and can be worked on in classrooms with the tablet computer system. In these developments, I believe that WhatsApp application should have a different place in my opinion. In all applications, the application is a very different and sharing feature that allows students to create their own class groups and share any kind of audio, video or text files over the application. In this sense, the WhatsApp application performs many functions alone, and can be considered to have become a tool both academically and in terms of popular culture. Students are no longer photocopying, but sending or sharing pictures through WhatsApp. Today, physical photocopy pages have been replaced by PDF files in electronic form. In libraries, transferring PDF files to portable memory has actually been deployed instead of copying. The simplest transfer in this sense is the job of getting images with mobile phones. So much so that in everyday life too quickly settled and found a wide range of uses. Of course, WhatsApp shareware might try to play a pioneering role.

4.Smart Applications and Android Era

The concept of smart has started to be heard in daily life in the context of television technologies. The first patent on Smart TVs, also called Smart TV, was taken in 1994. The use of this technology on TVs lasted for five years. In this sense, online TVs are called smart TVs that can work with portable devices and computer-like functions. When used in connection with telephones, this concept also makes sense as a small computer, such as an Internet connection and various applications, as well as phone functions. In this context, the term smartphone is understood as mobile phones, nowadays called smartphones, which provide online connectivity as well as phone functions and can perform computer functions. Android (similar operating systems like iPhone and iPad are also available) is an operating system and has been developed for touch screen devices. Most of the smartphones we use today use this operating system. With this, we can download and use the applications mentioned in the abbreviation of Android (Application Software), which can be called mini computer functions or programs. In this sense, the first applications in 2002, simple e-mail, alarm clock and so on. . In terms of applications, the main milestone was realized by Apple in 2007 as iPhones. In 2013, applications are seen all over the world from the simplest to the most complex program software.

In terms of linguistics, basic application sites, similar applications, encyclopedia and numerous dictionaries and translation applications are seen. There are many practical examples in the field of language teaching. In the sense of literary text, all applications related to reading can include this group. For example, the "Gutenberg.de" writing site, created under the auspices of the Spiegel-Online magazine and serving for many years online, is one of the best examples. It is a widely used example where we can find information on almost all classical texts and authors who have no problem with copyright. The following is an example of a writing movement in the streets, which is a widespread use of a smartphone sharing program.

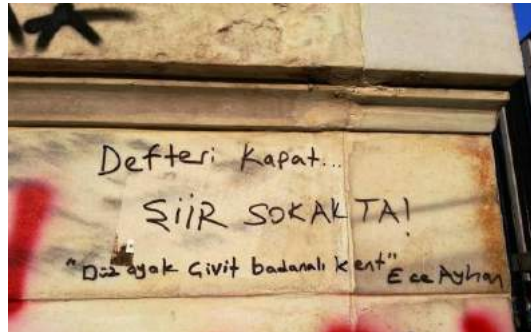
5.Poem in Street and Sharing Writing

"Poetry in Street" act comes from the phrase "Close the Book ... Poetry in the Street" which Rafet Arslan³ wrote on the wall during the "Gezi" boycott at the beginning of June. A string of Ece Ayhan is also located just below.

³ Rafet Arslan, May 12, 1972, Izmir. He is a writer-critic-contemporary performanceist who takes a cross-disciplinary look to Conceptual Art. Surrealism, New Wave Science Fiction, Erekte Poetry, Mutant Art. The writer of the book of Contemporary Art Manifestoları (6:45 Publication-May 2010). Destruction / Destruction 2011, Reality Terror, Coordinated Ubik Project exhibitions with Alper Ince, The first story book Ziggurat



The name and inspiration comes from here and of course from "Gezi". During the "Gezi" process, especially on the streets, it was written a series of poems from the "İkinci Yeni" Poems. Writing poetry on the walls was one of the ways people express themselves. This event, which existed before the "Gezi", increased with "Gezi". "Gezi" boycott could have been done every time without writing and without making distinction, with spray paintings or whitewash brushes, walls of buildings, pavement stones, tree trunks, etc. Nowadays, we are witnessing the rebirth of poetry these days when we are knit with technology. Social media has become one of the platforms where people share poems, poems and poems shared with each other, while poems written on the streets are shared with millions of people through the applications of the android revolution and online networks. The users, while occasionally costing the famous poets with unfounded lines, have made the old poems come back to the old poets. Forgotten books of poetry were downloaded and turned pages. Or at least it was keyed in the search engine. Social media users have gone a step further in sharing poetry. Not only the beautiful lines they found on the internet, they started to share poems that they came across in everyday life. With the influence of these exchanges, the writing of poems on the walls became widespread and became a great social movement. Now poetry was on the street. However, everybody was not satisfied with the poetry going out on the streets. Some artists and poets have argued that this will ruin the poetry and make art of poetry a craft. Those who say, "Poetry is beautiful on dusty pages, not on the streets," has declined war against this flow. Some even took the job so far that they took the paint chases and brushes to their owners and tried to cover up the poems on the walls. There have also been some accusers or others trying to justify being political because of "Gezi" incidents. Over time, however, poems began to move to schools, classes, with the great support of poetry lovers. Schools have begun to make "poetry in school" panels and corners. In this sense, poetry in terms of the world of literature has been mentioned, especially in the rebirth of the second new poems.



A photo from blogspot page

When we look at the movement "Poem in Street", it is seen that the majority of the bearers of this social movement are youth, and the vehicle is social networks with android mobile phone. In this respect, one of the best examples in the world to meet old and new (See Wagner: Goethe Institut 2015). In this context, the Goethe Institute of Germany distinguished 103th issue of "Art&Thought" in the context of literary movements around the world. The most important feature of the movement "Poem in Street" is that it is a communicative writing. Stories or sayings can be photographed after being written in various places and can be instantly shared with social groups online with new media tools. The Group has the following call at the blogspot internet address:

"We are taking it out on the street, poetry, we put it on the bus, we sit on the benches, we talk in the phone clubs, we make it with the voice of silent masses, we give it to the money, we drop it all while walking on the road, we wave it like a rebellion in shopping malls, We give it to you, we give



the hand to poetry, we drink tea in the tea garden, we share it with the ones sitting on a bench alone, we go out with our book of poetry. So, we grow this love, more, from the hand. Poetry is not in the book, it is beautiful in the street. Poetry is beautiful among people. Speak with them, consoled, happy, hopeful. Poetry breathe, make you take it. Poetry will come and take us all from this world. Cover your books and take the poetry out of here. Put people together, poetry."
(<http://siirsokak.blogspot.com.tr>)."

Over time, this trend was as prevalent as schools, classrooms, poetry in universities, schools and so on. Panels or corners were started to be prepared under the headings. In this sense, the "poetry on the street" movement can be considered both to the world of literature, especially to poetry and poets, as well as to the contribution of education. In this way, students perform highly intellectual reading and writing activities while achieving positive beneficial meanings in terms of literacy, as well as realizing literary and cultural activities.



Edirne School of Social Sciences "poetry at school" board in the corridor

It is important to note that the effectiveness of a writing is not only in the streets. It is possible to try a new era in the world of writing by sharing people with each other through technical photography and photo sharing applications. The most important characteristic of this is that a new process has begun to take place, in which readers are directed by the media instead of people who are guided through the media.

Conclusion

As a result, we can speak of two important developments with two decades: the first is individualized mass media. That is why it is necessary to distinguish mass media from modern media today. Because all new media are for individual use. Mobile phones, tablets, computers, etc., which emerged with new technologies developing. And we can name new media for all of the tools such as online networks, internet and social networking. All these tools are already known as new media in the West (Ewers 2002). It can be said that, through the new medias, there is generally a social sense: there is an active role of new media in living facts, social events and especially in the field of sightseeing. As for the world of writing, the world of writing has been reborn through new media, and has increased the interest in literary and therefore books. "Poetry in the streets" remerged and the poetry was loved by the young. Not only that, but in the youth world it can also try to create new things with creative ideas. On the other hand, there are many poetry, novels, etc. in the sense of the world of literature. Writing websites have been created and added to them almost every day. On the other hand, blog writing has improved in literary sense and it is very popular. Amateur poets and writers have the opportunity to publish and share their works at no cost. The online Wattpad site is just one of the best examples in this sense.



The second development relates to the concept of "Publikum", which is defined in the western languages as readers, readers, or readers. In this sense, the traditional viewer / reader has become more and more remembered as a SHARING USER. What is new here is not changing the definition of viewer / reader but it can only try to change the function. Because users share something with individual new media tools. This is what is new in this sense. In the past, there was a mass of passers-by, such as the traditional media (radio and television etc.), who were receiving only the messages that were ready for themselves in a passionate position. However, with the nineties, the audience concept has taken its place and has left it to the sharing user today. In general, when we look at this way, we can say that there are masses of audiences formerly directed by the media, whereas today there are media that are shaped by the sharing users. This is very promising in terms of the momentum from the leadership, because it is productive. There is now an innovative and creative generation that shares its own productions with others.

References:

- Atik, Oktay (2015), "The Youth Cultures in terms of Literature Education", 10th International Balkan Congress on Education and Science "Education and Globalization" (17.09.2015-19.09.2015).
- Ewers, Hans-Heino (2002) „Lesen zwischen Neuen Medien und Pop-Kultur. Kinder- und Jugendliteratur im Zeitalter multimedialen Entertainments“. Weinheim, München: Juventa, (Jugendliteratur - Theorie und Praxis), 270 S.
- Goethe Institut - "Art&Thought" Dergisi 53. yıl (15), No: 103 (no 28), Temmuz-Aralık 2015, München -Deutschland. İnternet Adresi: www.goethe.de/fikrun
- Göçerler, H., Yücel, M. S., & Demir, M. (2015). Interkulturelles Lernen durch den Whiteboard-Einsatz als Zusatzmaterial. HUMANITAS-Uluslararası Sosyal Bilimler Dergisi, 3(5), 229-242.
- Hofmann, Michael (2006) "Interkulturelle Literaturwissenschaft" Eine Einführung, W. Fink UTB.
- Luserke-Jaqui, Matthias (2002) "Einführung in die neuere Deutsche Literaturwissenschaft, UTB.

İnternet Reference:

- <https://twitter.com/siirsokakt>; 30.03.2017
- <http://siirsokak.blogspot.com.tr/>; erişim: 29.03.2017
- <http://siirsokak.blogspot.com.tr/p/siirsokakta-nedir.html> erişim: 29.03.2017
- <http://etilen.net/rafet-arслан/> erişim: 29.03.2017
- <http://www.futuristika.org/> erişim: 29.03.2017
- <https://tr.wikipedia.org/wiki/Transist%C3%B6r>; 29.03.2017
- <http://www.goethe.de/ges/phi/prj/ffs/the/103/deindex.htm>; 30.03.2017
- https://www.chip.com.tr/haber/smart-tv-nedir-smart-tv-size-gerekli-mi_38053.html; 05.07.2017
- http://praxistipps.chip.de/was-ist-ein-smartphone-einfach-erklaert_41244; 07.07.2017
- http://www.t-online.de/digital/smartphone/id_49385388/was-ist-android-google-android-klipp-und-klar-.html; 07.07.2017
- http://praxistipps.chip.de/was-ist-eine-app-einfach-erklaert_41316; 07.07.2017
- <https://www.informatik.uni-leipzig.de/~graebe/Texte/Wu-15.pdf>; 07.07.2017



Family, educational and vocational situation of young adults with disabilities in Poland and UN Convention on the Rights of Persons with Disabilities (CRPD)

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Abstract

Persons with disabilities are people whose physical, psychological, intellectual condition permanently or temporarily limits or prevents everyday life, education, work and fulfillment of social roles. There are about 4.7 million people with different kinds of disabilities in Poland (12.2% of the population) (Skoczyńska- Prokopowicz, 2016). People with disabilities face major stigma and prejudice, although they form an important part of each society. In recent years, there has been a change in perception of possibilities and needs of people with disabilities in Poland. This improvement has not been seen in all aspects of everyday life of this group (e.g. job market, public life, some limitations connected with partial or full incapacitation). The Polish Constitution, as well as other legislation including UN Convention on the Rights of Persons with Disabilities (CPRD), provides a general protection from discrimination and exclusion and guarantees access to education, employment and care. There are some new organizational solutions that support people with disabilities (including those with an intellectual disability) and help them to participate in society as equal citizens. The education system and preparation to adulthood are a crucial stage to enable persons with disabilities to function as equal members of society with high quality of life. The article analyzes different aspects of family, educational and vocational situation of young adults with disabilities in Poland and shows main barriers, chances and recommendations to improve their access to social life according to assumptions of CPRD. There is still a need to develop a system of support and to improve cooperation between different entities like local government, educational bodies, employers, members of NGO and adults with disabilities.

Keywords: Adults, Disability, CPRD, Support

Introduction

According to the National Census of Population and Houses from 2011, people with disabilities account for 12.2% of the whole population of Poland. There are people with various disabilities (the most common are problems with circulatory system, locomotor system and neurological system). Young disabled people from the age of 15 to 24 account for 4.6% of the whole group, while people under 29 are twice as numerous. (GUS BAEL 2016). It is a group which is very diverse, not only when it comes to disabilities, but also in their educational activity, profession or their family situation. They are more prone to discrimination, when comparing to their peers without disabilities, two to five times more exposed to violence and two or three times more likely to be unemployed. Also, the probability of finishing university is two or three times lower than the general population (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:181:0002:0006:PL:PDF>, 2012). This all means that the group requires comprehensive support in terms of treatment, rehabilitation, facilitation and adaptation of education, psychological assistance, educational and professional paths and also material support.

Family situation of young adults with disabilities in Poland

Family is an important element of life of people with disabilities, determines their educational, professional and social situation. Major problems connected with family and society are family dependence, social isolation (low

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level of cultural life, superficial relations with friends), high level of life passiveness, material problems, low level of local society life (Raszeja-Ossowska, 2013).

People with disabilities appreciate honest and close relationship with family. In case of young people there is a fear sometimes if their disability would not be an obstacle in forming their own family (Bartnikowska, Żyta 2007), although there is a great need of it, regardless of the type of disability

A vast majority of young people with disabilities in Poland live in their families of origin and consequences of their condition affect not only the person him/herself but also other family members such as parents, siblings and children. There are several groups of problems which are common for these families, regardless of the type and intensity of disorders, but there are also problems that are the consequence of the very condition. Common problems include those of a social nature (how the society reacts to disabled people, where they and their families belong), financial nature (usually income of these families is on a relatively low level when comparing to needs of rehabilitation, education, therapy and treatment) and emotional nature (disorders acceptance, lack of social support, marginalization and low level of life quality). Specific problems are connected with the need of life organization when it comes to proper care, treatment and support. There are differences in various illnesses specifics, its level and how independent a person is. Families of people with intellectual disabilities (especially profound ones) and multiple disabilities are a special group. There is a problem with formal support due to gaps and barriers in availability which is mainly connected to family's lack of knowledge and awareness of available forms of help. They often need to wait for a place in existing facilities (especially those for adults with deep intellectual disability and multiple disabilities). Their financial problems result from big expenses on rehabilitation, treatment and special equipment as well as transportation – which is a problem, when such family lives far from a city. These families also complain about the support system, which is not sufficient and does not fulfil their needs (Hewitt, 2013). Intellectually disabled people are usually dependent on their families for their whole lives – 86% of these adults live with their family or their siblings (Krause, Żyta, Nosarzewska 2010).

Educational situation and life-long learning of young adults with disabilities

Continuous education that aims to build a knowledge-based European economy is an important priority for European Union, however, disabled people often face infrastructural and social barriers. There are architectural, transport, communication, cognitive, social and information barriers (Żebrak, 2012).

In case of higher education, an important form of support in Poland is forming a specialized Department of Disabled People at universities and in institutions of professional training. This structure offers support when health affects education capabilities. They mainly support students and candidates with disabilities and chronic diseases and teachers working with these students. They also help to adapt buildings to the needs of physically disabled students, offer transportation, computers and teaching aids and provide digital library for people with poor sight. The office can also assist in obtaining special fellowships and mediate between students and teachers to adjust the time spent to perform various works, projects, exams and aids, also in alternative formats. Some students obtain a personal assistance (Recommendations for Inclusion of Higher Education and Vocational Training for People with Disabilities, 2015).

Vocational activity of young adults with disabilities

The majority of people with disabilities in Poland does not work, 80% stay unemployed. Among young people aged 25-29 only one in four people works while 70% remain outside labour market (GUS BAEL). Important elements in vocational activation are early diagnosis and appropriate vocational training combined with taking up a professional job. These people, in comparison to their able-bodied peers, tend to have low levels of general knowledge, lack of social communication skills, lower IT skills, and low level of language skills. They often need personalized support through Centers for Education and Professional Activation of People with Disabilities, dealing with comprehensive but also personalized counseling, training, or placement services (www.aktywizacja.org.pl). Among problems related to professional activity of young people with disabilities there are: (1) professional orientation performed too late and (2) inadequate school preparation. Sometimes the problem with lighter degrees and forms of disability is a late diagnosis (e.g. at the secondary school stage) and lack of professional counseling. Another problem is the maladjustment of preparation for the needs of the local labour market or professional preparation not taking into account the specific conditions or disabilities of individuals with disabilities. Another obstacle is entering the labour market (often after the school graduation these people become unemployed) or fear of suspension or loss of social pension. Some people fear losing their



benefits so much, they do not want to work at all, or choose low-paying jobs that will not result in a loss of their pensions (Raszeja-Ossowska 2013). Statistical indicators show that, despite a number of measures to prepare young people with disabilities to enter the labour market, the employment rate of people with disabilities still remains low. Barczyński's analyses (2008) which were performed 2001-2007, have confirmed the declining trend in the employment rate of people with disabilities and the increase in unemployment and occupational inactivity to a relatively higher level than in the general population. Other works devoted to the professional activity of people with disabilities (R. Necel, 2007-2011) see a small yet systematic growth of this activity. According to GUS BAEL data, they reached level of 22.6%, 23.9%, 24.6%, 25.9% and 26.4% in subsequent years to fall again (Necel, 2013). Such fluctuations can be, according to the authors quoted, evidence of the short-term effectiveness of the existing mechanisms introducing this group into the labor market. Even though people of working age with disabilities represent 10% of the population, their real share in labour market is only 3.8%. Unemployment in this social group in Poland not only outperforms other groups, but exceeds these of other European countries (Chłóń-Domińczak, Poznańska 2007).

In 2015 according to GUS BAEL (<http://www.niepelnosprawni.gov.pl/p,80,rynek-pracy>, downloaded: 21.04.2016) coefficient of professional activity of disabled people of economically productive age (18-59/64) was 25,9% while employment rate was 22.5% and unemployment rate equaled 13.1%. Such data indicates that level of employment is stable since 2012 and unemployment rate is relatively lower when compared to the previous year.

It is assumed that not all conditions of inactivity are the same among people with disabilities and in the general population (Podgórska-Jachnik, 2014). The disability affects the social contacts, the quality of life, the financial situation, and the professional activity of a person (Brzezińska, Piotrowski 2008). At the same time, it is stressed that disability should not be regarded as a decisive factor that affects the dysfunction of an individual without taking account-social contexts at the same time. Jachimczak (2011, 38-39) says: '(...) support for medical, pedagogical, psychological, social and occupational rehabilitation could significantly minimize disability issues and allow disabled persons to obtain the necessary degree of self-sufficiency, economic independence and socialization to achieve social and occupational roles, as in the case of people without impairments. However, there are obstacles that cannot be overcome by a person with disabilities, such as: lack of competence in the people responsible for the education process, program content not adapted to the requirements of the modern world (including the labour market) and lack of legible and up-to-date choice of forms of education, employment and opportunities for participation in the social life of people with disabilities. '

Education and specialized support (especially job consulting) are important factors that increase chances for employment. Unfortunately, education of people with disabilities does not adequately fulfill its role of preparing them for effective entry and retention on the labour market, which is indicated by the report of the Center for Methodological Psychological and Pedagogical Aid of Ministry of Education for 2003-2008. The issues mentioned in the report include late start of education, early school leaving after junior high school, lack or inadequate necessary therapeutic support, lack of systemic solutions for vocational guidance for students at different stages of education with individual consideration of the planning of vocational education of a disabled pupil and many others (Kummant, 2008). Also, a study on the impact of direction and education level on occupational activity on people with disabilities performed by Pentor Research International in 2009 (http://www.pfron.org.pl/ftp/dokumenty/Badania_i_analizy/Raport_CZESC_1z6_final.pdf, downloaded: 21.04.2016) reaffirms the lack of education and qualifications of people with disabilities to the requirements of the labour market (including a high percentage of people completing primary and lower secondary education, lack of lifelong learning, entrepreneurship problems, flexibility and willingness to change, lack of social competence). The problem is also inflexible and constant for years list of professions offered by special vocational schools. Too narrow educational offer and the lack of opportunities and interests of young people, coupled with the lack of labour market opportunities, can lead to dissonance in the range of available educational offerings and the real needs of people with disabilities and employers in the area.

UN Convention on the Rights of Persons with Disabilities (CRPD) and the situation of young adults with disabilities in Poland

The most important legal act on the rights of people with disabilities is the UN Convention on the Rights of Persons with Disabilities of 2006, which was ratified by Poland in 2012. "The Convention aims to protect dignity of all disabled persons and provide them with a possibility of limitless exercising fundamental human rights on par with fully able people. General principles of the Convention, specified in Art. 3 thereof, include respect for inherent dignity, individual autonomy including the freedom to make one's own choices, non-



discrimination, full and effective participation and inclusion in society, respect for difference and acceptance of persons with disabilities as part of human diversity and humanity, equality of opportunity, equality between men and women, or accessibility” (Radlińska, Bażydło, Karakiewicz, 2017, 27-28).

Article 23 (Respect for home and the family) contains important arrangements included in CPRD when it comes to family situation. It describes non-discrimination in all matters relating to marriage, family, parenthood, adoption as well as highlights the right of people with disabilities to marry, to start a family, and to make decisions about having children (their number and time of birth). The article also pays attention to the provision of access to information on procreation and family planning issues and the obligation to provide assistance in the care and education of children. The Convention was ratified with a so-called interpretative statement (on incapacitation) and a reservation on marriages. While the interpretative statement is alleged to be in contradiction with the Convention's objectives, because the Polish institution of incapacity does not meet the requirements of being equal in law, less controversy refers to the objection raised to the possibility of marriage. There is widespread consensus – acknowledged by both government and non-governmental organizations - on the need to amend national legislation in this area. Developed in 2014, "Draft Proposals for the Draft Law on Amendments to the Civil Code, Civil Code and Family Code Act, Civil Procedure Code, Family Support Act and Alternative Custody Act, and Certain Other Acts" (<https://legislation.Rcl.gov.pl/docs//1/208000/208001/208002/dokument104528.pdf>) assumes withdrawal of total incapacitation as an obstacle to marriage.

The most frequently mentioned deficiencies in the range of support for young families with disabilities in Poland are: - insufficient number of specialist family counseling (psychological, legal and therapeutic services), - insufficient number of sheltered dwellings (created for adults with disabilities), - too late delivery of help from the social services (lack of individual care plans), help most often in crisis / critical situations, and little emphasis on preventive actions, - lack of preparation of social workers to support families of people with intellectual disabilities or mental illnesses (these are groups at the bottom of the hierarchy of social importance, often exposed to social marginalization), (Szczupał, 2010), - financial barriers to the development of institutional and environmental assistance (the disparity between the results of state diagnoses and the distribution of public funds, often associated with poor management of funds, lack of monitoring and evaluation of the use of funds) (Gałęziak, 2009).

Art.24 of CRPD guarantees people with disabilities the right to education without discrimination and on the basis of equal rights. The education of students with disabilities in Poland takes place in inclusive education, integration schools and special schools.

For young adults, education itself concerns higher education and lifelong learning education. The analysis of the educational situation of people with disabilities in Poland shows that this is best achieved at the level of higher education. Universities have offices or attorneys for people with disabilities. Students are provided with a wide range of help with the adaptation of teaching materials, transportation, financial support and psychological help. This is the only educational stage where the concept of inclusive education has been fully implemented (Błaszczak, 2015). On the other hand, there are still some obstacles. Availability of specialized learning equipment, availability of textbooks, access to all university spaces (e.g. lecture halls, canteens, libraries, service offices, etc.) or adequate preparation of academic staff to teach people with disabilities (Żebrak, 2012). Lifelong learning education includes post-secondary education. It allows to acquire and improve skills, primarily professional but also social ones. The Convention (art. 24 law 5) highlights that persons with disabilities should have access to adult education and lifelong learning without discriminating and on an equal basis with others. In Poland for many reasons this access is unprotected or very difficult. The main barriers are architectural and transport barriers, which is also a violation of art. 9 CRPD. Lack of accessibility to the place of study often excludes visually impaired people from the very beginning.

Art. 27 (Work and employment) says about “the right of persons with disabilities to work, on an equal basis with others; this includes the right to the opportunity to gain a living by work freely chosen or accepted in a labour market and work environment that is open, inclusive and accessible to persons with disabilities” (CRPD, 2006). Poland, being a member of the European Union, successively implements international solutions for equal treatment in employment and non-discrimination, which apply to persons with disabilities. Persons with disabilities in employment may use four different independent systems in Poland: 1) rehabilitation (among others, Vocational Training Centers), 2) social assistance, 3) job placement (employment offices and employment agencies e.g. Centrum Vocational Training and Support for People with Intellectual Disabilities, 4) Social Employment (including social inclusion centers and clubs) (Klimczuk 2013).

The research shows that the problem in Poland is the cooperation of non-government employment agencies with public services and social, educational and scientific institutions. Ratification of the CRPD forces the integration



of social policy. Especially it is important in equality before the law, universal design (tailoring services, products and architecture to the needs of the individual), equal access to education, digital inclusion, participation of people with disabilities in elections, their access to justice service (Błaszczak 2015).

Conclusions and Recommendations

The analysis of the family, educational and professional situation of young adults with disabilities in Poland, in the light of the UN Convention on the Rights of Persons with Disabilities, allows to define certain directions of action and recommendations. The main focus is on moving away from focusing on the medical aspects of disability for implementing social inclusion and integration. In Poland ongoing work is being carried out on the development of a national strategy for the implementation of the provisions of the Convention (debates, quantitative and qualitative research, conferences involving both government officials, public and non-governmental organizations and, above all, persons with disabilities. (<http://www.pfon.org/wdrazenie-konwencji-o-prawach-osob-niepełnosprawnych-wspolna-sprawa?id=694>).

All people with disabilities (especially women, children and the elderly) are marginalized and need support in various areas of everyday life. Young adults are a very diverse group - their psychosocial situation depends, among others, on the type and degree of disability, education, presence or absence of additional health disorders, access to the support system, having a partner, residence, family financial resources. The Polish state, while guarding the equal rights of all citizens, cares for the interests of this group of citizens so that they can be independent, self-reliant and part of the social life. These services include:

- Work on the development and implementation of a uniform disability assessment system for education, work, social care and health care;
- The abolition of institutions of incapacitation and introduction of a model of decision support and self-determination;
- Empowerment of people with disabilities to face discrimination in various areas of everyday life;
- Continuous implementation and improvement of universal design principles in architecture, services, public spaces;
- Moving from institutional care (deinstitutionalization) towards community-based care;
- A larger number of personal assistants for people with disabilities;
- Promotion of alternative forms of communication in public space (e.g. easy-reading language, alternative communication, promotion of Polish sign language);
- Promotion of inclusive education at all stages of education for all groups of people with disabilities;
- Supporting employment on the open labour market and, where necessary, adequate protection of the financial needs of a person with disability and their family through a social security system;
- Access to rehabilitation services, equal rights and freedom of association (Błaszczak 2015).

The analysis of documents and actions devoted to the implementation of the CRPD in Poland highlights many positive steps towards equality and equal opportunities for this group of people, but at the same time demonstrates the need for continued and systematic actions, broadening public awareness and involving people with disabilities in the implementation of the goals of Convention in everyday life.

References:

- Barczyński, A. (2009). *Potrzeby osób niepełnosprawnych w przestrzeni konfliktów interesów ekonomicznych i społecznych*. In: Podgórska-Jachnik D. (ed.), *Problemy rzecznictwa i reprezentacji osób niepełnosprawnych*, Łódź: Wyd. Naukowe WSP w Łodzi.
- Bartnikowska, U., Żyta, A. (2007), *Żyjąc z niepełnosprawnością: przeszłość, teraźniejszość i przyszłość*. Toruń: Akapit.



- Błaszczak, A. (ed.) (2015): Realizacja przez Polskę zobowiązań wynikających z Konwencji o Prawach Osób Niepełnosprawnych. Sprawozdanie Rzecznika Praw Obywatelskich 2012-2014, Biuro Rzecznika Praw Obywatelskich, Warszawa.
- Brzezińska, A.I., Piotrowski, K. (2008). *Aktywność zawodowa osób z ograniczeniem sprawności: wyznaczniki społeczno-demograficzne i osobowościowe*. Warszawa: Wyd. SWSP „Academica”.
- Chłoń-Domińczak, A., Poznańska, D. P. (2007). *Promocja zatrudnienia osób niepełnosprawnych na otwartym rynku pracy. Proponowane działania w Polsce*. Budapeszt: Międzynarodowa Organizacja Pracy.
- Convention on the Rights of Persons with Disabilities (2006): <http://www.un.org/disabilities/convention/conventionfull.shtml> (Accessed 31.10.2016).
- Gałęziak, J. (2009). *Pomoc społeczna i wyrównywanie szans osób niepełnosprawnych*. In: Koncepcja Przestrzennego Zagospodarowania Kraju 2008-2033. Ministerstwo Rozwoju Regionalnego
- GUS BAEL (2016), Osoby młode na rynku pracy w 2016 roku; <http://stat.gov.pl/obszary-tematyczne/rynek-pracy/opracowania/osoby-mlode-na-ryнку-pracy-w-2016-r-13,1.html> (Accessed 05.07.2017)
- Hewitt, A., Agosta, J., Heller, T., Williams, A. C., Reinke, J. (2013). Families of Individuals with Intellectual and Developmental Disabilities: Policy, Funding, Services, and Experiences. *“Intellectual and Developmental Disabilities”*, 52 (5), 349-359.
- <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:181:0002:0006:PL:PDF>, (Accessed 03.05.2017)
- <http://www.pfon.org/wdrazenie-konwencji-o-prawach-osob-niepelnosprawnych-wspolna-sprawa?id=694> (Accessed 07.07.2017)
- Jachimczak, B. (2011). *Społeczno-edukacyjne uwarunkowania startu zawodowego młodych osób niepełnosprawnych. Studium empiryczne z regionu łódzkiego*. Kraków: Oficyna Wydawnicza „Impuls”.
- Klimczuk, A., (2013). Współczesna polityka społeczna wobec niepełnosprawności i osób niepełnosprawnych. „Pogranicze. Studia Społeczne”, Tom XXII, 185-200.
- Konwencja o Prawach Osób Niepełnosprawnych, sporządzona w Nowym Jorku dnia 13 grudnia 2006 r.* [online]. Dostępne w Internecie: <http://isap.sejm.gov.pl/DetailsServlet?id=WDU20120001169>
- Krause, A., Żyta, A., Nosarzewska, S. (2010). *Normalizacja środowiska społecznego osób z niepełnosprawnościami intelektualną*. Toruń: Wydawnictwo Edukacyjne Akapit.
- Kummant, M. (2008). *Tendencje w kształceniu integracyjnym w Polsce w latach 2003-2008. Raport CMPPP, MEN* http://wszystkojasne.waw.pl/sites/default/files/Raport_cmppp_Tendencje_w_ksztalceniu_integracyjnym_w_Polsce_2003-08.pdf (Accessed: 02.05.2017)
- Liczba bezrobotnych zarejestrowanych oraz stopa bezrobocia według województw, podregionów i powiatów. Stan w końcu lutego 2016.* <http://stat.gov.pl/obszary-tematyczne/rynek-pracy/bezrobocie-rejestrowane/liczba-bezrobotnych-zarejestrowanych-oraz-stopa-bezrobocia-wedlug-wojewodztw-podregionow-i-powiatow-stan-w-koncu-lutego-2016,2,42.html> (Accessed: 02.05.2017)
- Necel, R. (2013). *Dialog społeczny w praktyce – jak zmienić system zatrudniania osób niepełnosprawnych*. Poznań: Ekspertyza dla Polskiej Organizacji Pracodawców Osób Niepełnosprawnych.
- Pentor Research International (2009). *Badania wpływu kierunku i poziomu wykształcenia na aktywność zawodową osób niepełnosprawnych Raport końcowy* http://www.pfron.org.pl/ftp/dokumenty/Badania_i_analizy/Raport_CZESC_1z6_final.pdf (Accessed: 03.05.2017)
- Podgórska-Jachnik, D., (2014). *Praca socjalna z osobami z niepełnosprawnościami i ich rodzinami*. Warszawa: Centrum Rozwoju Zasobów Ludzkich.
- Projekt założeń projektu ustawy o zmianie ustawy – Kodeks cywilny, ustawy - Kodeks rodzinny i opiekuńczy, ustawy - Kodeks postępowania cywilnego, ustawy o wspieraniu rodziny i systemie pieczy zastępczej oraz niektórych innych ustaw (2014). <https://legislacja.rcl.gov.pl/docs/1/208000/208001/208002/dokument104528.pdf> (Accessed: 1.02.2016)
- Radlińska, I., Bażydło, M., Karakiewicz, B. (2014). The rights of persons with disabilities in Poland. *“Journal of Public Health, Nursing and Medical Rescue”*, 4, 25-30.
- Raszeja-Ossowska, I., (2013), *Młodzi – niepełnosprawni. Sytuacja społeczna i zawodowa*. Warszawa: Fundacja Pomocy Matematykom i Informatykom Niepełnosprawnym Ruchowo.
- Rekomendacje dla Włączającej Edukacji Wyższej i Zawodowej dla Osób z Niepełnosprawnościami (2015), Warszawa: Leonardo da Vinci projekt.
- Rynek pracy. <http://www.niepelnosprawni.gov.pl/p,80,rynek-pracy> (Accessed: 03.05.2017)
- Skoczyńska-Prokopowicz, B., (2016). Social work – help for people with disabilities- a Polish perspective. Educational opportunities for people with disabilities in Poland. *“Uniwersyteckie Czasopismo Socjologiczne”*, 16,12-20.
- Szczupał B. (2010), Zasada pomocniczości w systemie opieki nad rodziną z dzieckiem z niepełnosprawnością intelektualną – założenia a rzeczywistość. In: A. Żyta (ed.), *Rodzina osób z niepełnosprawnościami*



intelektualną wobec wyzwań współczesności. Toruń: Wydawnictwo Edukacyjne Akapit

Uścińska, G., Roicka, P. (2014). *Zakończenie*. In: Uścińska G., Wilmowska-Pietruszyńska A. (ed.) *Rehabilitacja zawodowa. Stan aktualny i proponowane zmiany*. Warszawa: Instytut Pracy i Spraw Socjalnych. www.aktywizacja.org.pl (Accessed: 06.07.2017)

<http://www.niepelnosprawni.gov.pl/p,80,rynek-pracy>, (Accessed: 21.04.2016)

Żebrak, A., (2012). *Edukacja osób z niepełnosprawnościami na poziomie szkolnictwa wyższego* [In:] Równe szanse w dostępie do edukacji osób z niepełnosprawnościami, RPO, Warszawa. <https://www.rpo.gov.pl/pliki/13490881580.pdf> . (Accessed: 31.10.2016).



Conceptual Mapping As An Inspiring Strategy Of Mathematical Lifelong Learning

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Abstract

The paper summarises our experiences with the concept mapping strategy in mathematical education and classroom experiences. Most pupils did not have any experience with the concept of concept mapping. It was a new idea for teachers as well. We were wondering whether future teachers of mathematics at primary school know the strategy of concept mapping and how they evaluate it. The paper deals with the preliminary results of the partial results ascertained in the research entitled ACPM (Attitudes Towards Concept Mapping in Mathematics), which was practiced in 2016 and 2017. This research was focused on student attitudes to the using of the concept mapping strategy for a better understanding of mathematical foundations. We believe that if future teachers accept concept mapping as a strategy that leads to a successful understanding of mathematical fundamentals generally, they will pass on this progressive method in the future teaching profession.
Keywords: Mathematics, Learning, Teaching, Concept mapping, Prospective teachers

Introduction

Lifelong learning is defined as learning that is pursued throughout life. Lifelong learning can develop creativity and individual skills needed for adaptability in a rapidly developing modern society. The school should provide pupils with strategies and methods to solve problems that are of general application. Teachers are expected to develop as professionals and they need to acquire new knowledge, become familiar with new didactics trends, learn about new teaching and learning methods.

Mathematics is a natural part of our everyday reality. Learning mathematics accompanies pupils from the very beginning of school education. The knowledge of mathematical laws and principles is a significant factor of the general literacy of everyone. Learning mathematics is necessary for an individual's complete development in today's complex society as a part of lifelong learning. Often, however, we encounter negative attitudes of people towards mathematics. The attitudes of pupils are similar. Pupils often refer to not understanding mathematics, they consider that school mathematics is too difficult for them. It is striking that we have encountered similar negative attitudes to mathematics in prospective first-level primary-school teachers who will themselves teach mathematics (Uhlířová, 2015). One of the reasons is that school mathematics often focuses on mere encyclopaedic knowledge and gaining "ready" knowledge and algorithms without a deeper understanding. Pupils and students learn individual concepts and mathematical topics separately without searching for mutual relations or building a deeper cognitive structure. In line with constructivism, the authors place emphasis on the active role of pupils in the cognitive process. One of the strategies based on the principle of pedagogic constructivism is the method of mental mapping, where pupils create their own ideas and build their own knowledge structures.

Mental mapping is a strategy that presents the subjective perception of reality on the basis of the reflection of an individual's inner thought processes. Fisher (Fisher, 2011) says that we organise our images of the world by converting our perceptions (what we see, hear, feel etc.) into words and ideas which we present through concepts. Concepts cover certain facts in order for us to be able to identify the diversity of relations and differences between phenomena. If we capture thoughts and concepts, we create a mental map that is "an external mirror of what is happening inside our heads" (Buzan, 2012). Therefore, a mental map is a graphic visualisation of mutual relations between thoughts or concepts. If we focus on concepts, the process is known in specialised literature as concept mapping and the visual presentation as a concept map.

Learning through concept mapping allows us to use the right and the left brain hemisphere at the same time. During learning, the use of the left hemisphere generally prevails. The left hemisphere controls functions such as speech, logic, sequencing and causality. The right hemisphere controls imagination and creativity. According to psychological researches (Pfeifer, 1990), true creative work is based on the interconnection of the left and the



right brain hemisphere. Mind maps that are based on this principle are thus not only creative tools of mental work, but also very strong stimulants of the development of creativity. It is necessary to realise that concept maps constitute a purely individual manifestation of one's personality and that they are not fixed structures. On the basis of new knowledge, the existing structure is repeatedly and dynamically reconstructed. The structure is expanded with new concepts and links, and concepts that have so far been isolated are connected.

Method

According to the input characteristics of concept mapping, we may distinguish between two types of concept mapping, in accordance with T. Janík (Janík, 2006):

- 1) Structured – there is a fixed list of concepts; the task is to arrange these concepts into a schematic structure. Such maps can be compared because they are identical in terms of their contents; they only differ in their structures.
- 2) Non-structured – only the key concept is given; the task is to compile a logical structure of concepts that are associated with the key concept.

Concept mapping plays the role of a multifunctional educational environment in the education process. Ficová and Žilková (Ficová, Žilková, 2012) state the following functions of mental mapping:

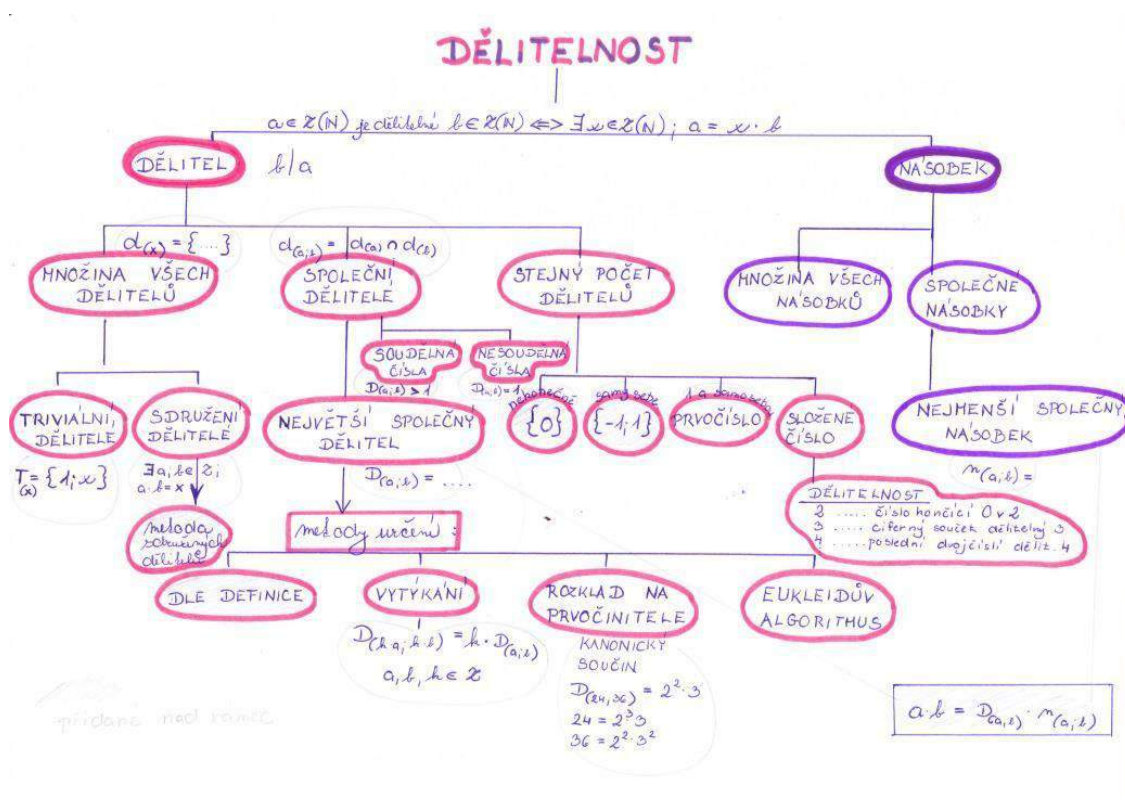
- ☐ Organisational function - arranging concepts in a meaningful structure, arranging and sorting thoughts, recording and summarising key concepts, defining relations and hierarchical levels;
- ☐ Inspirational function - supporting creativity, stimulating the creation of thoughts, ideas;
- ☐ Interpreting function - explaining complex problems, clarifying relations between concepts, deepening and expanding of problems;
- ☐ Effectiveness function - increasing the effectiveness of learning, increasing the meaningfulness of learning, improving language skills;
- ☐ Diagnostic function - analysing knowledge, evaluating the degree of understanding concepts and relations between these concepts;
- ☐ Presenting function - presenting thoughts with relevant arguments.

For the research, we chose the method of concept mapping in combination with a questionnaire. We included both structured and non-structured forms of concept mapping with an emphasis on the organisational, presenting and diagnostic functions.

The Attitudes Towards Concept Mapping in Mathematics (ACPM) research was conducted during the 2nd year of study of the programme Teaching at the 1st Level of Primary School at the Faculty of Education of Palacký University in Olomouc in the academic year 2016/2017. The research was focused on the identification of students' attitudes to the possibility of using the method of concept mapping to improve the understanding of mathematical topics. We were interested in whether the students would accept the concept mapping method as one of their learning strategies and whether they would include it in their teaching strategies. The research was conducted in 2 stages. The first stage was focused on practical experience of the students with creating concept maps as part of the thematic framework of the mathematical disciplines of Mathematics 2 and Mathematics 3. The students gradually prepared two concept maps with the following topics: Relations and operations, Divisibility. The students could choose whether to work individually or in pairs. The preparation of the concept maps and their presentation constituted one of the requirements to pass the course. An illustrative example of one of the prepared concept maps is provided in Figure 1. The first concept map was non-structured; the students only got a pair of keywords in the assignment, Relations and Operations. This was an assignment combining the completed discipline of Mathematics 1 (the 1st year of study) and the new curriculum of the 2nd year. The second concept map was structured - the students were assigned 20 concepts which they were supposed to organise into a cognitive structure. If necessary, they could add further concepts. All 62 students of the 2nd year participated in the stage of "active concept mapping", of which 58 were women (i.e. 93.55 %) and 4 men (i.e. 6.45 %). Given this unbalanced representation, we will not deal with gender differences. The second stage of the

research was conducted at the end of the 2nd year after the completion and submission of the concept maps. A non-standardised questionnaire was prepared for the purposes of the research. 49 respondents - 2nd-year students - participated in this part of the research. The respondent sample included 47 women (i.e. 95.92 %) and 2 men (i.e. 4.08 %). The remaining students were not present at the time of the survey.

Figure 1. An example of the created concept map



Findings and Results

In this section, we will focus on the analysis of the concept maps with the topic of *Divisibility*. It is an issue that is associated with a large number of concepts and is difficult for students. Our aim was to diagnose the level of mathematical knowledge which the students have in the field of divisibility, and to identify erroneous ideas. At the same time, we focused on the students' ability to create a graphical representation of their ideas in the given context. A total of 45 concept maps were evaluated.

In terms of the structure design, the maps can be divided into two categories. Hierarchical concept maps that are depicted using the root (tree) structure and “branch out” from the general concept to more specific concepts. It is interesting that the students generally opted for the vertical direction down from top (see Figure 1). On the other hand, spider concept maps have the general concept in the central position and the related concepts “branch out” in all directions. The evaluated concept maps have the minimum scope of 17 concepts and the maximum scope of 45 concepts, and 21 of the concept maps (i.e. 46.67 %) included only the assigned concepts. Some of the authors added shortened definitions, brief concept characteristics or calculation formulas. None of the students used the option of creating the map through a computer software.

Based on the content analysis of the concept maps, we reached the unhappy conclusion that many of the students had not created a correct concept structure on which to build further knowledge structures. The most frequent mistakes which we identified included:



- ☐ The students confuse the “to be a divisor” relation with the operation of division, and the “to be a multiple” relation with the operation of multiplication. They also confuse the characteristics of relations and operations.
- ☐ The students have not overcome the linear “isolation” of the concepts of divisor and multiple. The concepts in the students’ concept maps form separate units without being interconnected.
- ☐ The students chose an erroneous concept hierarchy. E.g. the concept “the highest common divisor” precedes the concept “set of all divisors”.
- ☐ The maps do not capture crucial links between concepts.
- ☐ The maps do not capture the analogies between concepts derived from the key concepts of “divisor” and “multiple”.

In terms of the questionnaire, we were interested in whether the students had already encountered the concept mapping method and the creation of concept maps. More than a half of the students (61.22%) only encountered the concept mapping method during the course Mathematics 2, where they created their first concept maps. The remaining students (38.78%) stated that they knew concept mapping from before. Most frequently, they had used concept mapping in psychology, foreign languages and in mathematics at primary or secondary school.

The students were then supposed to indicate the degree of agreement to 15 statements (items a – q), which we divided into 3 areas as part of the analysis: personal learning strategies, professional focus of the future teacher, and obstacles. The answers to the questions were scaled from 1 to 5, where 1 meant a complete disagreement and 5 complete agreement with the statement. The minimum point score for the individual statements was $n_{\min} = 49$, the maximum point score was $n_{\max} = 245$. The achieved point scores were within the interval of $n \in [49; 245]$, the average score was $n_p = 136.9$. Table 1 shows the items that achieved the highest point scores.

Table 1: Comparison of statements according to the declining point evaluation by the respondents

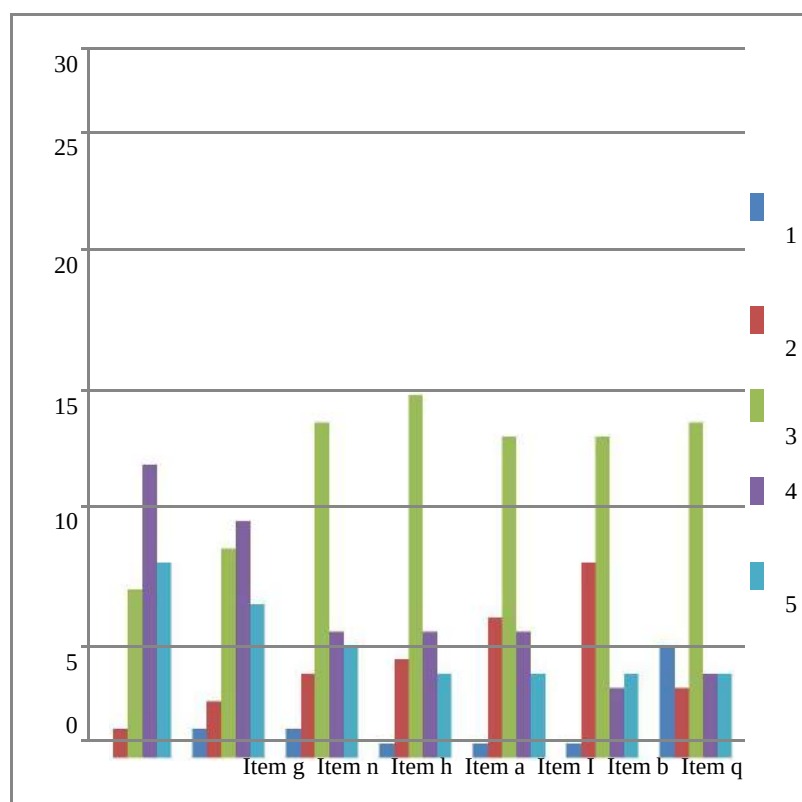
Order	Topic (Item)	n
1.	Concept mapping may be useful to pupils (Item g)	194
2.	Concept mapping is a method that is suitable for pupils of the 1st level of primary school (Item n)	178
3.	I will use concept mapping in my teaching profession (Item h)	162
4.	Concept mapping helped me to organise concepts (Item a)	159
5.	Concept mapping was a meaningful activity (Item i)	156
6.	Concept mapping helped me to understand the curriculum (Item b)	148
7.	I will use concept mapping during my university studies (Item q)	144

The first 3 items (g, n, h) fall within the area of the professional profiling of students – future teachers. The next four items (a, j, b, q) belong in the area of the personal learning strategy. The benefit the respondents see in concept mapping in terms of their future profession is much greater than the benefit they see for their effective personal growth. This statement is also supported by items that achieved the lowest point evaluation. Item l I do not understand the principle of concept mapping at all ($n = 78$) and Item k I use concept mapping often ($n = 92$) show that the students understand the principle of concept mapping, but have not adopted the method as an active part of their learning strategy. What seems positive is that the students agree to the statement that they will use concept mapping in their university studies (Item q, $n = 144$).

The structure of evaluation of the items with the highest score achieved is depicted in Graph 1. The highest degree of agreement to the presented statement is apparent in the case of Item g and Item n. The other items were most often evaluated by the students with the neutral point value 3. In individual personal interviews, the students said that they would welcome a deeper and more intense work with concept maps. A positive attitude and interest of students in concept mapping constitutes a perspective basis for further development of this creative education strategy.



Graph 1: Structure of evaluation of selected items (in accordance with Table 1)



Conclusions and Recommendations

Concept mapping provides a wide range of educating tools for teachers as well as pupils. A significant benefit is the possibility of analysing the specific content of the given topic in its entire width and complexity, and understanding the possible hierarchical levels. We see the inclusion of the mental mapping method in the training of prospective teachers as very beneficial. In addition to improving the students' learning strategy, there is a positive influence on the teaching style of the prospective teachers. Only a teacher who himself/herself has motivation, belief, activity and creativity can teach his/her pupils in the same way. Only the teacher's creative work develops in pupils the ability to think creatively, increases the pupils' motivation and, last but not least, gives them the opportunity to examine their feelings when acquiring skills through self-expression. Creative skills and abilities should be part of the professional "equipment" of every teacher.

The paper was written under the support of the grant IGA_PdF_2017_007. Unconventional motivating environment for the development of logical thinking in pupils.

References

- Pfeifer, L. (1990). *Techniky duševní práce*. České Budějovice: DT ČSVTS.
- Ficová, Žilková, K. (2012). Mentálne mapy ako prostriedok integrácie obsahu primárneho matematického vzdelávania. In: *Komplexnosť a integrita v predprimárnej, primárnej a špeciálnej edukácii*. Prešov: VPU.
- Buzan, T. (2012). *Mind Maps*. Brno, BizBooks.
- Čáp, J., Mareš, J. (2001). *Psychologie pro učitele*. Prague, Portál.
- Fisher, R. (2011). *Učíme děti myslet a učit se*. Prague, Portál.
- Janík T. (2005). *Znalost jako klíčová kategorie učitelského vzdělávání*. Brno, Paido, 2005.
- Uhlířová, M. (2015). Pre-Service Primary Teacher Attitudes towards Mathematics In: *L. Gómez Chova, A. López Martínez, I. Candel Torres (eds) ICERY2015 Proceedings*. Valencia: IATED Academy.
- Uhlířová, M. (2008). Mentální mapování jako nástroj aktivního učení v matematice. In: *Kognice 2006*. Prague: PÚ AV ČR.



International cooperation in mathematical education between the Czech Republic and the Arab Republic of Egypt

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Abstract

This paper presents results of the research on mathematical literacy of pupils of the fifth year of primary schools in the Czech Republic and Egypt. A non-standardised didactic test for pupils of the 5th year of primary schools was created, containing ten mathematical problems with a choice of answers. In choosing tasks, due to the different socio-cultural environments in which pupils grow up in the participating countries, emphasis was placed on the clarity of the context of the tasks. The research results from the two countries are compared. An analysis of the success of individual tasks is done. The test was supplemented by a questionnaire survey to determine the subjective perception of the set of problems solved by pupils. The research survey brought interesting results. Although mathematics is universal in its nature, teaching mathematics, especially in elementary schools, is related to the social and cultural environment of the country.

Keywords: Mathematical literacy, Didactic test, Primary mathematics

Introduction

Mathematical education is one of the pillars of the educational system of all countries. Mathematical knowledge is essential for the success of each individual in the rapidly evolving digital society. In different countries, we meet different concepts of education. We consider international cooperation in the field of education a unique opportunity to find a common perspective on the future in the spirit of globalisation tendencies.

The international TIMSS research tracks the level of mathematical literacy in selected countries of the world. The Czech Republic has repeatedly participated in the TIMSS international survey since 1995. Czech pupils were placed in the second half of the final placements of the participating countries. Pupils did not have a problem with knowledge-based tasks. Their biggest problem was to solve application tasks with contextual understanding of the text. The Arab Republic of Egypt is not a partner country of the TIMSS research. Our Egyptian partner was interested in mathematical literacy. Together, we designed a research survey Mathematical Literacy across Borders (MLB) inspired by the above-mentioned research, with an emphasis on application tasks within the definition of mathematical literacy of pupils. The research was carried out by the Department of Mathematics, Faculty of Education, Palacký University in Olomouc, Czech Republic, and the Department of Pedagogy, Faculty of Education, University of Alexandria, Egypt.

The main idea of the joint MLB project was to create a comprehensive set of mathematical tasks for 5th-year pupils in the Czech Republic and Egypt and to compare the results obtained in the individual countries.

Method

When conceiving the Mathematical Literacy across Borders (MLB) research, the method of didactic testing in combination with a questionnaire survey was chosen. The research tool was a non-standardised didactic test supplemented with a brief questionnaire. For the purposes of the MLB research, a didactic test by J. Češková (Češková, 2012) was modified; this test had been primarily designed to identify the differences in the level of knowledge and skills of 5th-year pupils at primary schools in the Czech Republic. The resulting texts of the didactic test assignment and questionnaire were prepared in three language versions: in Czech (for Czech



pupils), English and Arabic (for Egyptian pupils). The translation from Czech into English served for the subsequent translation into Arabic as well as directly for some Egyptian pupils, who did the test in English.

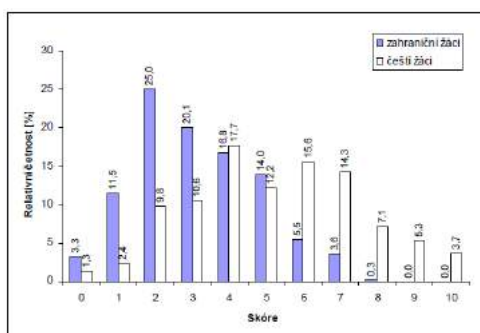
The non-standardised didactic test contains 10 mathematical tasks reflecting the curriculum of the 1st-5th year of primary school in the Czech Republic and Egypt. Nine of the tasks are tasks with the selection of one correct answer from four offered answers (tasks 1-9). One task is an open task (task 10) - the pupil has to write the correct answer himself/herself. In terms of verbal expression, the test includes numerical tasks (tasks 1-5, 9, 10) as well as contextual tasks (tasks 6-7). When choosing the tasks, emphasis was placed on the comprehensibility of the assignment and the applicability of the context given the different socio-cultural environments of the pupils in the Czech Republic and Egypt.

The questionnaire was focused on the identification of the pupils and the establishment of their subjective perception of the set of tasks. The foreign partner decided to reduce the information to be learned from the questionnaire. In line with socio-cultural norms, only the subjective reflections of the pupils were established. Therefore, the overall evaluation does not analyse the results achieved in terms of the respondents' gender or their previous study achievements.

742 pupils of the 5th year of primary school took part in the questionnaire, of which 378 (i.e. 50.9 %) were Czech pupils and 364 (i.e. 49.1 %) were Egyptian pupils. The respondent groups were thus proportionally balanced. In Egypt, 193 pupils (i.e. 26 % of all respondents) did the didactic test in Arabic and 171 pupils (i.e. 23.1 % of all respondents) did it in the English translation. The respondents' gender was not established in the Egyptian part of the research. In the Czech Republic, 181 boys and 197 girls did the test. I. Hrubá (Hrubá, 2015) deals with a detailed analysis of the results of the Czech pupils in her diploma thesis.

Findings

Based on the evaluation of the didactic tests and processing of the obtained data in MS Excel, the basic characteristics were obtained. The success rate with respect to the solution of the set of mathematical tasks by the pupils as a whole is summarised in Graph 1. The minimum number of points is 0, the maximum possible score is 10. The average value of the achieved score in the case of the Czech pupils is 5.21 points, in the case of the foreign pupils 3.19 points. We can say that the Czech pupils achieved better results overall.

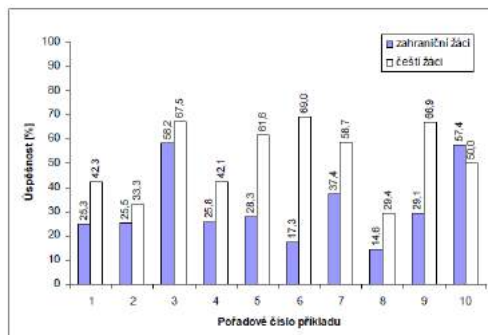


Graph 1. Relative frequencies of the total scores achieved in the test

Let us, however, focus on the success rate of the individual mathematical tasks in the test. The statistical evaluation is shown in Graph 2. The success rate in the individual tasks differs between the Czech and foreign pupils. The foreign respondents achieved a higher success rate only in task 10 (namely by 7.4 %). In all other cases, the Czech pupils were more successful. The most distinctive differences were recorded in task 6 (51.7 %)



and task 9 (37.8 %). The failure of the Egyptian pupils in task 6 might have been caused by not understanding the task context given the different socio-cultural background.



Graph 2. Success rate in the individual mathematical tasks

In the group of Czech pupils, the most successful tasks were tasks 3, 6, 9 (success rate in the interval of $< 67.5; 69.0 >$). In the group of foreign pupils, the most successful tasks were tasks 3, 7, 10 (success rate in the interval of $< 37.4; 58.2 >$). The highest values of differences in the success rate were seen in task 6 ($d = 52.7 \%$) and task 9 ($d = 37.5 \%$). In the case of the Czech pupils, these tasks rank first and second in terms of success. According to the subjective assessment by the pupils, neither group of respondents considered these tasks to be the most interesting, the easiest or particularly difficult (see Graph 4 and Graph 5). For illustration, the assignments of tasks 6 and 9 are shown in Figure 1.

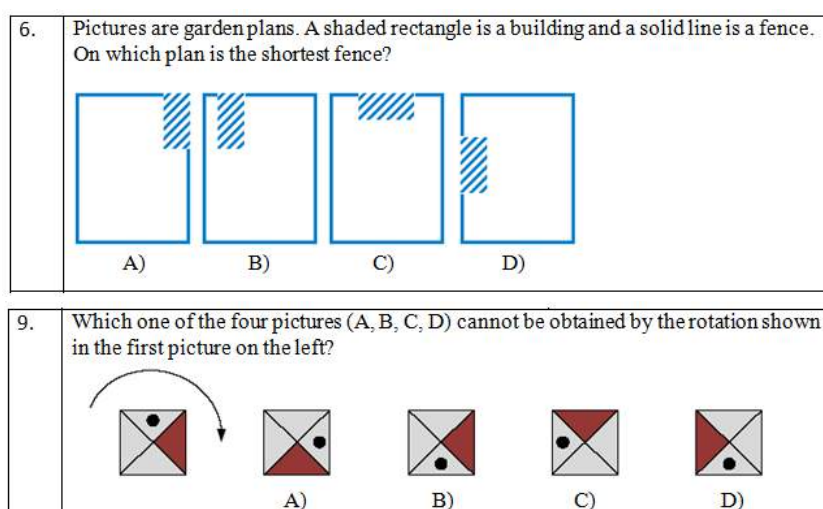
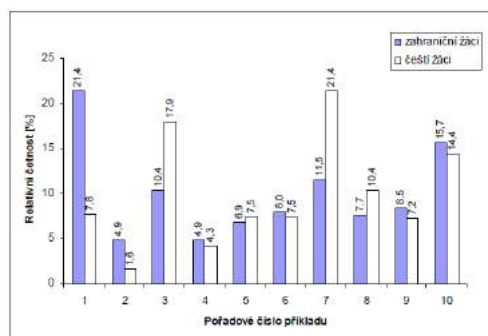


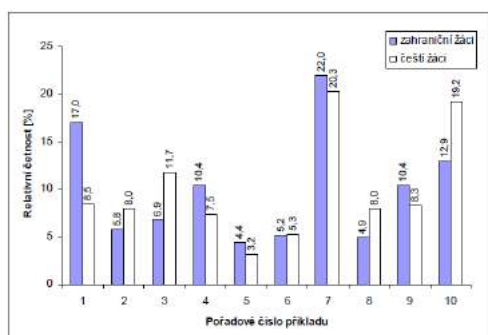
Figure 1. Assignments of task 6 and task 9

In terms of the subjective assessment of the tasks by the pupils, what interested us was which of the tasks was considered the most interesting (Graph 3) and which was considered the most difficult (Graph 4). We also wanted to find out which of the tasks seemed the easiest to the pupils (the evaluation of this aspect is not included in this paper).



Graph 3. Subjective assessment by the respondents - the most interesting task

An exceptional position among the tasks is taken by task 7 (see Figure 2). The Czech as well as Egyptian pupils considered it to be the most difficult task (20.3 %, 22.0 %, Graph 4). However, the Czech pupils also considered it to be the most interesting (21 %), and it was successfully solved by 28.7 % of the Czech respondents. In terms of a successful solution, task 7 ranked 5th. The fact that the unconventional context of the task has a strong motivating potential is reassuring. The Egyptian pupils evaluated task 7 as the 3rd most interesting; in terms of a successful solution, it also ranked 3rd.



Graph 4. Subjective assessment by the respondents - the most difficult task

7.		Which order of assembly of the individual pieces is impossible? A) 2, 7, 5, 6, 4, 1, 3 B) 2, 7, 5, 1, 6, 4, 3 C) 2, 7, 6, 3, 4, 5, 1 D) 2, 7, 6, 5, 3, 1, 4

Figure 2. Assignment of task 7

According to the Egyptian pupils (21.4 %), task 1 was the most interesting. (see Figure 3). In terms of difficulty, they considered it the second most difficult - this assessment corresponds to the success rate ranking. This task ranked only 8th. It was successfully solved by 25.3 % of the Egyptian pupils. In the assessment by the Czech pupils, task 1 was average. In terms of interest, the pupils ranked it 5th. In terms of a successful solution, it only ranked 6th (42.3 % of successful solutions). The reason may be that Czech pupils generally encounter similar tasks in mathematics textbooks, and tasks of this type are therefore nothing new to them.

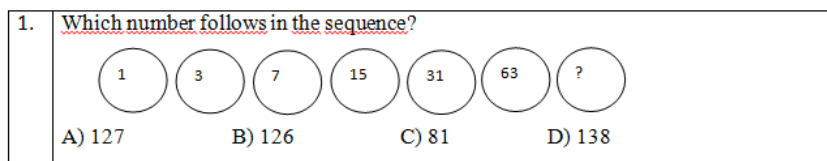


Figure 3. Assignment of task 1

Results, Conclusions and Recommendations

The MLB (Mathematical Literacy across Borders) research brought a number of stimuli and unusual comparisons. Mathematics has its universal dimension, but teaching mathematics is relatively closely associated with the socio-cultural environment of each country. Some conclusions were as expected, other findings surprised us. It was interesting to look at the “same” mathematics “in the eyes” of different cultures. In the future, we would like to continue in the research. In conclusion, we would like to thank especially prof. M. Nouha from the Faculty of Education of the University of Alexandria and his colleagues who actively participated in the MLB research.

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References

- Češková, J. (2012). *Rozvíjení matematické gramotnosti žáků primární školy při řešení nestandardních matematických úloh*. Diploma thesis. Palacký University in Olomouc.
- Hrubá, I. (2015). *Matematická gramotnost na 1. stupni základních škol*. Diploma thesis. Palacký University in Olomouc.
- Noah, A. (2014). Math Education via Foreign Language in Primary Schools: Policies & Conceptual Issues. In: *Matematika 6 - Acta Universitatis Palackianae Olomucensis*. Olomouc: Palacký University Publishing House.



Functional Thinking as a Part Of Mathematical Literacy In Lifelong Learning

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Abstract

The aim of the research was to find out how students of mathematics at the beginning of their Bachelor's degree program can use their knowledge and skills of learning about functions in solving problems with functional content, if the success of students in solving problems with functional content at all faculties of education in the Czech Republic is the same, to propose appropriate steps to increase the level of functional thinking of pupils and students, to determine the rate of success of the individual test tasks, to analyse the set of respondents, students of mathematics of the first year of university studies at the faculties of education at the beginning of the study. Quantitative research has been proposed to achieve these objectives. The research confirms the need to further develop problem-solving skills for students.

Keywords: Mathematical literacy, Functional thinking, Non-standardised didactic test

Introduction

Functional thinking is among the cognitive processes specific to humans. As the name emphasises, these are processes involved in getting to know (i.e. cognising) the reality. It is an activity of the brain during which information is processed. It enables us in particular to analyse and synthesise properties and relations between objects and phenomena, and solve theoretical as well as practical problems.

Every human is born with certain inborn dispositions of intellectual abilities. To a certain extent, it is possible to work on the development of such intellectual abilities. The human brain likes to learn and develop, it is just necessary to make it pursue an activity. The crucial content of each upbringing and education, as the current textbooks of pedagogy say, includes especially the training of thinking. Where there is a lack of the tendency to develop the ability of thinking during upbringing, this lack will be manifested in focusing on easier learning methods.

However, it is impossible to think without knowledge. Schemes of arranged knowledge in our mind constitute a prerequisite for thinking. Upbringing and education at schools will ensure the development of thinking in pupils and will teach them to obtain information independently and assess it, sort it and work with it. The development of functional thinking positively contributes to increasing the level and quality of thinking and intelligence of the individual, and its level affects the attitude to gaining new knowledge. We can find the greatest emphasis on the development of functional thinking in teaching mathematics.

Ever since the ancient times, people have noticed differences between themselves and others as regards their comprehensive faculty, correctness of thinking, originality of ideas, alacrity and riches (Pietrasinski, 1965). Thinking is examined in terms of its main functions. These include forming concepts, recognising and finding relations, deducing conclusions from premises (inference), solving problems and creating something new (Plhánková, 2004).

Functional thinking is one of the constituents of mathematical literacy. Perceiving dependencies in day-to-day life, their monitoring and understanding and the ability to express their nature is associated with the ability to see the relations between quantities. The capability of quantitative expression of dependencies, the ability to transfer a dependency into a chart or table, and the expression of dependencies in reality are connected with mathematical literacy (Blažková, 2007).



If teachers at all levels of education content themselves with teaching facts to their pupils and marginalise the application, comparison, context, solving non-typical tasks and problem situations and schemes, they will limit the development of not only functional thinking, but also abstract, symbolic, combinatorial, logical and other thinking. Especially in the case of students of faculties training future teachers, we should pay considerable attention to the development of functional thinking in these students, which they will in turn develop in their pupils. A teacher with a low level of functional thinking does not meet the prerequisites for a correct development of functional thinking in his/her pupils.

Problem statement and sub-problems

At the Department of Mathematics of the Faculty of Education of Palacký University in Olomouc, we were examining functional thinking of new students, future teachers of mathematics at the 2nd level of elementary school, in 2012. Leona Salvetová, a student of the postgraduate study programme, conducted a research in order to establish the level of functional thinking in students of the 1st year of the Bachelor study programme at all the eight faculties of education in the Czech Republic (Salvetová, 2014).

Due to an insufficient knowledge and mathematical skills when solving tasks with functional contents and problems, shortcomings in the concept-forming process in students, and insufficiently developed mathematical thinking in mandatory lectures and seminars of the course Mathematical Analysis, the following research problems were formulated.

P1: Czech as well as foreign studies point to an insufficient knowledge and mathematical skills when it comes to functions and their application on solving application tasks and problems in pupils. Are these shortcomings manifested in the students of the first year of mathematics at the faculties of education in the Czech Republic as well?

P2: How does the type of the secondary school attended and completed depend on the level of the student's functional thinking?

P3: What other factors may affect the level of functional thinking in future mathematics teachers at the beginning of their studies?

The research itself was preceded by a pilot study and pre-research, the attempt was to establish the situation at the departments of mathematics of the faculties of education in the Czech Republic.

The main aim of the research was to find out how the students of mathematics at the faculties of education in the Czech Republic at the beginning of their university studies in 2012 were able to use the knowledge and skills with respect to functions in solving tasks and assignments with functional contents (Salvetová, Laitochová, 2012).

The research also had the following objectives:

- ☐ Establish how the students of mathematics in the first year at the beginning of their Bachelor studies are able to use their knowledge and skills in solving tasks and assignments with functional contents,
- ☐ Propose suitable measures in order to increase the level of functional thinking of pupils and students,
- ☐ Establish the success rate of solving the individual test assignments,
- ☐ Analyse the group of respondents, students of mathematics of the first year of university studies at the faculties of education at the beginning of the studies, according to pre-set criteria, i.e. factors that relate to the previous mathematical education of the student (such as the school-leaving examination in mathematics etc.).

In order to achieve the set objective, relevant theoretical materials were studied in the preparatory phase of the research, namely the current situation, basic concepts – thinking, mathematical thinking, functional thinking, mathematical abilities and skills, intelligence, visual literacy, ontogenesis of functional thinking, competencies in teaching mathematics, the relation between functional thinking and speech, the development of functional



thinking in relation to the school curriculum, the level of mathematical literacy of Czech pupils in the international PISA research, and the comparison of these results to pupils from other OECD countries.

Method

A quantitative research was designed to achieve the set objectives. The research tool of the research was a non-standardised didactic test and a non-standardised questionnaire, in which the students were answering questions relating to their previous studies at secondary and tertiary schools. A total of 305 respondents participated in the research.

Statistical methods to analyse metric data were used for the verification of the hypotheses. Student's t-test and the method of analysis of variance were used.

The aim of the non-standardised didactic test was to establish the current situation as regards the use of knowledge and skills when solving tasks with functional contents (Laitochová, Salvetová, 2015). Although the test was focused on the knowledge and skills of pupils of elementary and secondary schools, it was set to students of mathematics at the beginning of their studies in the first year of the Bachelor study programme at the faculties of education in the Czech Republic. The didactic test was compiled by the author of the dissertation thesis; the author found inspiration for the assignments in the international researches of TIMMS, PISA and the assignments proposed in the project by Eisenmann and Kopáčeková (2006). The test contained 14 assignments, of which 5 were closed (assignments with a choice of answers) and 9 were open. The assignments in the test were focused on:

1. The examination of basic knowledge and skills (according to Fehérová (2010) - numerical skills, orientation and work with tables, work with diagrams and charts, graphic perception, function as a relation between quantities, the correctness of logical thinking).
2. The curriculum of functions in application mathematical tasks.

The following properties of the didactic test were examined. The reliability of the research tool was established using the Kuder–Richardson Formula; the sensitivity of the test assignments was established using the ULI coefficient, and the difficulty of the test assignments was ascertained by the index of difficulty.

The non-standardised questionnaire was another research tool to establish the factors that might affect the result of the test. The questionnaire contained 6 items, of which 4 items were dichotomic and 1 was an item with a choice of answers (three answers). The questionnaire items were related to the student's personality and his/her previous studies at a secondary school or university.

Findings

The overall success rate of solving mathematical tasks in the didactic test containing 14 assignments set to students of the first year at the beginning of their Bachelor study programme Mathematics with a focus on education reached the average value (arithmetic average) of 7.9 points out of the total of 14. The results with respect to the success rate of solving the individual assignments by all the test respondents are shown in Chart 1.

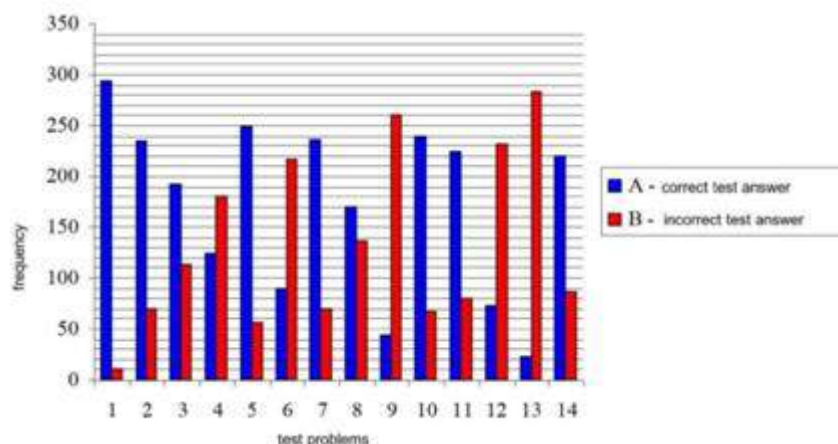
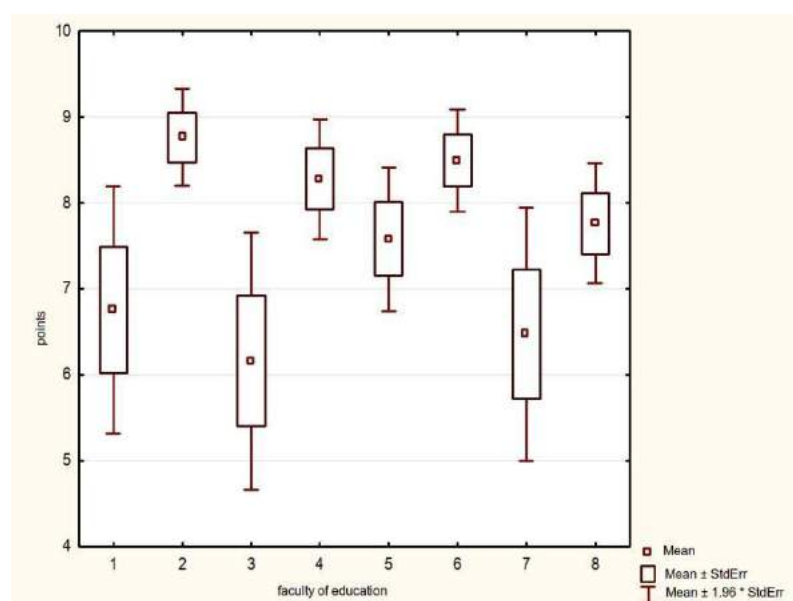


Chart 1: Overall results of the test assignments

This paper includes only a summary of the results of the statistics obtained in the research.

1. We assumed that the level of functional thinking in mathematics students at the faculties of education in the Czech Republic at the beginning of their university studies did not correspond to the level according to the standards of elementary and secondary education. According to the research results, we can say that the level of development of functional thinking of the respondents does not correspond to the expected level according to the standards of elementary and secondary education.
2. We believed that the students' results in the didactic test of mathematics would correspond to the median value at the individual faculties of education in the Czech Republic. However, this assumption was not confirmed; on the contrary, we must say that the success rate of solving tasks with functional contents as part of the didactic test differs in the respondents at the faculties of education. There is at least one group of medians which is not the same. In Chart 2 (box plot), the faculties are marked with numbers 1-8, as it is not our aim to assess the levels of the individual faculties, but rather the functional thinking of the students of these faculties.

Chart 2: Average results of individual faculties in the test





3. The average to slightly below-average results inspired us to think about the factors that might be the cause of the decreasing level of functional thinking in secondary-school graduates. We assumed that the respondent's gender did not influence his/her level of functional thinking. Our belief was not confirmed, and we had to accept the alternative hypothesis that the success rate of solving tasks in the didactic test differed in men and women; the men achieved a higher average number of points than the women. We must conclude that the respondent's gender does influence the success rate of solving mathematical tasks with functional contents. There is a statistically significant difference between the average number of points in the didactic test in the group of men and the average number of points in the didactic test in the group of women. The identified differences cannot be attributed to chance.
4. We assumed that the level of functional thinking depended on the type of the secondary school which the respondent completed. Namely, that graduates from grammar schools would be more successful in the test than graduates from secondary vocational schools. The research conducted proved that there were statistically significant differences between the achieved averages in the didactic test in the group of graduates from grammar schools and in the group of graduates from secondary vocational schools. It follows from the research results that the type of the secondary school which the respondent completed affects the success rate of solving tasks with functional contents. The identified differences in the average numbers of points in the test cannot be attributed to chance. We conclude that the average number of points in the didactic test in the group of graduates from grammar schools really is higher than in the group of graduates from secondary vocational schools.
5. Another factor considered in the research was the school-leaving examination in mathematics. We assumed that the students who passed their school-leaving examination in mathematics would achieve better results in the didactic test in mathematics than students who did not sit their school-leaving examination in mathematics. According to the results of the research conducted, our assumption proved correct; we adopted an alternative hypothesis. There are statistically significant differences between the achieved averages in the didactic test in the group of graduates from grammar schools and in the group of graduates from secondary vocational schools. The identified differences in the average numbers of points in the test cannot be attributed to chance. We conclude that the average number of points in the didactic test in the group of graduates from grammar schools really is higher than in the group of graduates from secondary vocational schools. The passing of the school-leaving examination in mathematics influences the success rate of solving mathematical tasks in the didactic test.
6. We also assumed that the success rate in the didactic test had a statistically significant relation to the length of the period that had lapsed from the school-leaving examination. There are no statistically significant differences between the results of the groups of students in the didactic test of mathematics. The year of graduation from secondary school does not affect the success rate of solving mathematical tasks in the didactic test.
7. We expected that the result of the respondent's test would be influenced by whether that respondent had completed another university before starting at the faculty of education. This was not confirmed. The identified differences in the average numbers of points in the test in both the examined groups can be attributed to chance. The results in both groups of students come from the same basic set. The fact whether the respondent had completed another university before starting at the faculty of education does not affect the success rate of solving mathematical tasks in the didactic test.
8. The last factor taken into consideration in our research was the level of the state school-leaving examination in mathematics in the years 2011-2012. We assumed that the level of the state school-



leaving examination influenced the test result of the respondent. There are statistically significant differences between the average number of points achieved in the didactic test in the group of those who sat a higher level of the school-leaving examination in mathematics and the average number of points achieved in the didactic test in the group of those who sat a lower level of the state school-leaving examination. The identified differences cannot be attributed to chance. The average number of points achieved in the test in the group of those who passed a higher level of the state school-leaving examination really is higher than in the group of those who sat a lower level of the state school-leaving examination. The level of the state school-leaving examination sat at secondary school influences the success rate of solving mathematical tasks in the didactic test.

Results, Conclusions and Recommendations

Benefit for teaching practice

We see a benefit for this area especially in the processing of the topic of functional thinking at university level. To this date, there are no researches or studies dealing exclusively with the level of functional thinking in university students; research respondents are frequently pupils of elementary and secondary schools.

This paper constitutes evidence of the need to change the existing approach to teaching mathematics, i.e. shift from the transmissive style of teaching to a constructivist style.

The paper also confirmed the necessity of developing the ability to solve problems and communicative competencies in students. Everyone finds themselves in problem situations on a daily basis, and communicative competencies enable one to understand different types of texts and depictions, respond to them and use them in a creative way.

The results of the research also indicate that functional thinking may have a major connection to visual literacy that is manifested by the ability to understand and use images and think and learn in terms of images (Hortin, 1980).

Recommendations for further practice in teaching mathematics

On the basis of the data obtained, we concluded that the decreasing level of functional thinking may be connected to insufficient knowledge and skills as regards functions. The students often solved the set tasks without thinking, and their solutions were frequently based on the similarity of a known function, the graph of which they remembered. The choice of solution was based on the formal knowledge gained at elementary and secondary school.

Another recommendation following the analysis of the students' assignments is to focus more on solving problematic tasks and tasks with functional contents that aid the development of functional thinking. These types of tasks are formed by a combination of school mathematics and situations of everyday life.

We recommend a correct posing of questions by the teacher according to Bloom's taxonomy of a hierarchically arranged system of education goals in relation to the level of thought processes. Gradually shift from simpler questions requiring only one's memory to more difficult questions that require assessment, evaluation and analysis for the formulation of the correct answer.

Also, when forming mathematical concepts, place emphasis on obtaining a sufficient number of separated models and gradually and smoothly lead students to the generic and abstract models.



It is necessary to continuously check whether students actually understand the topics taught and give them room for comments; the teacher will thus make sure that the student has understood the essence of the topic.

Recommendations for further development of the didactics of mathematics

Our research concerning the analysis of functional thinking in students of mathematics at the beginning of their university studies may serve to enrich the university pedagogy, which might use this source to specify the initial requirements for university students - future mathematics teachers at the 2nd level of elementary school.

It may also be assumed that teachers who teach first-year students at university will have to deal with a low level of functional thinking, and it is necessary to introduce a course in the first year in which the students would revise the elementary- and secondary-school curriculum as regards functions; the students should in particular solve problematic tasks that eliminate formalism and encourage thinking.

The aim of our attempt was to establish the diagnostic values of the test assignments that may serve as an inspiration for the creation of a test of study prerequisites. We used a non-standardised didactic test as a tool to measure the students' knowledge at the beginning of their studies.

As our research did not include students of the combined form of studies, it may be assumed that the factors that did not affect the results of the full-time students or affected them only partially, for example the period that lapsed from the school-leaving examination, previous university studies etc., would intervene in the results of students of the combined form of studies more. Nevertheless, this assumption would have to be verified in a new research.

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References

- Blažková, R. (2007) Matematická gramotnost absolventů základní školy. In *Absolvent základní školy*. Brno: Pedagogická fakulta MU, 140-146.
- Eisenmann, P., Kopáčková, A. (2006) Rozvoj funkčního myšlení ve výuce matematiky na základní škole. Praha: JČMF.
- Fehérová, Š. (2010) Didaktická příručka z matematiky pro střední školu. Ostrava: Ostravská univerzita. Hortin, J. A. (1980) Visual Literacy and Visual Thinking. *Proceeding of the 12th Annual Conference on Visual Literacy*. Maryland: University of Maryland.
- Laitochová, J. - Salvětová, L. (2015) Functional thinking of pre-service mathematics teachers. ICERI2015 Proceedings, 5781-5788.
- Pietrasinski, Z., (1965) Psychologie správného myšlení. Praha: Orbis.
- Plháková, A. (2004) Učebnice obecné psychologie. Praha: Academia.
- Salvětová Leona (2014) Úroveň funkčního myšlení studentů matematiky na počátku jejich studia na pedagogických fakultách v ČR. Dissertation thesis. Olomouc: Univerzita Palackého.
- Salvětová, L., Laitochová, J. (2012) A contribution to functional thinking. In *MATHEMATICA IV, Scientific Issues*, Ružomberok: VERBUM - Catholic University in Ružomberok, s. 145-152.



Visual stimulation as one of the conditions for successful development of a child with visual impairment

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Abstract

The birth of a child with visual impairment, a sudden interference by a child's health condition that affects his visual function or the progression are circumstances that affect both the child himself and his family. The child is suddenly needed to approach differently. One of the important tasks for both parents and early care workers is the need to consider whether and how the vision and visual functions of the child can develop and then do so. The technique we are talking about is called visual stimulation, and we want to present it not only theoretically but also practically - from the perspective of the parents of children with visual impairment. The paper will present the results of an investigation carried out between parents of children / young people with severe visual and combined disability related to early care and related services - visual stimulation.

Keywords: Child with visual impairment, visual stimulation, early intervention, family

Introduction

Healthy development of children depends on many circumstances, which include health, family, medical care, surroundings of the family, etc. In a child with visual impairment this healthy development is determined by other variables including the fact that it is desirable to develop the child's residual vision as much as possible, teach the child to use it, and explain the child's parents what the child can do, and what the child should achieve under their guidance. One of the techniques used to develop visual functions in children with severe visual impairment is visual stimulation.

Matoušková (in Baslerová et al., 2012, p. 80) claims that 'visual stimulation represents a set of all visual stimulation techniques, methods and procedures making use of compensatory devices, which, if applied in an intensive way, might lead to an improvement in visual perception through the impaired visual function of the eye. The objective of visual stimulation is to support and develop residual visual functions, to train visual looking and the ability to use residual vision in everyday life as much as possible, and to train processing, storing and recalling of visual perceptions; to develop visual skills (attention, localization, fixation, transfer of attention, motion tracking, eye-hand coordination, spatial orientation, surface orientation), to develop the ability to identify light, direction of light, shadow, colours and shapes.' Visual stimulation can be both passive and active; the passive form primarily includes adjustments to the environment, the active form includes stimulation of vision and visual functions in a child with remaining light perception.

Method

Visual stimulation is a set of techniques that help develop residual vision in young aged children. This technique is offered by early intervention centres. For the purposes of the present research, which was performed as part of a monograph entitled Visual training (Růžicková, Kroupová, Kramosilová, 2016), the authors addressed parents of children with severe visual impairment, who had undergone visual stimulation, and asked them about early intervention services. The recruitment procedure was performed through visual therapists, early intervention centres, special education centres, students of special education, and a conversation group for parents of children with visual impairment on social networks.

Regarding the potential emotional aspect of the issue, the primary data collection method was a questionnaire mostly consisting of open items that provided space for free responses. To increase the validity of the survey the authors used the triangulation of methods approach – the questions were followed by an individual structured interview.



Regarding the fact that parents are often flooded with questions and interviews, the survey was deliberately narrowed down to a survey questionnaire in order to achieve a high return rate. The authors believe that the relatively low number of questions and recruiting through persons who are trustworthy to the parents resulted in a relevant sample of respondents, who were willing to provide a sufficient body of information about visual stimulation and its effect on their children with severe visual impairment.

The questionnaire survey included a total of 17 families with children with visual or multiple impairment. The research sample is considered appropriate to provide relevant results. The age of the parents included in the sample was 30 to 73 years, their level of education varied from secondary school with certificate of apprenticeship to university degree.

In addition to the parent's age, another significant aspect was the current age of the child, who at the time of the survey had undergone or was undergoing visual stimulation. The age range of the children was from one year to fifteen years of age. This information suggests that the questionnaire was completed by both groups of parents; those whose children had completed visual stimulation and those whose children were still undergoing visual stimulation.

The children were diagnosed with the following visual defects (according to the parents – mostly mothers):

- Nystagmus;
- Optic disc hypoplasia;
- Type 3 ROP – practical blindness;
- Retinal pigment epithelium dystrophy (Bardet–Biedel syndrome);
- Developmental defects of the brain, grade 4 mental retardation, physical disability – crawling and moving on a wheelchair, visual impairment in both eyes;
- Spastic quadriplegia cerebral palsy, epilepsy and vision;
- Severe cerebellar atrophy, microcephaly, epilepsy, partial optic nerve atrophy, hypermetropia, CVI;
- Optic nerve coloboma, nystagmus, strabismus, amblyopia, one eye smaller, dioptric defect;
- Optic nerve atrophy, and corneal astigmatism;
- Suspected Leber congenital amaurosis;
- West syndrome, spastic diparesis, TMR, CVI;
- Albinism, nystagmus;
- Blindness with light perception.

Some of the visual defects were repeated in the questionnaires, but here they are listed only once. This list suggests that visual stimulation is known to the parents of children who only work with sources of light as well as those who should learn to read on a symbolic level. The following set of questions focused solely on the experience of parents (mostly mothers) from all over the Czech Republic; both from cities with over 100,000 inhabitants and rural areas.

Regarding the fact that the questions were asked by means of questionnaires and interviews, the authors decided to leave the questions open and leave space for the respondents' comments on the issue in order to receive a wide range of responses, which might sometimes be contradictory. The results of the questionnaire survey are presented by means of clustering of statements that have the highest response relevance.



Table 1. Categorization of questions for the parents of children with visual impairment

Category	Statement
Experience with visual stimulation	We have positive experience with visual stimulation.
Place of first experience with visual stimulation	We learned about visual stimulation through an early intervention counsellor, who showed us everything, after that we did it ourselves at home.
Parents' associations concerning visual stimulation	Certainly do it, although it's a small move, it's worth it.
Frequency and location of visual stimulation	As needed – we were shown how to do it, then we did it at home.
Challenges of visual stimulation for the parents	Learn to work with signals that my child sends to me.
Challenges of visual stimulation for the children	Concentrated work.
Progress as a result of visual stimulation	The progress is visible and important for us as motivation for further work.

Findings

This subchapter analyses the results obtained by means of the interviews and questionnaires. The table in the previous section of this chapter shows the categories and most frequent responses.

In this section the statements are described in context:

Experience with visual stimulation

- Most of the parents (mothers) suggest that visual stimulation is a good therapy and that they have rich experience with this approach, although their children are not always willing to cooperate and sometimes they have to commute to a distant location.
- In this category, the respondents commented on various aids required for visual stimulation, time demands, and the period that their child has been subject to visual stimulation. One of the statements that contains all answers is as follows: Our child has been subject to visual stimulation for quite a long time – since we discovered the visual defect. At that time, early intervention counsellors came and explained what to do. Now after practising visual stimulation for some time, we can develop our own aids and toys that motivate our child for visual work.
- In this category, an interesting finding was that once the child starts attending a preschool facility or even school, the parents rely on the institution and no longer perform visual stimulation at home.
- Already in this introductory section, all of the parents suggested a very significant role of a third person – in case of young children this person is the early intervention counsellor, who explains the beginnings, shows the procedures of visual stimulation and checks what the parents are doing; in case of older children these are kindergarten or elementary school teachers who perform visual stimulation with the child and present an authority, with whom the child cooperates better than with the parents.

Place of first experience with visual stimulation

- The category of the first experience with the concept and practices of visual stimulation included only two types of responses – early intervention centres and their employees. It should be noted the parents mentioned both types of visual stimulation – consultations in early intervention centres and visits of their staff at home.
- In two cases, the responses were somewhat surprising. These parents heard the term visual stimulation for the first time from a doctor in a healthcare institution where they stayed with their child.

Parents' associations concerning visual stimulation

- The next question focused on what visual stimulation means to the parents, what are their associations and what they would like to share with other parents or other people. Most of the parents gave the following answer: 'Do not hesitate because it makes sense to develop this area and give it the required time, the same applies to physical exercise.' 'Go for it whether your child has healthy eyes or not.' 'It's



a long journey which is definitely worth trying.’ These three statements clearly show that the parents are aware of the time demands, but still they consider visual stimulation helpful and worth trying.

- Some of the parents also mentioned negatives of visual stimulation – ‘More visual stimulation aids should be available.’ ‘Visual stimulation requires adjustments to the surrounding environment, one should know that less is sometimes more.’
- Last but not least, visual stimulation was aptly summarized by one of the mothers: ‘It is a wide range of exercises and a variety of visual skills that help improve visual skills of a visually impaired individual.’
- The points listed above suggest that visual stimulation raises various associations – some of the respondents highlight the time demands, practical aspects, or effectiveness, while others emphasise the need for appropriate aids, adjustments, and trying not to overstimulate the child. All these aspects are part of visual stimulation, which is a time-consuming and long-term process with uncertain results, a process that requires adjustments to the environment, toys and aids.

Frequency and location of visual stimulation

- In this question, two possible types of responses were anticipated and eventually confirmed by the respondents – one group of parents focused on the time spent at home performing visual stimulation themselves, the other group defined the time spent in an early intervention centre or the time that an early intervention counsellor spent at home with them.
- The following responses were given in the case of stimulation methods shown by early intervention counsellors: once a week, three times a year, once every two months, or once a month or two months.
- In the case of performing visual stimulation at home the parents suggested that if their child was healthy, visual stimulation was performed daily or as advised by the early intervention counsellor.
- Visual stimulation is or was performed by the parents as frequently as specified provided that there was no subjective or objective barrier. A large proportion of the respondents consider the duration of visual stimulation (not elements of visual stimulation) the time that the early intervention counsellor spent with them showing the stimulation techniques or the time that they spent in the early intervention centre.

Challenges of visual stimulation for the parents

- Although visual stimulation consists of techniques and methods that help children develop their visual functions as much as possible, it brings not only advantages but also some negatives. The following text describes some of the difficulties that the parents and their children have to face.
- According to the parents, the most difficult aspect for them is the work with their child – to be able to identify whether the procedure is performed correctly and whether the child cooperates. (‘The hardest thing for us as parents is to recognize whether our son is looking, whether he is cooperating. He doesn’t fix his eyes, it’s just a short blink and his eyes turn away.’ ‘Making our daughter cooperate.’ ‘Getting the right distance from our son’s eyes.’)
- Another area identified as difficult is the time spent commuting if visual stimulation is performed by other professionals than the parents themselves (‘Commuting.’ ‘It’s difficult to commute to Liberec, and an hour later back to Jablonec to kindergarten, but if that’s what he needs, we don’t mind.’)
- The last group of responses is represented by a statement of one of the mothers – ‘Understanding the correlations between visual functions.’ This statement demonstrates that visual stimulation is difficult for the parents because they do not understand why they should do an activity and why it is important. But when they look back, they understand, and consider visual stimulation a technique that they would definitely use again.
- The last statement that forms a separate category is as follows: ‘This therapy made me happy, because the therapist always gave me clear and concise recommendations, advice, aids, and when I understood what to do and my son reacted, it was great.’ This mother’s response demonstrates all problems,



strengths, advantages and benefits of visual stimulation, and is so well-formulated that it deserves to round off the category of difficulties of visual stimulation for the parents.

Challenges of visual stimulation for the children

- The parents of visually impaired children are not the only ones that have to cope with the challenges of visual stimulation. The following text explains whether there are any difficulties for the child. The statements made by the mothers were used to form several areas, as suggested below.
- It is not surprising that the most frequent statement made by professionals who work with visually impaired children is that they do not know. This is documented by the following statements – ‘It’s hard to say.’ ‘I don’t know.’ ‘I can’t specify.’ These responses occurred several times.
- Another area includes techniques, aids and well-being of the child and the parents, which is demonstrated by the following statements: ‘Appropriate positions – he hates sitting in the lap, he enjoys moving on his belly, so it is difficult to find a suitable working position.’ ‘Eye patch.’ ‘Constantly searching for something motivating.’ ‘Mutual cooperation.’
- The last of the major areas was again related to commuting and time consuming nature of the technique, should the child undergo visual stimulation in a different location.
- The very last area is demonstrated by the following statement – ‘Fixation, that’s what we’re still practising.’ This area shows that every child is different, children’s visual skills and possibilities vary, not every child is able to advance to the tenth stage of visual stimulation. This implies that visual stimulation is strongly individual; some children advance quickly, the pace of others might be slower, they may even fail to reach some levels.

Progress as a result of visual stimulation

- The last part of the questions of the interview or questionnaire again focused on the subjective perceptions of mothers / fathers, but also measurable and objectively observable phenomena – whether the parents believe that visual stimulation has helped their child and that the child has made some progress.
- This category is demonstrated by a single statement – yes. This statement is aptly illustrated by the following responses: ‘Both vision and visual perception improved.’ ‘He still can’t look at me straight, but he can see and distinguish colours in the distance, differences, details, concentration, using a tablet – controlling.’ ‘After a year he began to notice toys and better reacts to us parents.’ ‘In two years we managed to equalize visual acuity of the weaker eye, improve looking into the distance, and calm nystagmus at a short distance. Incredible progress that no one will believe.’ ‘After two and a half years he can fix a light object for a certain period.’ ‘After about four months of visual stimulation, he can easily identify the right side, left side, up, down, back, front, he learns shapes...’ ‘At the beginning our daughter did not see virtually anything, she couldn’t fix an object, she couldn’t take anything by her hand, she had no eye contact, gradually through large pictures she has made considerable progress, she can now identify pictures 5x5 centimetres in size, she practises gripping small objects, she loves working on iPad, her eye contact improves.’ ‘After about a year he managed to ‘place the lion inside the cage’ - those who ever tried this know what I mean, this requires cooperation of both eyes and this improved a lot.’

Conclusions and Recommendations

Visual stimulation is a set of techniques and practices that can help children in their further development. The research clearly suggests that all parents of children with severe visual impairment are familiar with visual stimulation and that they consider it beneficial for their child. After being trained by a professional they perform visual stimulation themselves at least once a day. In the context of visual stimulation, most parents think of pictures, techniques, light and many other areas.



Visual stimulation forms the basis for the development of visual functions in young aged and preschool children. Visual stimulation is a set of practices, methods and techniques that help children with preserved light perception develop their visual functions as much as possible so that these preserved functions help the child in everyday life, movement in space and visual work. The present study confirmed that although visual stimulation presents some challenges and difficulties to the child and the parents, these are outweighed by the progress made by the child in practical life.

References

- BASLEROVÁ, P. et al. (2012). *Metodika práce se žákem se zrakovým postižením*. Olomouc: UP.
- STEJSKALOVÁ, K. (2011). Kvalita života dětí s retinopatií nedonošených – teoretická východiska a praktické aplikace. In Sborník textů z XII. Mezinárodní konference k problematice osob se specifickými potřebami a VII. Mezinárodní dramaterapeutická konference pořádaná na téma „Teorie praxe – praxe teorii“. Olomouc: UP.
- KROUPOVÁ, K. et al. (2016). *Slovník speciálněpedagogické terminologie: vybrané pojmy*. Praha: Grada.
- LOPÚCHOVÁ, J. (2010). *Reedukácia a komplexná rehabilitácia zraku u jednotlivcov so zrakovým postihnutím*. Bratislava: Iris.
- LOPÚCHOVÁ, J. (2010). Stručný prehľad terminológie z pedagogiky zrakovo postihnutých. Bratislava: Iris.
- RŮŽIČKOVÁ, V., KROUPOVÁ, K., KRAMOSILOVÁ, Z. (2016). *Zrakový trénink a jeho podmínky*. 1st ed. Olomouc: UP.

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Lifelong education of mathematics teachers in information and communication technologies

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Abstract

In the paper we consider trends in mathematics teacher education, in the area of information and education technology. On the basis of our own and independently written questionnaire surveys, together with research reports prepared by the Czech School Inspectorate, we will try to identify areas considered key in the context of mathematics teacher educational needs. A major drawback in current teaching with technology is its transmissive usage, where teachers use technology to provide direct knowledge, instead of helping learners to create new knowledge themselves. While Czech teachers undergo high level training in mathematics and methods, information technology education is a rapidly changing subject requiring teacher education to be in constant development. One of the means that teachers of mathematics can use in teaching is digital learning objects, i.e., any digital entity usable for education, including text documents, animations, simulations, presentations and collaborative efforts with an interactive whiteboard.

Keywords: lifelong education, mathematics teachers, teaching practise, digital learning objects, information technology

Introduction

To form a more exact idea of the procedure, effectiveness, results and system of further / lifelong education of teachers in information and communication technologies (ICT), let us summarise selected results of several researches that dealt with this issue. A report of the Czech School Inspectorate describes the results of the TALIS2013 research (Kašparová, V., Boudová, S., Ševců, M. & Soukup, P., 2014), in which 34 countries of the OECD and partner countries participated, and which involved all Czech teachers at the ISCED2 level, i.e. the 2nd level of primary school and the lower years of six-year and eight-year grammar schools.

Teachers in the Czech Republic mostly (65 %) participate in professional training focused on facts and knowledge in subjects that they teach; skills in the field of information and communication technologies (hereinafter referred to as ICT) necessary for teaching (53 %).

Teachers in the Czech Republic are mostly aided in professional training by having the training financially covered in full (this fact was declared by 77 % of teachers); two-thirds of teachers also stated that they were given time off work. What teachers see as crucial is especially the need of specialist training in ICT skills, necessary for teaching (15 %); however, this result was below the TALIS average, which was about 19 % (see p. 29).

As regards education in ICT as such, the evaluation of the effect of professional training on the teaching of teachers in the Czech Republic and on the international average (the percentage of teachers who stated that the relevant training had a positive or medium-positive influence) reached about 83 % in the case of ICT skills (which was a higher score than the TALIS average, which was around 80 %). But there is only 40 % (in international average) of teachers participated in TALIS, who stated that their students use ICT in teaching. So there is a large group of teachers, who are not inclined to use ICT and ready to use them in teaching (MŠMT, 2015).



A relatively interesting finding that applies not only in the Czech Republic is that those teachers who have already participated in professional training in the form of courses feel a greater need for further learning compared to teachers who have never taken part in this form of professional training. In terms of the inclusion of work with ICT in lessons, Czech teachers do not differ from the international average.

For informative purposes, let us supplement the results of a research focused, among other things, on subjectively felt causes of the failure of the respondents to participate in further ICT education,

In order to be able to formulate, on the basis of the findings, our own subsequent conclusions and recommendations to introduce innovative elements in the system of further training and lifelong education of mathematics teachers provided at our faculty, our research was oriented at the area of using digital tools in teaching mathematics, namely at the creation and modification of teaching materials and digital learning objects (DLOs). Therefore, we focused on establishing the teachers' opinions on this matter and the issues associated with the use of DLOs in teaching their pupils.

A sample of quantitative research consisted of elementary-school mathematics teachers in the Olomouc Region (Bártek, K., Nocar, D. & Laitochová, J., 2017).

- The research was carried out between November and December 2016.
- The questionnaire consisted of 10 questions, 6 closed, 3 semi-closed, where respondents could choose "Another" answer and 1 open answer.
- At the end of the questionnaire, questions related to respondent data were given, namely gender, length of practice and the class in which the interviewee teaches mathematics.
- The questionnaire was created using Google forms, which created a link to fill in the questionnaire.
- We received 104 answers from the teachers (female = 83; male = 21).

Problem 1

The key question for all innovative changes in education offers focused on the creation of DLOs for mathematics was to what extent DLOs were actually used in practice, and whether there were differences between men and women in using them in teaching. The questionnaire item was formulated as follows and we also indicate the frequencies of the individual attributes, see the table 1.

How often do you include DLOs – digital teaching objects in teaching mathematics? (presentations in PowerPoint, Excel files, animations, simulations, didactic games etc.)

We set the following research hypotheses:

H10: There are no differences in the degree of usage of DLOs in teaching between the groups of men – mathematics teachers and women – mathematics teachers.

H1A: There are statistically significant differences in the degree of usage of DLOs in teaching between the groups of men – mathematics teachers and women – mathematics teachers.



Table 1. Utilization of DLOs in teaching mathematics.

	Absolute frequency	Relative proportion to the whole	Men Absolute frequency	Men Relative proportion in the group of men	Women Absolute frequency	Women Relative proportion in the group of women
A. I do not use	13	12.5 %	2	9.5 %	9	10.8 %
B. Rarely – not more than 25 %	44	42.3 %	14	66.7 %	30	36.1 %
C. Sometimes – 25 % - 50 %	28	26.9 %	3	14.3 %	25	30.1 %
D. Often – 50 % - 75 %	0	0 %	0	0 %	0	0%
E. Very often – 70 % - 95 %	16	15.3 %	2	9.5 %	14	16.8 %
F. All the time – more than 95 %	3	2.8 %	0	0 %	3	3.6 %

We verified the hypothesis using the Mann Whitney U test in the STATISTICA12 program (see table 2); the p-value was higher than the set value of $p=0.05$, that was why we did not reject the zero hypothesis. There are no statistically significant differences in the degree of usage of DLOs in teaching mathematics between the monitored groups.

Table 2. Mann-Whitney U test.

Variable	Sum of sequence	Sum of sequence	U	Z	p-value	Z modified	p-value	N group 1; Women	N group 2; Men	2*1 side exact p
Usage of DLOs Min=0 Max=5	457.5	912.5	681.5	1.534463	0.12492	1.61817	0.105628	83	21	0.12454

Problem 2

Another element significant to us was to establish whether there were significant differences in the usage of DLOs in teaching between groups of teachers with varying lengths of teaching practice. We divided the examined set of teachers into 4 subgroups, see table 3.

Table 3. Groups of teachers – lengths of practice.

	Absolute frequency	Relative frequency
Less than 3 years	6	5.8 %
3-10 years	14	13.4 %
11-19 years	29	27.9 %
More than 20 years	55	52.9 %

We set the following hypotheses:

H₂₀: There are no differences in the degree of usage of DLOs in teaching between the groups of mathematics teachers in connection with the length of their teaching practice.

H_{2A}: There are statistically significant differences in the degree of usage of DLOs in teachings between the groups of men – mathematics teachers and women – mathematics teachers.



Again, we verified the hypothesis using the STATISTICA12 program; we used Kruskal-Wallis ANOVA, see table 4. The p-value was, once more, higher than the set value of $p=0.05$, that was why we did not reject the zero hypothesis H2. There are no statistically significant differences in the degree of usage of DLOs in teaching mathematics between the monitored groups.

Table 4. Kruskal Wallis ANOVA; Independent (grouping) variable: length of teaching practice;
Kruskal-Wallis Test: $H(3; N=104)=3.209896$; $p=0.3604$

Dependent: Usage of DLOs	code	Number of valid	Sum of sequence	Average sequence
Less than 3 years	1	6	271.0	45.16667
3-10 years	2	14	599.5	42.82143
11-19 years	3	29	1,692.0	58.34483
More than 20 years	4	55	2,897.5	52.68182

Problem 3

We were interested in the reasons why the respondents did not use DLOs in teaching. Of those who do not use DLOs (13), 8 respondents state the reason “A. I do not see DLOs as useful teaching tools.” Only two of the respondents gave the reason “B. I have no time, creating DLOs is time-consuming”. Three of the respondents stated the reason “E. I do not have the necessary software tools at my disposal”.

We also wanted to find out what the proportions of respondents who did not create or modify any DLOs were in the relevant group (respondents who do not use DLOs in teaching). The proportion of those who do not create or modify any DLOs is thus understandably the highest in the relevant group, see the table 5.

Table 5. Creating DLOs – respondents who do not use DLOs in teaching

	Total number	Percentage share in the group (n=13; respondents not using DLOs in teaching)
A. I do not create any	9	69.2 %
B. I create – MS Word documents etc.	3	23.1 %
C. I create – MS PowerPoint documents etc.	1	7.7 %
D. I create MS PowerPoint documents using animations...	0	0 %
E. I create – interactive objects...	0	0 %

The same number and the identical respondents who do not create DLOs do not modify them. The remaining 4 respondents modify DLOs at the level of textual documents (MS Word etc.). Other levels of this attribute recorded a zero frequency.

On the other side of the spectrum, there are mathematics teachers who use DLOs in their lessons “Very often” or “All the time”. There were 19 of these respondents in total (16 “Very often” and 3 “All the time”).

What is possibly a little surprising is that the group has a larger percentage of women; in absolute terms, they were 17, which was 89.4 % of the group (they use DLOs in their lessons “Very often” or “All the time”). Women in this group thus formed 20.4 % of the total number of the women and 16 % of the number of all the respondents, compared to the men, who were only 2 and formed the remaining 10.6 % of the group, in comparison to the women mere 9.5 % of the total number of men and 1.9 % of the total number of respondents, see table 6.



Table 6. Teachers who use DLOs in their lessons “*Very often*” or “*All the time*”.

sex	absolute	Relative share n = 104	Share in the group according to gender	Share in the group Use DLOs in lessons “ <i>Very often</i> ” or “ <i>All the time</i> ” (n = 19)
women	17	16 %	20.4 %	89.4 %
men	2	1.9 %	9.5 %	10.6 %

There seem to be interesting results in the degree of usage of DLOs in teaching in connection with the length of teaching practice of the respondents. This subgroup consists of 1 respondent with practice shorter than 3 years (17 % of teachers with teaching practice shorter than 3 years), 2 with practice between 3 and 10 years (in this case, the percentage is even lower, not even 15 %). There were 6 teachers with teaching practice between 11 and 19 years in this group, which was almost 21 % of teachers with this length of practice; teachers with practice longer than 20 years were 10, i.e. 18 % of teachers with a practice longer than 20 years. When we compare the groups of teachers with the shortest and the longest practices, we can see that the respondents constitute a similar part in relation to their group. Whereas in the case of older teachers (meaning teaching with a long teaching practice) this relatively low percentage may be attributed to, among other things, the perception of one’s own PC skills as insufficient (although this is explicitly stated only by 2 respondents, i.e. 7 % of the teachers, who do not use DLOs or use them only rarely), other teachers in this category primarily state lack of time (13 respondents, i.e. 46 %), and there is also a strong representation of the opinion that DLOs are not useful tools (12 respondents, i.e. 42 %). In the case of teachers with a short practice, this relatively low proportion may be caused rather by insufficient temporal or material means; however, none of the respondents in this group consider DLOs inefficient teaching tools.

Nevertheless, even among respondents who create DLOs themselves, we can find those who declare that this activity is somewhat limited, see table 7. It is no surprise that identically in both groups of respondents (those who do not use DLOs at all and those who use them very often or all the time), the most frequent reason why DLOs are not created by teachers or why they are created but the teachers have a problem is lack of time (77 % and 26.3 %).

Table 7. Question:

“If you do not create DLOs for your lessons, or you create or modify them only rarely, where do you see the main problem?” (multiple answers possible)

Teachers who use DLOs in their lessons “ <i>Very often</i> ” or “ <i>All the time</i> ”.	Absolute	Percentage share in the group N=19
A. I do not see DLOs as useful teaching tools.	0	0 %
B. I have no time, creating DLOs is time-consuming.	5	26.3 %
C. I do not enjoy the creation of DLOs.	2	10.5 %
D. I do not have the necessary skills.	2	10.5 %
E. I do not have the necessary software tools at my disposal.	1	5.3 %

A positive finding is that of this group of 19 respondents, there is a rather high proportion (11, which is 58 %) of the respondents who are able to create higher-level DLOs (Bártek, K., Nocar, D., 2016) – interactive presentations, animations, simulations etc., see table 8. Interestingly, although such a proportion could have been expected, considering the previous findings, there is a high proportion of women among the teachers who are able to create, create and modify DLOs with the greatest degree of interactivity (this six-member group included 5 women).



Table 8. Levels of created DLOs.

Teachers who use DLOs in their lessons “ <i>Very often</i> ” or “ <i>All the time</i> ”.	Absolute	Percentage share in the group N=19
A. I do not create any	0	0 %
B. I create – MS Word documents etc.	3	15.8 %
C. I create – MS PowerPoint documents etc.	5	26.3 %
D. I create MS PowerPoint documents using animations...	5	26.3 %
E. I create – interactive objects...	6	31.6 %

A surprisingly high percentage of teachers from this selection state that they do not modify any DLOs created by other people (4 respondents, which is 21 %), see table 9.

Table 9. Modifying DLOs

Teachers who use DLOs in their lessons “ <i>Very often</i> ” or “ <i>All the time</i> ”.	Total number	Percentage share in the group N=19
A. I do not modify any	4	21 %
B. I modify – at the level of common textual documents (MS Word documents etc.).	3	15.8 %
C. I modify – at the level of common presentations (MS PowerPoint documents etc.).	7	36.8 %
D. I modify MS PowerPoint documents using animations...	2	10.5 %
E. I modify – interactive objects...	3	15.8 %

Conclusion

For the purposes of further structuralising and a better orientation of the offer of teacher lifelong education courses at the intended target groups, we addressed the question of whether there were significant differences in the usage of DLOs in teaching mathematics between teachers in terms of gender and the length of teaching practice. Despite the general assumptions and evidence (Schumacher and Morahan Martin, 2001; Lucas, 2003; Tømte, 2008; Wang and Dostál, 2017) that men have a different, frequently even a more positive, approach to ICT and their usage and learning new skills in this area compared to women, we did not observe this difference in the monitored group, as was the case with other researches (Klement, Dostál, Bártek, 2017). Neither were any differences manifested in the usage of DLOs between groups of teachers with different lengths of teaching practice, where a more positive approach to technologies might have been expected on the part of teachers with a shorter practice. The present findings may therefore form a basis for targeting the education offer at the entire general mathematics teacher population.

Surprisingly, younger teachers (i.e. teachers with a shorter practice) do not consider DLOs useless tools, while using them less than we expected. The main reasons for this are apparently temporal and material factors, in particular insufficiently equipped schools in terms of software (“I do not have the necessary software equipment”) as well as hardware (free answer – “There is no computer classroom” or “There is no technology in my classroom for presentations”). Teachers with the longest practice (20 and more years) state, as the main reason, lack of time, and they do not see DLOs as useful tools in mathematics education. Unfortunately, according to the analyses conducted (Bártek, K., Nocar, D., 2016) the DLO repositories in the Czech Republic do not contain enough “advanced” DLOs (meaning comprehensive interactive systems or applications) that teachers could use as inspiration or that they could use in teaching at primary as well as secondary schools or recommend to pupils for home preparation.

On the other hand, our experience and the experience of our colleagues from other universities and fields, from the Czech Republic (Brandejsová, J., Brandejš, M., 2007) or abroad (Busstra, C., Feskens, E. J. M.,



Hartog, R. J. M., Van't Veer, P., and Kok, F. J., 2008; Halverson, R., Williams, C., Wolfenstein, M. & Rockman, Ch., 2009), with the use of DLOs at university level in the training of students or teachers involved in lifelong education courses confirms our belief that comprehensive and interactive DLOs are very efficient education tools. As far as we know, in the system of teacher lifelong education, there is no education offer focused on the creation of interactive educating materials or interactive digital educating objects using other tools than the available office applications or software for interactive boards.

DLOs may play a significant role for example in the home preparation of pupils, which is extremely important in mathematics. Unfortunately, today's social climate does not really favour home preparation and homework. Teachers say that it is very hard to force pupils to do homework and that they do not get much support from state authorities either, e.g. the Czech School Inspectorate (Smetáčková, I. In Rendl, M., Vondrová, N. et al., 2013). In addition to other benefits, DLOs have the potential of increasing motivation and interest in mathematics, and might enable children to build knowledge themselves, in their own ways and at their own pace. Another important, positive benefit is the immediate and time-unlimited availability of DLOs.

We see considerable reserves in the area and a potential in the preparation of teachers for creating advanced interactive DLOs, promotion and discussing the usage of DLOs in mathematics, which may be implemented in further or lifelong education of mathematics teachers as an addition to the already completed field-specific and didactic education.

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References

- Bártek, K., Nocar, D. (2016). Mathematic education support by digital learning objects. *EDULEARN16*, 3249 – 3253.
- Bártek, K., Nocar, D. & Laitochová, J. (2017). Digital learning objects by the view of Czech mathematics teachers. *EDULEARN17*, 10175 – 10179.
- Busstra, C., Feskens, E. J. M., Hartog, R. J. M., Van't Veer, P., & Kok, F. J. (2008). Interactive digital learning material on collating evidence from human nutrition research. *e-SPEN*, Eur. e-J. Clin. Nutr. Metab. 3, 52–61.
- Brandejsová, J., Brandejs, M. (2007). Tvorba multimediálních a interaktivních objektů na Masarykově univerzitě pro rapid e learning. https://is.muni.cz/do/1499/el/web/clanky/2007_clanekSCO_Brandejsova.html
- Halverson, R., Williams, C., Wolfenstein, M. & Rockman, Ch. (2009). Remembering Math: the design of digital learning objects to spark professional learning. *E-Learning*, 6(1). 97 – 118.
- Kašparová, V., Boudová, S., Ševců, M., Soukup, P. (2014). Národní zpráva šetření TALIS 2013, ČŠI, Praha. <http://www.csicr.cz/html/TALIS2013-NZ/flipviewerexpress.html>
- Klement, M., Dostál, J. and Bártek, K. (2017). Perception and Possibilities of ICT Tools in the Education from the Teachers' Perspective. Olomouc, 2017. DOI 10.5507/pdf.17.24450933
- Morahan-Martin, Janet and Schumacher, Phyllis, (2001). Gender, Internet and Computer Attitudes and Experiences. *Applied Psychology Journal Articles*. Paper 3. <http://digitalcommons.bryant.edu/apjou/3>
- MŠMT, (2015). České školství v mezinárodním srovnání 2015. Available at: http://www.msmt.cz/file/36518_1_1/
- Rendl, M., Vondrová, N., a kol. (2013). Kritická místa matematiky na základní škole očima učitelů. Praha, 2013.
- Tømte, C., (2008) .Return to gender: gender, ICT and education. https://www.researchgate.net/publication/242267044_%27RETURN_TO_GENDER%27_GENDER_ICT_AND_EDUCATION
- Wang, X., Dostál, J. (2017). An analysis of the integration of ICT in education from the perspective of teachers' attitudes. *EDULEARN17*, 8156 – 8162.



Utilizing a systems management model to explore future leadership in early education

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Abstract

Currently all children in the United States (U.S.) have access to free public education beginning in kindergarten or at the age of five years. However, research has shown that children who are afforded earlier formal preschool education experience multiple long-term benefits (Hard, 2011). Although many children attend preschool in the U.S., it is most often privately funded with limited publicly funded access. In 2013, Barack Obama, then President, proposed that all children have universal access to preschool, which is a significant change to early childhood education (ECE). The purpose of this study was to identify existing facilitators and barriers to implementing a systems wide change in the education of young children through conducting a comprehensive needs assessment in the State of Connecticut (CT).

Keywords: Early childhood education, leadership

Introduction

Currently all children in the United States (U.S.) have access to free public education beginning in kindergarten or at the age of five years. However, research has shown that children who are afforded earlier formal preschool education experience multiple long-term benefits (Hard, 2011). Although many children attend preschool in the U.S., it is most often privately funded with limited publicly funded access. In 2013, the 44th President of the United States, Barack Obama, (Scott, 2013) had proposed a federal initiative to assure that all children have universal access to preschool, which is a significant change to early childhood education (ECE) policy. Then President, Barack Obama called for an expansion of quality preschool access through an investment of resources to support a series of new initiatives beginning at birth and continuing to age 5 years.

Specific focus was on identification of resources, teacher qualifications, financial implications, administrator training, coordination of systems and the design of common core standards. Both teacher and administrator groups were surveyed to identify strengths, weaknesses, and areas of concern. Two focus groups were held with representative members of each group to further examine key considerations for readiness to change. A systems approach was utilized to identify programmatic needs to meet combined new requirements with a basis in the integration of research and practice. Innovative strategies and alternative methodologies to meet proposed future changes in the educational system are explored. The goal is to create a systems-thinking model that demonstrates the impact on current ECE programs with improved outcomes for all preschool children.

A goal of this proposed *Preschool for All Initiative* (The White House, 2013) was to partner with all 50 states to fund programs through the Department of Education (DOE) to local school districts for low- and moderate-income four-year-olds at or below 200% of poverty. Simultaneously states were encouraged to establish public preschool services for four-year-olds from middle-class families. This cost sharing model was intended to increase access and ensure that all children had the chance to enter kindergarten with a higher chance for success. In order to qualify for



this new initiative, preschool programs across the states had to meet common consistent standards for quality across all programs, including: well-trained teachers, who were to be paid comparably to Kindergarten to High School (K-12) staff, small class sizes and low adult to child ratios, rigorous curriculum, comprehensive health and related services, and effective evaluation and review of programs (Scott, 2013; The White House, 2013).

In response to this initiative, one state, Connecticut (CT), created a new Office of Early Childhood (OEC) as a cohesive and consolidated early childhood system of care and services. The state's population has rapidly changed with services provided to a range of socio economic and culturally diverse families. This new agency was phased in over a year, unifying state services for young children that had traditionally been spread across multiple separate state agencies. Previously, ECE funding and oversight was provided to programs based on type. For example, Head Start came under the Office of Head Start Collaboration, Child Day Care was under Social Services and the DOE oversaw school readiness programs. The second phase of this transition in 2014 moved Child Care and Youth Camp licensing and a federal home visiting grant into the new agency from the Department of Public Health, Early Childhood Special Education moved from the DOE, and the Children's Trust Fund and Care 4 Kids moved from the Department of Social Services.

Method

In these current economic times, ECE programs are experiencing instability in funding, job security and staffing, which impact upon their ability to deliver services. Bronfenbrenner (1977) in a seminal paper described a mesosystem as the interactions or relationships among settings that revolve around children; including the classroom, agency, community and additional external environments. At the same time these new proposals were developed to facilitate universal preschool access, many early childhood education and care programs continue to experience funding crisis, and are witnessing long term staff retire, and be replaced by younger staff members with more credentials and who often have different expectations and communication styles. Furthermore, with the aging of ECE professionals succession planning is key. Survival of any one program may largely depend on the skills of the leaders of the organization and the degree to which they have the insight and ability to anticipate change. Muijis, Aubrey, Harris & Briggs (2004) concluded after a review of literature on leadership in early childhood (EC) that there is a clear need to identify what effective leadership practice is in terms of processes and outcomes. Aubrey, Godfrey & Harris (2013) identified and tested different models and characteristics of leadership with the goals to identify, describe and analyze what leadership meant to key EC participants; to consider roles, responsibilities and characteristics; to investigate core components; to capture practice and judge how it was understood and enacted. Hard (2011) explored the concept of leadership in the ECE field with particular emphasis on gender, workforce issues, and generational differences. Hard (2011) further suggests that collaborative and relational style leadership approaches may be more effective than traditional, hierarchical models in ECE.

Table 1. Types of learners by generation

Matures	born	prior
The term was coined by marketing researchers, Yankelovich Partners, Inc.	to 1946	
Baby Boomer Generation		
Landon Jones, author of <i>Great Expectations</i> , a book chronicling the Boomer generation, 1946 coined the term.		1964
Generation X		
The term was coined by author Douglas Coupland in his novel, <i>Generation X</i> .	1965	1980



The Millennials		
Sociologists Neil Howe & William Strauss coined the term. Alternates include 1981 Generation Y, Generation Why?, Nexters, and Internet Generation.	1981	1999
Generation Z or Homelanders	1999	2015

Center for generational studies (2017)

Addressing these challenges' impact upon future ECE programs necessitates an innovative approach to planning for early childhood programs. The business sector has traditionally relied on data from consumer spending and anticipated trends in the marketplace to survive in a highly competitive field. The business system analysis methods developed present an innovative approach to developing solutions to challenges. Knowing both the current and future needs of the programs is paramount to achieving success.

Findings

The purpose of this study was to identify existing facilitators and barriers to implementing a systems wide change in the education of young children. Although this would be a national mandate, each state is allowed to develop its own educational standards, policies and procedures, which present a major challenge to leaders in early childhood education. The major goal was to implement a comprehensive needs assessment in the State of Connecticut (CT) to evaluate the potential impact of such a change across educational domains. Specific focus was on identification of resources, teacher qualifications, financial implications, administrator training, coordination of systems and the design of common core standards.

2.1 Study Design

This descriptive quality improvement project utilized a web based survey design to identify existing facilitators and barriers to implementation of such a systems wide change in ECE. Both teacher and administrator groups were surveyed to identify strengths, weaknesses, and areas of concern. Two focus groups were held with representative members of each group (administrators n=4, teachers n=4) to further examine key considerations for the readiness to change. The survey was anonymous and did not include any identifying data. It took approximately 20 minutes to complete and participation was voluntary. A pilot survey was sent to two experts to determine content validity, initial reliability, and clarity of questions. Inclusion criteria included: All participants must read English, be at least 18 years of age, and be an ECE professional in the State of CT. Institutional ethical review approval was obtained from the University.

2.2 Procedure

A convenience sample of ECE professionals in CT was emailed an 18-question web based survey that this investigator developed. An unsigned informed consent for the web-based survey was included electronically with completion of the survey implying consent. An email reminder was sent out at one week prior to the 2-week deadline for survey completion.

2.3 Analysis

Both quantitative and qualitative methods were used to analyze the data. A team of two experts identified common themes of the open-ended responses coding by frequency and relevance until saturation occurred. Final themes were determined based on consensus of experts.



Results

Thirty-five members (n= 35) of a state based ECE professional association were queried through an 18-question web based Survey Monkey questionnaire. Of these, 22 respondents indicated they were administrators with 2 self identified as teachers, and 10 noting other roles including consultant and student. ECE programs were described as private agencies (n=9, 25.71%), corporate (n=2, 5.71%), community based (n=5, 14.29%. Of these programs 11(31.43%) were described as non-profit, n=9 (25.71%) as not for profit, n=4 (11.43%) as for profit with n= 12, (34.29%) indicating other types such as university or grant funded. When asked, “If there were to be a national mandate for universal access for preschool ECE, how ready is your center to implement such a systems wide change?”, the responses were divided with n=10 (28.5%) indicating ready for change, n=9 (25.7%) not sure, another n=9 (25.7 %) very ready or could get ready and n=6 (17.1 %) not ready at all. Five respondents skipped the question. A majority of participants reported they utilized a variety of technologies in their daily routine with work, noting n=28 (87.5%) smart phones, n=14 (43.75%) iPads, n=10 (31.25%) whiteboards, n=9 (28.13%) WebEx for meetings and n=4 (12.5%) blogs wikis. Nine respondents (28.13%) listed other technologies including cameras and computers. A large majority, n=24 (92.31%), would be interested in learning new technology tools. Participants were then asked to rate their awareness of generational differences. Twenty-one or 63.64 % replied they were familiar with the term ‘baby boomers’, 23 or (69.7%) acknowledged awareness of the term ‘generation x’, n=25 (75.76%) noted familiarity with ‘generation y’ but only 13 (39.39%) ever heard of ‘millennials’. Nineteen individuals indicated workshops could provide training to address these generational differences. When asked minimal qualifications for administrators, thirty respondents equally proposed a minimal bachelor or master’s degree, noting needed expertise in ECE closely followed by a business degree. Twenty-one described the best-suited type of leadership to be strong, visionary, and futuristic, commenting experience is also key.

Most of these respondents (n=20, 71.43%) indicated there exists no succession plan to replace teachers, professional staff and or administrators with only n=8 or 28.57% acknowledging any type of succession planning. Of interest, 28.57% or n=8 admit to any formal mentoring program for some specific roles, teachers (n=8), administrators (n=7), and (n=20) for professional staff. Most ECE rely on a board of directors to support decision-making and provide long-term vision for the organization. When queried as to the optimal composition of boards of directors, respondents identified ECE professionals, business representatives, and parents. The respondents clearly indicated funding (n= 23 of the 25 respondents) is the number one priority to implement future systems wide change, followed by training (n= 1) and cooperation (n= 1). Finally, respondents noted a variety of network support needed for their own ECE professional development, such as trainings, workshops and regular support groups. Funding, adequate salaries and qualified staff were both the top 3 positive factors reported that would facilitate such a systems wide change in ECE as well as the top 3 challenges that might serve as barriers. Interesting to observe that funding was also the number one resource that might be needed to implement such a systems wide change in ECE followed by adequate training and qualified teacher.

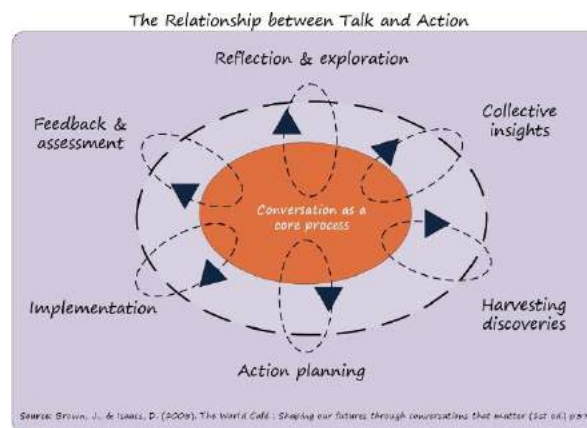
Conclusion

This paper focused on clarifying systems in place and identifying the many aspects of change occurring within ECE field in one state (CT) in the U.S. A goal was to describe a systems management approach to identify the impact on leadership in early childhood programs as a result of a proposed universal preschool implementation. Until a few years ago, no national ECE accreditation system existed. There was a paucity of funding available. Technology had not yet gone through such monumental growth with cell phones, wireless computers and even desktop computers in the future. Baby boomers existed, but Generation Xers had not entered the workforce and Generation Ys were not yet born. Utilization of a systems approach to identify programmatic needs to meet combined new requirements with



a basis in the integration of research and practice will better situate ECE programs for future change. Mistry, Sood and Mistry (2012) suggest that newer ECE practitioners are better prepared for leadership from formal educational training in comparison to more experienced ECE practitioners with less academic preparation. Innovative methods for staff advancement and recognition are warranted. *CT Charts A Course* is an early childhood career ladder program that has demonstrated success offering scholarships to move teachers along the career ladder. However, increased compensation is currently not tied to the career ladder. Generation X professionals value a balance between work and life, flexibility and collaborative models of leadership (Center for Generational Studies, 2017). A central point for programs to access benefits such as insurance and workman's compensation results in a larger finance pool, reducing cost to individual small programs, and freeing up money to allocate toward salaries. Provision of flexibility in scheduling, inclusion of more technology, salaries commensurate with educational credentials, and succession planning are evidence-based strategies that will facilitate change. Northouse (2015) and Schein (2010) describe alternative leadership styles that address gender, generation and philosophy of the ECE workforce and promote communication between administration and staff.

Fig. 1. The relationship between talk and action.



Recommendations

Innovative strategies and alternative methodologies to meet proposed future changes in the educational system should be explored. The goal is to create a systems thinking model that demonstrates the impact on current ECE programs with improved outcomes and effective ECE for all children. According to Senge (2006), “An organization’s ability to learn may make the difference between its thriving or perishing in the years ahead.”

References

- Aubrey, C., Godfrey, R. & Harris, A. (2013). Manage? An investigation of early childhood leadership. *Educational Management Administration & Leadership*, 41, 5-29.
- Bronfenbrenner, U. (1977, July). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513-531.



- Center for Generational Studies. (2017). *Frequently asked questions (FAQs)*. Retrieved May 1, 2017 from <http://www.generationaldiversity.com/faq.html>
- Hard, L. (2011). *Leadership in early childhood education and care: Facing the challenges and embracing new possibilities*. Retrieved June 1, 2017 from <http://louisehard.files.wordpress.com/2012/12/leadership-in-ecec.pdf>
- Mistry, M., Sood, K. & Mistry, M. (2012). Challenges of early years leadership preparation: A comparison between early and experienced early years practitioners in England. *Management in Education*, 26, 28-37.
- Muijis, D., Aubrey, C., Harris, A. & Briggs, M. (2004). How do they manage? A review of the research on leadership in early childhood. *Journal of Early Childhood Research*, 2 (2), 157-169.
- Northouse, P. G. (2015). *Introduction to leadership: Concepts and practice* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Schein, E. H. (2010). *Organizational, culture and leadership* (4th ed.). San Francisco: John Wiley
- Scott, D. (2013, April 10). Obama proposes \$75 billion for universal preschool. *Governing*. Retrieved May 1, 2017 from <http://www.governing.com/.../gov-obama-proposes-66-billionover-10-years-funding>
- Senge, P. (2006). *The fifth discipline: The art & practice of the learning organization* (revised ed.). San Francisco: Doubleday.
- The White House: Early Childhood Learning. (2013). *Preschool for all initiative*. Retrieved May 1, 2017 from <http://www.whitehouse.gov/issues/education/early-childhood>



Negotiation Ethics as Integral Part of MBA Curriculum

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Abstract

The process of negotiations plays ever-growing role in the global business environment. There are many factors that should be taken into account, so students who are working on their MBA degree has an excellent opportunity to master negotiation techniques and to be successful in the negotiation process. At the same time, negotiations always involve important ethical issues, that is, danger of unethical behavior. The purpose of the present paper is to investigate graduate students' attitude to ethically marginal tactics in the negotiation process and to work out proposal for the micro-insertion module "negotiation ethics". The research questions are the following: (1) What is distribution of MBA students' attitude to ethically marginal negotiation tactics? (2) What is relation between number of years of students' work experience and attitude to ethically marginal negotiation tactics? Using a questionnaire derived on the basis of SINS scale ("Self-reported Inappropriate Negotiation Strategy Scale" created by R. J. Robinson, R. J. Lewicki and E. M. Donahue) MBA students rated 16 deceptive negotiation tactics using 5-point appropriate-inappropriate Likert-type scale. After that the factor analysis were completed by the means of descriptive statistics, that included the main 5 factors: (1) traditional competitive bargaining; (2) attacking opponent's network; (3) false promises; (4) misrepresentation; (5) inappropriate information gathering. Analyses of scale ratings yielded results that students' evaluation of ethical/unethical behavior in negotiation process depends on their work experience, as well as on their cultural background (the research was conducted among international students), although their criticism of inappropriate negotiation strategies does not always lead to the appropriate behavior in their actual negotiation performance. The article works out suggestions how to incorporate issues of ethical negotiation strategies within the MBA curriculum (in such courses as business ethics, negotiation skills, management, marketing, international marketing, organizational psychology, sales management, etc.).

Keywords: Negotiation Ethics; SINS scale; Business Ethics, Micro-insertion Module

1. Introduction

The topic and the scope of the present research has grown out of the author's involvement in teaching such courses as Business Ethics and Negotiations in Intercultural Business Environment courses to MBA students. During the study process, it has become clear that these two subjects are closely intertwined, since any managerial decision; any agreement is always value-laden. In other words, the business ethics course includes themes on bargaining and negotiation, whereas the negotiation strategy and tactics in many cases involve ethically marginal business behavior. C. Menkel-Meadow distinguishes five common ethical issues in negotiation related to: (1) telling truth or lying; (2) choice of negotiation tactics; (3) duties to stakeholders; (4) desirable outcomes; and (5) social influence. (Menkel,-Meadows, 2004) The questions posed are like this: Can negotiation be ethical in principle since it always presupposes some game plan? Should all parties involved have to have full information? Do the parties share expected criteria for assessing outcomes? These and similar issues naturally arise in discussing cases with MBA students during the individual and group assignments in the courses of business ethics and negotiation. These discussions have led to author's decision to work out a special micro-insertion module "negotiation ethics" that can be included in such courses as sales management, international marketing, organizational psychology, corporate communications, and others. Namely, this micro-module (6-8 hours) is compatible with all study courses related to people's interactions in the business environment. However, in order to design the module for MBA students, it is important to know students' attitude towards ethical/unethical decision-making practices while negotiating, that is, what they perceive to be acceptable or unacceptable actions. The paper first examines the nature of negotiation, then – the ethical issues involved in the negotiation process and the possibility of teaching negotiation ethics. Using a questionnaire derived on the basis of SINS scale ("Self-reported Inappropriate Negotiation Strategy Scale" created by R. J. Robinson, R. J. Lewicki and E. M. Donahue) MBA students rated 16 deceptive negotiation tactics using 5-point appropriate-inappropriate Likert-type scale. After that the factor analysis were completed, that included the main 5 factors:



(1) traditional competitive bargaining; (2) attacking opponent's network; (3) false promises; (4) misrepresentation; (5) inappropriate information gathering.

2. Literature review

The theoretical framework of the current article, according to its purpose, falls into three broad categories: basic concepts of negotiation (definitions, actors, processes, tactics, and strategies); negotiation ethics (appropriate and inappropriate negotiation tactics); and teaching negotiation ethics (integrative and/or non-integrative approaches).

There is extensive research literature on different aspects of business negotiations: on the process, on the participants (actors), on the expected outcomes etc. Let us mention a few aspects relevant for the current research. The first and the most logical starting point is the definition that sets the stage for further investigation. Negotiation is a process where two parties with differences, which they need to resolve, are trying to reach agreement through exploring for options and exchanging offers – and an agreement. (Fells, 2009) This definition pinpoints main aspects of negotiations, i.e., existence of at least two parties with differences in opinion, in final goal to be reached, in preliminary and strategical and tactical plans, etc. Moreover, the process of negotiation itself, give or take, consists of certain stages. And, finally, there is certain outcome than can be satisfactory or dissatisfactory to the parties involved. (Lewicki et.al., 2003) The whole situation of negotiations can be characterized by the term interdependent relationship. That is, in negotiations both parties need each other, there is no negotiation possible if there is just one side without opposition. R. J. Lewicki and others (2002) stress that one of the most important features of the interdependence is the existence of interlocking goals - within the negotiating team itself (different team members may have their personal interests that may comply with the team general strategy or may not comply with it), as well as outside the team (the goals of opponents). Each party can influence other party's decisions and actions, and the choice of the strategy. Theoreticians and practitioners distinguish among several styles (strategies) of negotiation. Thus, for example, D. Goldwich (2010) talks about five styles employed during the process of negotiation. In sum, they can be described in the following way: (1) avoiding – the negotiator tends to avoid any confrontation and is apt for putting off discussions, whenever encounters the opposition; (2) accommodating - the accommodating negotiator is primarily concerned with preserving his relationship with the other party, ready to sidestep under certain circumstances; (3) competing – the negotiator is focused upon his/her personal goals primarily and is ready to play somewhat dirty, though within the limits of the game; (4) compromising – the accent is put on the fairness and ethical negotiation tactics; (5) collaborating – the negotiator tries to reach the optimal outcome. Whereas other authors (Lewicki et. al., 2003, Fells, 2009) distinguish between competitive (distributive) and collaborative (integrative) styles. The first one is characterized by attempts to gain optimum value at the expense of the other party and is commonly referred to as the “win-lose” approach, when engaged in this style, the parties may use different tactics to win like: persuasion, argument, power, or even threat. The latter or “win-win” style means the negotiating parties have reached an agreement after fully taking into account each other's interests, such that the agreement cannot be improved upon further by any other agreement. As we can see, the distributive style is particularly subjected to ethical transgressions since the aim is to win at all costs, even on the expense of other people. The process of negotiations involves four phases: preparation, exchanging information, bargaining and closing commitment. (Shell, 2006) The negotiators can meet ethical challenges during each phase. Hence, for our purpose, it is necessary to describe briefly each phase. During the preparation phase the negotiator(s) become familiar with the facts of the problem, identify and prioritize the goals, attempt to clarify what the other party can and cannot accomplish and investigate the behavioral styles of the opposite parties. Though there can be a few ethically challenging moments, we would like to mention the one of information gathering. It goes without saying that to be successful in negotiations we have to have all possible information about our prospective opponents, their expectations, the situation, still the question is about the way of information collection, it can be quite dishonest. The interaction phase includes activities of trust building, exchanging points of view and perceptions in order to clarify differing perceptions of the issues and identifying areas of agreement and common ground. The heart of many negotiations is in bargaining, the adjustment of what is being traded until both parties are satisfied with the



arrangement. This stage can become heated and use many competitive negotiation tactics, especially if the parties have a win-lose attitude. The final closing phase (combined with the execution phase) is the point where the consensus is reached or, vice versa, there is no agreement whatsoever.

Works on the ethics of negotiation form the significant corpus in the literature devoted to business ethics. In the current literature review, we aspire to describe the main directions of the research. It has been widely admitted that in the line with today's business developments the ethical of bargaining issues play ever-growing role. The authors, for example, ask such questions:

- How to be deceptive without being dishonest? How to be assertive without being offensive? (Craver, 2010)
- Is business bluffing ethical at all? (Allhoff, 2003; Carr, 2004)
- Is lying (or so-called Machiavelli strategy) acceptable during the negotiation process? (Reilly, 2009; Shell, 2004)
- How the marginal and deceitful bargaining tactics play upon the trust and corporate image issues in the long run? (Strudler, 2004; Yu-Te, 2013)
- What are the moral effects of empathy and perspective taking in deterring deceitful negotiation? (Cohen, 2010)

In sum, majority of the authors mentioned above admit that some bluffing and/or deception cannot be avoided while negotiating business matters. However, at the same time they stress that it is necessary to pay attention to the negative effects of such practices, for instance, - spoiled image of a person or a company, reputation crisis, severed relations between negotiating parties, etc. It is worth mentioning though that in the sharp contrast to these critical remarks there stand out the conception developed by A. Z. Carr (2004). When his seminal article "Is Business Bluffing Ethical?" came out first in 1968, it created quite a controversy, since the author advocates here a "game-strategy" view of business where ethical considerations are not taken into account; like in a poker game deceptive tactics are appropriate within the business context. Among the sharpest critics, we can mention F. Allhoff (2003), R. J. Sullivan and others (1984), B. Morris (2014). To illustrate the point let us mention a few arguments against the bluffing theory put forward by B. Morris. According to the author, Carr's poker game analogy involves a confused notion of ethics (he offers the compartmentalized approach instead of the holistic one), as well as the disregard of the value/fact distinction, these confusions may lead to unpredictable consequences. C. Alavoine (2011) defines what can be considered as an "ethical negotiation". He states that the ethical negotiation occurs when the parties involved are willing to find a fair solution in an acceptable manner without abusing their bargaining power through straightforward or hidden lying, threatening, etc. Still, there are some general basic ethical principles underlying the whole quest for being ethical in the negotiation save the situation if the original intent is cheating someone (such case we cannot exclude altogether). D. Lax and J. Sebenius (2004) delineate three areas or three complexes of ethical issues: the appropriateness of certain tactics, the distribution value created by agreement and the possible effects of negotiation on those not at the table (externalities). The grounds for the ethical tactical choice can be answers to two simple questions about the possession of sufficient information by the all parties involved and the possibility to enter and to leave the situation freely. Whereas the fair distribution of values rests upon the equality of position of the parties. Moreover, finally, the absolute imperative is not to harm those, who are not included into the negotiation process. H. Raiffa (2004), in his turn, talks about ethical decisions based on the moral empathy, that is, ability to put oneself in the certain situation rather than asking the abstract questions, for example, "Is it morally righteous to do this or that, to act in this or that way?". The empathy makes it possible to personalize the situation and to think it through. This could be one of the most important aspects in teaching the course (short or long) of negotiation ethics.

K. Gibson proposes the new canon of negotiation ethics. He states that the educators have to deal with three ethical elements: students' personal moral beliefs, issues that arise in the problem-solving process and wider ethical context (justice, rights, equality, etc.). Contemporary teaching, according to the author, have to facilitate students' reflections on their own moral "bottom line", as well as, to advise them on the tricks of the trade



(bluffing, deception, evasion, aggression, etc.), in order they could recognize the potential pitfalls and traps set by opponents. (Gibson, 2004) Approaches to teaching business ethics (and negotiation ethics among other issues) can be divided in two broad groups – the integrative and non-integrative ones. The first group of researchers (Rache et.al., 2013; Acevedo, 2013; Tello et al., 2013; Rajeev, 2012) represents the opinion that ethical issues should be essentially integrated within various subjects in a targeted manner (in accordance to industry needs, for example), it presupposes also adding the philosophical reasoning to every-day case studies and analyses. Although there are many good reasons to require a standalone business ethics course in the BBA and MBA curricula, this is not always the case, since business ethics professors are often criticized for being isolated from the industry issues. Whereas the latter approaches stress the importance of the stand-alone business ethics course, perhaps differentiated according to needs of BBA and MBA students – thus, there is a proposal to offer bachelor students the experience based education, with aim to create self-awareness, while master students are to take a special course drawing on their previous learning and work experience. (Felton & Sims, 2005; Sims & Felton, 2006) The innovative teaching methods, including lectures, interactive studies, guest lectures are required to fulfill the aims of the subject. (Rajeev, 2012) In addition, D. Collins (2006) offers ne new course design based on the stages of moral development. Still, for the purpose of the present investigation, among publications on the ethics education, we would like to single out the one entitled “Teaching Business Ethics Through Strategically Inserted Micro-insertions” (Slocum et al., 2014) The authors of the publication stress the importance of the micro-insertions that are defined as “small scale insertions of ethics instructions” throughout a course, producing a larger number of ethics mini-lessons during a semester, each taking only a few minutes. (Riley et al., 2009) In other words, particular themes are developed and delivered by the ethics professor or by the guest lecturer amidst the rest of the themes as a workshop, a seminar, a lecture, a class activity, etc. The micro-insertion offers a way to communicate ethics using a “low-dose” approach. In our opinion, the micro module of negotiation ethics is a promising way of engaging students in discussions of ethical issues.

It accounts for the purpose of this study to investigate graduate students’ attitude to ethically marginal tactics in the negotiation process and to work out proposal for the micro-insertion module in negotiation ethics.

The research questions of the current investigation are:

- (1) What is the distribution of MBA students’ attitude to ethically marginal negotiation tactics?
- (2) What is the relation between number of years of students’ work experience and their attitude to ethically marginal negotiation tactics?

3. Method

Method of research. In order to investigate students’ attitude to ethically marginal negotiation tactics, we chose a quantitative research design – the formalized survey of participants. Approaching the students involved in the graduate business ethics and negotiations courses provided a first-hand account of what negotiation tactics they felt to be more or less ethically appropriate. Students were approached with the request to be questioned about their opinion during the class, they were given certain time to fill out the questionnaire without any interruption and control of the professor. The respondents received all necessary information about the purpose and procedure of the research, as well as their anonymity was guaranteed. The questionnaire was developed based on the literature study; it consisted of 16 questions divided into five groups according to 5 factors; the questions were presented in the mixed order to get truthful responses from the surveyed students. Each question had five-point value varying from the answer “not at all appropriate” (value – 1) to “very appropriate” (value – 5). The design of the questionnaire was adaptation of the SINS scale (“Self-reported Inappropriate Negotiation Strategy Scale”). (Robinson et al., 2000) Besides that, the current investigation studied also the practical application of the aforementioned SINS scale. (Lewicki & Robinson, 2004; Rivers et. al., 2003) The following factors were put forward: (1) traditional competitive bargaining; (2) attacking opponent’s network; (3) false promises; (4) misrepresentation; (5) inappropriate information gathering. The survey included statements (the statements and their mean value are depicted in the findings part of the present article). MBA students were asked also open-ended questions regarding their gender, age, nationality and work experience. The present analysis included just the latter indicator.

Population sampling. Once the research design was established, it was necessary to make a decision about the sampling unit (a unit of population chosen during the sampling process; the unit should contain one or more



elements describing the population). Participants of the survey were chosen according to the principle to include the international MBA students taking the courses in business ethics and negotiations in two private business schools in the study year of 2016/2017. This procedure can be described as a purposive sampling, i.e. single stage procedure where sampling unit contains only one element, namely, involvement in the classes of business ethics. (Smith & Albaum, 2012) Altogether 40 MBA students were surveyed.

Analysis techniques. The participants were asked to rate each negotiation tactic on a 5-point Likert scale, indicating how appropriate they believe each tactic was in negotiation (1 = not at all appropriate, 7 = very appropriate). The descriptive statistics were applied to calculate the means and standard deviations for the appropriateness of each group of factors (Table 1). The tactic means were ordered by the decreasing appropriateness accordingly. After that the comparative analysis of the results was performed. In order to answer the second research question, we made comparison between means for five factor SINS scales and the number years of work experience (Table 2).

Limitations of research. Reliability of data. The fact that only those students who were enrolled in courses on business ethics and negotiations were surveyed set some limitations for the research; namely, they already had some preliminary knowledge on the subject. The second factor to be mentioned is that only international MBA students were surveyed. This was done deliberately, since there is certain relation between years of work experience and attitude to the ethically marginal negotiation tactics, the result was influenced also by the respondents' nationality, but this correlation we will be investigated in the next research article. Despite these limitations, we think that our research was representative, it demonstrated prevailing tendencies. The obtained data can be employed (all respondents were first or second year business students) and it has exposed some tendencies that should be taken into account when designing the micro-insertion module "Negotiation Ethics".

4. Findings and discussion

After the respondents rated 16 negotiation tactics that were divided into 5 groups and presented in the mixed sequence, we compiled the table "Means and standard deviations for the five factor scales" (Table 1). The results were presented in the decreasing order – the higher the evaluation, the more positive attitude towards the negotiation tactic.

Table 1. Means and standard deviations for the five factor scales

	Factor	Means	Standard Deviations
1.	Traditional competitive bargaining	2,60	0,46
2.	Misrepresentations	2,13	0,63
3.	Inappropriate information gathering	2,02	0,15
4.	False promises	1,82	0,14
5.	Attacking opponent's network	1,57	0,43
	All factors (16-item average)	2,03	0,38

Means are calculated from 5-point Likert-type scale, where 1=not at all appropriate, and 5=very appropriate

Examination of this table indicates that the highest mean (2,60) was assigned to the factor "Traditional competitive bargaining". It has to be noted that the standard deviations in factors in most cases are less than 0, 5, save the one of "Misrepresentation" (0,63). This makes it possible to conclude that differences among answers within each factor are insignificant. In the real life business situation, bargaining is always a competition among different parties, that involves presenting the initial offer, the procedure, then, finally, the outcome that is usually more or less favorable to one of the actors. But if, in the procedure complies with two basic conditions, that is, that each party has fair amount of information in its disposal and that all participants can freely enter and leave negotiations, the traditional competitive bargaining tactics are regarded as somewhat appropriate by the respondents. Among tactics the highest value in the scale of appropriateness is assigned to the one of making the opening demand far greater than the negotiator hopes to settle for in the end, whereas the lowest – to the tactic of undermining opponent's confidence in his/her ability to negotiate, and the standard deviation comes up to 0,46.

The second place in the rating takes the factor "Misrepresentation", the mean is 2,13 respectively. The students were presented 4 statements regarding the negotiation tactics. All proposed tactics here revolve around the negotiator's intention – be it misrepresentation of starting information, the nature of negotiations, the



progress of negotiation process, as well as denial of the validity of opponent's information on the negotiating party. However, the standard deviation of 0,63 demonstrates that there exists some inconsistency in valuation of appropriateness that could require our attention. Thus, the statement: "Intentionally represent the progress of negotiations to your constituency in order to make your own position to appear stronger" was rated at 2,77, while the statement "Intentionally misrepresent information to your opponent in order to strengthen your negotiation argument or position" exhibited the mean of 1,26. The possible explanation for that lies in the fact the MBA students feel the accountability to their constituency to be more important than the ensuring the fair negotiation process. It could be rather a short-term solution, since the disinformation of the stakeholders, if negotiations do not yield the expected result, can harm the company reputation and image.

The factor "Inappropriate information gathering" takes the third position with the mean of 2,02. This factor includes such tactics as (a) putting the time pressure upon the opponent; (b) the offer of personal favors that somewhat borders a bribery; (c) recruiting or hiring the opponent's teammate. The standard deviation regarding this factor is highly insignificant (0,15). Although the sample size (40 respondents) does not allow making broad generalizations, it still demonstrated the tendency, that the ethically marginal negotiation tactics are almost appropriate. Not to put any value judgement regarding these results, we would like to state that the class discussions within the micro-insertion module of negotiation ethics could make the reevaluation of the current position possible.

The fourth rated factor the one of the "False promises" (the mean of 1,82) exhibits the same characteristics as previous one, including the standard deviation of 0,14. This factor involves such tactics as (a) delivering false promises that would never be kept whatsoever; (b) offering the future concessions that would not occur; (c) guaranteeing that the respective constituency would uphold the settlement, though it would not be the case.

The lowest rated factor, the one of the "Attacking opponent's network" seems to require a special interest, since the mean of 1,57 differs from the higher valued factors. The can be explained by the formulation of the statements themselves, since their tone is straightforward aggressive and there is no doubt that employing them would inevitably lead to the ethical violations during the negotiation process. This factor includes such tactics as (a) attempting to get the opponent fired from his/her position; (b) threatening to make the opponent to look weak or foolish in front of his/her boss or constituency; (c) talking directly to people the opponent is accountable to in order to undermine their confidence in the existent negotiator. Whereas the standard deviation comes up to 0,43, that is explained by the students' high rating of the item (c) of this factor. The author of the present article cannot offer the comprehensive explanation for the fact that respondents rate as somewhat appropriate going behind the back of the opponent, in order get better opening position in negotiations at the moment. This aspect should be researched more deeply, possible by the means of the semi-structured interviews or focus group discussions.

The students were asked also a question about their previous work experience. Although the study "Extending and Testing Five Factor Model of Ethical and Unethical Bargaining Tactics: Introducing the SINS Scale" (Robinson et al., 2000) reports a negative strong correlation between work experience and the use of unethical negotiation tactics, namely, people with more general work experience are less apt to use marginally ethical tactics, our investigation didn't yield the conclusive results depicted. In other words, there is no a clear pattern. The results are depicted in the Table 2.

Table 2. Relation between the means for five factor scales and number of years of work experience

Factor	up to 3 years	4 – 6 years	7 – 10 years	11 years and more
Work experience				
Traditional competitive bargaining	2,35	2,90	3,0	2,70
Attacking opponent's network	1,59	1,60	1,43	2,30
False promises	1,90	1,90	1,10	2,30
Misrepresentations	2,16	2,30	1,50	2,75
Inappropriate information gathering	2,0	2,2	1,70	3,0
All factors (16-item average)	2,0	2,18	1,75	2,61

Means are calculated from 5-point Likert-type scale, where 1=not at all appropriate, and 5=very appropriate



All respondents were divided 4 groups according to the years of work experience: up to 3 years (17 students), 4 – 6 years (10 students), 7 – 10 years (8 students), 11 years and more (5 students) accordingly. These groups were juxtaposed with the means of each factor. All groups, except the one (11 years and more) rated the factor “Traditional competitive bargaining” as the most appropriate. All groups assigned the lowest rating to the factor “Attacking opponent’s network”. Analyzing the 16-item average means of all factors, we can see that the group of 11 years exhibit certain inconsistencies, thus, for example the factor of the information gathering is rated as the most appropriate, then follows the factor of misrepresentations and only after that – the traditional competitive bargaining. Besides that, the latter group demonstrated the inclination for using the unethical negotiation tactics. This could be explained by the fact, that the respondents were MBA students (the majority coming straight from the bachelor studies) and there were differences among number of respondents in each group that gave more weight to each answer of the respondents representing the most experienced group. Still, we believe that the results can serve as the background information in designing the micro-insertion course on negotiation ethics.

5. Results, conclusions and recommendations

The purpose of this study was to investigate the graduate students’ attitude to the ethically marginal tactics in the negotiation process and to work out proposal for the micro-insertion module in negotiation ethics. In order to attain this goal we carried through the survey of the MBA students. The data were collected using the five point Likert scale, the results were interpreted by the means of the descriptive statistics – the means and the standard deviations were calculated for the each factor. The theoretical background of this investigation consisted of three broad groups of literature, and they were the publications on: (1) negotiations; (2) ethics of negotiations; (3) teaching business ethics and negotiations. The questionnaire that consisted of 16 statements (items) regarding the marginal ethical tactics of negotiations, based on the SINS scale (“Self-reported Inappropriate Negotiation Strategy Scale” created by R. J. Robinson, R. J. Lewicki and E. M. Donahue). The population sample was the purposive one, the sample of convenience (MBA students involved in the courses of business ethics and negotiations). Two research questions were put forward: (1) What is the distribution of MBA students’ attitude to ethically marginal negotiation tactics? (2) What is the relation between number of years of students’ work experience and their attitude to ethically marginal negotiation tactics?

The answer to the first question goes as follows: the highest mean (2,60) was assigned to the factor “Traditional competitive bargaining”. It has to be noted that the standard deviations in factors in most cases are less than 0, 5, save the one of “Misrepresentation”. This makes it possible to conclude that differences among answers (items) within each factor are insignificant. The lowest rated factor, the one of the “Attacking opponent’s network” seems to require a special interest, since the mean of 1,57 differs from the higher valued factors. The can be explained by the formulation of the statements themselves, since their tone is straightforward aggressive and there is no doubt that employing them would inevitably lead to the ethical violations during the negotiation process.

The second research question regarded the relation between the tactical preferences and the number of years of work experience. To answer this question we divided all respondents into 4 groups: up to 3 years (17 students); 4 – 6 (10 students); 7 – 10 years (8 students); more than 11 years (5 students). The current research did not the strong negative correlation, as it would be expected according to the literature (the more years of experience, the less choice of unethical bargaining tactics). It did not show the clear patter. Partly this can be explained by the unequal number of respondents in each group, the explanation for this – the respondents were the MBA students with shorter or longer pauses in between the undergraduate and graduate studies.

Nevertheless, the results demonstrated a few tendencies: the higher regard for the traditional bargaining techniques and the lower – for the direct and open attacking the opponent’s network; the controversial issues (readiness to violate the ethical standards and procedures). All these factors can form the core structure of the proposed micro-insertion module “Negotiation ethics”. The advantage of the module proposed lies in the fact that it is the autonomous module that can be inserted in various MBA courses: marketing, management,



negotiations, business ethics, organizational psychology, economic diplomacy, culture diplomacy, etc. In the conclusion, the author of the present article puts forward the possible structure of such a course.

Module title: Negotiation ethics

Module type – Micro-insertion, cross disciplinary

Pre-requisite: None

Compatibles: Marketing, International marketing, Management, Business Ethics, Organizational Psychology, Human resource Management, Negotiations

Incompatibles: None

Number of academic hours: 6-8

Level: MBA (possibly also BBA)

Instruction form: lectures, seminars, group discussions, case studies, group and individual assignments

Form of testing: students' conference – presentations, discussions and answers to the questions

Description: This module is designed to provide course participants with the necessary conceptual tools to analyze ethical dilemmas and problematic situations that arise in the negotiating process in the business world. It will train and enhance students' skills in applying ethical reasoning to the real life situations related to negotiating. Students examine the core concepts, approaches, strategies and tactics. Through active participation in class work and individual and group assignments MBA students will improve their capacity of ethical analysis and critical evaluation of negotiation situation. In the end, students will participate in the study conference presenting their findings regarding negotiation ethics.

Learning outcomes:

1. Demonstrate a systematic understanding of relevant ethical principles and values
2. Apply ethical bargaining strategies in the business environment
3. Display a critical understanding of unethical bargaining practices
4. Apply certain ethical decision-making models

Themes to be covered during the course:

1. Theoretical framework of negotiation ethics – procedure, actors, different approaches.
2. Ethical dilemmas during negotiation process, problem- solving models
3. International and intercultural aspect of bargaining
4. Ethical/unethical bargaining tactics – application and analysis

References

- Acevedo, A. (2013). But, Is It Ethics? Common Misconceptions in Business Ethics Education. *Journal of Education For Business*, 88, 63–69.
- Alavoine, C. (2011). Ethics in Negotiations: The Confrontation between Representation and Practices. *World Academy of Science, Engineering and Technology*, 78, 205-210.
- Allhoff, F. (2003). Business bluffing reconsidered. *Journal of Business Ethics*, 45, 283–289.
- Carr, A. Z. (2004). Is Business Bluffing Ethical? *What's Fair. Ethics for Negotiators*. San Francisco: John Wiley & Sons, Inc., 246-256.
- Collins, D. (2006). Taking Business Ethics Seriously. Best Practices in Teaching and Integrating Business Ethics Within a Business Program. *New Visions of Graduate Management Education*. Greenwich, Connecticut: Information Age Publishing, 329-359.
- Menkel-Meadow, C. (2004). What's Fair in Negotiation? What Is Ethics in Negotiation? *What's Fair. Ethics for Negotiators*. San Francisco: John Wiley & Sons, Inc., xiii-xxxv.
- Cohen, T. R. (2010). Moral Emotions & Unethical Bargaining: The Differential Effects of Empathy and Perspective Taking in Deterring Deceitful Negotiation. *Journal of Business Ethics*, 94(4), 569-579.
- Fells, R. (2009). *Effective Negotiation. From Research to Results*. Cambridge: Cambridge University Press.
- Felton, E. L., Sims, R. R. (2005). Teaching Business Ethics: Targeted Outputs. *Journal of Business Ethics*, 60, 377-391.
- Gibson, K. (2004). The New Canon of Negotiation Ethics. *Marquette Law Review*, 87, 747-752.
- Goldwich, D. (2010). *Win-Win Negotiations. Developing The Mindset, Skills and Behaviors of Win-Win Negotiators*. Singapore: Marshall Cavendish International (Asia) Private Limited.



- Lax, D. A., Sebenius, J. K. (2004). Three Ethical Issues in Negotiation. *What's Fair. Ethics for Negotiators*. San Francisco: John Wiley & Sons, Inc., 5-14.
- Lewicki, R. J., Barry, B., Saunders, D. M., Minton, J. W. (2003). *Negotiation*. New York: McGraw/Irwin.
- Lewicki, R. J., Robinson, R. J. (2004). Ethical and Unethical Bargaining Tactics: An Empirical Study. *What's Fair. Ethics for Negotiators*. San Francisco: John Wiley & Sons, Inc., 221-245.
- Menkel-Meadow, C. (2004). Introduction: What's Fair in Negotiation? What Is Ethics in Negotiation? *What's Fair. Ethics for Negotiators*. San Francisco: John Wiley & Sons, Inc., xiii-xxxiv.
- Morris, B. (2014). Carr and Business Bluffing-Lying: Making the Separation Thesis Work. *Northern Plains Ethics Journal*, 65-73.
- Raiffa, H. (2004). Ethical and Moral Issues. *What's Fair. Ethics for Negotiators*. San Francisco: John Wiley & Sons, Inc., 15-18.
- Rajeev, P. N. (2012). Teaching Business Ethics: An Integrated Approach. *Journal of International Business Ethics*, 5(2), 45-51.
- Rasche, A., Gilbert, D. U., Schedel, I. (2013). Cross-Disciplinary Ethics Education in MBA Programs: Rhetoric or Reality? *Academy of Management Learning & Education*, 12(1), 71-78.
- Reilly, P. (2009). Was Machiavelli Right? Lying in Negotiation and the Art of Defensive Self-Help. *Ohio State Journal on Dispute Resolution*, 24(3), 481-534.
- Riley, K., Senior Member, Davis, M., Senior Member, Jackson, A. C., Maciukenas, J. (2009). "Ethics in the Details": Communicating Engineering Ethics via Micro-Insertion. Tutorial. *Ieee Transactions on Professional Communication*, 52 (1), 95-108.
- James Maciukenas
- Rivers, C., Lytle, A. L., Hudson, M. (2003). *Ethical Marginal Tactics and Developing the SINS Scale: Incorporating an Australian Perspective*. Retrieved July, 14, 2017 from <https://www.researchgate.net/publication/228182843>
- Robinson, R. J., Lewicki, R. J., Donahue, E. M. (2000). Extending and Testing a Five-Factor Model of Ethical and Unethical Bargaining Tactics: Introducing the SINS Scale. *Journal of Organizational Behavior*, 21, 649-664.
- Shell, G. R. (2004). Bargaining with the Devil without Losing Your Soul: Ethics in Negotiation. *What's Fair. Ethics for Negotiators*. San Francisco: John Wiley & Sons, Inc., 57-78.
- Shell, G. R. (2006). *Bargaining for Advantage: Negotiation Strategies for Reasonable People*. London: Penguin Books.
- Sims, R. R., Felton, E. L. (2006). Designing and Delivering Business Ethics Teaching and Learning. *Journal of Business Ethics*, 63, 297-312.
- Slocum, A., Rohlfer, S., Gonzalez-Canton, C. (2014). Teaching Business Ethics Through Strategically Integrated Micro-Insertions. *Journal of Business Ethics*, 125, 45-58.
- Smith, S. M., Albaum, G. S. (2012). *Basic Marketing Research. Handbook for Research Professionals*. Vol. 1. Provo, Utah: Qualtrics Labs, Inc.
- Strudler, A. (2004). On the Ethics of Deception in Negotiation. *What's Fair. Ethics for Negotiators*. San Francisco: John Wiley & Sons, Inc., 138-156.
- Sullivan, R. J., Van E. Langley van, E., Powell, D. C. (1984). A Response to "Is Business Bluffing Ethical? *Business & Professional Ethics Journal*, 3(2), 1-23.
- Tello, G., Swanson, D., Floyd, L., Caldwell, C. (2013). Transformative Learning: A New Model for Business Ethics Education. *Journal of Multidisciplinary Research*, 5(1), 105-120.
- Yu-Te, T. (2013). The Relationships between Trust and Unethical Negotiation. *International Journal of Business, Humanities and Technology*, 3(3), 45-52.



A PLS-SEM of Factors Affecting the Sustainability of Music Programs within Thai Private Universities

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Abstract

As indicated by the present aging population and fewer children situation, the number of Thai youngsters has been radically diminishing contrasted with the earlier decades and this prompts the insufficient number of students enlisting in the university level. It has influenced both public and private university however the second one has gotten a higher effect as Thai parents and children have a typical social esteem that graduating from the public university will get more pride and respect to the family. Programs in music have been popular in the recent year; however, for the private universities offering a degree in music is attempting to survive. This paper therefore investigated a multitude of factors both the direct and indirect factors affecting organizational sustainability of Thai private university's music programs. From the 280 Thai administrative members in the private universities surveyed and analyzed by use of a structural equation model by PLS-Graph software. This research also concluded that business strategies were not influenced directly through organizational sustainability but instead was indirectly influenced through organizational performance. The innovation process and innovative marketing affect potential competitiveness which in turn affects organizational sustainability. Strategies within the university must also be stated clearly, which also meets the needs of the learners with cost management being imperative as well. It was determined that organizational performance affects organizational sustainability to the greatest extent due to monetary and non-monetary factors with an intermediate input into innovation, the business environment and business strategies. Organizational performance is also influenced by innovation and business strategies.

Keywords: innovation, business environment, business strategies, organizational performance, organizational sustainability, SEM

1. Introduction

According to National Economic and Social Development Board of Thailand, in 1980 the number of school age children (< 21 years) represented 62.3 percent of the population but by 2040, this number will drop to 20 percent of the population. The reasons are varied and complex but the reality is many Thai universities are entering a period of where change and flexibility are becoming a matter of institutional sustainability. According to education officials, in 2015's admissions period, Thai universities had up to 156,216 spots open for prospective students. However, only 105,046 applied to take the entrance exams, leaving more than 50,000 places empty (MAA, 2016). If the trend continues, academics fear that some universities may be forced to close their doors.

According to the Office of the Prime Minister (2012), Thai fertility rates plunged from 6.3 from 1964-1965 to approximately 1.82 from 2000 - 2005, which is considered lower than the replacement level and it continued to decline to 1.62 in the 2005 -2010 period. The resultant change to Thailand's demographic structure has thus become a threat to sustainable economic and social development (and universities) with the aged population rapidly increasing, whereas the working-age population and school-aged children have been declining rapidly (Searchinger et al., 2013).

As noted above, in 2015 there was less number of students wishing to enter a university program as compared to the available seats. The future appears also bleak as student enrollment in primary and secondary schools also had 800,000 empty seats throughout the country (Sakworawit, 2016). Of the 170 Thai universities, the Rajabhat University system is the mostly likely candidate to face the crunch due to a trend shift in the majors chosen by students, with changes in the labour market having a large impact on non-scientific programs.

Further supporting data for the coming crisis in social science enrollment was seen in the 2015 as the number of participants who entered the national entrance exam dropped to 91,813 students with total availability at 151,000 seats (Numman, 2016). The knock-on effect will eventually be a decrease in graduate students and PhD candidates that are available for academic and research positions. This is already being played out in 2016 by the government's decision to spend 34.3 billion baht to produce 12,290 post-doctoral researchers to meet the development of 10 targeted industries (not the social sciences) and the concept of "Thailand 4.0", which focuses on technological development and innovation (Bangkok Post, 2016). In the 2016 plan, of the 1.07 billion baht earmarked for 300 scholarships, 60 scholarships are slated for ASEAN and six other countries.



According to statistics from the website of International Association of University Presidents of Thailand, among the top 100 university programs in 2015, music was not listed. The academic pursuit of music is always considered an optional choice by university students with most viewing music as a risky profession in terms of employment and income potential as compared to professions in medicine, engineering, or business.

Enrolments in Thai university music programs continue to drop and with the subsequent competition in both public and private institutions ever increasing, the standard of quality of students that become enrolled often times becomes suspect and can with time lead to lower standards and/or disqualified students. There also appears to be a relationship between whether a student pursues a music degree from either a public or private institution and how this is viewed by families and society (Chareonwongsak, 2016).

The bottom line is the competition for music students is fierce as enrolments have plummeted due to population demographics, more competitive foreign programs, and online courses which are often significantly lower campus attended tuition rates. Many Thai universities are struggling, particularly private ones, with financial concerns becoming first and foremost the greatest concern of university and program administrators. The ratio between lecturers and students is not in balance and especially, private universities which mainly rely on tuition fees of students. Therefore, some weak programs will need to be shut down in order to stabilise the organisational structure. It is a time to prepare for change in higher education. Things need to be done now to change the business of education before the corridors are empty and the music has stopped.

The researchers used a structural equation model (SEM) to develop and understand the music programs in Thai private universities and the variables affecting its sustainability within 74 registered private institutions nationwide. This research will focus on factors that affect sustainability of Thai private university's music programs. There are dramatic changes affected by the decreasing number of population and social value. Survival and to sustain in such a situation in the present circumstance is complicated and difficult and it leads to the main objective of this research.

2. Literature Review

2.1 Innovation

Birkinshaw et al. (2008) defined innovation as the creation and introduction and use of new and modern ideas, their processes, related structures and techniques which can further an organization's goals. According to Hamel (2006) company innovation can produce seismic shifts in industry leadership through management breakthroughs giving companies a potent advantage, whereas technology and product innovation tend to deliver limited small-caliber advantages. Put simply, management innovation changes how managers do what they do. This is consistent with the OECD (2005) 'Oslo Manual' which indicated the importance of management's strategic vision on the ability for an organization to learn. Further emphasis was placed on communications, information flow, skills transmission and the accumulation of knowledge, both within and outside the organization. Organizational innovation management (OIM) is another component which consists of the organization's culture and beliefs which need to be flexible, simple and uncomplicated, focused on decentralization with an ear tuned towards acknowledging the opinions of others which helps achieve continuous improvement (Wong and Chin, 2007). And finally, according to Schaltegger and Wagner (2011), sustainable entrepreneurs and sustainability managers are shaping markets and society through their innovation.

The literature review has thus led to the creation of the following two hypotheses:

H1: Innovation directly affects Organizational Sustainability

H2: Innovation directly affects Organizational Performance

2.2 Business Strategies

The Business strategy alludes to the instruments that organizations use to judge the competition in the business sector compared to its rivals (Meskendahl, 2010) which is the competitive strategy, business strategy, or corporate system, is the fabric of verbal and non-verbal communications in business setting the behavioural standards for the business long-term orientation (Johnson et al., 2011) In that capacity procedure ought to influence day by day activities however only or mostly those related to the organizations' expectations of its main activities on a more distant horizon (Porter, 1996) and expressed that a country's competitiveness relies on



upon the limit of its industry to innovate and update. The Balanced Scorecard (BSC) was created as a managerial device to support the introduction of successful organizational strategies, while also helping with the monitoring of organizational performance against strategic goals (Kaplan, R.S. and Norton, 1992). The BSC's four perspectives are: financial, customer, the internal process, and the learning and growth perspective (Figge et al., 2002). The BSC has been adapted into what is called the 'Sustainability Balanced Scorecard' (SBSC) which was created to help overcome limitations with use of the BSC in areas such as environmental and social management systems. According to Figge et al. (2002) there are three key elements of sustainability which include economic, environmental and social.

The literature review has thus led to the creation of the following two hypotheses:

H3: Business Strategy directly affects Organizational Performance

H4: Business Strategy directly affects Organizational Sustainability

2.3 Business Environment

According to Jiao et al. (2011) discussed emerging markets while using the resource-based view and determined that sustainability within the business environment was critically linked to flexibility. Lewin et al. (1999) posited that environmental aspects such as environmental dynamism and competitiveness moderate the relationship between both types of innovation and performance. They also indicated that organizational units operating in more dynamic environments increase their financial performance by pursuing exploratory innovations.

The literature review has thus led to the creation of the following hypothesis:

H5: Business Environment directly affects Organizational Performance

2.4 Organizational Performance

De Waal (2007) focused on the distinguishing variables that decide the consistent achievement of a high performance organization and according to a broad review of the study which included non-financial performance, better financial performance, and sustained growth compared to long-term orientation and over five year's better results. Kaplan and Norton (1992) changed traditional concept of organizational performance measurements with the balanced scorecard. The balanced scorecard indicates that if organizations wish to increase their successful performance they must adhere to the three main ideas of sustainable development which includes economic, environmental and social. Also, according to Figge et al. (2002), sustainability management need not be concerned with economic crises if they are economically solid.

The literature review has thus led to the creation of the following hypothesis:

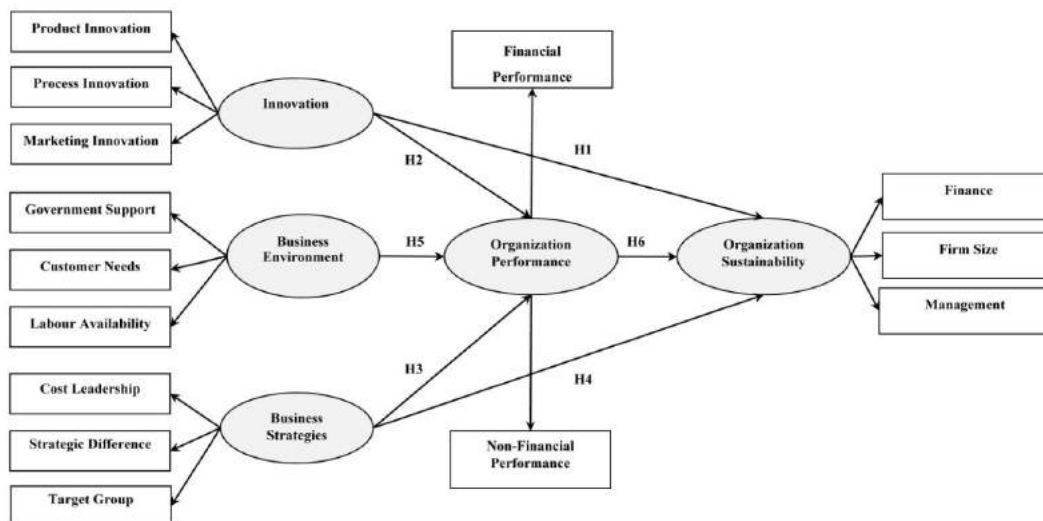
H6: Organizational Performance has a direct effect on Organizational Sustainability

2.5 Organizational Sustainability

Organizational sustainability has been contended to be an essential objective or goal every firm must set. It was expressed to be almost the top of the management plan and it reflects strategic planning and financial results of the organization (Rothwell, 2010). Bertels et al. (2010) reported that a UN study of global CEOs indicated that 93 percent viewed survival as crucial for their firm's success and furthermore indicated from their own report that the key importance to corporate sustainability was organizational culture. Epstein et al. (2014) added that enterprise sustainability depends on the daily effect that a firm has on society, the surrounding environment and the financial impact of the local community.



Figure 1. Conceptual Framework



3. Methodology

The research focuses on the factors affecting the sustainability of private university's music programs in Thailand. The population in this study is 280 administrative members within the total 74 private universities and colleges in Thailand which have been registered and licensed by the Office of the Higher Education Commission of Thailand.

3.1 Data Collection

It is suggested a 15:1 to 20:1 subject-to-variable ratio as a rule of thumb can be used structural equation modelling (Schumacker and Lomax, 2010; Worthington and Whittaker, 2006; Cunningham, 2008; Weston and Gore, 2006; Meldrum, 2010). As the study had 14 variables, a 20:1 ratio was used to determine the sample size of 280 which was selected by multi-stage random sampling, with the population divided into six regions distributed throughout Thailand, selected in proportion to the population of each group within each region.

3.2 Measurement

Samples used for the study included 280 executives and administrators randomly sampled from 6 regions in Thailand. To gauge both content validity and reliability of the survey, 5 experts consisting of scholars and industry executives were chosen to evaluate the consistency of the content and confirm it was valid for the purposes of the research. Additionally, Rovinelli and Hambleton (1977) developed the Item-Objective Congruence (IOC) which was used to carry out the screening of the survey questions.

3.3 Variables

3.3.1 Dependent variable

Organizational Sustainability (Sustain) was analyzed by use of a 7-Point Likert Scale (Likert, 1932) which measured Finance, Firm Size, and Management (Management).

3.3.2 Intermediate variables

Organizational Performance was analyzed by use of a 7-Point Likert Scale (Likert, 1932) which measured Financial Performance (FinanPer) and Non-Financial Performance (Nonfinan).

3.3.3 Independent variables

Innovation (Innovation) was analyzed by use of a 7-Point Likert Scale (Likert, 1932) which measured Product Innovation (Prod_in), Process Innovation (Proc_in) and Marketing Innovation (Market_in).



Business Environment (Bus_envi) was analyzed by use of a 7-Point Likert Scale (Likert, 1932) which measured Government Support (Govern), Customer Needs (Customer) and Labour Availability (Labour).

Business Strategies (Strategy) was analyzed by use of a 7-Point Likert Scale (Likert, 1932) which measured Cost Leadership Strategy (Cost), Strategic Difference (Different) and Target Group (Target_group).

4. Analysis and Results

Henseler et al. (2014) indicated that PLS is an important statistical tool for research. PLS-Graph software was used to discover the causal relationships of the structural equation model (SEM) as presented in Figure 2 (Piriyakul, 2011). This involved defining the observed or manifest variables with the latent variables, which were then analyzed for their accuracy and reliability of the measurement.

Measurement results showed that the mean correlation was reliable ranging from 0.725 to 0.856. All values had statistical significance (Table 1) by ($|t| \geq 1.96$) (Lauro and Vinzi, 2004; Henseler et al., 2009).

In Table 3 discriminant validity and the scale reliability were analyzed from Composite Reliability (CR) as well as the Average Variance Extracted (AVE). The CR value should be maintained above 0.60 while the AVE values be lower than 0.50. Additionally, the coefficient of determination (R^2) value should always exceed 0.20 (Lauro and Vinzi, 2004; Henseler and Fassott, 2010).

Table 1. Convergent validity of the latent variables

Construct/Item		Loading	t-stat
Organizational Sustainability (Sustain)			
Finance	Finance	0.8531	42.6629
Manage	Management	0.8870	55.0902
Size	Organizational Size	0.8643	46.8357
Organizational Performance (Performance)			
FinanPer	Financial Performance	0.9078	77.4380
Nonfinan	Non-Financial Performance	0.9031	77.5605
Innovation (Innovation)			
Prod_in	Product Innovation	0.8721	44.6352
Proc_in	Process Innovation	0.9011	51.0742
Market_in	Marketing Innovation	0.9224	96.8576
Business Environment (Bus_envi)			
Govern	Government Support	0.9321	93.1261
Customer	Customer Needs	0.9572	117.8708
Labour	Labour Availability	0.9256	101.5733
Business Strategies (Strategy)			
Cost	Cost Leadership Strategy	0.9351	95.3369
Different	Strategic Difference	0.9551	121.4790
Target_group	Target Group	0.9391	125.1222

Organizational Sustainability (Sustain) was determined to be affected by Finance (Finance), Management (Manage), and Organizational Size (Size) which had a confidence level of 95% ($|t| \geq 1.96$). These variables have a direct positive influence on *Organizational Sustainability* (Sustain) (Figure 2).

Business Environment (Bus_envi) was determined to be affected by Government Support (Govern), Customer Needs (Customer), and Labour Availability (Labour) which had a confidence level of 95% ($|t| \geq 1.96$). These variables have a direct positive influence on *Business Environment* (Bus_envi) (Table 3 and Figure 2).

Business Strategies (Strategy) was determined to be affected by Cost Leadership Strategy (Cost), Strategic difference (Different), and Target Group (Target_group) which had a confidence level of 95% ($|t| \geq 1.96$). These variables have a direct positive influence on *Business Strategies* (Strategy) (Table 3 and Figure 2).



Organizational Performance (Performance) was determined to be affected by Financial Performance (FinanPer), and Non-Financial Performance (Nonfinan) which had a confidence level of 95% ($|t| \geq 1.96$). These variables have a direct positive influence on *Organizational Performance* (Performance) (Table 3 and Figure 2).

Innovation (Innovation) was determined to be affected by Product Innovation (Prod_in), Process Innovation (Proc_in), and Marketing Innovation (Market_in) which had a confidence level of 95% ($|t| \geq 1.96$). These variables have a direct positive influence on *Innovation* (Innovation) (Table 3 and Figure 2).

Table 2 shows factor analysis results affecting Thai private university's music programs' sustainability with composite reliability in Table 2 greater than 0.60 with the AVE values also greater than 0.50. Coefficient of determination (R^2) values are also higher than 0.20, representing the reliability of the measurement (Lauro and Vinzi, 2004; Henseler et. al., 2009). Reliable measurements can be found in the column of interest which is higher than the cross construct correlation values in the same column.

Results from the analysis of structural equation modelling of the sustainability of Thai private university's music programs is shown in Figure 2 and Table 3.

Table 2. Statistics showing the discriminant validity

Construct	CR	R^2	AVE	cross construct correlation				
				I.	B.E.	B.S.	O.P.	O.S
Innovation (I)	0.926		0.808	0.899				
Business Environment (B.E.)	0.957		0.881	0.801	0.939			
Business Strategies (B.S.)	0.960		0.890	0.742	0.882	0.943		
Organizational Performance (O.P.)	0.901	0.8235	0.820	0.828	0.833	0.862	0.906	
Organizational Sustainability (O.S.)	0.902	0.6201	0.754	0.701	0.723	0.702	0.780	0.868

Figure 2. Final Model

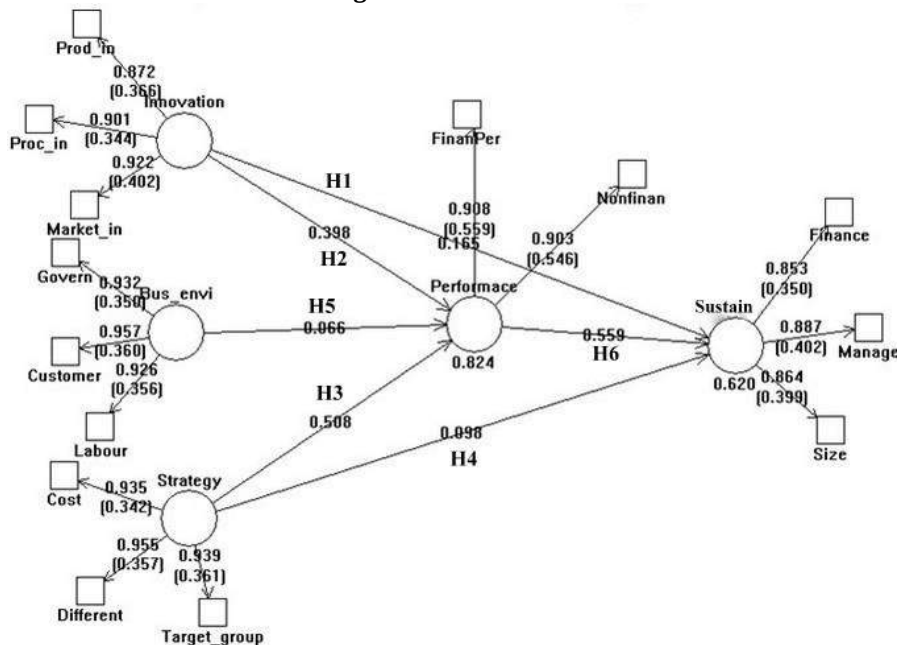




Table 3. Results of hypotheses testing

Hypotheses	coef.	t-stat ¹	Results
H1: <i>Innovation directly affects Organizational Sustainability</i>	0.165	2.0906	Supported
H2: <i>Innovation directly affects Organizational Performance</i>	0.398	9.4282	Supported
H3: <i>Business Strategy directly affects Organizational Performance</i>	0.508	7.7875	Supported
H4: <i>Business Strategy directly affects Organizational Sustainability</i>	0.098	1.1393	Not Supported
H5: <i>Business Environment directly affects Organizational Performance</i>	0.066	.9106	Not Supported
H6: <i>Organizational Performance directly affects Organizational Sustainability</i>	0.559	5.1254	Supported

¹ |t| ≥ 1.96, means significance at $p \leq 0.05$.

Influence of each of the variables that affect organizational sustainability of Thai private university's music programs is shown in Table 4 below.

Table 4. Direct and indirect effects of the independent variables

Dependent Variable	R ²	Effect	Independent Variables			
			Innovation	Business Environment	Business Strategies	Organizational Performance
Organizational Performance	0.824	Direct Effect	0.398	0.066	0.508	N/A
		Indirect Effect	0.000	0.000	0.000	N/A
		Total Effect	0.398	0.066	0.508	N/A
Organizational Sustainability	0.620	Direct Effect	0.165	0.000	0.098	0.559
		Indirect Effect	0.222	0.037	0.284	0.000
		Total Effect	0.387	0.037	0.382	0.559

From Table 2, it was found that the variables that influence organizational sustainability the most are innovation, business strategy and business environment, in which the three variables are influenced by variations in organizational performance.

5. Discussion and Conclusion

Research concluded that organizational performance *directly affects* organizational sustainability to the greatest extent due to monetary and non-monetary factors. It also has an intermediate input into innovation, the business environment and business strategies. Cohen (2014) has indicated that the transition to sustainability is an impetus for an enterprise to embrace innovation and change. Epstein et Al. (2014) nine principles of sustainability included the idea that organizations must focus on environmental protection and promote sustainable development with products, processes, and services.

This research also concluded that business strategies were not influenced directly through organizational sustainability but instead was indirectly influenced through organizational performance. The innovation process and innovative marketing affect potential competitiveness which in turn affects organizational sustainability. Management of the enterprises must be perceived as creating and producing innovative products.

Organizational strategies must also be stated clearly, which also meets the needs of the learners with cost management being imperative as well. It was also discovered that *business strategies* are aligned with organizational *innovation* which therefore affects *organizational performance* leading to *organizational*



sustainability. Within the *business environment* there must also be governmental support and each enterprise has the ability to reduce the negative impact of the *business environment* if they develop an ability to determine their own destiny and success when the *business environment* changes.

References

- Bangkok Post (2016). Govt designs 20-year plan to churn out more researchers Bangkok Post. Retrieved from <http://tinyurl.com/gkuqeuj>
- Bertels, S., Papania, L. and Papania, D. (2010) *Embedding sustainability in organizational culture*. Network for Business Sustainability. Retrieved from <http://tinyurl.com/l6nswwq>
- Birkinshaw, J., Hamel, G. and Mol, M.J. (2008) 'Management Innovation', *Academy of Management Review*, Vol. 33, No. 4, pp. 825–845, [Online] <http://tinyurl.com/zkm3et3>
- Chareonwongsak, K. (2008). *When a birth rate drops, how can Thai universities survive?*. OK Nation. Retrieved from <http://tinyurl.com/z83cnk7>
- Cohen, S. (2014) Sustainability, Leadership and Management Innovation, The Blog HuffPost Green, [online] <http://tinyurl.com/l3p5f9u>
- Cunningham, E. (2008). *A practical guide to Structural Equation Modelling using AMOS*, Statsline, Melbourne.
- De Waal, A. A. (2007). The Secret of High Performance Organizations, *Management Online Review*, ISSN 1996-3300. Retrieved from <http://tinyurl.com/jufx5tj>
- Epstein, M.J. and Buhovac, A.R. (2014) *Making Sustainability Work: Best Practices in Managing and Measuring Corporate Social, Environmental, and Economic Impact*, Published by Berrett –Koehler Publishers. Retrieved from <http://tinyurl.com/zkzomdq>
- Figge, F., Hahn, T., Schaltegger, S. and Wagner, M. (2002) The Sustainability Balanced Scorecard-Linking Sustainability Management to Business Strategy, *Business Strategy and the Environment*, Vol 11, pp. 269 – 284. Retrieved from <http://tinyurl.com/z5byw73>
- Hamel, G. (2006) The Why, What, and How of Management Innovation, *Harvard Business Review*, February, [online] <http://tinyurl.com/j8ldo5j>
- Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: an illustration of available procedures, In: Esposito Vinzi, V., Chin, W.W., Henseler, J., Wang, H. (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications* (Springer Handbooks of Computational Statistics Series, vol. II). Springer, Heidelberg, Dordrecht, London, New York, pp. 713-735.
- Henseler, J., Dijkstra, T.K., Sarstedt, M., Ringle, C.M., Diamantopoulous, A, Straub, D.W., Ketchen Jr., D.J., Hair, J.F., Hult, G.T.M. and Calantone, R.J. (2014) Common Beliefs and Reality About PLS Comments on Rönkkö and Evermann (2013), *Organizational Research Methods*, Vol. 17, No. 2, pp. 182-209 [online] <http://tinyurl.com/jo9nx7r>
- Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009). 'The use of partial least squares path modeling in international marketing', *Advances in International Marketing*, Vol. 20, pp. 277-319. Retrieved from <http://tinyurl.com/jo9nx7r>
- Jiao, H., Alon, I. and Cui, Y. (2011) 'Environmental dynamism, innovation, and dynamic capabilities: the case of China', *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 5, Iss. 2, pp.131 – 144. Retrieved from <http://tinyurl.com/j3qwjqg>
- Johnson, G., Whittington, R., Scholes, K. & Pyle, S. (2011). *Exploring strategy: text & cases*. Harlow: Financial Times Prentice Hall.
- Kaplan, R.S., & Norton, D.P. (1992). Using the Balanced Scorecard as a Strategic Management System, *Harvard Business Review*, July–August. Retrieved from <http://tinyurl.com/ozdnzdy>
- Lauro, C. and Vinzi, V.E. (2004) 'Some contribution of PLS path modeling and a system for the European customer satisfaction', *Dipartimento di Matematica e Statistica, Università Federico II di Napoli*, pp: 201-210. Retrieved from <http://tinyurl.com/k2fgqa9>
- Lewin, A.Y., Long, C.P. and Carroll, T.N. (1999) 'The Coevolution of New Organizational Forms', *Organization Science*, Vol. 10, pp. 535-550.
- Likert, R. (1932) 'A technique for the measurement of attitudes', *Archives of Psychology*, Vol. 22, No. 140. Retrieved from <http://tinyurl.com/z5f2nmX>
- MAA, D. (2016). Unis face crisis as students turn away. Bangkok Post. Retrieved from <http://tinyurl.com/z3hdogx>



- Meldrum K. (2010), Structural Equation Modeling: Tips for Getting Started with Your Research, *Contemporary Approaches to Research in Mathematics, Science, Health and Environmental Education*, 1-5. Retrieved from <http://tinyurl.com/hxxosl>
- Meskendahl, S. (2010). The influence of business strategy on project portfolio management and Its success—a conceptual framework. *International Journal of Project Management*, 28(8), 807-817.
- Numman, T. (2016). *Full of Universities but an Empty Classroom: A Thai Higher Education Crisis*. Post Today. Retrieved from <http://tinyurl.com/zqvjyxs>
- OECD (2005) Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data (2005 Edition), Organisation for Economic Co-operation and Development [online] <http://tinyurl.com/jeoccm6>
- Piriyakul, M. (2011) 'A partial least squares model for SCM strategy, willingness for external collaboration, competitive performance and relative performance: Effects of marketing and logistics performance in the palm oil industry', *African Journal of Business Management*, Vol. 5, No. 4, pp. 1431-1440. Retrieved from <http://tinyurl.com/zf496px>
- Porter, M. E. (1985). *The Competitive Advantage: Creating and Sustaining Superior Performance*. NY: Free Press.
- Rothwell, W.J. (2010). *Effective Succession Planning: Ensuring Leadership Continuity and Building Talent from Within - 4th Edition*. New York: American Management Association,. Retrieved from <http://tinyurl.com/zukgdum>
- Rovinelli, R. J. and Hambleton, R. K. (1977) 'On the use of content specialists in the assessment of criterion-referenced test item validity', *Dutch Journal of Educational Research*, Vol. 2, pp. 49-60.
- Sakworawit, A. (2016). *Will Thai Universities be Able to Survive?*. Manager Online. Retrieved from <http://tinyurl.com/z9xk822>
- Schaltegger, S. and Wagner, M. (2011) 'Sustainable entrepreneurship and sustainability innovation: categories and interactions', *Business Strategy and the Environment*, Vol. 20, Iss. 4, pp. 222–237.
- Schumacker, R. E. and Lomax, R. G. (2010) *A beginner's guide to structural equation modeling*, Routledge, New York. Retrieved from <http://tinyurl.com/h5fqmh7>
- Searchinger, T., Hanson, C., Waite, R., Lipinski, B., Leeson, G., & Sarah Harper, S. (2013). *Achieving Replacement Level Fertility-Creating a Sustainable Food Future*, Installment Three. World Resources Institute. Retrieved from <http://tinyurl.com/h7jrjp9>
- Weston, R. & Gore, P. A. (2006) 'A brief guide to structural equation modeling', *The Counseling Psychologist*, Vol. 34, No. 5, pp. 719–751.
- Wong, S.Y. and Chin, K.S. (2007) 'Organizational innovation management: An organization-wide perspective', *Industrial Management & Data Systems*, Vol. 107, pp. 1290-1315.
- Worthington, R. L. and T. A. Whittaker (2006) 'Scale development research: A content analysis and recommendations for best practices', *The Counselling Psychologist*, Vol. 34, No. 6, pp. 806-837.



Educational Paradoxes as a Part of Field Didactics of Citizenship Education

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Abstract

There is a whole range of factors influencing the educational process. Educational paradoxes belong undoubtedly among the phenomena of educational reality that affect both the formal and the informal curriculum. We perceive those paradoxes as a part of the educational process that has been not much discussed by experts and the professionals in pedagogical field are not sufficiently informed about them. At present, we face antinomy because the paradoxes of education can be identified in the educational practice, but there is a lack of further work with the results of scientific analyses and there is no feedback given to the teachers. Our study mainly deals with the educational paradoxes that directly affect the field didactics of social sciences. The paper presents the decomposition of the educational paradoxes into the elementary parts, which are analysed from the perspective of two subjects: Citizenship Education and Social Sciences, on the basis of the current national researchers and international connotations. The aim of the article is to summarize the approaches to the research of educational paradoxes, both from general and Citizenship Education point of view, and open discussion on further development of pedagogical research in this field. Individual paradoxes will be described in more detail, including basal implications in educational practice. We want to contribute to a more structured systematization of educational paradoxes topic in the field didactics of social sciences and to frame the whole problematics of social sciences didactics by the introduction of the realized researches, because it is relatively new in the Czech Republic. Another positive implication of the study is the enrichment of the teacher's portfolio with the knowledge mentioned in the text which can improve his / her profession.

Keywords: pedagogy, educational paradoxes, field didactics, citizenship education

Introduction

This text refers to a theoretical outline of the issue, which is even more wide and related quite specifically to the educational process. However, the literature still does not cover the so-called educational paradoxes and their theoretical or practical characterization.

In the last years, there has been a gradual establishment of the field didactics as the independent scientific disciplines in the Czech Republic. It is proved by the intense publishing activity in scientific journals, but also by the establishment of the Commission for the Field Didactics under the Accreditation Commission of the Czech Republic at the beginning of the second decade of the 21st century (it is necessary to specify that the aim of the commission was primarily to “*take care of the quality of the university education*” and to “*evaluate the activities of universities and the quality of accredited activities*.”¹ The Accreditation Commission of the Czech Republic formally ceased to exist on 31st of August, 2016 and its successor, the National Accreditation Office for Higher Education was established.

However, not all the field didactics clearly define their subject and professional interest. The situation may seem clearer for science-oriented subjects (e.g. mathematics, chemistry, physics), where can be found the first attempts to analyse the content of individual field didactics. Unfortunately, for social sciences, the attempts to constitute the erudite specifics of the field didactics seem more difficult. In the context of the Czech Republic, the field didactics of social sciences is the most complicated.

Social sciences also have different forms of the educational system curriculum for different types of schools (classification ISCED-F 2013 and education level 2, 3). However, the main difficulties are in their multidisciplinaryity, because they include knowledge from the major humanities disciplines. The problem of the more difficult scientific framing of the social science didactics can then be reflected in the practical level of the educational reality - instead of an attractive and modern teaching, larger amounts of knowledge are transferred from the teacher to the pupil without verifying of the complete content learning and understanding. The situation is also complicated by the professional discussion on differentiation and content concretization of the subject and field didactics².



Our article aims to contribute to the stabilization of the field didactics of social sciences by presenting one of the possible issues as a challenge to more detailed pedagogical research in this field. This theme or challenge are the so-called paradoxes of the education in the field didactics of social sciences. In the following passages, we want to briefly present the genesis of the current research in the Czech Republic and the theoretical basis of the problem.

1. Paradoxes in the Educational Process

Generally, educational paradoxes have been discussed by e.g. R. Palouš in his monography. His work could be thematically classified as a theory of philosophical education (according to the classification of J. Průcha³). Palouš considers totally 10 areas that influence the pedagogical theory and practice of current reality⁴:

- a) Inspiration and topicality of Comenius
- b) Paradoxes in the moral education
- c) The eco-harmony
- d) The „location“ paradox
- e) The importance of authority
- f) Knowledge and education
- g) The role of the universities
- h) The educational absurdity
- i) Truthfulness
- j) Geronto-pedagogy

¹ see <https://www.akreditacnikomise.cz/cs/>.

² The theme is more discussed in T. Janík, I. Stuchlíková (2010, 2015), T. Janík (2013), Z. Beneš (2013), A. Staněk (2013, 2015) etc.

⁴ The author's classification corresponds to the each chapter of Palouš publication, but the names of the points are a reflection of the contents of each chapter rather than a literally taken text.

Palouš takes a very close look at the interaction between the educator and the educated, and in this context he mentions the role of the teacher in relation to the pupils, that should : *"release the pupil from the curse of his/her prejudices, of a false self that does not have a notion about being in the falsehood."*⁵

There is space for a few questions in this point. When we accept the thesis that a teacher as a personality is a professional but cannot be infallible, then the logical implication of the proposition predicts the conclusion that the educational process cannot avoid the situation that may not be desirable from the official curriculum perspective. However, as we discuss later, it is not possible to perceive all the paradoxes in a purely negative connotation. On the contrary, some of them may encourage teachers e. g. to extend their qualifications, to analyse their performance in more detail, or to develop deeper understanding of their pupils.

For example, the democratic system is characterized by the free elections, which are repeated at a certain period. The teacher, in accordance with the curriculum, supports the idea of democracy and participation in the electoral act in the lessons. However, what if he decides to be active in this process and becomes either a sympathizer or a party nominee for a particular function. Is this fact going to affect his/her pedagogical work



Under the influence of our pedagogical professionalism, we can argue that the teacher must separate his/her potential public activities from the work in the classroom. Thus, a good teacher does certainly not have an intentional influence on the class from this point of view. But how is it with the unintended action?

No matter if the answer of the individual teachers, who find themselves in a similar situation, is positive or negative, the scientists who try to define this reality, suddenly face a paradoxical paradox, because it is difficult to verify such a statement empirically. The problem is not so much in the field of research methodology, but in the potential of authenticity of the respondents' answers. Are we able to get a reflection of reality or a subjective assessment of this reality from the perspective of the educational process actors?

A. Staněk suggests in his work that the degree of reflection and the perception of the educational paradoxes presence changes in relation to the length of the teachers' practice. Therefore, it can be assumed that the longer the teacher works in his professional field, the better he/she is prepared to manage the educational paradoxes. However, we cannot accept this premise globally without any comments. The following part of the article therefore focuses on more specific issues of the paradoxes.

Educational Paradoxes in the Citizenship Education

The previous part of the article mentions one of the possible general classifications of the educational paradoxes. Now we would like to present one of the outputs from an empirical survey that has already been realized in a certain area of teaching - in the citizenship education.

The educational paradoxes in the citizenship education represent a current and innovative topic from the perspective of social science didactics. It is connected to the requirement of ensuring a successful result of the educational process for all its actors. The problems of the educational paradoxes are more or less constantly confronted by the educators who are professionally focused on the citizenship education (Civics, Basis of Social Sciences).

⁵Palouš, 2009, p. 89.

⁶The question is not academic, because the expected answer would be obvious. We look for a real reflection of the reality. Moreover, this example is only illustrative and simplified, but it points out the principle of this issue.



During the process of “prejudice release”⁷, these teachers should not substitute one phenomenon by other one, which is not quite desirable as well. In other words, they should not force the pupils to look at the outside world through their optics, they should not persuade them of the correctness of their own worldview, but they should lead the pupils to the active democratic citizenship, active participation and social engagement⁸.

A. Staněk names and characterizes nine paradoxes of the citizenship education in his habilitation thesis⁹:

- a) Doubts – reflect the teacher’s uncertainty: how much is he entitled to impose his concept of life on others and how much he knows enough to know what is good, what is true, and whether he understands the right educational aims and pedagogical ideals.
- b) Helplessness of the powerful one – reflects the teacher's conflict of a real power and the helplessness of education, the risk concealed in education as a powerful instrument of ideological indoctrination, and finally the perception of education as a helpless instrument of the non-transferable life experience of the teacher.
- c) A conflict of an ideal and reality - This educational paradox describes the educational process during which the teacher reveals the contrast between the ideal and the actual state of the described phenomena before his pupils.
- d) A socialized individualist - this paradox conceals the latent contradiction that must be overcome by a teacher in the educational process. He/she must concern both the general cultural patterns of behaviour that are socially desirable and the development of his/her pupils’ uniqueness and individuality.
- e) Enslavement - the educational paradox puts the teacher in front of the antithesis of education for the occupation and education for the humanity, which means the contradiction between the general and professional education.
- f) A change of the unchangeable – there is the teacher's uncertainty again hidden in the educational paradox in finding the answer to the question whether his/her educational activity is not against the nature itself, whether he/she is doing everything possible to cultivate student humanity.
- g) Social – the merit of this educational paradox lies in the teacher’s confrontation of the openness on one side, which awakens the tendency towards social, cultural and ethnic closeness on the other side.
- h) Acceleration - in connection with this educational paradox, the teacher realizes how the information explosion, which is characteristic for the 20th and early 21st century, has accelerated the development of knowledge but also has caused its fragmentation.
- i) School pseudo-democracy - the teacher is confronted in this context with a reality, where the lack of clear rules in the process of the school practice democratization significantly limits the personal responsibility and responsibility of the pupils for participating in this process. Finally, there is no forming of liberal democracy, but some forms of pseudo-democracy called defective democracy.

⁷ See R. Palouš in the previous part.

⁸In more detail see Staněk, A., Habilitation thesis, PdF UP, 2012.

⁹Ibid., p. 32-33.



Conclusion

According to the current researches, the teachers are aware of the educational paradoxes presence of different intensity in their practice, which is the necessary condition for dealing with them (the awareness of the problem or the presence of a particular paradox). However, some teachers underestimate or overestimate these risks, which can also negatively influence the teaching of citizenship education (most of the teachers underestimate or feel insecure about the possibility to transfer their own opinions to the pupils and students.)

It is a remarkable fact that the current market of professional pedagogical literature is saturated with manuals for novice teachers describing the specifics and difficulties of the educational reality. However, the issue of the educational paradoxes in teaching is covered only in minimum of this quantum, although the novice teacher is threatened by the presence of paradoxes in his teaching the most (as we have already pointed out). We therefore see the urgent need to stimulate a discussion on this issue among the pedagogical professionals and the public to and to draw the attention to other phenomena that influence the educational practice.

References

KOPEČEK, P., KRÁKORA, P., CINGELOVÁ, G. at all. (2016). Tak trochu jiné soudobé dějiny. Praha: Epoque, 2016, 79 s. ISBN 978-80-7557-048-2.

KRÁKORA, P. (2016). Etická výchova a formování charakteru dospívající v kontextu přípravy budoucích učitelů základních a středních škol v české republice. *Civilia. Revue pro oborovou didaktiku společenských věd*, 2016, roč. 7, č. 1, s. 80–90. ISSN 1805-3963.

PALOUŠ, R. (2009). Paradoxy výchovy. V Praze: Karolinum, 2009, 111 s. ISBN 9788024616506.

PRŮCHA, J., ed. (2009). Pedagogická encyklopedie. Vyd. 1. Praha: Portál, 2009. 935 s. ISBN 978-80-7367-546-2.

STANĚK, A. (2010). Kvalitativní výzkum profesní identity učitele výchovy k občanství: [výzkumná zpráva z kvalitativního výzkumu konstrukce profesní identity učitele výchovy k občanství prostřednictvím případové studie]. Praha: Epoque, 2010, 124 s. Erudica. ISBN 978-80-7425-086-6.

STANĚK, A. (2012). *Výchovné paradoxy v kontextu didaktiky společenských věd a jejich reflexe učitelů vybraných společenskovědních předmětů na úrovni sekundárního vzdělávání*. Habilitační práce, Pedagogická fakulta Univerzity Palackého, 2012.

STUCHLÍKOVÁ, I. et al. (2015). Oborové didaktiky: vývoj, stav, perspektivy. 1. vydání. Brno: Masarykova univerzita, 2015. 465 stran. Syntézy výzkumu vzdělávání; svazek 2. ISBN 978-80-210-7769-0.

On-line

BENEŠ, Z. Co je a co není oborová didaktika. 2013. [online]. [cit. dne 25. 6. 2017]. Dostupné z: https://www.akreditacnikomise.cz/attachments/article/280/co_je_neni_oborova_didaktika_Benes.pdf

JANÍK, T. Didaktika obecná a oborová: Pokus o vymezení a systematizaci pojmů. 2013. [online]. [cit. dne 20. 5. 2017]. Dostupné z: https://www.akreditacnikomise.cz/attachments/article/279/didaktika_obecna_a_oborova_Janik.pdf

STUCHLÍKOVÁ, I., JANÍK, T. Oborové didaktiky na vzestupu: přehled aktuálních vývojových tendencí. 2013. [online]. [cit. dne 2. 6. 2017]. Dostupné z: <http://www.scied.cz/index.php/scied/article/viewFile/3/4>
Poslání akreditační komise. 2015. [online]. [cit. dne 20. 5. 2017]. Dostupné z: <https://www.akreditacnikomise.cz/cs/>

Zápis ze setkání didaktiků občanské nauky, občanské výchovy, základů společenských věd, psychologie a etické výchovy. 2012. [online]. [cit. dne 12. 5. 2017]. Dostupné z: https://www.akreditacnikomise.cz/attachments/article/420/zapis%20ze%20setkani%20OD%20obcan_nauky%2002-05-2012.pdf



Didactics of the Social Sciences and Methodology of the Educational Paradoxes Research

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Abstract

The aim of the scientific study is to present one of the possible approaches to a methodologically sophisticated empirical research in didactics of social sciences on the example of a specific pedagogical survey with a subject-didactical impact. The didactics of social sciences as a scientific discipline uses scientific research methods to create not only scientific knowledge reflecting objective reality, but also to use the principles of our thinking to correctly explain and purposefully transform the given, objectively existing reality. In this context, the need for high-quality methodologically sophisticated empirical research appears as a prerequisite. The insufficient methodological sophistication of many surveys of academic institutions in the Czech Republic causes a major problem for the further development of didactics of social sciences. The current challenge for academic institutions developing the didactics of social sciences in the Czech Republic is to look for ways to improve and expand the themes of field-didactical research and to improve their methodological basis. Only high-quality research, which is sufficiently methodologically prepared, has a chance to compete with others and extend the knowledge of the realization of the educational process through social science subjects. We attempt to contribute to the discussion on possible approaches to empirical research in didactics of social sciences by describing the methodology of a specific survey of our study focused on examining the reflection of educational paradoxes by teachers of Civics. In addition to traditional areas such as the theoretical background of research, definition of the research problem, the formulation of research hypotheses and the definition of terms, we emphasize the choice of research methods and techniques, especially the Statistical Implicative Analysis (SIA), including its Cohesive Hierarchical Implicative Classification (CHIC). In the conclusion of the study we explain why the use of Statistical Implicative Analysis (SIA) is perceived as an innovative work with high potential for future research projects in the field of interpreting research data of empirical research focused on social sciences.

Keywords: Cohesive Hierarchical Implicative Classification, didactics of social sciences, subject didactics, pedagogy, Statistical Implicative Analysis, educational paradoxes.

Introduction

The current challenge for academic institutions developing the didactics of social sciences in the Czech Republic is to look for the ways to improve and expand the themes of field-didactical research and to improve their methodological basis. Only high-quality research, which is sufficiently methodologically prepared, has a chance to compete with others and extend the knowledge of the realization of the educational process through social science subjects.

We attempt to contribute to the discussion on possible approaches to empirical research in didactics of social sciences by describing the methodology of a specific survey of our study focused on examining the reflection of educational paradoxes by the teachers of civics. In addition to traditional areas such as the theoretical background of research, definition of the research problem, the formulation of research hypotheses and the definition of terms, we emphasize the choice of research methods and techniques, especially the Statistical Implicative Analysis (SIA), including its Cohesive Hierarchical Implicative Classification (CHIC). The aim of the scientific study is to present one of the possible approaches to a methodologically sophisticated empirical research in the didactics of social sciences on the example of a specific pedagogical survey with a field-didactical impact.

In the conclusion of the study we explain why the use of Statistical Implicative Analysis (SIA) is perceived as an innovative work with high potential for the future research projects in the field of interpreting research data of empirical research focused on social sciences.

1) Theoretical definition and characterization of the research field

From the social sciences didactics perspective, the educational paradoxes in the citizenship education represent a topical and innovative issue¹. It is related to the need to ensure the successful result of the educational efforts of all the participants in the lessons of Civics and the basis of social sciences. Before, The teachers, especially of civic education and basis of social sciences, have to face the problem of educational paradoxes every day. It is necessary for them to show the world in the right colors to the pupils in the classroom without distorting the reality or slipping into the ideological indoctrination and also without forcing their personal vision of the world. Nevertheless, the teachers should be able to prepare their pupils for deliberate, active and democratic citizen life and active citizen participation in the democratic society.



The following text wants to present the key outcomes of the research on the teachers' reflection of educational paradoxes of selected social science subjects in the Olomouc region and to illustrate the benefits of the applied methodology.

It is a fact that our research has a regional character and we generalize its results only in the Olomouc region and not in the whole of the Czech Republic. We limited the selection of respondents to the Olomouc Region, because Palacký University represents a significant catchment area for the selection of potential students but also their subsequent use of the skills in practice. It is also the region where most of the future teachers of Palacký University have their compulsory practice.

Our aim was to identify the degree of familiarity of the pedagogical public with the pedagogical paradox phenomenon as a reason for reducing the effectiveness of the educational process (see Staněk 2009, p. 80).

In the process of considering the extent of the problem we have realized that there is a large number of variables which can intervene to a greater or lesser extent in solving the problem. That is why we have chosen to focus on three influences in our research from this broad spectrum: the length of pedagogical practice, the qualification of the teacher and the type of school.

¹ See Palouš, R. 2009, Staněk, A. 2012, Hubálek, T. 2016.



Regarding the length of pedagogical practice, we can assume that in the first three years of the novice teacher stage, the intensity of the educational paradoxes reflection is not significant and the influence of the educational paradoxes is underestimated by the teachers. At the mid-stage of the teacher's professional identity construction (between 4-7 years of his teaching practice) we can assume that progressive teachers² perceive the risks of educational paradoxes more intensely than pessimistic teachers³. It is related to the fact that this group of teachers has not undertaken a fundamental turn in the relationship between the subject (the teacher) - object (the pupil) and rather focuses on his/her subjective problems while pupil stays aside of their pedagogical and professional considerations. It is interesting to observe the intensity of the educational paradoxes reflection in relation to the increasing length of the pedagogical practice, i. e. the teachers with 8-10 years of practical experience and those with more than ten years of experience. Can this long practice negate the teacher's alertness and bring him/her to a stage where, in view of his professional identity, the risks associated with educational paradoxes will be overlooked or flouted?

In relation to the teacher's qualification, we can assume that the qualified teachers - those who have a degree in basis of social sciences or major in civic education – do not differ from teachers without qualification in the reflection of the risks of educational paradoxes. Both groups of teachers perceive the risks of educational paradoxes with equal difficulties. The certificated teachers are guided by their social sciences specialization, non-certificated teachers by their life experience or instinct.

Regarding the type of the school, we consider that the risks of educational paradoxes in relation to education for citizenship are experienced the most by the teachers at grammar schools, followed by teachers at secondary vocational schools and vocational schools. These risks are perceived the least by teachers at primary schools. Our statements at this stage are based on these arguments. The teachers at grammar schools, secondary vocational schools and vocational schools have to overcome the significant influences of pupils' misconceptions (preconceptions) combined with a strong inclination of pupils to criticize mainstream social views. During the process of transformation of the relevant social science content into the forms that are pedagogically efficient and at the same time acceptable to the pupils' abilities (in the process of forming the didactic content knowledge), these teachers get more aware than others of the risks that are hidden in the educational paradoxes.

2) Formulation of research hypotheses, basic set and selection

We assume that the teachers' qualification to teach selected social science subjects does not affect the teachers' reflection of the educational paradoxes. We have formulated a research hypothesis for our empirical survey.

H1 „The teachers qualified to teach selected social science subjects perceive the risks of educational paradoxes in their teaching more intensely than the teachers without this competence“,

² Progressive teacher has decided to develop his/her professional competencies after the novice teacher's phase and slowly turns his sight away from himself and his problems to the pupils and their needs. (Staněk 2010, p. 108).

³ Although the pessimistic teacher has decided to stay in the teacher's profession after the novice phase, he resigned to the fundamental changes and transformations of his/her professional identity, especially to his/her need for the professional social science specialization (Staněk 2010, p. 108).



which will be subsequently verified. For the purpose of verifying our premises, we have formulated zero (H0) and alternative (HAlt.) hypotheses:

H0: The qualification of the teachers to teach selected social science subjects has no effect on the teachers' reflection of the educational paradoxes.

HAlt.: There is at least one case where the qualification of the teachers to teach selected social science subjects affects the teachers' reflection of the educational paradoxes.

It is necessary to define a basic set to make the research successful and credible. We have considered all the teachers of civic education, respectively the foundations of social sciences at elementary schools, grammar schools and secondary vocational schools and vocational schools as suitable for our research. However, from the very beginning it turned out that its exact definition would not be easy at all, and so we had to proceed to its more detailed definition (characteristics).

The basic set for our research has been consisted of:

teachers teaching civic education, respectively the basics of social sciences at primary and secondary schools in the Olomouc Region in the school year 2011/2012. There were a total of 426 primary and secondary schools in the Olomouc Region including 328 primary schools (77%), 19 grammar schools (4.5%) and 79 secondary vocational schools and vocational schools (18.5%). Based on these facts, we have determined the size of the sample of teachers to 150 including 105 teachers from primary schools, 15 teachers from grammar schools and 30 teachers from secondary vocational schools and vocational schools. After returning all the questionnaires, the reality has been like this:

Total of 103 questionnaires have been returned from teachers of primary schools, grammar schools, secondary vocational schools and schools in the following structure:

57 teachers from the primary schools (55 %),

29 teachers from the grammar schools (28 %),

17 teachers from secondary vocational schools and vocational schools (17 %).

From the above mentioned overview is clear, that we have used the method of random sampling. With regard to the interconnection of data collection with schools organizing the practice of future teachers and the teachers who led students during their practice, we could also refer to so-called method of purposive sampling. Due to the real return of the questionnaires, it has been not possible to guarantee the same probability of selection for each element of the core set. We are aware of these facts and take them into consideration when formulating the conclusions of our research. However, we are convinced that with regard to the objectives of our research, the sample selection has not significantly affect the final results and it is possible to continue the work with them⁴.

68.6% of respondents from the research sample have corresponded to the definition of "the teacher qualified to teach selected social sciences". Other 31.4% of respondents have been identified as non-qualified.

⁴ The definition of the basic set or the acquisition of the choice (if the basic set is very large or too complicated for the researcher) is the stumbling block of most empirical researches of pedagogical phenomena, not only in didactics of social sciences.



3) Choice of research methods and techniques

For our research, we have chosen a relatively often used research design in the social sciences - the exploratory method (see Pelikán 2007, p. 103). We have chosen a questionnaire from the techniques offered by this approach. The questionnaire itself has consisted of 23 questions. Eighteen of them have been focused on their own research and have had a closed parametric character. The five remaining questions have been auxiliary (identifying questions) that have helped us to get information about the respondents. These questions are closed, non-parametric. The choice of these types of questions has been also purposeful. Although the closed questions do not allow the respondent the freedom to answer, they have enabled us to make a statistical processing of these answers.

We processed the data by mathematical and statistical approach⁵ using nonparametric statistical methods⁶ that were used with respect to the fact that we did not expect a normal distribution. In addition to previous analyses, we decided to process the empirical data obtained from our questionnaire survey through a statistical analysis of implication by R. Gras⁷. This method is not commonly used in the social sciences including pedagogy⁸.

Our aim was to identify possible implicit relationships between individual assertions based on respondents' answers. That is why we have focused our attention on the eighteen statements submitted to the respondents in the questionnaire for the research of The Perception of the Educational Paradoxes. Individual statements are variables (variable 1 to variable 18). Other variables, such as respondents' gender, length of practice, etc., have already been used only as auxiliary variables. Before describing and interpreting the results of the Statistical Implications Analysis (SIA) in the data of our questionnaire survey, we briefly describe the nature of this method, including its Cohesive Hierarchical Implicative Classification (CHIC).

CHIC is an analytical tool for statistical data processing based on Statistical Implicative Analysis (SIA), a statistical analysis of implications. Its purpose is to discover very important (relevant) relationships between variables on the basis of implication. The method offers two different ways to put these relationships into a unified system. The first is a hierarchical implicative tree, the second is an implicative graph. In addition, a similarity tree is constructed based on the probability of the links between the variables. The main features and uses of CHIC in practice are described in, for example, Couturier (2008), Gras and Kuntz (2008) or in Statistical Implicative Analysis: Theory and Applications (2008) by team of authors.

Statistical Implication Analysis was first used by Régis Gras (Polytechnic Graduate School of Nantes University, France). The main aim of this non-parametric statistical method was to define the way of answering the question: "If an object has any attribute, then does it have more than this one in consequence?" Of course, the answer is rarely positive. However, there are cases where this tendency is possible. SIA (Statistical Implication Analysis) is focused on highlighting such a trend in a set of attributes. SIA (Statistical Implication Analysis) can be considered as a method for forming of the clustering rules. Compared to other methods, the SIA (Statistical Implication Analysis) differs by providing nonlinear procedures.

⁵ A special statistical software Statistica was used for data processing.

⁶ Specifically Westenberg-Mood median test, Kruskal-Wallisov H test, Kolmogorov-Smirnov test (K-S test), Mann – Whitney U test.

⁷ prof. Régis Gras, since September 1998, emeritus professor at the Polytechnic Faculty of the University of Nantes and until 1998 also a research director at the Institute of Mathematical Research at the University of Rennes.

⁸ With the practical use of SIA, we met, for example, with Benedetto di Paola, a student of the “”Scuola Interuniversitaria Siciliana di Specializzazione per l’Insegnamento Secondario di Palermo, Italy, class 47A (Mathematics), who, as stated in his article *Some experimental observations about passage from the arithmetic thought to the algebraic thought* (Age: 14-18 years) used this method as one of many methods for data.



The method is based on the intensity of the relationship between the statements, one of which is the result of the other (the statement of the form "if A, then B") when measuring its degree within a rule (regularity). That is the reason why some trivial rules, which are potentially well known, are omitted from such an investigation. In fact, the rule "A $\Rightarrow$ B" is considered trivial if almost all objects "A" have the "B" attribute. In this case, the intensity of the relationship between the statements, one of which is the result of the second, is near 0, and in this case does not generate a surprise and cannot be considered as significant. Conversely, as the intensity of the relationship is close to 1 (i.e. 100%), it means that almost no object "A" has the attribute "B". Then the rule in the form "A $\Rightarrow$ B" is surprising and it is not trivial.

4) Conclusion

Our research at the level of the Olomouc Region confirms that the teachers of this region are influenced by their qualification (i.e. the ability to teach civic education and the foundations of social sciences based on a master degree in civic education) in their reflection of educational paradoxes during the teaching process. In addition to this key conclusion, some other facts have been confirmed during the empirical survey.

It includes the choice of research strategy, research methods and techniques, containing those for the processing of measured data. The implicative analysis turns out to be a beneficial for the further development of empirical research in the field of didactics of social sciences and allows the identification of possible implications between individual assertions, thus pointing to new relations between variables (our research was focused on the intensity of relations between statements, when one was in consequence with the other). We have succeeded in pointing out the relationship in which the forms of reflection of some educational paradoxes (the reactions to the statements) statistically point to a reflection on another educational paradox, which is the consequence of them. In this way, we have been able to identify the inner insecurity of the teachers presented in the form of doubts about themselves.

As can be seen from the results of our research, the qualified teachers have the ability to perceive educational paradoxes more sensitively, they are aware of their risks, and more often they operate with them carefully in their educational activities. However, at the same time, it has been shown that this certainty can weaken their alertness in the perception of some educational paradoxes impacts (especially in relation to the risk of an ideological indoctrination of pupils that can be practiced through civic education). On the other hand, non-qualified teachers show that their reflection of educational paradoxes in relation to citizenship education is highly fragmented. The results of the application analysis of the research data then point to other significant phenomena - the teachers of civic education and the foundations of social sciences do not agree internally with retreating from the process of humanization in education and regard this tendency perceive as negative for the pupils. There have also been some evidences of conflicts in the teachers' professional life and his / her private life, which is reflected in the doubts about the effectiveness of his / her profession, including the possibility to pass on his/her own life experiences. Teachers' doubts about themselves have been proved to be a very significant trend by the application analysis.

The use of implicative analysis is perceived in the field of interpretation of research data of socially-oriented empirical research as an innovative step with a great potential for the future research projects.

References

- COUTURIER, R. (2008). CHIC: Cohesive Hierarchical Implicative Classification. In *Statistical Implicative Analysis: Theory and Applications*. Régis Gras, Einoshin Suzuki, Fabrice Guillet, Filippo Spagnolo (Eds.). Studies in Computational Intelligence, 2008, Volume 127. Berlin, Heidelberg: Springer, 2008, pp. 41-54. ISBN 978-3-540-78982-6.
- GRAS, R., KUNTZ, P. (2008). An overview of the Statistical Implicative Analysis (SIA) development. In *Statistical Implicative Analysis: Theory and Applications*. Régis Gras, Einoshin Suzuki, Fabrice Guillet, Filippo Spagnolo (Eds.). Studies in Computational Intelligence, 2008, Volume 127. Berlin, Heidelberg: Springer, 2008, pp. 11-40. ISBN 978-3-540-78982-6.
- HUBÁLEK, T. (2016). Výchovné paradoxy – pouze teoretický problém? In *CIVILIA. Revue pro oborovou didaktiku společenských věd*. Olomouc: Univerzita Palackého v Olomouci, č. 1, roč. 7., 2016, s. ISSN 1805-3963
- PALOUŠ, R. (2009). Paradoxy výchovy. V Praze: Karolinum, 2009, 111 s. ISBN 9788024616506.
- PELIKÁN, J. (2007) *Hledání těžiště výchovy*. Praha: Nakladatelství Karolinum, 2007. 176 s. ISBN 978-80-246-1265-2.
- PELIKÁN, J. (2007) *Základy empirického výzkumu pedagogických jevů*. Praha: Nakladatelství Karolinum, 2007. 272 s. ISBN 978-80-7184-569-0.
- STANĚK, A. (2009). Výchova k občanství v současné škole: profesní identita učitele výchovy k občanství. Praha: Nakladatelství Epocha, 2009. 136 s. ISBN 978-80-7425-082-8.



- STANĚK, A. (2010). Kvalitativní výzkum profesní identity učitele výchovy k občanství: [výzkumná zpráva z kvalitativního výzkumu konstrukce profesní identity učitele výchovy k občanství prostřednictvím případové studie]. Praha: EPOCH, 2010, 124 s. ERUDICA. ISBN 978-80-7425-086-6.
- STANĚK, A. (2012). *Výchovné paradoxy v kontextu didaktiky společenských věd a jejich reflexe učiteli vybraných společenskovědních předmětů na úrovni sekundárního vzdělávání*. Habilitační práce, Pedagogická fakulta Univerzity Palackého, 2012.
- STUHLÍKOVÁ, I. et al. (2015). *Oborové didaktiky: vývoj, stav, perspektivy*. 1. vydání. Brno: Masarykova univerzita, 2015. 465.



Future teachers' perception of modern educational technology (MET) in the Czech Republic

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Abstract

The aim of this study is to research the attitudes and beliefs that future teachers studying at Palacký University Olomouc have about modern educational technology, and also about technology in general that could be used in the course of education. Teacher beliefs are one of the integral and important components of teacher's personality and they influence the whole education process: from how teachers behave in the classroom to what materials they choose to use. Different beliefs of each person also influence their attitude towards the educational technology and their opinion on whether it is beneficial to use it in teaching or not. The research was conducted via a questionnaire that was distributed to students of Faculty of Education in Olomouc, Czech Republic. This article presents the results which were achieved via this research.

Keywords: education, technology, students, teachers, beliefs

Introduction

Technologies are an essential part of the world and they have a great impact on people's lives. As schools are part of a public space, they are naturally influenced by technology, in a way how schools present themselves but mainly in their actual use of technology during a teaching process. While using modern digital technology, not only in schools, it is important to realize that even though technology can make lives easier, according to Spitzer (2014) using too much of it can have a negative impact on one's life by being too reliant on technology.

The aim of our research is to discover how using technology for educational purposes is perceived by future teachers. Our research is based on the proposition that teachers use modern educational technology not because it brings better results in a teaching process than other tools and methods that do not use such technology, but they use technology because they have a positive relationship with it and they themselves are personally convinced about the positive impact of educational technology. However, it is necessary to deal with a theoretical background of the issues which were dealt in the research; it is dealt in the following paragraphs.

The conducted research study explained in the following article focuses on the perception of future teachers of using technology for education. It is, therefore, crucial to give an account about the theoretical background behind the study, starting with the description of what is considered educational technology and ending with an outline of the workings of teachers' character and beliefs concerning the usage of educational technology. The term educational technology can be described as technical devices and gadgets that are used for educational purposes (Palán, 2002). In the same online dictionary, there can be found possible representatives of educational technology, such as: "... projection devices, sound devices, devices that enable recording and reproduction of sound and images, overhead projectors, language laboratories, teaching devices and simulators, computers, computer networks, devices for magnifying pictures and things, etc...". Nosková (2011), on the other hand, classifies educational technology into the following groups: displays, projection technology, auditory technology, TV and information technology.



The concept of modern (educational) technology is not very obvious and the distance and boundaries between modern (educational) technology and the classic one are unclear. For the purpose of this article, modern educational technology is considered as educational technology based on computing technology using microprocessors and integrated circuits. Taking this into consideration, modern educational technology can be further divided into first, computer technology (meaning hardware - a computer as such and its software parts, such as computer system, specialized programs, etc.) and second, modern educational technology (henceforth as MET) for which computers are not necessarily needed, for example: reprographic devices, TVs, e-books, etc.).

Each person tends to deal with various problems and questions differently, whether those are trivial matters that are part of an everyday life, or whether more serious matters that could potentially change an individual's life. It is the same for teachers. Even the future ones who are still training to become professional teachers at faculties of education have to make decisions about what their classes are going to look like, what attitude they are going to adopt towards education including their attitude to modern educational technology and its use during their classes. A teacher's take on education and the use of MET is influenced by the knowledge he gains during his studies, his skills and potential as a teacher, and, last but not least, his behaviour and personal characteristics. All these parts make what can be called teacher's personality.

A question arises as to what exactly determines teacher's personality, and what, or maybe even who, stands behind a teacher's attitude to MET. It generally depends on their own subjective perception of the matter, whether they themselves have a positive outlook on technology or rather a realistic or pessimistic, which is all connected to their personality. As stated by Čáp (1993, p. 83) there is a specific personality structure integral to every person and every teacher makes decisions that are in harmony with their personality structure. Every teacher can also be psychologically categorized by answering several questions connected to their internal structure.

First question is directed towards motivation – why a person does what he does and what motivates him to do it. Second question is focused on abilities – how well is a person able to do something. Next question is about temperament – if a person performs an activity with excitement, relentlessly and if he ceases doing the activity when obstacles arise. The last question is about a teacher's work ethics – how hard he works and if he is reliable, diligent with his work and what relationship he has to children and people in general. All these questions help identify what personality type a teacher is.

There are several definitions that explain the term teacher's personality. According to Dytrtová and Krhutová (2009), these are the constituents that create teacher's personality:

- mental resilience
- adaptability (an ability to create alternative solutions in various situations)
- adjustability (mental flexibility)
- ability to adopt new knowledge
- social empathy
- communicative competence

Several researches were conducted in order to find out what a teacher should be like. Fontana (1997, p. 364) introduces a research done in the US in 1960 by Ryans who said that a successful teacher should have a warm personality and be understanding, friendly, responsible, systematic, creative and excited for the job he is doing. According to Průcha (2002, pp. 189–192) it is, however, important to realize that there is no universal definition of a good and effective teacher as everybody is too different.



One of the principal factors that is part of the teacher's personality are teacher beliefs or thinking that influence how a teacher behaves in a classroom, how he makes decisions and what methods and forms of teaching he uses. Pedagogický slovník (in English: Dictionary of Education) defines teacher beliefs as a complex of professional ideas, attitudes, expectations, wishes and judgments that create a cognitive basis for teacher's behaviour, his perception and creation of educational process (Průcha, Walterová, Mareš, 2003, p. 261). Teacher beliefs influence everything that is done in the classroom. Williams and Burden (1997) claim that teacher beliefs are fairly stable and teacher's behaviour can be predicted based on his beliefs. They add that teacher's thinking and attitudes form in the early stages of life and his beliefs are connected with the culture in which a teacher grew up and lived in and it is probable that these beliefs are resistant to big changes. Williams and Burden (1997) also agree that a person's belief about how teaching and learning should be conducted appears at the time when a future teacher comes to the university and his beliefs are more connected to what he thinks is right instead of reliable knowledge.

Calderhead (1996) suggested five main areas into which teacher beliefs and thinking can be divided, these are: beliefs about a student and their learning; beliefs about teaching; beliefs about a specific school subject; beliefs about pregradual training for teaching and lastly, teacher beliefs and thinking about himself and his role as a teacher. It is possible that teacher's personality does not correspond with his teaching style which the teacher thinks is the best. This can lead to frustration and it is important for every teacher to realize his own expectations and beliefs he has of students and connect his pedagogical thinking with his current teaching practice (Williams et al., 1997)

Teacher beliefs of different teachers and future teachers influence their attitude towards information technology and its use for educational purposes. Ertmer (2005, p. 26) even thinks that teacher's belief about the usefulness or unsuitability of ICT for education is essential for its actual use. If a teacher is convinced that technology does not bring anything useful or interesting to the lessons, he is simply not going to use it. Research in this area has proven that a style of teaching can differ with each teacher based on their beliefs about the educational process even though their knowledge and skills are similar (Pajares, 1992). Another research study in 2011 (Hammond, Reynolds and Ingram) done among future teachers confirmed Pajares' research results and showed that willingness to use information technology in students' future teaching careers is influenced by their own attitudes towards technology in general. Pajares (1992) even suggests that teacher beliefs are more influential in a teacher's career than the knowledge the teacher has learnt during his studies.

Even though that there is a proven connection between teacher beliefs about technology and its real use in practice, other studies suggest that there are inconsistencies between what teachers say their beliefs about technology are and its utilization in their classes (Judson, 2006). Ertmer (2005) explains it by a combination of factors such as school curriculum, teacher's colleagues and lastly, expectations of parents and headmasters on how the lessons are conducted. All these contribute to a teacher's decision on whether to use educational technology or not, even though he himself is confident about its positive impact. This discrepancy between teacher beliefs about technology and its implementation in his teaching was also confirmed by a research by Chen in 2008 who states that another factor that influences a teacher's decision is his limited knowledge in the field of constructivism.

Teacher beliefs can be considered a form of subjective reality which comes from what a teacher believes is right. It influences his whole teaching process and it is a part of teacher's personality which is often difficult to change since it is anchored in a teacher since their start of studies. It is, therefore, important to discover and analyse teacher trainee's beliefs and attitudes towards educational technology in order to possibly modify how educational technology is presented to them in the course of their studies and their future teaching careers as well.



Since the topic of the article is now theoretically anchored, it is possible to actually introduce the questionnaire which was used to discover the attitudes and beliefs held by students in teacher training with regard to MET.

Method

As it was already mentioned, the purpose of this article is to present results from a research which took place at Faculty of Education, Palacký University Olomouc – the research sample consisted of 110 students of the first year of their studies at the very faculty. The initial outline of the research was already described in the previous article of the same project of the authors (Čihánková, Gregar Sittová, 2017) The empirical research was performed in a form of online questionnaire (the questionnaire itself might be found at <http://bitly.com/questionnaire-met>). The purpose of the research was to find out the students' awareness of the MET, their previous experience with this means of technology and their attitudes to its employment. The last mentioned issue is the subject of this paper. Although the questionnaire was composed in the Czech language, its text and all of the responses were translated for the purpose of this paper and for the purpose of further research (see section “Results, Conclusions and Recommendations” below).

The questionnaire was divided into items of general and professional nature. There were seven general items whose aim was to define and delimit the research sample (items e.g. age and sex of the respondent or their previous education). Additionally, there were nine professional items whose aim was to discover and describe the attitudes and awareness of the future teachers of the field of MET.

While the first items were dealing merely with the concept of the MET (which is not dealt in this paper), in the other part (in form of scaling), the respondents were asked to express their agreement (or disagreement) with presented statements by choosing one of possible responses of the scale “I strongly agree” – “I agree” – “I neither agree nor disagree” – “I disagree” – “I strongly disagree” (see Table 1 below). This part of the questionnaire consisted of 24 statements and results of a selection of them are presented in the “Findings” section of the present paper.

Table 1. Possible responses and the scaling of the attitude-based part of the questionnaire

Assessing statement	I strongly agree	I agree	I neither agree nor disagree	I disagree	I strongly disagree
Grade	1	2	3	4	5

To discover attitudes of the students (i.e. the future teachers) to MET, the responses were further processed. Every assessing statement of the scale of every statement was assigned a value from 1 point (assigned to the statement “I strongly agree”) as a maximum to 5 points (assigned to the statement “I strongly disagree”) as a minimum. The score was calculated as an arithmetic mean of a total number of points at the specific statement divided by the number of respondents who responded on the item.

There were, however, four statements at which the arithmetic mean was calculated conversely (i.e. 5 points for the response “I strongly agree” as a maximum and 1 point for the response “I strongly disagree” as a minimum) - these were statements no. 3 (“The skills of contemporary basic-schools' pupils and secondary-schools' students greatly surpass my skills”), no. 10 (“I am afraid to use unauthenticated applications (software)”), no. 11 (“Operation of new applications (educational software) is difficult for me”) and no. 12 (“I think that operation of modern educational technology will be difficult for me”) due to the nature of the statement (see Table 2 below).

Table 2. The reversed order of grades for possible responses and the scaling of attitude-based part of the questionnaire

Assessing	I strongly	I agree	I neither	I disagree	I strongly



statement	agree	agree nor disagree	disagree
Grade	5	4	3
			2
			1

This processing method of the obtained empirical data via assigned points was chosen because of the simple processing of results and their further comparison with sets of various numbers of respondents. Therefore, the results of the empirical research are transformed on a mark which expresses the assessment index.

The assessment index of quality was calculated based on the assignment of the specific value to a specific assessment opinion. Individual absolute frequencies of the assessment opinions in specific categories were multiplied by the number of points, and its sum was divided by the number of respondents assessing the particular category. By doing so, the comparable indicators of quality have been achieved – those are not dependent neither on the number of respondents nor on the number of responses of individual groups of respondents.

The values might therefore be interpreted according to a certain critical interval (see Table 3 below).

Table 3. Overall assessment of the attitude-based part of the questionnaire

Interval	Assessment
Grade 1 – 1,50	Highly positive assessment, expression of respondents' absolute agreement with the assessment ("I strongly agree")
Grade 1,51 – 2,50	Positive assessment, expression of respondents' relative agreement with the assessment ("I agree")
Grade 2,51 – 3,50	Indecisive assessment, expression of disability to make a decision or the lack of knowledge of the topic ("I neither agree nor disagree")
Grade 3,51 – 4,50	Negative assessment, expression of respondents' relative disagreement with the assessment ("I disagree")
Grade 4,51 and more	High degree of the disagreement with the assessment ("I strongly disagree")

Findings

This section provides a selection of results of the research of statements no. 2, no. 12, no. 13, no. 14, no. 16., no. 19, no. 22 and no. 24. The statement no. 2 ("I can create a website on my own.") was included in the research since the subject matter dealing with the ability to present information in a form of a website is included in the governing curricular document of the Czech educational system – the Framework Educational Programme for Elementary Education (Millerová and Miller, 2013, p. 34). Therefore, it might be argued that the university students should be able to create a simple website on their own. It brought rather negative responses since the majority of 64 respondents does not agree with this statement (while 27 of them strongly). The minority of 36 respondents (to some extent) agrees with the statement and the rest (10 respondents) does not give a clear answer since they do not consider themselves being neither able nor unable to create a website on their own. The total score at this item is 377 which, when divided by the number of responses (110) gives the result 3.4 (grade), which is, sadly, according to the Table 3 (see above), an overall indecisive assessment – the students do not consider themselves neither able nor not-able to create a website on their own.

The purpose of inclusion of the statement no. 12 ("I think that operation of modern educational technology will be difficult for me") in the questionnaire was to encourage the respondents to self-evaluate their current and



possible future ability to employ the means of MET in their careers and general life. 48 respondents do not agree with the statement while 16 more of them do not agree with the statement strongly. Therefore, it is possible to say that the responses indicate that the students think that the operation of MET will be rather easy. The total score at this item was calculated 276 and the grade 2.51, which is on the line of positive assessment.

In the statement no. 13 (“I am glad when I can use modern educational technology”), we tried to find out whether the inclusion of MET makes the students in teacher training happy, whether they like to employ. This was confirmed by the majority of 72 respondents (17 of them even strongly agreed with it). Therefore, it is possible to declare the positive approach to the employment of MET (confirmed even by the grade 2.3).

The statement no. 14 “I am able to use interactive white board” was included to the fact that in the interactive white boards were introduced on a massive scale in previous years in the Czech Republic (Neumajer, 2008). Therefore, the authors of the present paper considered the ability to use the interactive white board to be necessary for future teachers. The outcome of this item was rather positive – 46 respondents agree with this statement and 20 agrees strongly (the grade is 2.4 at this item).

The positive assessment is present also at the statement no. 16 (“I am glad when my teachers use interactive white board”) confirming the popularity of interactive white boards among students – 54 of them agree with the statement and 27 respondents agree strongly with this statement which results in the grade 2.1.

The statement no. 19 (“The teaching with the support by modern educational technology is more interesting for the pupils (students) than the teaching without the support of modern educational technology”) takes a different approach. It lets the respondent think if the inclusion of MET actually makes a difference in the teaching and in its results. However, it is not a surprise that the majority of respondents gave the answer that this statement is agreeable (54 of them agreed and 33 of them agreed strongly) while the grade at this item is 2.0 (i.e. a positive assessment, the second lowest grade in the results in total).

The results of the next statement, presented in this paper – statement no. 22 (“The faculties of education should train future teachers to use efficiently modern educational technology in their teaching”) – evidence the conviction of future teachers that the means of MET should be taught at faculties of education. This thought is held by the vast majority of respondents (50 agree and 42 agree strongly). It is also necessary to note that at this item there was the lowest number of respondents who did give an indecisive answer (only 11 of them), i.e. the majority of 92 respondents held a positive attitude to the inclusion of teaching about (and with) MET at the faculties of education (the grade at this item was 1.9 – which is the lowest grade within the whole questionnaire as well).

Results, Conclusions and Recommendations

This article follows on the already mentioned treatise by the same authors (Čihánková, Gregar, Sittová, 2017) which dealt with the research and questionnaire at a general level. The most striking result of this questionnaire is that despite the overwhelming majority of 92 respondents (out of 110 respondents in total) held a positive attitude to the inclusion of teaching about (and with) MET at universities preparing future teachers (see statement no 22 above), they do not know if the actual inclusion of MET at schools is beneficial for the pupils’ (and students’) education – which is evidenced by a statement of 65 respondents at statement no. 24 (“The results of pupils’ (students’) education are better when they are using modern educational technology”) who neither agree nor disagree with the statement. Therefore, there emerges a question if the students are indecisive due to a lack of their actual experience or due to the fact that this field is not adequately researched. However, the number of students giving indecisive response was the highest at this item.



Therefore, the next question should be – why the future teachers think that they should be taught about means of teaching when its outcome is (at least) debatable. This issue should be addressed as soon as possible in order to avoid a blind alley (some similar researches are presented in Spitzer, 2014).

The future teachers also show uncertainty and general unawareness of its possibilities and one's abilities in this field – this is evidenced by the total grade 2.81 (an arithmetic means of all of the grades of individual items). Since the electronic devices, PCs, tablets, cell phones... are omnipresent, it is surprising that the future teachers do not know whether to use these means and how, or to not use them at all.

The question of actual equipment of schools (which certainly does influence the conviction of the future teachers of their possible employment in their teaching) is subject of the next articles of the authors of the present paper while they compare the material equipment of various schools of the Czech Republic, Austria and Indonesia (with a possible inclusion of China in the research as well).

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References

- Čáp, J. (1993). *Psychologie výchovy a vyučování*. Praha: Karolinum, 1993.
- Calderhead, J. (1996). Teachers: Beliefs and knowledge. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 709-725). New York: Macmillan.
- Čihánková, H., Gregar, J., Sittová, B. (2017). Subjektivní vnímání moderní didaktické techniky, přínosy a limity jejího využití v kognitivních strukturách studentů učitelství na PdF UP v Olomouci. *Trendy ve vzdělávání 2017*.
- Dytrtová, R., Krhutová, M. (2009). *Učitel. Příprava na profesi*. Praha: Grada Publishing
- Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration. *Educational Technology Research and Development*, 53(4), 25-39.
- Fontana, D. (1997). *Psychologie ve školní praxi*. Praha: Portál
- Hammond, M., Reynolds, L., Ingram, J. (2011). How and why do student teachers use ICT? *Journal of Computer Assisted Learning*, 27(3), 191-203
- Judson, E. (2006). How teachers integrate technology and their beliefs about learning: Is there a connection? *Journal of Technology and Teacher Education*, 14(3), 581-597.
- Millerová, K., Miller, S. M. (2007). *Framework Education Programme for Elementary Education* (H. Čechová, Trans.). Prague: VÚP.
- Neumajer, O. (2008). Interaktivní tabule – vzdělávací trend i módní záležitost. Retrieved July 23, 2017, from <http://ondrej.neumajer.cz/interaktivni-tabule-vzdelavaci-trend-i-modni-zalezitost/>
- Nosková, L. (2011). *Využívání moderní didaktické techniky ve výuce odborných předmětů na SOŠ*. Brno: MU.
- Palán, Z. (2002). Didaktické prostředky - didaktická technika. Available at: <http://www.andromedia.cz/andragogicky-slovník/didakticke-prostredky-didakticka-technika>
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*. 62(3), pp. 307-332.
- Průcha, J., Walterová, E., Mareš, J. (2003). *Pedagogický slovník*. 4., aktualizované vydání, Praha: Portál. ISBN 80-717-8772-8.
- Průcha, J. (2002). *Učitel: současné poznatky o profesi*. Praha: Portál
- Spitzer, M. (2014). *Digitální demence*. Brno: Host.
- Williams, M., Burden, R. L. (1997). *Psychology for language teachers: A social constructive approach*. Cambridge, UK: Cambridge University Press.



Mobile Application as an Innovative Tool for the Agricultural Industry: A Conceptual Perspective

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Abstract

Agriculture has been practiced in Thailand since the ancient past and continues to be practiced today. This is because Thailand is a biologically abundant nation. Furthermore, Thailand's income primarily results from the agricultural sector. Farming has been developed from the household level up into enterprises. And one highly important cash crop is "rice". Thai rice is accepted for its quality and flavor worldwide. Rice supplies flooded the market as a result of the aforementioned policy and exceeded consumer demands, leading to domestic prices to be greater than prices on the international market. Consequently, Thai farmers faced a severe crisis in rice sales and created for political gains that finally provide benefits to middlemen. Moreover, the farmers' problems are always the basic problems of the nation. In response to the aforementioned problems, the rice trading mobile application has been developed to provide assistance to farmers for their sustainability through ICT. It has been initially created to allow farmers to sell their rice crops by letting consumers and producers directly communicate through the application. The researcher related concepts, theories and research for adoption in the application to reach target groups through the theory of diffusion of innovation and the technology acceptance model. Quantitative data is being obtained from a proposed sample of 240 Thai farmers who have experiences accessing to the internet via mobile phones are anticipated for the survey sampled from 6 regions in Thailand with qualitative research being conducted with 10 executives by the use of purposive sampling. Analysis will be conducted using Partial Least Square (PLS-Graph) software to apply Structural Equation Modeling (SEM).

Keywords: Rice Trading Mobile Application, Theory of Diffusion of Innovation, Technology of Acceptance Model (TAM), SEM

Introduction

Agriculture has been practiced in Thailand since the ancient past and continues to be practiced today. This is because Thailand is a biologically abundant nation. Furthermore, Thailand's income primarily results from the agricultural sector. Farming has been developed from the household level up into enterprises. And one highly important cash crop is "rice". Thai rice is accepted for its quality and flavor worldwide.

According to rice export statistics from the Office of Agricultural Economics and the Customs Department from 2012-2016, Thailand was the largest exporter of rice in 2011 with an export value of 1.742 billion USD. Thai rice exports, however, have been declining due to policies to promote and insure produce prices with the greatest impacts occurring in 2014 when the export value was only 1.49 billion USD and the lowest export volume occurred in April (Rice Department of Thailand, 2016). As for the situation of domestic rice trading in Thailand during the rice subsidy policy, according to the weekly rice situation report by the Rice Monitoring and Situation Analysis Center, Rice Department of Thailand, in October 2014, jasmine rice was sold in Thailand at 958 USD per ton. This was a decrease from the rice price in 2013 by 20 USD. And in October 2015, the domestic price of rice was 292 USD per ton. The aforementioned statistics are consistent with the situation regarding confidence in domestic and international trade resulting from the policy to promote and insure rice prices (Office of Agricultural Economics, 2016).

Rice supplies flooded the market as a result of the aforementioned policy and exceeded consumer demands, leading to domestic prices to be greater than prices on the international market. Consequently, Thai farmers faced a severe crisis in rice sales. Their crisis became a national crisis as stated by Prof. Dr. Prawet Wasi, Thai health public scholar, who stated that the farmers' problems are the basic problems of the nation (Isra News, 2014) and that the farmers' plights are the source of the country's weakness. Thailand's view of farmers usually involves poverty and difficulty. Furthermore, the country's policies are not conducive to the prosperity of farmers. Even though the government has created policies to assist farmers, the majority of these are only on the surface and do not seriously solve problems. Instead, they are only created for political gains that finally provide benefits to "middlemen".



Therefore, there is a clear imbalance in the agriculture sector. The majority of products are seasonal. Agricultural products have little flexibility while food rates and consumption remain stable. Furthermore, natural imbalance such as droughts and floods occur, and prices are still dependent on demand and supply. Farmers are impoverished because of high production costs and uncertain prices. In addition, small-scale farmers and agricultural institutes and cooperatives remain weak, lacking in their own land to make a living. Moreover, the soil has deteriorated, farmers do not work in clusters and have inequality, and farmers do not have sufficient access to resources, innovations, technology and financial resources. Hence, government policies are unable to quickly steer agriculture, despite it being the heart of Thailand.

In response to the aforementioned problems, a research has been developed to provide assistance to farmers. A rice trade mobile application would allow farmers to sell their rice crops by letting consumers and producers directly communicate through the mobile application. This application can be because of its convenience, speed and ability to broadly reach the younger generation. With the advantages of technology, it is possible to reduce the gap between farmers and consumers and thereby lead to a new form of rice trade and stability and sustainability for domestic trade. The research objective is to help farmers to adopt new innovative technology and is based on the desire to directly assist farmers without going through middlemen which the application to become a trade medium for rice between buyers and rice farmers (producers) in order to allow farmers sell quality rice at fair prices without going through middlemen for the sake on their sustainability throughout ICT model.

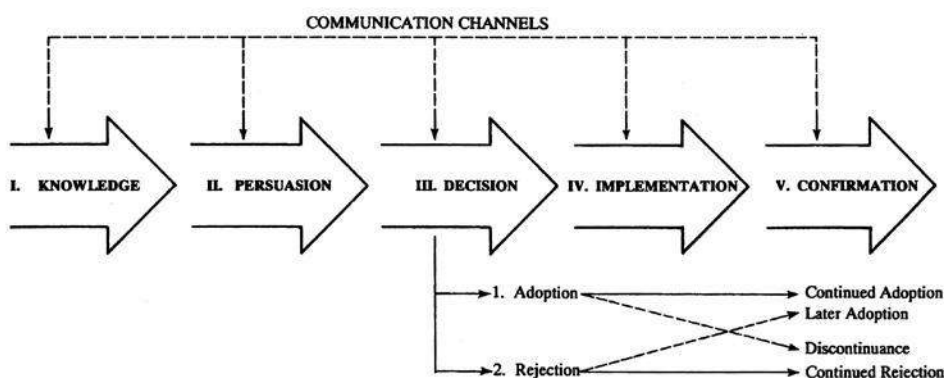
Literature Review

Furthermore, with the desire for the application to become a primary source of rice trade, the mobile application acts as a direct rice trading hub with farmers who produce agricultural products, regardless of whether the farmers offer only a single strain of rice or are traders of a wide range of agricultural products, and to allow producers (farmers) and consumers, who are rice buyers, to easily communicate with one another and obtain detailed information about products as well as provide them a sense of safety through the application. Hence, the researcher related concepts, theories and research for adoption the application. Hence, the following theories, diffusion of innovation and technology acceptance model were made:

Theory of Diffusion of Innovation

Everett Rogers (1962) described the theory as being related to the diffusion of innovation via various communication channels between members of society over a given period of time to induce social and cultural changes. There are five primary components as innovation, adopter, communication channels, time and social system. Rogers (1962) further described the innovation acceptance process as one of the processes for diffusion of innovations. It is a psychological process composed of the five steps as knowledge, persuasion, decision, implementation and confirmation (as shown in Figure 1). Furthermore, he mentioned the people in society who will accept the diffusion of innovation and divided them into five groups as innovator, early adopters, early majority, late majority and laggards.

Figure 1. A Model of Five Stages in the Innovation-Decision Process (Rogers, 1962)





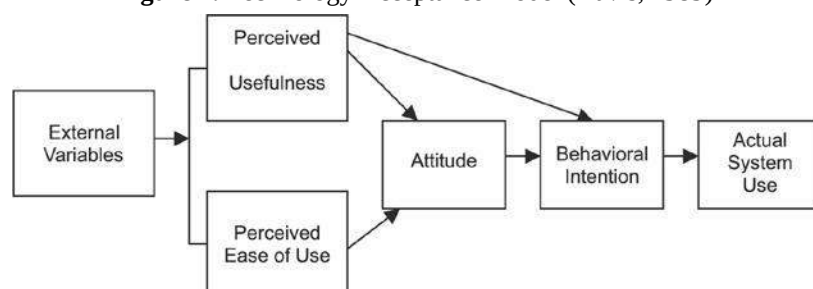
The researcher used the Theory of Diffusion of Innovation because it is consistent with the application and can be used to describe the spread of the aforementioned application. According to Peshin et al. (2009), the Theory of Diffusion of Innovation has been applied to the agricultural industry for half a century. By referencing the Theory of Diffusion of Innovation and the research of Stephenson (2003), the early adopter farmers once they have accepted the innovation, they will implement it in their lives and pass to early majority farmers.

Technology Acceptance Model (TAM)

This theory was developed from the Theory of Reasoned Action and was proposed by Fishbein and Ajzen (1975). Based on the essential content, before humans take any action, guidance, i.e., subjective norms have to take place first along with attitudes toward the aforementioned behaviors. The theory was further reinforced by the Theory of Planned Behavior, which was subsequently proposed by Ajzen (1985). Subjective norms influence attitudes. The person follows the norms follows groups that are important to them. In particular, the more a person follows the reference group, the higher intention that person will have to perform the behavior. This is independent of rights and wrongs with morals. Furthermore, the intention to take any action is also dependent on the strength of the reference group, which results from the surrounding environment and the motivation for the intention to follow the reference group (Ajzen, 1991). Conversely, if the reference group is unimportant, there will be no impacts to the decisions to engage in actions of the person (Miller, 2005).

The Technology Acceptance Model (TAM) is a theory that discusses users' acceptance of the use of given technologies that are suitable to users were offered new technologies. One of the factors that influence acceptance is perceived ease of usage of the technology (Chaweasuk and Wongchatupat, 2012). Davis (1989), the originator of the theory, described perceived ease of use as the feeling of users who believe that the use of a given system as being free from difficulty. Davis and colleagues who created the theory said that because new technologies such as computers are complex and difficult to use for ordinary people without significant technological knowledge, problems occur in accepting usage, and if users encounter obstacles and difficulty after usage, they accumulate negative attitudes and the usage of the technology fails (Bagozzi, Davis and Warshaw, 1992). Previously, a study was conducted by Tornatzky and Klein (1982) on the Theory of Diffusion of Technology, which found indicators on perceived ease of use such as consistency, benefits of the technology used and complexity. Subsequently, Venkatesh (2000 & 2003) proposed new indicators, namely, basic technological competence of users, anxiety caused by the use of technology and enjoyment from the use of new technology. Hence, if new users perceive that systems to be used are not complicated and can be used easily, they will accumulate positive attitudes and future determination. Furthermore, if users believe that the technology will provide convenience in their work and create benefits, whereby perceived benefits is based on knowledge about one's own technological competence (Bandura, 1986), perceived benefits from usage will occur directly and indirectly in terms of the quality of outcomes from the use of new technologies and positive images resulting from usage. Hence, if new users perceive that technology benefits them and promotes their positive image, positive attitudes and usage determination will also occur (as shown in Figure 2).

Figure 2. Technology Acceptance Model (Davis, 1989)



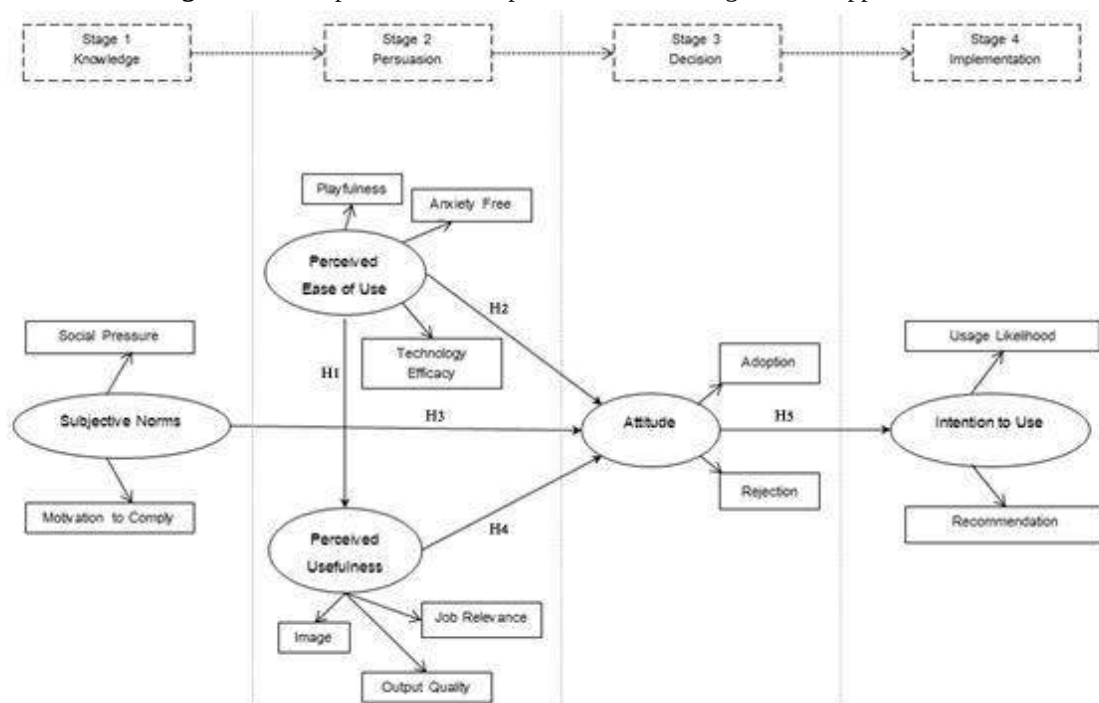
The Technology Acceptance Model is geared toward usage intention leading to actual usage, whereby perceived ease of use, perceived benefits and attitudes are variables that influence usage intention. The Technology Acceptance Model was further revised, and two more variables were added to become TAM 2 (Venkatesh et al.,

2000 & Venkatesh, 2000). In this model, external factors that influence usage motivation were discussed such as subjective norms, image, job relevance, output quality and result demonstration, which lead to perceived usefulness, attitudes and usage intention.

Next, Venkatesh et al. (2003) further developed the Technology Acceptance Model into TAM 3 as an extension of Venkatesh et al. (2000). It mentioned external factors on the computer proficiency of users, perceived external control, computer anxiety, playfulness, perceived enjoyment and objective usability. These are factors that impact perceived ease of use of new technologies.

From the Technology Acceptance Model, it can be concluded that the key factors are perceived ease of use, perceived usefulness, attitudes and behavioral intention to use, which lead to actual use. Additionally, a highly important factor is subjective norms. Therefore, once the Theory of Diffusion of Innovation and Technology Acceptance Model are combined, the model for the development of the application was obtained as shown in Figure 3.

Figure 3. Conceptual Model adapted for Rice Trading Mobile Application



Research Hypotheses

H1: Perceived Ease of Use directly influences Perceived Usefulness

H2: Perceived Ease of Use directly influences Attitude

H3: Subjective Norms directly influences Attitude

H4: Perceived Usefulness directly influences Attitude

H5: Attitude directly influences Intention to Use

Methodology

This research focuses to model the structure of the factors that influence the Thai farmers' adoption to rice trading mobile application. The researchers have therefore set out to determine the details and procedures of the methods as follows:

Data Collection and Analysis

It is suggested a 15:1 to 20:1 subject-to-variable ratio as a rule of thumb can be used structural equation modelling (Schumacker and Lomax, 2010; Worthington and Whittaker, 2006; Cunningham, 2008; Weston and Gore, 2006; Meldrum, 2010). As the study had 12 variables, a 20:1 ratio was used to determine the sample size



of 240 which was selected by multi-stage random sampling, with the population divided into six regions distributed throughout Thailand, selected in proportion to the population of each group within each region.

Samples used for the study included 240 Thai farmers who have experiences accessing to the internet via mobile phones are anticipated for the survey sampled from 6 regions in Thailand. To gauge both content validity and reliability of the survey, 5 experts consisting of scholars and industry executives were chosen to evaluate the consistency of the content and confirm it was valid for the purposes of the research. Additionally, Rovinelli and Hambleton (1977) developed the Item-Objective Congruence (IOC) which was used to carry out the screening of the survey questions to a group of 10 initially in the pilot study. The research will then proceed to select items that have an IOC index higher than 0.5, which will be considered acceptable. The measurement instrument or questionnaires will utilize a 7-Point Likert Scale (Likert, 1970) as a tool for research.

Data Analysis

Henseler et al. (2014) indicated that PLS is an important statistical tool for research. PLS-Graph software was used to discover the causal relationships of the structural equation model (SEM) (Piriyakul, 2011). This involved defining the observed or manifest variables with the latent variables, which were then analyzed for their accuracy and reliability of the measurement. Discriminant validity and the scale reliability were analyzed from Composite Reliability (CR) as well as the Average Variance Extracted (AVE). The CR value should be maintained above 0.60 while the AVE values be lower than 0.50. Additionally, the coefficient of determination (R^2) value should always exceed 0.20 (Lauro and Vinzi, 2004; Henseler et al, 2009).

Preliminary Conclusion

The focus is placed on modern farmers who are familiar with today's technology (early adopters). The adoption to rice trading mobile application is only in the beginning stages of its usage. It is necessary to wait for responses from users to develop and make improvements to the application to meet the requirements of users as much as possible. In the future, this application can be expanded to cover other agricultural groups for the benefit of Thai farmers and provide convenience to product distribution without leftover produce and with reduced poverty and with products sold at fair prices. As for consumers, they benefit by having access to quality products at fair prices and by saving time in the search for high quality agricultural products. In addition, relationships are formed between buyers and sellers, thereby reducing burdens of the government to subsidizing the prices of agricultural products, to achieve stability, prosperity and sustainability for Thai farmers in the future.

References

- Ajzen, I. (1985). *From intentions to actions: A theory of planned behavior*. In J. Kuhi & J. Beckmann (Eds.), *Action.control: From cognition to behavior* (pp. 11.39). Heidelberg: Springer.
- Ajzen, I. (1991). *The Theory of Planned Behavior*. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Bagozzi, R. P., Davis, F. D., & Warshaw, P., R. (1992). Development and test of a theory of technological learning and usage. *Human Relations*. 45 (7), pp. 660–686.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Chaweasuk, S., & Wongchatupat, S. (2012). Technology Acceptance Model for Information Technology. *KMITL Journal of Information Technology*. 1(1).
- Cunningham E. (2008). *A practical guide to Structural Equation Modelling using AMOS*, Melbourne: Statsline.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly* 13 (3): 319–340.
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior*. Reading, MA: Addison-Wesley.
- Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009) 'The use of partial least squares path modeling in international marketing', *Advances in International Marketing*, Vol. 20, pp. 277-319. Retrieved from <http://tinyurl.com/jo9nx7r>
- Isra News. (2014). *Pravet Wasi: The Holistic Solution for Farmers and the Country Reformation*. Available at <https://tinyurl.com/mgzsxz9>



- Lauro, C. and Vinzi, V.E. (2004) 'Some contribution of PLS path modeling and a system for the European customer satisfaction', *Dipartimento di Matematica e Statistica*, Universita Federico II di Napoli, pp: 201-210. Retrieved from <http://tinyurl.com/k2fgga9>
- Likert, R. (1970). *A Technique for the Measurement of Attitudes*, In: Attitude Assessment, Summers, G.F. (Ed.). Chicago, IL., USA: Rand-McNally and Company, 149-158.
- Meldrum K. (2010), Structural Equation Modeling: Tips for Getting Started with Your Research, *Contemporary Approaches to Research in Mathematics, Science, Health and Environmental Education*, 1-5. Retrieved from <http://tinyurl.com/hxxoslr>.
- Miller, K. (2005). *Communications theories: perspectives, processes, and contexts*. New York: McGraw-Hill. Office of Agricultural Economics. (2016) *The Agricultural Readiness of Smart Farmer for entering to Thailand 4.0*. Available at <http://tinyurl.com/k2l28rf>.
- Peshin, R., Vasanthakumar, J., & Kalra R. (2009). Diffusion of Innovation Theory and Integrated Pest Management. Integrated Pest Management: Dissemination and Impact. *Springer Netherlands*. Vol. 2. pp. 1-29.
- Piriyakul, M. (2011) 'A partial least squares model for SCM strategy, willingness for external collaboration, competitive performance and relative performance: Effects of marketing and logistics performance in the palm oil industry', *African Journal of Business Management*, Vol. 5, No. 4, pp. 1431-1440. Retrieved from <http://tinyurl.com/zf496px>
- Rice Department of Thailand. (2016). *Rice Thailand Center* Available at <http://tinyurl.com/n7nu5pe>.
- Rogers, E., M. (1962). *Diffusion of innovations* (1st ed.). New York: Free Press of Glencoe.
- Rovinelli, R.J. & Hambleton, R.K (1977). On the use of content specialists in the assessment of criterion-referenced test item validity. *Dutch Journal of Education Research*, 2: 49-60.
- Schumaker, R. E., & Lomax, R. G. (2010). *A beginner's guide to structural equation modeling*, New York: Routledge.
- Stephenson, G. (2003). The Somewhat Flawed Theoretical Foundation of the Extension Service. *Journal of Extension*. 41(4).
- Subong, P.E. (2005). *Statistics for Research*, Phillipines: Rex Book Store, ISBN 971-23-4311-1. Retrieved from <http://tinyurl.com/jpmwnsw>.
- Tornatzky, L. G., & Klein, R., J. (1982). Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings. *IEEE Transactions on Engineering Management*. EM-29: 28–45.
- Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information systems research*. 11 (4), pp. 342–365.
- Venkatesh, V., & Davis, F., D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*. 46 (2): 186–204.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*. 27 (3): 425–478.
- Weston R. & Gore P. A. (2006). A brief guide to structural equation modeling, *The Counseling Psychologist*, 34, 5, 719-751.
- Worthington R. L., & Whittaker T. A. (2006). Scale development research: A content analysis and recommendations for best practices, *Journal of Counseling Psychology*, 34, 6, 806- 837.



Integration from the point of view of foreign students as an important factor during the formation of value of education

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Abstract

This article focusses on students of a different ethnicity living in the United Kingdom, it mainly focuses on how these students are being integrated into the majority society, also on how the school and teachers reflect their needs. The main aim of the research is to find out what value does education have for the students in the land that their parents came to live in from different reasons. The first partial aim is to find out what were the reasons for the family to move to the United Kingdom, what languages does the family speak and how educated are their parents. The second aim is to describe in what way were the families making effort to integrate into the majority society, whether the students went to the common British schools and what obstacles they had to overcome. We also focused on whether the students had enough knowledge (since some of them came from the same country of origin as the first generation) and whether they feel fully accepted by society and surroundings. The last aim of this research is to find out what value does education represent to them and their parents, how are they planning to represent this value to their children one day and what does obtaining of a degree diploma in the United Kingdom represent for them. For this research, I picked a qualitative approach with a method of semi-structured questions. The obtained data will be analyzed by the card unloading technique. The results will be described in the open, axial and selective codes.

Keywords: students of different ethnicity, value of education, integration, qualitative research, semi-structured interview.

Introduction

The article deals with the issue of value of education among the students from different socio-cultural environment. The present research is a part of a larger complex whose purpose is to research the value of education not only in countries with a large percentage of immigrants in the total population (e.g. the UK, the Netherlands and Belgium), but also from the perspective of foreigners in our country (i.e. the Czech Republic) – e.g. Ukrainian immigrants in the Czech Republic. The authors decided to deal with the target group – students of the UK universities – while they assume that the value of education is rather permanently anchored in their hierarchy of life values. Due to the fact that the authors still focus on the students from different socio-cultural environment, they aim their attention to the students that are not British (i.e. that are of different ethnicity). Therefore, they deal mainly with so-called 1.5 generation which includes the descendants of people who came to the UK. The main aim is to determine the reason why the student's family decided to come to the UK, which type of education had their parents achieved, and which languages are spoken by the students and their families. The second aim is to discover the ways how the family strived to integrate within the majority society and the problems which they struggled with. The third (the last) aim is the question dealing with the student's education and which value they add it themselves, or in various situations in their life (e.g. in choosing of their partner or while raising their children). In the first part of this article, the authors therefore deal with the theoretical anchoring of the terms *value*, *value of education*, *attitudes* and *socio-cultural environment*. The second part deals with the methodology of the research while the third part describes the outcomes of this research.

The *values* (as described by Průcha in Pedagogický slovník, 2009) are subjective pricing or a degree of importance which the individual assigns to certain things, phenomena, symbols, other people, i.a. Popovič (in: Cakirpaloglu, 2004) states: ... *values represent social standards by which activity and behavior of people in the society is*



regulated. The values determine what needs to be done, appreciated, what should be aimed to; whereas the norms regulate how, i.e. the way of behavior during the realization of a value, or the behavior in general.

M. Rokeach (1970) speaks about individual's *system of beliefs*, which is not possible to be studied as individual beliefs, but only as their manifestation in individual's behavior. The degree of individual's beliefs about various facts is changeable and more or less central or marginal. Rokeach sees this as the difference between values and attitudes since the values are (in his concept) in the center of individual's system of beliefs – this is the reason why there are fewer values than attitudes. This concept of a value as a belief is accepted by e.g. Cakirpaloglu (2009) or Schwartz (2015). According to the latter (Schwartz, 2015), the values are, however, the central element of individual's self-concept. The value represents *a specific psychological category which constitute rather stable and permanent personality structure which is important for individual, social and historical realization of an individual* for Cakirpaloglu (2009, p. 277) as well. Schwartz, on the other hand, understands the value rather as a component of the subject than a component of the object: *"Value is in the eye of the beholder, not in the object of perception."* (Schwartz, 2015), while he calls them motivational constructs which express the things that is considered important by the individual while they consider various objects, situations, events and individuals more or less valuable only based on their values.

Sereno (2012) states that value is something that helps people to aim their life in a certain direction or to lead it. As an example, Sereno gives us an individual with a plenty of ideas and wishes, and another individual with only a few wishes. The second individual keeps the wishes as the most precious things in their life which makes them to strive for them even more. Sereno classifies the values as instrumental (abstract values determined by an individual to lead their life according to them, e.g. trustworthiness, honesty, etc.) and terminal (aims – broadly speaking – which an individual strives to achieve, e.g. a degree from USC). The question if it is important for the students to achieve a certain degree of education and knowledge, or if it is important to get the diploma is therefore included in our research as well. The question therefore is whether the students perceive the value of education merely as a form of instrumental value (i.e. as an acquisition of knowledge), or as a form of terminal value (i.e. the receiving of the diploma). Therefore, the *education* is in the text of the present article as a *summary of knowledge, skills and attitudes which is acquired by an individual in the course of their life in the process of education which is mediated by educational institutions*. The individual's attitudes (in the concept mentioned above) to the education are constituted based on the values.

In order to understand the relationship between the individual and the value, it is necessary to begin the description of the issue at an individual and their experience. It is obvious that every research of values suffers from a certain reduction which is necessary to perform e.g. a research itself. Therefore, the content of the evaluation and the way how is this content changing are more interesting than the things that are evaluated. The fact that something is more valuable for us than something else means that we have good experience with it and therefore it makes us happy or satisfied. A set of values which is hierarchically arranged which is constituted by individual's attitudes, interests, experience and behavior is called *value orientation*. This set regulates both the individual's behavior and the behavior of the whole society. The value orientation belongs among the most important characteristics of our personality while the important fact i.a. is that it changes with age. The value orientation is therefore influenced by both internal factors and external factors – it is possible to mention here mainly the material conditions, influence of educational institutions or politically economic situation of a country.

The content of attitudes is constituted by the relationship to values. According to Hayes (1998), the values are *rather stable personal preconditions which lie in the very basis of the attitudes*. The attitudes are most commonly derived directly from the basic value system of an individual. The individual who is aware of the relationship to the education creates permanent attitudes to the education which are important for them. The cognitive needs (needs of self-realization, cognition and understanding) play a significant role in the relationship to the educational aims as well the performance needs. However, that would lead to a result which favors the students which prefer the acquisition of knowledge to the receiving of the diploma and disprove the urge to receive just the diploma.

For the purpose of this research, also the term *different socio-cultural environment* is used which is an umbrella term for a broad field of terminology. It is necessary to point out the fact that contemporary terminology is ambiguous in the delimitation of the extent and content of this term. First of all, we agree with the Mohanty's definition, who includes



not only habits and traditions in the term *culture* but faith and behavior as well: „*Culture is a human group which shares a number of essential aspects of daily life. Language, customs, traditions, religion and values are some of the shared products that define each cultural group. Each human group creates both material and non-material culture. Material culture for example includes physical objects (money, homes, cars) while non-material culture addresses the beliefs, values and behavior shared by a particular group. Taken together, this material and non-material culture shapes emotional, cognitive, spiritual, and social experiences of individuals within the group*” (Mohanty, 2005). The terms *social* and *cultural* are often linked to national or race differences, language barriers, health handicap, low social and economic status, socio-pathological family (or community) environment, or to institutional (correctional) education (Slowik, 2007). Therefore, we focus on the socio-cultural environment while we include the *religion* in the definition of the term *cultural* and the ethnicity in the term *socio*. Based on this, there emerges our question – i.e. how may the socio-cultural awareness and background of an individual (and also their different ethnicity) influence the creation of their value of education.

Methods

Method of the research

In the course of this paper, the qualitative research design was used while the semi-structured interview was chosen as a method.

Population sampling

For the purpose of this research, we had chosen the UK since there live almost 8.3 million immigrants. This figure has risen by more than 4 million people since 1993. The British stats distinguish between immigrants which were born in another country and came to the UK (these, therefore, do not have British citizenship) and those, who were born in the UK, therefore, have the British citizenship – hence becoming 1.5 Generation (Humby, 2016). The first group includes often people from Poland, India, Ireland, Italy and Pakistan while the second group mainly consists of people from India, Poland, Pakistan, Ireland and Germany.

Therefore, the authors chose as respondents whose students who come from a different socio-cultural environment, who study in the UK (therefore in a country other than the one which they consider a country of their origin), who have experience with multiple educational systems, and whose country of origin is “culturally” very distant to the country of their current residence.

Data collection tools

In order to select respondents, the authors used the snowball sampling. All of the students were asked the same questions while additional questions were added as necessary. All students were explained the purpose of the interviews; they were also briefly introduced to the topics which were dealt. Their responses were recorded, transcribed and coded. The first stage of the analysis was the open coding while the second stage was the axial coding.

Analysis techniques

The *open coding method* is employed in order to process and analyze the text in depth while it also able to discover the meanings which are not obvious at first sight. It is an inductive method which creates its terms and categories based on the acquired data – in our case – the responses from the interviews. Therefore, new groups and terms are created while they are subsequently grouped according to their similarity.

The following codes were created during the open coding of responses of selected students:

- 1) *Demographic data*
 - name,
 - age,
 - origin,



- religion.
- 2) *Arrival at the UK*
 - Reasons for family's coming to the UK,
 - Criteria to choose the particular country (i.e. why the UK?).
- 3) *Comparison of the UK with their country of origin (if possible)*
 - general differences between the countries,
 - differences in terms of education, attitudes to children, schools.
- 4) *Language competence*
 - language used when communicating with parents, friends,
 - preferred language,
 - communication with other people from their country of origin.
- 5) *Education*
 - education of student's parents,
 - place of parents' studies,
 - quality of education of the student's parents,
 - time and place of the start of the respondent's studies,
 - type of school,
 - way of the first contact with the classmates,
 - majority of the friends' ethnicity,
 - use of other classmates' (or educators'),
 - problems at school due to its curriculum,
 - problems at school due to bullying,
 - causes of the bullying (due to ethnicity, different accent, etc.),
 - ambitions related to the education (degree of education of the respondents),
 - parents' influence on the respondent's studies,
 - importance of the education and self-education,
 - importance of the graduation (receiving of the diploma),
 - importance of the education of the future children of the respondents,
 - importance of the support of one's future children in their studies,
 - willingness to move in order to provide one's children better education,
 - importance of the education in the process of choice of a partner.
- 6) *Faith*
 - role of the faith in the course of respondents' studies,
- 7) *Integration*
 - parents' integration,
 - problems in the ordinary life (outside of school) due to different ethnicity,
 - possibility of living in a different country,
 - possibility of living in the country of their origin,
 - the UK as a home.

Axial coding

Based on the open coding, it is possible to observe the relationships between the codes – this is called *axial coding*.

Its purpose is to discover possibilities to merge some categories and their clear organization.

In the case of this paper's coding, the central point is the *student* (i.e. phenomenon) of a different ethnicity. They are influenced by three contexts (i.e. the influences): their *faith*, *family* and *life circumstances*. As causal conditions (i.e. conditions that are in the spotlight and directly influence the respondent's development), the authors chose the *education*, the *value of education* and the *student* themselves. As a so-called category of consequences, the authors chose the category of *troubles* which may influence both the students' integration and their study results as well. This coding resulted in the following Figure no. 1.1:

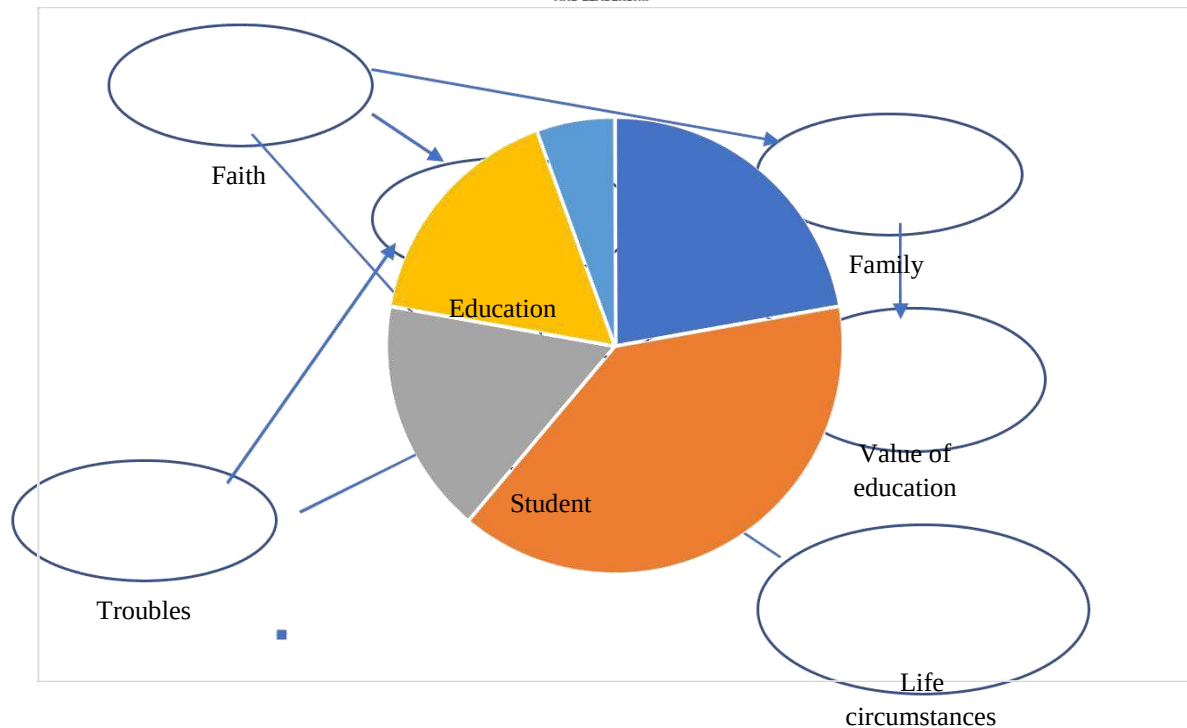


Figure no. 1.1: Axial coding.

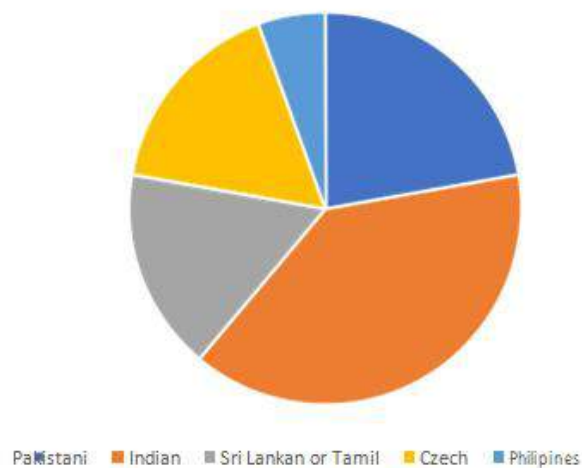
Findings

In the present part of the article, the results based on the open coding are discussed. Based on categories which emerged during the coding in the above stated chapter of the paper, we proceed gradually also in the findings' interpretation. The most substantial results are summarized here together with comments of respondents themselves.

Demographic data

The number of respondents (asked in the UK) is 17 in total. It is possible to see the respondents' overview based on their ethnicity in the Figure no. 1.2 below.

Fig. 1.2 Respondents





Out of these 17 respondents, 11 of them are believers of various religions: seven Hindus (two of them Sikhs), one Buddhist, one Christian and two Muslims.

Arrival at the UK

Eleven respondents stated that their parents came to the UK due to job offers. Three families came in order to get better education and one due to the civil war in Syria. Both Czech families came to the UK to work there, however, one family came back to the Czech Republic.

Comparison of the UK with their country of origin (if possible)

According to students who were able to compare the countries (since they had spent at least several years in the country of their origin), education in the UK is more free and open. The education in the country of their origin, on the other hand, goes with the traditional education – considering even the teacher's status as an authority. The education is stricter, academic and focused on accuracy; however, the education in the UK brings a possibility to develop creative and critical thinking as well as the argumentation. An Indian, who stayed in India for several years and attended there a basic school as well, stated the following: „Yeah..so...the schools in India focus more on memorizing as much information as possible... On the other hand in England, more focus is put upon teaching methods and using that knowledge in practice... If I had to choose which country has better schooling, I'd have to opt for England ... In fact, with the strength, emphasis and resources the government can provide English schools I'd actually say the top ranked schools in India would compare with the lower ranked schools in England.... Child treatment? Hmmm.... I would probably say it depends on the family, actually even in England there have recently been laws put in place on child abuse. From what my English friends say, since the rules were put in place, child treatment in England has significantly improved. With no such rules in India yet, I'd compare child treatment over there to how it was in England about ten years ago. Hopefully India can catch up with England's improved laws as soon as possible.... For me personally then, let's just say... hmmm... laws or not, if I deserved it mum would definitely still give me a spanking. Moral of the story, don't talk back to my mum.” Considering the homeland memories, the respondents mainly remember the family members, scents and sounds, or the weather.

Language competence

All respondents stated that they are bilingual: while they know their native tongue, English is their second language. The surprising fact is that despite all the respondents are bilingual, they use both languages when communicating with their parents, not the native tongue solely. An Indian (living in Scunthorpe) said: “At home we normally speak in Hinglish...We say half of a sentence in Hindi, then finish it off in English. However, with Grandma we speak only in Hindi as that's what she prefers, and of course what Grandma says goes. My brother on the other hand, like me, has been brought up in England, so we only really chat to each other in English. Even though mum and dad speak to him in Hindi, unless he's getting told off, he'll just reply in English...”. Four respondents even stated that they speak with their parents only in English despite the fact that they are able to speak also in their native tongue. However, the respondents are used to speak with other family members which live in the country of their origin only in their second language.

Education

Fourteen respondents stated that their parents graduated and all of those were studying (at least for some time) also in their native country. Nine respondents started their compulsory school attendance in the UK at the age of four or five, the rest of respondents started to attend school in the UK later due to a fact that they were not living in the UK yet. One respondent (originally from the Czech Republic) stated that she started to attend a university in 2011.

Out of the total of 17 respondents, twelve of them stated that they attended state funded schools; on the other hand, five of them attended fee paying private schools. All but one respondents stated that their classmates were of various ethnicities and origins. A student from London (originally from India) stated the following (when commenting his classmates' ethnicity): “There were literally people from everywhere...Indians, Asians, Muslims, white people, black people... simply everyone. I do not even remember ever going to a school where it



would be mostly just one race...”. One respondent (residing in Manchester, of Pakistani origin) stated: “At my primary school I was the only non-white person there...haha...oh, yeah! There actually was also one Indian girl... Yeah it was a private school.”

All respondents stated that it was not difficult for them to make new friends. On the other hand, eleven respondents stated that they experienced discrimination or bullying. The majority of respondents did not want to talk about their unpleasant experiences, however, one respondent (of Syrian origin, living in London) was willing to give us some examples: “Yeah, some children were... I guess...I dunno. Some of the worst things said were like my dad being called a terrorist, targeting me hurt but targeting my family was just plain low. I heard many jokes like that... Once on my desk someone wrote, “Your dad is a terrorist”. I felt so humiliated and embarrassed... I just remained silent and didn’t tell anyone. If I told my parents they’d worry, if I told the teacher then the kid would get in trouble, leading to me getting even more grief for being a “tad-tale”. One time the teacher took us aside and asked me whether I was okay, of course I didn’t say anything... so that was pretty much it. On the other hand, I wasn’t the only one... I remember kids even bullying the Caucasians... Now when I look back I wish I actually caused more drama around that issue ... but for instance my parents don’t know anything about it, I was too humiliated and ashamed, you know?”

The education is important for all of the seventeen respondents while they also stated that their parents support them and encouraged them to study. All of them also stated that it is important for them to acquire new knowledge and the self-development itself. Four students stated that the graduation and the university degree is not important for them, however, that they want to have the knowledge. Twelve respondents stated that the education of their partners is not important for them, while sixteen respondents stated that they wish their parents to be educated as well. Nevertheless, thirteen of them stated that they want to support their children mainly in order to lead a happy life – regardless their university studies. If the children are happy without the university, the respondents will respect their decision.

Faith

Eleven respondents (out of the total seventeen) stated that they believers. Seven respondents stated that the faith did not mean nothing else than just the traditions and habits that were passed on by their parents. Four of them stated that they adopt the faith from their parents while now they practice it on their own. Two students stated that the faith means more to them now, when they are grown up, than it used to. For both Muslims, the faith is something that should be preserved and respected while it is an integral part of their everyday life. A respondent (of Pakistani origin, Manchester resident) stated: “Religion to me is something that became increasingly important to me with age... When I was younger with a less independent mind I’d follow my parents’ footprints, print for print. With age, reading, maturity and experience I started thinking about what life actually means to me. Though I am less practicing than my parents, which I would put down to my environment, religion is essential to me. I firmly think religion should be private and a not a public show, my five prayers a day are only between me and Allah. By all means, ask me anything, I love a nice conversation, but don’t go around unnecessarily preaching. If you expect society to respect your beliefs, you must respect theirs also. Though I am a Muslim, there is a Biblical quote I live by supporting this notion, “Do unto others as you would have them do unto you.”

Integration

All of the seventeen respondents stated that their family and themselves tried to integrate. Their parents associated with parents of their classmates, organized various events for children together, they invited neighbors (or their colleagues) over for a dinner, etc. Six respondents stated that they cannot imagine themselves living in their native country or that they do not want to live in their native country. However, fourteen respondents stated that they can imagine living in another country (i.e. not in the UK).



Conclusions and Recommendations

The aims of our research, i.e. the discovery of reasons of families coming to the UK, the question of their integration and troubles, the attitudes to the value of education and to the education in general, are fulfilled. Firstly, the authors discovered the reasons why the respondents' families came to the UK, secondly the education of respondents' parents. The authors also achieved to describe the students' perception of the UK in comparison with their country of origin, concerning both – general or educational aspects. Another aim was achieved while researching the integration of families and troubles which may occur during this particular process. The families struggled with a negative (and even discriminatory) response as well as open arms. The achievement of this aim smoothly overlaps into our last aim – i.e. discovery of the value of education, respondents' own view on the education and the troubles which they had to deal with. Besides the language-related and the knowledge differences, there emerged also the troubles caused by their different ethnicity. From the interviews with respondents, there emerged the fact that the respondents really appreciated the education and possibilities to educate – it may, therefore, be stated that their view on education is accompanied by a great deal of humbleness. This is often true among respondents of Asian origin. They tend to perceive education as something which is “facilitated” or “enabled” by their parents by the very arrival in the UK, therefore, the large effort of respondents to achieve their dreams or to satisfy their parents is clearly manifesting. The answer to the question whether the students perceive the value of education as the acquisition of findings and knowledge, or rather as receiving of a diploma, might, therefore, based on the answers of the respondents, be generalized as a combination of both. The value of education does not represent only the non-material perspective (the desire for knowledge), but the material perspective as well – the receiving of the diploma and the degree as well as the vision of better future.

From the research, many interesting findings emerge which might be used as a basis for further research. The creation of the comparison between the teachers' approaches and authority in the country of their origin (or in the country of respondents' origin) and in the UK might be inspiring, since even the respondents see a great difference in this field. Another issue might be the question of comparison between European countries' and Asian countries' concept of education since those two differs a great deal (based on the research presented in this article). This is also linked to the issue of perception of education and its value in the eyes of people. The fact that the possibility to study should be appreciated was undebatable, however, the question is whether it was influenced by their parents coming to a foreign country for better conditions, or if it is caused by generally different value ladder.

Now, the main question for us is, however, the faith support during the studies. This thought was suggesting itself more than once in previous researches for a deeper examination, that was the reason we decided to focus our attention there in our further research, mainly because of different attitudes to the faith of e.g. a Hindu and a Muslim. Therefore, it is interesting to research which role does their faith play in their studies, if they see a support in it, if it is more or less important for them when facing a difficult life situation (or even a difficult study situation).

A complex (and therefore not-easy-to-be-researched) element to research was the question of integration – mainly the struggles which the families had to face. The respondents had difficulties to talk about this issue, however, the topic of discrimination and bullying at schools (which is rooted in racism) is not less topical while it encourages to a deeper examination in more detail which we want to devote our time in the future. Due to a fact that this contribution is a part of a larger research (as it was already mentioned), the comparison with countries that we want to focus on in the future (i.e. the Netherlands, Belgium and with Ukrainians in the Czech Republic) suggests itself.

References

- Brožík, V. (2004). *Hodnotenie a hodnoty*. Prešov: Vydavateľstvo Michala Vaška.
- Čáp J., Mareš, J. (2007). *Psychologie pro učitele*. Praha: Portál.
- Čapek, R. (2015). *Lexikon výukových a hodnotících metod*. Praha: Grada publishing, a.s.
- Gavora, P. (2010). *Úvod do pedagogického výzkumu*. Brno: Paido.
- Hayes, N. (1998). *Základy sociální psychologie*. Praha: Portál.



- Kraus B. et al (2005). *Středoškolská mládež na přelomu tisíciletí*. Brno: Paido.
- Kropáčová, J. (2006). *Výuka žáka s odlišným mateřským jazykem*. Olomouc: Univerzita Palackého.
- Maňák, J., Knecht, P. (2007). *Hodnocení učebnic*. Brno: Paido.
- Mareš, J., Průcha, J. a E. Walterová (2013). *Pedagogický slovník*. Praha: Portál.
- Mohanty, G. S. (2005). *Cultural Sociology*. Gyan Publishing House.
- Možný, I. (2002). *Sociologie rodiny*. Praha: Sociologické nakladatelství.
- Nakonečný, M. (2009). *Sociální psychologie*. Praha: Academia.
- Petrusek, M. (2009). *Základy sociologie*. Praha: Akademie Veřejné Správy O.p.s.
- Popovič, M., Cakirpaloglu, P. (2004). *Psychologie hodnot. Přehled pro humanitní obory*. Olomouc: Votobia.
- Průcha, J. (2002). *Moderní pedagogika*. Praha: Portál.
- Rokeach, M. (1970). *Beliefs, Attitudes and Values*. San Francisco: Jossey-Bass Inc., Publishers.
- Sereno, K. (2012). *Explaining Theories of Persuasion, Communication and Social Science*. Unknown publishing.
- Schwartz, S.H. (2015). *Basic individual values: Sources and consequences*. In: *The Praeger Handbook of Personality across cultures*. A. Timothy Church, A. Merritt. 2017. ABC Clio.
- Slowík, J. (2007). *Speciální pedagogika*. Praha: Grada publishing, a.s.
- Švaříček, R., Šedová, K. a kol. (2007). *Kvalitativní výzkum v pedagogických vědách*. Praha: Portál.
- Veverková, H. Učivo. In Kalhous, Z. a O. OBST (2009). *Školní didaktika*. Praha: Portál.
- Vojtová, P. (2012). *Hodnota vzdělání z pohledů žáků různých typů škol*. Diplomová práce.

Electronic sources:

- Hrubá, J. *Co nejvíc ovlivňuje mladé lidi?* [online]. [cit. 2017-01-10]. Dostupné z URL www.ceskaskola.cz/2009/04/jana-hruba-co-nejvic-ovlivnuje-mlade.html.
- Humby, P. *Overview of the UK population: February 2016*. [online]. [cit. 2017-01-10]. Dostupné z URL <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/overviewoftheukpopulation/february2016>.
- Kučerová, L. *Hodnoty současné mladé populace*. [online]. [cit. 2017-01-11]. Dostupné z URL https://is.muni.cz/th/251972/pedf_m/diplomova_prace.
- Makovská, K. *Hodnoty a hodnotová orientace adolescentů*. [online]. [cit. 2017-01-10]. Dostupné z URL <http://vyzkum-mladez.nidv.cz/zprava/1414250482.pdf>.
- Mazáčová, N. *Vybrané problémy obecné didaktiky*. [online]. [cit. 2017-01-08]. Dostupné z URL <http://www.vyzkum-mladez.cz/zprava/1434886741.pdf>.
- Papřoková, A. *Hodnota vzdělání v současné společnosti*. [online]. [cit. 2017-01-12]. Ostrava: VŠB-TUO, Katedra společenských věd, 2006. Dostupné z URL knowledge.vsb.cz/sborniky/2006_Paprovka_Hodnota_vzdelani.pdf. Vargas-Silva, C., Rienzo, C. *Migrants in the UK: An overview*. [online]. [cit. 2017-01-14]. Dostupné z URL <http://www.migrationobservatory.ox.ac.uk/resources/briefings/migrants-in-the-uk-an-overview/>.
- Wha, L. J. *Čínská revoluce ve vzdělání*. [online]. [cit. 2017-01-07]. Dostupné z URL http://www.euro.cz/archiv/cinska-revoluce-ve-vzdelani-1089597#utm_medium=selfpromo&utm_source=euro&utm_campaign=copylink.
- White, N. *Population of the UK by country of birth and nationality: 2015*. [online]. [cit. 2017-01-10]. Dostupné z URL <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/ukpopulationbycountryofbirthandnationality/august2016>.

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Psychological Traits in Teacher and Pupil Mutual Communication

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Abstract

Many factors contribute to a pupils' academic performance. Studies suggest that, between school-related factors, teachers matter most and have two to three times larger impact than any other school factor. Researchers provide various lists of necessary traits for the effective teacher. Fewer lists are provided on required traits for the effective pupil. The problem is that ideas about necessary traits of the effective teacher or effective pupil differ from the point of view of the viewer. This research examines pupil - teacher and teacher - pupil expectations about the necessary personal traits in the educational process. Participants are pupils (N=125, age 7 - 18) and teachers (N=30, age 32 - 64), all from the same regional school. A structured questionnaire developed on the basis of the theoretical studies was used. Ten traits for the effective pupil (discipline; freedom; will power; courage make mistakes; curiosity; goal; comprehension; belief in self; responsibility; politeness) and effective teacher (strictness; friendliness; high expectations; sense of humor; enthusiasm; care; explanatory; positivism; organized; politeness) were measured with ordinal and nominal scales. Results demonstrate significant difference between expectations and actual state evaluation concerning the teachers - for pupils about: care, strictness, high expectations, enthusiasm; for teachers about friendliness, enthusiasm, sense of humor and care; concerning the pupils - for pupils about: curiosity, belief in self, responsibility, politeness, freedom, courage make mistakes, comprehension; for teachers about freedom, curiosity, responsibility. The results suggest that difference in mutual expectations between teachers and pupils may interfere with the common awareness of the educational process. **Keywords:** Teacher, Pupil, Communication, Expectations, Traits.

Introduction

Hanushek (2011) has found that effective teachers raise students earnings. A teacher one standard deviation above the mean effectiveness annually generates marginal gains of over \$400,000 in present value of student future earnings (Hanushek, 2011). There have been numerous studies about the traits of the effective teacher (Hildebrand et al., 1971; Triana 1999; Stronge, 2007; Ko, Sammons & Bakkum, 2013). Effective teachers reach classrooms with preparation for teaching and possess optimistic attitudes about teaching, pupils and set no limits since they believe everyone can be successful (Walker, 2008). The top quality international teachers chose is to grade student work fairly (McCall, 2008). It is found that the qualities of an effective teacher are similar regardless of nationality in which teachers are described as effective as long as they have good personal or affective characteristics such as enthusiastic (Malikow, 2006; Walls, Nardi, von Minden, & Hoffman, 2002), respectful (Walker, 2008), and enjoys teaching (Walls, Nardi, von Minden, & Hoffman, 2002). Research claims three dimensions of expert teachers' behavioral traits that are suggested to be especially important - a challenge, deep representation, monitoring, and feedback (Hattie, 2003).

Teachers are not alone and they interact with pupils who need certain learning qualities to meet the demands of a modern, globalized world (Arnot et al., 2003). The most required traits for the effective pupil of the 21st-century school are the ability to built positive social relationships, ability to take responsibility for own learning, creativity, flexibility, the ability to express opinions, courage for innovations and initiative (Manefield et al., 2007; Alismail & McGuire, 2015). Although there are different perceptions and expectations between teachers and pupils about the most required traits in the education process and not always they match. Research has stated that the ideas about necessary characteristics of the participants in the effective education process differ from the point of view of the viewer (Holdsworth, 2005; Lyle et al., 2010; Wilson & Sproats 2009).

Method



This quantitative pilot study research was conducted in the framework of the project Erasmus+ K2 "Wind of Change" with the aim to introduce research-based practice in the school for the development of the dialogue between teachers and pupils (Wilson, 2002; Wilson & Sproats, 2009). This research examines pupil - teacher and teacher - pupil expectations about the necessary personal traits in educational process and comparison with the actual state evaluation.

Participants are pupils (N=125, age 7 - 18) and teachers (N= 30, age 32 - 64), all from the same regional school. A structured questionnaire developed on the basis of the theoretical studies was used (Hattie, 1989, 2003; Ko, Sammons & Bakkum, 2013; Manefield et al., 2007).

Ten traits for the effective pupil (discipline; freedom; will power; courage make mistakes; curiosity; goal; comprehension; belief in self; responsibility; politeness) and effective teacher (strictness; friendliness; high expectations; sense of humor; enthusiasm; care; explanatory; positivism; organized; politeness) were measured. Teachers and pupils had to rate in the hierarchy of traits the desired expectations for medium teacher and medium pupil within the ordinal scale from 1 to 10, and evaluate in the hierarchy of traits the actual state for medium teacher and medium pupil within the nominal scale from 1 to 10.

For data analysis Statistical Package for the Social Sciences (SPSS) predictive analytics software was used. The Mann-Whitney U-test was used to compare differences between two independent groups when the dependent variable is ordinal, but not normally distributed. For representation the number of standard deviations between each data point the mean Z-scores, and for a probability of observing result from a sample, p-values are reported.

Findings

Teachers' and pupils' expectations differ significantly concerning the teacher in hierarchy of traits about friendliness ($p < .05$), high expectations ($p < .05$), care ($p < .001$), organized ($p < .001$). Analysis of the results is shown in Table 1.

Table 1. Differences between teachers' and pupils' expectations about what should be the teacher

Variables	U	Z	p
Strictness	804.50	-.381	.703
Friendliness	473.00	-2.829	.005*
High Expectations	501.50	-2.623	.009*
Sense of Humor	664.50	-1.410	.158
Enthusiasm	790.00	-.481	.631
Care	351.50	-3.725	.000**
Explanatory	716.00	-1.027	.304
Positivism	697.00	-1.169	.242
Organized	324.50	-3.920	.000**
Politeness	606.00	-1.846	.065

* $p < .05$ ** $p < .01$

There was no significant difference between teachers' and pupils' actual state evaluation in the hierarchy of traits concerning the teacher. Analysis of the results is shown in Table 2.

Table 2. Differences between teachers' and pupils' evaluation about what is the teacher



Variables	U	Z	p
Strictness	603.00	-.496	.620
Friendliness	628.50	-.274	.784
High Expectations	489.50	-1.050	.294
Sense of Humor	579.00	-.237	.813
Enthusiasm	599.00	-.050	.960
Care	417.00	-1.675	.094
Explanatory	490,00	-1.048	.295
Positivism	490,00	-1.048	.295
Organized	595.50	-.037	.971
Politeness	463.00	-1.270	.204

* $p < .05$ ** $p < .01$

Pupils have the significant difference between expectations and actual state evaluation concerning the teachers in the hierarchy of traits about care ($p < .05$), strictness ($p < .001$), high expectations ($p < .001$), enthusiasm ($p < .001$). Teachers have a significant difference between expectations and actual state evaluation concerning the teachers in the hierarchy of traits about friendliness ($p < .05$), enthusiasm ($p < .05$), sense of humor ($p < .05$), care ($p < .05$). Analysis of the results is shown in Table 3.

Table 3. Difference between expectations and evaluation of teachers and pupils about the teacher

Variables	Pupils p	Teachers p
Strictness	.000**	.720
Friendliness	.227	.008*
High Expectations	.000**	.833
Sense of Humor	.192	.010*
Enthusiasm	.000**	.045*
Care	.001*	.003*
Explanatory	.053	.238
Positivism	.051	.370
Organized	.000	.683
Politeness	.052	.372

* $p < .05$ ** $p < .0$



Teachers' and pupils' expectations differ significantly concerning the pupil in the hierarchy of qualities about freedom ($p < .05$), comprehension ($p < .05$), responsibility ($p < .001$), curiosity ($p < .001$). Analysis of the results is shown in Table 4.

Table 4. Differences between teachers' and pupils' expectations about what should be the pupil

Variables	U	Z	p
Discipline	666.00	- 1.398	.162
Freedom	548.00	-2.283	.022*
Will Power	796.00	- .433	.665
Courage Make Mistakes	768.50	- .642	.521
Curiosity	324.00	- 3.925	.000**
Goal	822.00	- .244	.807
Comprehension	487.50	-2.718	.007*
Belief in Self	813.50	- .307	.759
Responsibility	547.50	-2.274	.023*
Politeness	760.50	- .699	.484

* $p < .05$ ** $p < .01$

There is a significant difference between teachers' and pupils' evaluation concerning the pupil in the hierarchy of qualities about the goal ($p < .05$). Analysis of the results is shown in Table 5.

Table 5. Differences between teachers' and pupils' evaluation about what is the pupil

Variables	U	Z	p
Discipline	593.00	- .158	.875
Freedom	546.50	- .579	.563
Will Power	469.00	-1.275	.202
Courage Make Mistakes	520.50	- .812	.417
Curiosity	495.50	- 1.036	.300
Goal	359.00	-2.271	.023*
Comprehension	484.00	-1.180	.238
Belief in Self	523.00	- .833	.405
Responsibility	466.00	-1.302	.193
Politeness	525.50	- .772	.440

* $p < .05$ ** $p < .01$



Pupils have significant difference between expectations and actual state evaluation concerning the pupil in the hierarchy of qualities about curiosity ($p < .05$), belief in self ($p < .05$), responsibility ($p <$

$.05$), politeness ($p < .05$), freedom ($p < .001$), courage make mistakes ($p < .001$). Teachers have a significant difference between expectations and actual state evaluation concerning the pupil in the hierarchy of qualities about freedom ($p < .05$) and curiosity ($p < .05$). Analysis of the results is shown in Table 6.

Table 6. Difference between expectations and evaluation of teachers and pupils about the pupil

Variables	Pupils p	Teachers p
Discipline	.615	.719
Freedom	.000**	.005*
Will Power	.889	.644
Courage Make Mistakes	.000**	.621
Curiosity	.009*	.009*
Goal	.001*	.893
Comprehension	.000	.119
Belief in Self	.012*	.837
Responsibility	.009*	.025*
Politeness	.018*	.183

* $p < .05$ ** $p < .01$

Results, Conclusions, and Recommendations

Results demonstrated that pupils have a significant difference between expectations and actual state evaluation concerning the teacher in the hierarchy of traits about care, strictness, high expectations, enthusiasm. Pupils expected to care, strictness, high expectations, and enthusiasm to be less expressed as required traits for teachers than it was valued to be displayed by teachers in the school routine.

Teachers demonstrated a significant difference between expectations and actual state evaluation concerning the teacher in the hierarchy of traits about care. Teachers expected care to be the less required trait for a teacher but valued it as the most displayed in the school routine. Results demonstrated that teachers have a significant difference between expectations and actual state evaluation concerning the teacher in the hierarchy of traits about friendliness, enthusiasm, sense of humor. Teachers expected friendliness, enthusiasm, and sense of humor to be a more required trait for a teacher than it was valued to be displayed in the school routine.

Results show that teachers' and pupils' expectations differ significantly concerning the teacher in the hierarchy of traits about friendliness, high expectations, care, and organization. Friendliness was the most expected trait from the teacher by pupils, while teachers rated it as one from the less important traits. High expectations were one from the most expected trait from the teacher by teachers, while pupils rated it as one from the less important traits. Care pupils rated as more important trait than teachers. Being organized was the most expected trait for teachers from teachers, while pupils did not see it as a very important trait.

Results demonstrated that pupils have a significant difference between expectations and actual state evaluation concerning the pupil about curiosity, belief in self, responsibility, politeness, freedom, courage to make mistakes and comprehension. Pupils expected from themselves to have more curiosity, belief in self, responsibility, and politeness than they valued these traits to be displayed in the school routine. Contrary, they expected that freedom, courage



make mistakes and comprehension are not important traits for pupils, while valued to be strongly expressed by them in the school routine. This suggests, that there are many traits about which pupils do not feel adequate in the school routine. The traits that are connected with the free personal expression they value more negative in the school context and are critical about traits that are connected with learning motivation.

Conclusions suggest that pupils may have a very different picture from teachers about what is expected from them as pupils. Teachers may expect different traits from pupils than pupils think, what teachers expect from them. Pupils may undervalue such important traits for learning process like freedom, courage to make mistakes and comprehension. Teachers agree with the pupils that curiosity and responsibility are important traits, that are expected from the pupil, but not enough displayed in the school routine. Results demonstrate that teachers have a significant difference between expectations and actual state evaluation concerning the pupil about freedom, curiosity, responsibility. Freedom by teachers was rated as the least important trait for the pupil and the most displayed in the school routine.

Recommendations suggest noting that difference in mutual expectations between teachers and pupils may interfere with the common awareness of the educational process. Obvious that pupils want to see teachers more friendly, careful and less formal, while teachers underline organizational traits. Interesting that meanwhile enthusiasm is not highly valued by both - pupils and teachers, which may lead to the deprivation of the excitement in the learning process and to the formalization of the school activities (Malikow, 2006; Walls, Nardi, von Minden, & Hoffman, 2002). If freedom is seen as a more negative trait for the school environment, we may miss the development of curiosity, responsibility, courage to make mistakes and comprehension, which are essential traits for the teaching and the learning process.

References:

- Annot, M., McIntyre, D., Pedder, D. & Reay, D. (2003). Consultation in the Classroom: Developing Dialogue About Teaching and Learning, Cambridge: Pearson Publishing.
- Alismail, H., A., McGuire, P. (2015). 21 st Century Standards and Curriculum: Current Research and Practice. Journal of Education and Practice, Vol.6, No.6.
- Hanushek, E.A. (2011). Valuing Teachers: How Much is a Good Teacher Worth? Journal Education Next, 11(3), 40-45, Hoover Institution, Stanford University.
- Hattie, J.A.C. (2003). Teachers make a difference: What is the research evidence? Building Teacher Quality: What does the research tell us. ACER Research Conference, Melbourne, Australia.
- Hattie, J. A. (1987). Identifying the salient facets of a model of student learning: a synthesis and meta-analysis. International Journal of Educational Research, 11, 187-212.
- Hildebrand, M., Wilson, R.C. & Dienst, E.R. (1971). Evaluating University Teaching. Berkeley: UC Berkeley, Center for Research and Development in Higher Education.
- Holdsworth, R. (2005). Taking Young People Seriously Means Giving Them Serious Things To Do in Mason, J. & Fattore, T. Children Taken Seriously, in Theory, Policy, and Practice. London: Jessica Kingsley Publishers.
- Ko, J., Sammons, P., Bakkum, L. (2013). Effective teaching: a review of research and evidence. CfBT Education Trust, UK.
- Lyle, S., Hendley, D. & Newcomb, J. (2010) The Teaching and Learning Research Programme in Wales: Improving Learning by Taking Account of Learners' Perspectives, University of Oxford.
- Manefield, J., Collins, R., Moore, J., Mahar, S. & Warne, C. (2007). Student Voice: A historical perspective and new directions. Research and Innovation Division, East Melbourne, Victoria.
- Stronge, J.H. (2007). Qualities of Effective Teachers 2nd edition. Alexandria: ACDC, p.9. Triana, R.P. (1999). What makes a good teacher[Online]. Education Week. January 20 Retrieved March 2008 from the World Wide Web. www.educationweek.org.
- Walker, R.J. (2008). 12 Characteristics of an Effective Teacher. NC: Lulu Publishing.
- Stronge, J.H. (2007). Qualities of Effective Teachers 2nd edition. Alexandria: ACDC, p.9.



Wilson, S. (2002). Student participation and school culture: A secondary school case study. *Australian Journal of Education*, 46(1), 79-102.

Wilson, S. & Sproats, E. (2009). Re-engaging young people in learning: What schools can learn from a community-based program for 'at-risk' students. *Curriculum Perspectives*. 29(1), 29-40



An Analysis of Pre-School Teacher Candidates' Technological Pedagogical Content Knowledge

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Abstract

This study has been conducted with the aim of examining the technological pedagogical content knowledge of teacher candidates who study Pre-school Teaching in Faculty of Education, Sakarya University, based on variables such as age, gender, grade level and access to the technology. The target population and sample of the study is comprised of 316 teacher candidates (16 male, 300 female) who is currently studying in Sakarya University, Faculty of Education. In the study, data was collected by means of "Technological Pedagogical Content Knowledge (TPACK) Scale", which was developed by Schmidt, improved by D.A., Baran, E., Thompson, A.D., Mishra, P., Koehler, M.J. ve Shin, T.S., (2009:140), and translated into Turkish by Horzum, Akgün and Öztürk (2014). The data analysis was implemented by SPSS 20.0 Statistics Package Programme. Kolmogorov-Smirnow test was applied in order to figure out normalisation of the data. Mann-Whitney, Kruskal-Wallis test and correlation analysis were used in the analysis of percentage, frequency, arithmetic mean, standard deviation values throughout the data analysis. It was discovered at the end of the study that technological pedagogical content knowledge of pre-school teacher candidates was quite adequate.

Key words: TPACK (Technological Pedagogical Content Knowledge), Pre-school Teacher Candidates

Introduction

A change from the technology-based approach into a pedagogy-based approach is observed today. The utmost goal of the pedagogy-based education model is that teachers, and teacher candidates should associate their technology use which they attain during the education period with their pedagogical knowledge, while the technology-based education model aims at letting teachers and teacher candidates attain every sort of information, skills and experience. (Yurdakul, 2011:400).

The most significant assistant technology from which teachers get support in order to make learning more efficient and permanent when they prepare learning environment is training technologies in pedagogical sense. It is only with the help of adequately received pre-service training to be able to succeed in this field.

During the pre-school education phase where children have got the biggest curiosity and wish to learn everything, teachers who have undergone education in this field, and teacher candidates who are still undergoing education in this field have to improve themselves in terms of both technology and pedagogy, to be open to changes and to include training technologies in the classroom setting for most of the time. This study can be considered to be crucial, in that it will contribute to the studies conducted on pre-school education where our children have their first experiences in the educational setting. This study will reveal techno-pedagogic competences of pre-school teacher candidates during the pre-service training who will have an important part in students' lives as their first architects and lead the way to other studies which would be conducted in this field with a view to covering up deficiencies in this field.

Problem



What level is pre-school teacher candidates' techno-pedagogic content knowledge at?

Sub problems

Is there any reasonable differentiation between pre-school teacher candidates' levels of technological pedagogical content level in terms of their gender?

Is there any reasonable differentiation between pre-school teacher candidates' levels of technological pedagogical content level in terms of their grades?

Is there any reasonable differentiation between pre-school teacher candidates' levels of technological pedagogical content level in terms of the level of their technology use?

Method

Information on the model, target population and sampling, data collection and analysis is available in this part.

The study is relational screening model and submits a descriptive quality. Screening model aims at describing a past or present situation as it is. (Karasar, 2012).

The target population and sampling of the study are comprised of 316 teacher candidates who study in Sakarya University, Faculty of Education, Department of Pre-school Teaching in fall/spring semesters of 2016-2017 educational year.

Technological pedagogical content knowledge test was used in order to measure teacher candidates' self-efficacy perceptions regarding their own technological pedagogical content knowledge. This scale is made up of 5 Likert 51 items. The scale was developed by Horzum, Akgün ve Öztürk (2014:257) in a way that it could be comprised of 7 sub dimensions which would measure self-efficacy perception on technological pedagogical content knowledge.

The sub factors of the scale are "technology", "pedagogy", "content", "technological content" and "technological pedagogical content knowledge self-efficacy". Internal consistency parameters of the factors of the scale were found as .86, .85, .89, .79, .90, .90 and .90 successively. Kaiser-Meyer-Olkin (KMO) and Bartlett test were applied for the behalf of the construct validity of the scale. KMO value is used with the goal of measuring proficiency of the sampling on conducting factory analysis and this value should be at least .60 (Büyüköztürk, 2010). KMO value of the scale was measured as .78 in the study. The result of Bartlett test (Barlett test of Sphericity), which illustrates the statistical relevance of the general correlation matrix which shows correlations between the variables which are put into factor analysis, should also be statistically relevant (Büyüköztürk, 2010). Bartlett test was found relevant at the end of the applied analysis.

The data attained in the study were analysed through SPSS 20.0 Statistical Package Programme. Kolmogorov-Smirnow test was applied with the aim of testing whether the data showed normal distribution or not, and non-parametric tests were carried out, since the data was discovered not to distribute normally. Percentage, frequency, arithmetic mean, standard deviation, Mann-Whitney, Kruskal-Wallis tests and correlation analysis were used in the analysis of values throughout the data analysis related to the sub-problems.

The significance level was accepted as .05 in the testing phase of the significance of the differences. Moreover, the items were grades as follows; "1"- Not Adequate (1.00–1.80), "2"- Almost not adequate (1.81–2.60), "3"- Barely Adequate (2.61–3.40), "4"- Quite Adequate (3.41–4.20), "5"- Very Adequate (4.21–5.00).

Findings



Averages and standard deviations of pre-school teacher candidates' points from technological pedagogical content knowledge (TPACK) are presented on Table 1.

Table 1. TPACK points of Pre-school teacher candidates

Sub-dimensions	N	$\bar{X}$	Ss
Technology Knowledge	314	3.73	.71
Pedagogical Knowledge	314	3.91	.60
Content Knowledge	314	4.03	.60
Technological Content Knowledge	314	3.88	.60
Pedagogical Content Knowledge	314	4.01	.61
Technological Pedagogical Knowledge	314	3.99	.61
Technological Pedagogical Content Knowledge	314	3.98	.62

From the dimensions of the scale regarding technological pedagogical content knowledge, the average of technology knowledge was found $\bar{X} = 3.73$, pedagogical knowledge $\bar{X} = 3.91$, content knowledge $\bar{X} = 4.03$, technological content knowledge $\bar{X} = 3.88$, pedagogical content knowledge $\bar{X} = 4.01$, technological pedagogical knowledge $\bar{X} = 3.99$, technological pedagogical content knowledge $\bar{X} = 3.98$.

When arithmetic means for the sub-dimensions of the scale are checked, it can be noticed that the arithmetic mean of all the dimensions is 3 or 4 points higher than the average value, which shows that the technological pedagogical content knowledge of pre-school teacher candidates is above the average. Furthermore, the facts that the dimension of "content knowledge" is of the highest score and the dimension of "technology knowledge" is of the lowest score have also come into existence.

Table 1a. TPACK Significance Values to Gender

		Kolmogorov-Smirnov		
		Statistics	sd	p
Technology Knowledge	Female	,122	297	,000**
	Male	,213	17	,039*
Pedagogy Knowledge	Female	,087	297	,000**
	Male	,219	17	,030*
Content Knowledge	Female	,108	297	,000**
	Male	,155	17	,026*
Technological Content Knowledge	Female	,134	297	,000**
	Male	,230	17	,017*
Pedagogical Content Knowledge	Female	,127	297	,000**
	Male	,160	17	,045*
Technological Pedagogical Knowledge	Female	,093	297	,000**
	Male	,128	17	,035*
Technological Pedagogical Content Knowledge	Female	,118	297	,000**
	Male	,127	17	,048*

*p < .05; ** p < .01

Table 1a illustrates that the scale scores are not normal distribution in terms of gender, since the level of significance is lower than 0.05 as Kolmogorov-Smirnov test has shown.

The results of Mann Whitney U test, which was applied in order to identify whether there is any significant difference between the scores of female and male pre-school teacher candidates on the technological pedagogical content knowledge, are illustrated on Table 1b.

Table 1b. TPACK scores of teacher candidates to gender



	Dimensions	Gender	N	$\bar{X}$	Mean rank	Mean total	U	p
	Technology Knowledge	Female	297	3,73	157,45	46762,50	2509,500	,967
		Male	17	3,70	158,38	2692,50		
	Pedagogy Knowledge	Female	297	3,94	161,69	48023,00	1279,000	,001**
		Male	17	3,41	84,24	1432,00		
	Content Knowledge	Female	297	4,06	161,78	48048,00	1254,000	,000**
		Male	17	3,56	82,76	1407,00		
	Technological Content Knowledge	Female	297	3,90	159,85	47475,50	1826,500	,053
		Male	17	3,56	116,44	1979,50		
	Pedagogical Content Knowledge	Female	297	4,03	160,97	47809,00	1493,000	,004**
		Male	17	3,56	96,82	1646,00		
	Technological Pedagogical Knowledge	Female	297	4,01	160,15	47564,00	1738,000	,030*
		Male	17	3,64	111,24	1891,00		
	Technological Pedagogical Content Knowledge	Female	297	4,00	160,16	47568,00	1734,000	,029*
		Male	17	3,64	111,00	1887,00		

*p < .05; ** p < .01

No significant difference among teacher candidates' technological pedagogical content knowledge related to the dimensions was found in terms of the gender variable just in the sub-dimensions, "Technology knowledge" and "Technological content knowledge" (p > .05). As to the other dimensions, the scores of female pre-school teacher candidates on the technological pedagogical content knowledge were discovered to be relatively higher than men's.

Table 2a. TPACK significance scores of teacher candidates to grade level

		Kolmogorov-Smirnov		
		Statistics	sd	p
Technology knowledge	1 st GRADE	,121	74	,009**
	2 nd GRADE	,161	83	,000**
	3 rd GRADE	,138	91	,000**
	4 th GRADE	,139	66	,003**
Pedagogy knowledge	1 st GRADE	,093	74	,017*
	2 nd GRADE	,111	83	,013*
	3 rd GRADE	,096	91	,037*
	4 th GRADE	,139	66	,003**
Content knowledge	1 st GRADE	,090	74	,028*
	2 nd GRADE	,138	83	,000**
	3 rd GRADE	,104	91	,017*
	4 th GRADE	,179	66	,000**
Technological knowledge	1 st GRADE	,110	74	,027*
	2 nd GRADE	,173	83	,000**
	3 rd GRADE	,137	91	,000**
	4 th GRADE	,143	66	,002**
Pedagogical content knowledge	1 st GRADE	,133	74	,003**
	2 nd GRADE	,134	83	,001**
	3 rd GRADE	,141	91	,000**
	4 th GRADE	,189	66	,000**
Technological pedagogical knowledge	1 st GRADE	,083	74	,032*
	2 nd GRADE	,124	83	,003**
	3 rd GRADE	,113	91	,006**
	4 th GRADE	,167	66	,000**
Technological pedagogical content knowledge	1 st GRADE	,071	74	,021*
	2 nd GRADE	,153	83	,000**
	3 rd GRADE	,114	91	,005**
	4 th GRADE	,207	66	,000**

*p < .05; ** p < .01



Table 2a illustrates that the scale scores are not of normal distribution in accordance with the grade level, since the significance level is lower than 0.05 according to applied Kolmogorov-Smirnov.

The results of Kruskal Wallis, which was carried out with a view to identifying possible significant differences among the scale scores among the teacher candidates who study in different grades, are exhibited.

Table 2b. TBACK scores of pre-school teacher candidates to grade level

	Grade	N	$\bar{X}$	Mean Rank	Sd	χ^2	p	Significant Difference	
Technology knowledge	1 st Grade	74	3,68	148,64	3	11,733	,008**	1-3	2-3
	2 nd Grade	83	3,55	134,20					
	3 rd Grade	91	3,89	177,29					
	4 th Grade	66	3,80	169,44					
Pedagogy knowledge	1 st Grade	74	3,82	143,17	3	15,519	,001**	1-3	2-3
	2 nd Grade	83	3,79	137,07					
	3 rd Grade	91	4,11	186,57					
	4 th Grade	66	3,90	159,19					
Content knowledge	1 st Grade	74	4,00	152,94	3	3,714	,294		
	2 nd Grade	83	3,96	143,98					
	3 rd Grade	91	4,09	167,09					
	4 th Grade	66	4,06	166,39					
Technological content knowledge	1 st Grade	74	3,78	146,69	3	8,286	,040*	1-4	2-4
	2 nd Grade	83	3,77	141,23					
	3 rd Grade	91	3,95	165,41					
	4 th Grade	66	4,03	179,17					
Pedagogical content knowledge	1 st Grade	74	3,93	153,55	3	7,151	,067	2-3	2-4
	2 nd Grade	83	3,91	138,05					
	3 rd Grade	91	4,07	166,09					
	4 th Grade	66	4,14	174,54					
Technological pedagogical knowledge	1 st Grade	74	3,86	138,76	3	12,506	,006**	1-3	1-4
	2 nd Grade	83	3,87	140,62					
	3 rd Grade	91	4,07	171,34					
	4 th Grade	66	4,15	180,65					
Technological pedagogical content knowledge	1 st Grade	74	3,84	136,81	3	7,959	,047*	1-3	1-4
	2 nd Grade	83	3,92	150,73					
	3 rd Grade	91	4,04	168,03					
	4 th Grade	66	4,12	174,70					

*p < .05; ** p < .01 1: 1st Grade; 2: 2nd Grade; 3: 3rd Grade; 4: 4th Grade

When Kruskal Wallis test on Table 2b is examined, the scores of pre-school teacher candidates on technological pedagogical content knowledge related to the dimensions were found to vary significantly in terms of their grade ($p < .01$; $p < .05$). According to the results of Mann Whitney U test, which was carried out with the aim of identifying to what grade this differentiation pertains, it was discovered that, as the grade of the teacher candidates increases, their level of technological pedagogical content knowledge also increases.

Table 3a. Relevance results of TPACK scores to pre-school teacher candidates' levels of use of the technology

		Kolmogorov-Smirnov		
		Statistics	sd	p
Technology Knowledge	Not Adequate	,141	44	,029*
	Adequate	,123	269	,000**
Pedagogy Knowledge	Not Adequate	,162	44	,005**
	Adequate	,084	269	,000**
Content knowledge	Not Adequate	,138	44	,034*
	Adequate	,115	269	,000**
Technological content knowledge	Not Adequate	,110	44	,025*
	Adequate	,134	269	,000**
Pedagogical content knowledge	Not Adequate	,106	44	,042*
	Adequate	,122	269	,000**
Technological pedagogical knowledge	Not Adequate	,092	44	,030*
	Adequate	,096	269	,000**
Technological pedagogical content knowledge	Not Adequate	,096	44	,040*
	Adequate	,127	269	,000**

*p < .05; ** p < .01



The data on Table 3a reveals that the scale scores are not of normal distribution in terms of gender, since the relevance level, according to Kolmogorov-Smirnov test, is lower than 0.05.

The results of Mann Whitney U test, which was applied with a view to identifying whether there is a significant difference in their self-efficacy levels in technological pedagogical content knowledge related to the dimensions, are presented on Table 3b.

Table 3b. TPACK scores of pre-school teacher candidates to their level of using the technology

Dimensions	Tech. Use	N	$\bar{X}$	Rank Mean	Rank Total	U	p
Technology knowledge	Not Adequate	44	3,12	69,68	3066,00	2076,000	,000*
	Adequate	269	3,88	171,28	46075,00		
Pedagogy knowledge	Not Adequate	44	3,63	100,75	4433,00	3443,000	,000*
	Adequate	269	3,96	166,20	44708,00		
Content knowledge	Not Adequate	44	3,83	120,17	5287,50	4297,500	,000*
	Adequate	269	4,11	163,02	43853,50		
Technological content knowledge	Not Adequate	44	3,45	96,99	4267,50	3277,500	,000*
	Adequate	269	4,00	166,82	44873,50		
Pedagogical content knowledge	Not Adequate	44	3,85	111,48	4905,00	3915,000	,000*
	Adequate	269	4,07	164,45	44236,00		
Technological pedagogical knowledge	Not Adequate	44	3,59	76,61	3371,00	2381,000	000**
	Adequate	269	4,05	170,15	45770,00		
Technological pedagogical content knowledge	Not Adequate	44	3,61	94,49	4157,50	3167,500	,000*
	Adequate	269	4,01	167,22	44983,50		

*p < .05; ** p < .01

According to what Table 3b shows, a significant difference was attained in the scores of pre-school teacher candidates in technological pedagogical content knowledge related to the dimensions in terms of the variable of the level of using the technology ($p < .01$). It was discovered that the technological pedagogical content knowledge scores of the pre-school teacher candidates who consider themselves competent in using the technology are significantly statistically higher than those of teacher candidates who do not consider themselves competent in using the technology. In other words, it can be said that, as pre-school teachers' level of using the technology increases, the competence of technological pedagogical content knowledge also increases.

Discussion, Conclusion and Suggestions

Applied analyses;

- Illustrate that self-efficacy perceptions of pre-school teacher candidates, regarding the technological pedagogical content knowledge are above the average. Furthermore, it has been discovered that “content knowledge” is of the highest score, while “technological knowledge” is of the lowest score. Self-efficacy perceptions related to technological pedagogical content knowledge in all sub-dimensions in general has been figured out to be in the level, “quite adequate”.



- Self-efficacy perceptions of pre-school teacher candidates based on technological pedagogical content knowledge related to the dimensions has been found to be relatively higher for female pre-school teacher candidate teachers in all dimensions except for the sub-dimensions, “Technological knowledge” and “Technological content knowledge”.
- Moreover, the result that, as the grade of the pre-school teacher candidates increases, their level of self-efficacy on technological pedagogical content knowledge also increases has been figured out.
- The other result is that, as the pre-school teacher candidates’ level of using the technology increases (which means they consider themselves competent), their level of self-efficacy perception for technological pedagogical content knowledge will also increase.

As the domestic studies which have been conducted in this topic are taken into consideration, in the studies which were conducted by Aksin (2014:20) in order to investigate TPACK level of form teachers, it figured out that the form teachers’ TPACK level was higher than the medium level. It was also discovered that their lowest level of knowledge belonged to technological one and the highest level of knowledge pertained to the knowledge associated with their own field.

In another study which was implemented by Kiylik (2016:4), it was ascertained that TPACK level of students of associate degree was high; however, their technological, pedagogical and field knowledge were higher than the medium level. Furthermore, in Kiylik’s study, contrary to this study, grade level and technology use were not of any effects on TPACK level of the students. On the other hand, another result of this study which is parallel with this study was that gender is not a distinguishing variable.

The foreign studies conducted in this topic show that Koh and Sing (2011:740) analysed TPACK levels of teacher candidates in terms of various variables; while other variables, as they do in this study, show significant differences in TPACK levels of the teacher candidates, demographical features such as age and gender were not of any distinguishing qualities.

Based on the results attained in this study, suggestions for further studies in this topic can be listed as follows;

- It was observed that the department on which is studied the least is pre-school teaching when TPACK screening was carried out. Further studies can be implemented in this topic regarding pre-school teaching.
- Our teacher candidates were discovered to have been given theoretical lessons rather than practical ones related to how to integrate technology into classroom settings in pre-service trainings. Teacher candidates can be provided with more opportunities of experience in pre-service training through which they will have more application opportunities.
- Teacher candidates can be demanded to prepare many more technological applications during practicum phase, and technology can also be integrated with the assessment aspect.
- While almost every teacher candidate today has got more access to the technology, this variable has been able to present any qualities. This topic can be more scrutinised in further studies.
- This study is only limited to Hendek district of Sakarya province. Further studies can be implemented in various provinces and geographical districts in order for the study results to be compared and popularised.
- Only quantitative measurement instruments were used in this study. Qualitative measurement instruments can also be added to further studies in this field.

References

Aksin, A. (2014). Sosyal Bilgiler Öğretmen Adaylarının Teknolojik Pedagojik Alan Bilgisi (TPAB) Yeterlilikleri: (Amasya İli Örneği). Doktora tezi. Atatürk Üniversitesi, Eğitim Bilimleri Enstitüsü.



- Bandura, A. (2006). Guide for Constructing Self-Efficacy Scales. In F. Pajares & T. Urdan (Eds.). Self-Efficacy Beliefs of Adolescents (pp. 307-338). USA: Information Age Publishing, Inc
- Baran, E., Bilici Canbazoğlu, S. (2015). Teknolojik Pedagojik Alan Bilgisi Üzerine Alanyazın İncelemesi: Türkiye Örneği. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 30(1), 15-32.
- Kabakçı Yurdakul, I. (2011). Öğretmen Adaylarının Teknopedagojik Eğitim Yeterliklerinin Bilgi ve İletişim Teknolojileri Kullanımları Açısından İncelenmesi. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 40, 397-408.
- Kıyık, D. (2016). Sınıf Öğretmeni Adaylarının Teknolojik Pedagojik Alan Bilgisi Seviyelerinin Çeşitli Değişkenlere Göre İncelenmesi. Yayınlanmamış Yüksek Lisans Tezi. Yüzüncü Yıl Üniversitesi Eğitim Bilimleri Enstitüsü.
- Koh, J. H. L. ve Sing, C. C. (2011). Modeling Pre-Service Teachers Technological Pedagogical Content Knowledge (TPACK) Perceptions: The Influence of Demographic Factors and TPACK Constructs. In G. Williams, N. Brown, M. Pittard, B. Cleland, Changing Demands, Changing Directions, 17, 735-746.
- Öztürk, E. ve Horzum, M. B. (2011). Teknolojik Pedagojik İçerik Bilgisi Ölçeği'nin Türkçeye Uyarlaması. Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi, 12(3), 255-278



Education Of Children With Intellectual Disabilities As Expressed By Mothers – Secondary-Data Analysis

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Abstract

Intellectual disability is characterized by significant limitations in both intellectual functioning and adaptive behavior that is expressed in conceptual, social and practical skills (Schalock, et al., 2010). Being labelled as an individual with an intellectual disability has got life-long consequences both for the child and his/her family, influencing experiences in many aspects of their lives (Parchomiuk, 2007), including the child's education. This paper examines mothers' perspective on education of their children with intellectual disabilities. the authors made an attempt to answer two research questions: What is the mothers' of children with intellectual disabilities perception of education of their children? What contributes to the mothers' of children with intellectual disabilities perception of education of their children? The findings are based on a secondary analysis of a qualitative data (Corti & Thompson, 2007; Johnston, 2014) gathered in four previous research projects (Bartnikowska & Ćwirynkał, 2013; Ćwirynkał & Żyta, 2014; Kimbar, 2015; Szczepański, 2017). In total, 25 in-depth interviews with mothers of children with intellectual disabilities were analyzed. In the analysis two main categories of description referring to education emerged: (1) places (a dream and a real school, kindergarten or institution for a child with an intellectual disability, a place of living as a determinant of parents' choice of an educational institution), (2) persons (teachers and specialists whose work influences the quality of a child's education, their attitudes and competences, a child's typically developing and disabled peers and mothers themselves as their children's animators and educators). Based on the categories, the authors presented answers to the research questions. Implications for practice are also discussed.

Keywords: intellectual disability, education, mothers

Introduction

Intellectual disability is characterized by significant limitations in both intellectual functioning and adaptive behavior as expressed in conceptual, social and practical skills (Schalock, et al., 2010). Being labelled as an individual with an intellectual disability has got life-long consequences both for the child and his/her family (Kwaśniewska, 2005, Parchomiuk, 2007, Pisula, 2007, Kaniok, 2011, Żyta, 2011).

The diagnosis of an intellectual disability in a child induces complex feelings in mothers. Mothers of intellectually disabled children, who are often their main caregivers, are often prone to suffer from anxiety, depression (Quasir, et al., 2015, Chandravanshi, et al., 2017) and excessive stress (Abbeduto, et al., 2004, Burke & Hodapp, 2014) that may cause burnout (Bilgin & Gozum, 2009). This may be due to the fact that they face numerous challenges that refer to more difficult economic situation (Twardowski, 1999), care and rehabilitation burden (Pisula, 1998) as well as the deprivation of needs, desires and expectations (Twardowski, 1999). The need to change certain aspirations and expectations referring to a child with a disability (especially if this is an intellectual disability) also involve the sphere of the child's education. Nonetheless, there is little research available on mothers' perspective of their intellectually disabled children's education.

In the current research report the authors illustrated the result of secondary qualitative data analysis based on 4 datasets and 25 transcripts of interviews with Polish mothers of children with intellectual disabilities. The main aim of this enquiry was to examine mothers' perspective on education of their children with intellectual disabilities.



Method

Secondary Qualitative Data Analysis

Archived qualitative data as a source of research material, although often unexploited and uncommon, is considered to be rich and unique (Corti & Thompson, 2007). There are several advantages of the reuse of qualitative raw materials, e.g. it may cut costs is accelerate the pace of research (which is important for researchers with limited resources and time), avoid duplication of effort, gain methodological and substantive insights (Corti & Thompson, 2007, Johnston, 2014). Reanalysis of the qualitative data allows either reinterpretation or investigating new research questions and the importance of this method is emphasized both in case of reanalyzing other researchers' material (Corti & Thompson, 2007) and one's own material (Åkerström, et al., 2007).

Since secondary analysis is a systematic method, certain procedures and steps can be distinguished in the process of conducting the research. According to Johnston (2014) the steps include the following tasks: (1) developing the research questions, (2) identifying the dataset, (3) evaluating the dataset. The authors applied this model in the present study.

Step 1 Developing the research questions

The aim of this research was to gain an in-sight view into mothers' perspective on education of their children with intellectual disabilities. In the study two research questions were developed:

Research Question 1: What is the mothers' of children with intellectual disabilities perception of education of their children?

Research Question 2: What contributes to the mothers' of children with intellectual disabilities perception of education of their children?

Step 2 Identifying the datasets

In the process of identifying the datasets to reuse in order to answer the research question, the following criteria were taken into account:

- participants of the primary study: mothers of children with intellectual disabilities,
- methodology employed in the primary study: qualitative character, interviews as a method of collecting the data,
- time of data collection: the material no more than 5 years old,
- availability of the raw primary research material: access to transcripts of the interviews.

As a result, four datasets based on primary research projects were chosen for the analysis.

Primary research project 1

The first research project (Bartnikowska & Ćwirynkało, 2013) was designed to explore the situation of adoptive and foster families with children with disabilities of different types, e.g. intellectual disability, autism, hearing impairment, visual impairment, serious chronic disease. In total, adoptive and foster parents from twenty families were included in the research. The authors used an interpretative paradigm (Husserl, 1989) and a phenomenography (Paulston, 1993) as a method in this qualitative study. In the process of coding the transcripts from the interviews grounded theory by Charmaz (2009) was applied.

For the purpose of the present study only 8 interviews with 4 adoptive and 4 foster mothers raising children with intellectual disabilities were taken into account for the analysis. The mean age of these participants was 46.25



(minimum=30, maximum=60) and the mean age of their children with mild to profound intellectual disabilities was 12,45 (minimum=6, maximum=23). Six interviewees raised one child with an intellectual disability, one had 2 and one – 3 children with this type of a disability. In order to identify the mothers in this study, they were given symbols from P1-1 to P1-8.

Primary research project 2

The aim of the second research project (Ćwirynkało & Żyta, 2014) was to gain in-depth view into the experiences of mothers of children with Down syndrome. Unstandardized, unstructured, face-to-face interview (Gudkova, 2012) was utilized for data collection and a phenomenographic approach (Morton, 1981) was applied to gather different ways of understanding and experiencing the phenomenon of having a child with an intellectual disability. To code the transcripts, elements of grounded theory were used (Charmaz, 2009).

The purposive sample consisted of 10 biological mothers of children with Down syndrome. The mean age of the participants was 39.36 (minimum=31, maximum=56) and their children – 7.18 (minimum=1, maximum=16). For the purpose of this study, the authors used symbols from P2-1 to P2-10 to identify the mothers interviewed in this project.

Primary research project 3

The purpose of the third research project (Kimbar, 2015) was understanding the motherhood as described by mothers of children with a profound, multiple intellectual disability of a child. The specific research problems referred to mothers' reactions to the diagnosis of their children's disability, their difficulties, level of satisfaction with being a mother, relationships with their children and perceptions of the future. In the study a qualitative strategy (Rubacha, 2008) and an unstructured interview (Gudkova, 2012) was applied in order to show unique, individual experiences of the mothers. The sample consisted of three mothers (aged 38, 43 and 45) of children with profound, multiple, intellectual disabilities (children's ages respectively: 8, 5 and 16). The symbols used for the mothers' identification in this study were P3-1, P3-2 and P3-3.

Primary research project 4

The last primary research project (Szczepański, 2017) was aimed to analyze the process of coping with an intellectual disability of children by their mothers. Specifically, the author analyzed the mothers' reactions to the diagnoses of their children, the changes after the children's birth as well as resources and support that mothers received and needed. In the project in-depth, face-to-face interviews were utilized for qualitative investigation. Data was collected using a semi-structured questionnaire prepared by the author. The purposive sample consisted of 4 mothers, aged 45, 52, 55 and 72, of children with a severe or moderate intellectual disability. The mothers' children's ages varied from 8 to 49. In the present study the symbols used to identify the mothers from this primary project were P4-1 to P4-4.

Table 1 presents the summary of the datasets used for secondary data analysis.

Table 1. *The Datasets for secondary data analysis*

Dataset	Primary interviews with mothers of children with intellectual disabilities
Dataset 1: Bartnikowska & Ćwirynkało (2013)	8
Dataset 2: Ćwirynkało & Żyta (2014)	10
Dataset 3: Kimbar (2015)	3
Dataset 4: Szczepański (2017)	4
Total: Four Datasets	25

Source: Inspired by Long-Sutehall, T., Sque, M. & Addington-Hall, J., (2010). Secondary analysis of qualitative data: a valuable method for exploring sensitive issues with an elusive population? *Journal of Research in Nursing*, 16(4) 335–344



Step 3 Evaluating the datasets

Ethics of primary data collection

Questions of confidentiality and agreements necessary to make at the time of fieldwork remain the prime anxiety of researchers (Corti, et al., 2000). In each of the primary research projects (Bartnikowska & Ćwirynkało, 2013, Ćwirynkało & Żyta, 2014, Kimbar, 2015, Szczepański, 2017), the participation of the interviewees was voluntary and anonymity was guaranteed. The participants were informed about the aims of the research, gave written consent to take part in it, to record and transcribe the interviews as well as to code and store the data. The consents were either created by the primary researchers or based on the form proposed by Rapley (2010). Each of the interviews in the projects was performed in a suitable physical environment.

Ethics of secondary data collection

The ethical issues of secondary data collection are partially associated with the researchers responsible for collecting the material in primary research projects and the entities to reuse the datasets. In the first two research projects (Bartnikowska & Ćwirynkało, 2013, Ćwirynkało & Żyta, 2014), the authors of the present study participated in collecting and analyzing the primary data and were entitled to dispose it. In case of the latter two (Kimbar, 2015, Szczepański, 2017), these were Bachelor theses written under the supervision of Ćwirynkało, a co-author of this study and the researchers were granted permission to access the raw material and supporting documentation from the projects from the University of Warmia and Mazury in Olsztyn, Poland where the theses were prepared.

Coding and categorization analysis

Coding and categorization proposed by Flick (2010), Kvale (2010) and Gibbs (2011) was used in the analysis of the current research. The analysis involved five steps:

- coding of words generated from verbatim data of 25 transcripts of interviews from 4 datasets,
- categorization: grouping the codes generated from verbatim data into broader categories,
- comparison of categories and examination of their relations to the research questions,
- categorization: segmentation the verbatim data according to the research questions,
- presentation of the results in a text (Kvale, 2010, Bartnikowska, Ćwirynkało & Borowska-Beszta, 2017).

Findings

The process of the analysis of the verbatim data started with generating the codes and grouping them into broader categories. As a consequence, two main categories of description of education of a child with intellectual disabilities in the perception of mothers were distinguished. These are:

(1) places: the category included two subcategories: (1a) places of living and (1b) places of education,

(2) persons (main people influencing the process of education): three subcategories: (2a) specialists (teachers), (2b) children's peers (with and without disabilities) as well as (2c) mothers themselves.

In the next step the comparison of categories and examination of their relations to the research questions took place.

The categorization of the verbatim data according to the research questions allowed us to answer them.

As far as Research Question 1 (What is the mothers' of children with intellectual disabilities perception of education of their children?) is concerned, the interviewees presented their visions of both real and ideal



educational institutions for their children with intellectual disabilities. The visions were located mainly in the subcategory 2b: places of education.

Below we present some mothers' statements that refer to the desirable or dream places of learning for a child with a disability:

"I used to dream that David would go to a mainstream school" (P2-4)

"I think all these groups [in kindergarten] should be inclusive. All the children in her [the interviewee's daughter's] group are really cool but they all have some disadvantages" (P2-8)

"I would like her to attend this school here, where we have classes organized by our Association [on Down Syndrome]... Here there are only a few students in the class. And these classrooms are really well equipped" (P2-9)

These statements are very diverse and reveal the hierarchy of values of particular mothers and their dreams. The dreams refer to interviewees' desires for a child to be either included in a public school or to find an ideal specialist centre that would support a child with (a certain type of) a disability. It is worth noting that the options to choose from are considered with taking into account the positive impact the institution may have on a child's development.

The dream educational institution can be either very different or quite similar to institutions that children actually attend (or attended) to. The first situation can be illustrated by two mothers of children with Down syndrome::

"Now he is in an integration class, third grade. There are 5 children with statements there but he's the only one with Down syndrome. I know they [teachers] would love to get rid of him. This school is a sort of fiction. They would like to have students with minor disorders [...] And kids like my son cause a problem. He needs more time, more attention, they need to look after him so that he didn't leave" (P2-6)

"This is a group for children with profound intellectual disabilities. I also have my objections. He was the youngest then [...], everyone admired him, because he's not aggressive, nice, not very absorbing... But he's been there for so many years and they don't know that he goes to the toilet by himself, and they take him when they feel like it..." (P2-11)

In both cases mothers perceived schools of their children as places that require improvements. Some interviewees, however emphasized only good aspects of the schools their children went to:

"I believe that it's really great when a child goes to an integration class and keeps in touch with various people and since the very beginning they're looked after. (P2-2)

"I like it that she is here in this [special] kindergarten. I can see all these kids playing. The older help the younger. They have such good relationships. (P2-9)

An interesting theme that emerged in the analysis was connected with the choice of school/kindergarten (mainstream or special) or educational institution for a child with an intellectual disability. Actually, this was the theme that in many ways joined all the categories distinguished in the study. The mothers' decisions and desires referring to their children's education were varied: some of them decided on mainstream, others on special institutions for their children. What is more, their desires did not always match the reality they encountered. Generally, the choice of a certain school or kindergarten depended on such factors as:

- the place of living: a long distance to school/kindergarten was considered as a limitation – problems with transportation, sometimes connected with the necessity of choosing a boarding school;
- mothers' views on the role of peers: perceiving the peers either as abusers who might hurt a child with an intellectual disability or children who would be good models and would motivate children with disabilities to learn,



- mothers' opinions about specialists (teachers/therapists): their competences and attitudes towards children with intellectual disabilities,
- availability of professional support for a child with an intellectual disability: therapy, didactic aids etc.,
- the functioning of their children: their abilities and competencies,
- mothers' expectations about educational institutions: the therapies they offer and the process of teaching (including the aim of teaching).

Looking for the answer to Research Question 2 (What contributes to the mothers' of children with intellectual disabilities perception of education of their children?), we distinguished several factors that refer both to places (category 1) and persons (category 2).

The place of residence determines the place of a child's education, which is clearly illustrated in the statements of mothers:

"There are some cool schools near here, these special ones" (P1-4)

"Over there, in O., there are more possibilities. There are schools and everything... And here we have nothing... The closest school is in B., and this is a boarding school. My Paul attends a normal school in K., but this is only because there are no special schools" (P2-6)

"This is a small village and it's definitely different from a big city (...) There is no special school here. There is just one, quite far away, somewhere in the woods, far away from the people. An old communist institution, because they built it this way then" (P2-1)

As the analysis of the interviews shows, the place of living of a family is the first limitation in choosing a child's educational institution. Mothers analyze local resources and look for optimal solutions for their child and family. The distance from the place of residence to an educational facility as well as the possibility of transporting a child appear to be essential factors in choosing a school or kindergarten. The choice is often dictated by purely practical and logistical considerations.

On the one hand, the statements reveal the determinism of the place of living, but, on the other hand, some mothers reveal their active attitude towards finding the right school / kindergarten for their child. In these cases, not only logistical considerations, but also an appropriate offer that would fulfill the child's needs appears to be important. Mothers make a kind of 'profit and loss' balance and on this basis they make decisions about the child's education. This is illustrated in the following quote:

"Our elder daughter goes to school in the village, and the younger to this kindergarten on P. Street. Earlier she used to go to this [special] kindergarten in T., but all the extracurricular activities were here and it was really tiring to go there so far. And now she's got everything in one place" (P2-5)

The second category highlighted in the interviews and related to the Research Question 2, refers to persons. This category was divided into three subcategories: (1) specialists (teachers, therapists), (2) peers and (3) mothers.

Subcategory 1: Specialists

Beneath there are two distinctive statements about specialists:

„It all depends on the people who work there. It can be fantastic in a mainstream kindergarten, with wonderful people, where a child will be fantastically welcomed and will feel great, and there can be a hopeless integration kindergarten. It all depends on the people who work there. (...) There is, for example, a wonderful therapist here – she runs sensory integration classes. Children love her and she says: 'I'm having a great time with the kids and I get paid for it!' And that's how it should be" (P2-2)



"There was an amazing Mrs. Karolina who started working with David. At first she was scared, but now she is his favorite teacher." (P2-4)

These narratives refer to the therapists' ability to get on well with the child and the child's feelings about the therapists. Apparently, the interviewees perceive the teacher's involvement and his / her attitude towards the child as a basis for learning. These elements are usually described in more detail, which may indicate the importance of the relationships between teachers / therapists and children to the mothers.

The therapists' attitudes towards parents are also important which is illustrated in the following statement:

"A school psychologist who is a specialist in the rehabilitation of such children helped me a lot. I can always count on her advice or support from her. This is a wonderful woman" (P4-3)

It depicts yet another relational aspect that refers to education: the ability to interact with the parent and support him or her. It turns out to be more important than the type of an educational institution (public, integration or special).

The second element referring to specialists is their competence and the specialized support they can offer to their child:

"There are two form teachers and an assistant. And there are additional speech therapy and sensory integration classes" (P2-5)

"Celinka has been attending private sensory integration classes for a year and she has a speech therapy at school" (P1-2)

"At school, a psychologist and a speech therapist take care of my daughter. She also attends hippotherapy, hydrotherapy. We also go to a therapist and he works with her to improve her relationships with friends." (P1-6)

Interestingly enough, although the interviewees reported on numerous and various therapies their children attend, they did not emphasize this as much as the attitude of the teacher / therapist towards the child. Furthermore, some of them critically evaluated the place of education of the child in this respect:

"We still have to fight with teachers. They would love to relinquish him [a son with a disability] to another institution. (...) We [parents of children with disabilities] often organize different trainings or suggest what can be done" P2-1

In this case the teachers' behaviour is a source of disappointment for the mother. She perceives them as people rejecting children, feckless, and lacking a creative approach to the child.

Subcategory 2: Peers

Peers (both able-bodied and disabled) form another group of persons that contribute to the quality of education of children with intellectual disabilities. The statements of the mothers concerning this topic are extremely extensive. The interviewees separately described their children's contacts with typically developing and disabled peers.

a) Typically developing peers

Some statements do not refer to actual contacts of the mothers' children with peers but rather to the ideas of parents who would like their children to be in touch with their typically-developing peers:
"I think she would develop better among able-bodied peers" (P1-4)

"I would very much love Jake to go to an integrative kindergarten so that he was with his healthy children, but at the same time there would be a rehabilitation and a speech therapy (...). I would like these children, at least once in a while, to come to other groups, to have fun, to play, do something they normally do. I have a dream that an integration is not just about learning, but more about spending leisure time, having fun together." (P2-2)



Contacts with typically developing peers are perceived as beneficial for children with intellectual disabilities by their mothers. This – as they convince – can be due to the availability of appropriate role models and the children's desire to be as good as peers. Unfortunately, only two of the mothers surveyed reported positive child-to-peer relationships and confirmed the above mentioned scenario:

"Children are incredibly concerned about him, they take care of him very much. They've known from the start that David was different, that he had to be helped. The previous group was also in love with David" (P2-4)

"In contacts with other people, with friends, she is more open, not afraid to go to friends or school dance" (P1-2)

However, more statements illustrate the negative (or not necessarily positive) experiences of a child with an intellectual disability resulting from his or her contact with able-bodied peers:

"But he doesn't play with anyone, only group plays maybe... I think he's aware that he's different... Somehow he's afraid of these children. He just stand or sits aside and watches" (P2-10)

"When she had been reading before in front of class, she was making mistakes and kids making fun of her, so now she's afraid of it" (P1-1)

"There are unpleasant incidents at school because of her impulsiveness. She's got problems with relationships with her peers. She's getting more and more aware of her otherness and it results in her lower self-esteem and lower self-confidence." (P1-6)

"Sometimes when I go out with the child for a walk, other children often stare at him, make remarks and come closer to see" (P4-2)

It appears that a child with a disability experiences various difficulties in relationships with able-bodied peers. The difficulties derive from: 1) different behaviors of the child, 2) a sense of difference in the child with an intellectual disability, 3) emotional disturbance of the child with disabilities, e.g.: anxiety, intimidation, 4) negative behaviors of typically developing peers, 5) victimization of a child with an intellectual disability in a peer group. This shows that including a child with an intellectual disability in a group of able-bodied peers requires special attention and good guidance from adults.

b) Peers with disabilities

One of the interviewees stated:

"I like it that he's here at [special] school. I see how these kids are having fun. The older help the younger. They have such a specific contact. No one will convince me that in a normal school older children make friends with kids like ours... No one..." (P2-9)

The desire to pursue a normal or typical 'scenario of life' for a child with an intellectual disability is to ensure that the child has got good relationships with the peers, is accepted, and has typically developing friends. Some of the mothers' statements, however, reveal a modified 'scenario' in which the experiences of rejection of a child by able-bodied peers (or self-anticipation of rejection) have made the mothers appreciate the education of their child in special care facilities and notice positive aspects of their relationships with other children with intellectual disabilities. In these cases an ideal situation they were hoping for was replaced by a realistic one.

A different case is presented below:

"I remember these mildly retarded kids, these tinkers, as I call them... They were stealing lunches and they were laughing at our kids. And I'm very scared of this (...) of these pathological children so that they didn't hurt him. I'm not scared if these children who are really handicapped... Not at all... Because I know that even if he is hit by one of them, he can handle it and will hit back. I'm also a bit scared that David will start copying their behaviour. I can't stand this kind of behavior, I hate it" (P2-4)



This mother points to two more aspects of relationships of an intellectual disabled child with a group of children with different disorders. First of all, she notices that some children (children with mild intellectual disabilities) cause potential danger for her child with a deeper intellectual disability. These are children who may follow pathological patterns of behaviour, and a child with a deeper intellectual disability may become their victim. Second, she pays attention to the aspect of learning children from each other, but in a negative context: learning undesirable behaviours from children with deeper intellectual disabilities. In case of contacts with typically developing peers a child with a disability would be exposed to learning positive behaviours, skills and attitudes from them, here this learning process appears in a negative context.

Subcategory 3: Mothers

The third important category of people contributing to children's education are the mothers themselves. In this case two subcategories can be distinguished: (a) mothers' (parents') beliefs and (b) their commitment to the education of the child.

a) Mothers' beliefs

"I'm thinking of an optimal school for Jake all the time... And I come to conclusion that it should be a special school" (P2-2)

"Such a child [with an intellectual disability] is lost when he or she goes to a mainstream school, where children behave like animals nowadays. when a child with a disability goes to a regular school, they will certainly be treated badly." (P2-7)

"Well, I would never insist to make my child go to such a [public] school. Because I'm not the kind of person who thinks my child is supposed to learn in a normal school no matter what." (P2-6)

Parents' views are an important aspect of the whole education of a child with a disability, because in Polish system of education, parents make a final decision about the place of their child's education (counselling centres only suggest the type of school for a child in their statements, leaving decisions to parents). As a consequence, parents' beliefs seem crucial. In the above mentioned statements mothers' fears and disbelief that a public school could be a suitable place for a child with intellectual disabilities are revealed. Another aspect refers to concerns about a child's abilities to study in a mainstream school. Generally, legal regulations guarantee that a curriculum should be adjusted to a child's abilities regardless the type of school he or she attends. It is plausible, however, that the experiences of mothers and other people in their surroundings indicate that these requirements are not fulfilled by (some) public schools.

b) Mothers' commitment

"From the age of three we've been going to a speech therapists to O." (P2-4)

"We are aware that in fact he will only learn this what we will teach him... So we work a lot with him at home... We're stubborn and we're considered to be difficult parents. We fight for his rights." (P2-1)

"Mother is such a machine to love" (P4-3)

"She reacts when she sees me, she knows that mom means food (...) I'm afraid that for her mom is also a pain of rehabilitation" (P3-1)

"Now I help her with homework by myself. I'm trying to motivate her to work." (P1-4)

"Before she went to school, Agnieszka and I regularly went to a speech therapist (once a week) and we practiced at home every day – that was my job because Dad had to work long hours to support us" (P1-1)

In their statements mothers show their engagement into the process of their children's education and rehabilitation. On the one hand, they give children unconditional positive feelings ('machine to love'), on the other hand, they follow teachers' / therapists' recommendations to maximize the children's achievements. Some statements also reflect mothers' self-efficacy and engagement. Internal beliefs that it is the right and only way to



make efforts for the well-being of the child make the interviewed mothers very active (as indicated by when they mention rehabilitation time: 'from the age of three', 'every day'). Furthermore, most interviewees indicated that they were the main persons in families who were involved in supporting the development of the children. Interestingly, they did not emphasize this, which may suggest that they treated this situation as obvious or natural.

A greater involvement of mothers was usually perceived as a chance to obtain better results of education or rehabilitation of children with disabilities, but the interviewees also talked about the costs:

"Taking care all the time is very difficult, you get really tired" (P2-5)

"Sometimes I would like to go back in time and do something for myself, you know... I gave up my job, and if someone helped me with Greg, then maybe I could go back to work?" (P4-1)

"My doctor offered me psychotherapy and I agreed. I had to help myself... In order to help my children, I have to be strong myself. Sometimes it happens that I have bad days, I have no strength to get out of bed or even brush my teeth (...) If only someone could replace me just for a few hours" (P4-2)

"A disabled child needs more care and involvement, and above all you need to adjust your own life to the child. For me it meant the resignation of my own dreams or desires" (P3-2)

These statements emphasize an enormous need for support of mothers of children with intellectual disabilities. Their great engagement may be associated with a great risk of exhaustion and burnout. In order to avoid this risk, they should be enabled to make their own dreams come true and to devote time to other activities (work, self-care, passion).

The categories mentioned and described above are not the only ones that appeared in the process of the analysis. Additional (non-dominant) themes referred to: (1) legal regulations appearing in two contexts: (a) requirements for parents (mainly involving parental activity necessary to obtain a child's statement of special educational needs); (b) adjustments guaranteed by Polish educational law for a child with a disability (for example, parents' right to choose either inclusive or special educational institution, the local authority's obligation to enroll a child with a disability to a local school as well as their obligation to help parents with transporting the child to and from school); (2) the functioning of a child with a disability – his or her limitations, abilities, weak and strong points, the educational stage in the context of a child's ability (or disability) to meet the requirements; (3) educational goal – parents verbalize the goal of education in relation to their child's abilities, i.e. the category usually refers to a child's autonomy and sustainability; 4) other adults that have an indirect impact on education (non-pedagogical school staff, parents of other typically developing and disabled children).

Conclusions and Recommendations

The secondary data analysis of the raw material from the research by Bartnikowska & Ćwirynkało (2013), Ćwirynkało & Żyta (2014), Kimbar (2015) and Szczepański (2017) gave us an in-depth view into mothers' perceptions of education of their children with intellectual disabilities. The findings reflect a diversity of mothers' views on their intellectually disabled children's education.

Answering the research question, we found that the degree of mothers' satisfaction with the school their children attend/attended to is varied. On the one hand, some of the interviewees seemed to be happy with these educational institutions. These results are in line with other research (Gasteiger-Klicpera et al., 2009, Ćwirynkało, Włodarczyk-Dudka & Arciszewska, 2015). For example, Gasteiger-Klicpera et al. (2009) indicated that an overall degree of satisfaction with the schooling is high and it depends on the degree of an intellectual disability and on the type of school (higher satisfaction with inclusive settings). On the other hand, however, there is a group of mothers who perceive the children's educational institutions as imperfect, unprepared to teach



students with more complex developmental disabilities. Similar findings can be found in the study by Walker et al. (2012).

The study has several implications for practice. Some of them relate to mothers/parents of children with intellectual disability and some relate to schools and (especially) to teachers/therapists.

- Mothers are significant persons who have real influence on their child's education. They need to be treated seriously by specialists who should take into consideration their knowledge and beliefs about disability (not only a condition of a child with an intellectual disability).
- Some mothers claim they are overtired. There is a real risk of burnout syndrome and depression in the group of parents of the children with intellectual disability. Similar results were indicated in the studies by Abbeduto, et al. (2004), Burke & Hodapp (2014), Bilgin & Gozum (2009).
- A support network for mothers/parents should be organized.
- There should be more educational institutions (with a wider choice of both mainstream and special schools, kindergartens and centres) available for children with disabilities. The findings show that the place of living can be an important limitation as far as the access of children to good quality education and rehabilitation is concerned. Polish educational law allows parents (or legal guardians of a child) to choose the type of school they want their child to attend regardless his or her disability. Nonetheless – as the results of our research indicate – sometimes they do not have real choice, especially if they live more remote areas, far from cities.
- Teachers and therapists should be trained not only to conduct various therapies and acquire teaching skills but also (and maybe especially) they should improve their relational/social skills (to found and maintain good relationship with a child) because mothers emphasize these competences as vital. The results are also consistent with the findings from other studies about the role of relationships in the teaching and learning process (Spitzer 2017, Żylińska 2013).
- From the mothers' point of view peers are another important group that contribute to the quality of education of children with intellectual disabilities (which is in line with the studies by: Skorek, 2000, Webster & Carter, 2007, Rudek 2007, Baraniewicz, 2009, Zamkowska, 2014). The interviewees noticed the role of positive attitudes of other children and its impact on a child with a disability. Nonetheless, we believe that it is the role of a teacher/therapist who should moderate relationships between students in a group/class. Teachers/therapists should realize not only educational/therapeutic but also social goals.

Clearly, the current research has a potential limitation as well. It is associated with the method used. In the primary research projects the data were collected for some other purposes and therefore they might not give a thorough insight into the phenomenon analyzed in the present study. In this project, however, the researchers avoided the pitfalls connected with secondary data analysis by either participating in (Bartnikowska & Ćwirynkało, 2013, Ćwirynkało & Żyta, 2014) or supervising (Kimbar. 2015, Szczepański, 2017) the primary research design. Furthermore, although the participants were generally a diverse group (the sample consisted of biological, adoptive and foster parents, the ages of participants differed from 30 to 72, the ages of children from 1 to 49, and children's level of intellectual disability from mild to profound), the sample size was relatively small. Therefore, the results cannot be generalized.

References

- Abbeduto, L., Seltzer, M.M., Shattuck, P., Krauss, M.W., Orsmond, G., Murphy, M.M. (2004). Psychological well-being and coping in mothers of youth with autism, down syndrome, of fragile X syndrome. *American Journal on Mental Retardation*, 109(3), 237-254.



- Åkerström, M., Katarina Jacobsson, K., Wästerfors, D. (2007). Reanalysis of previously collected material. In: Seale, C., Gobo, G., Gubrium, J.F., Silverman, D. (ed.) *Qualitative Research Practice* (pp. 314-327). London, Thousand Oaks, New Delhi: SAGE Publications.
- Baraniewicz, D. (2009). *Uwarunkowania akceptacji uczniów w klasie integracyjnej*, Kraków: Wydawnictwo Uniwersytetu Pedagogicznego.
- Bartnikowska, U., Ćwirynkało, K. (2013). *Rodziny adopcyjne i zastępcze dziecka z niepełnosprawnością*. Kraków: Impuls.
- Bartnikowska, U., Ćwirynkało, K., Borowska-Beszta, B. (2017). A Pattern of Transition to Adulthood Indicated in Plans for the Future of Males with Intellectual Disabilities: Secondary Qualitative Data Analysis. *International Journal of Psycho-Social Sciences*, 6(1), 51-66.
- Bilgin, S., Gozum, S. (2009). Reducing burnout in mothers with an intellectually disabled child: an education programme. *Journal of Advanced Nursing*, 65(12), 2552-2561.
- Burke, M.M., Hodapp, R.M. (2014). Relating stress of mothers of children with developmental disabilities to family – school partnerships. *Intellectual and Developmental Disabilities*, 52(1), 13-23.
- Chandravanshi, G., Sharma, K.K., Jilowa, C.S., Meena, P.S., Jain, M., Prakash, O. (2017). Prevalence of depression in mothers of intellectually disabled children: A cross-sectional study. *Medical Journal of Dr. D.Y. Patil University*, 10(2), 156-161.
- Charmaz, K. (2009). *Teoria ugruntowana. Praktyczny przewodnik po analizie jakościowej*. Warszawa: Wydawnictwo Naukowe PWN.
- Corti, L., Day, A. & Backhouse, G. (2000). Confidentiality and informed consent: issues for consideration in the preservation of and provision of access to qualitative data archives. *Forum: Qualitative Social Research* [online journal], 1(3).
- Corti, L. & Thompson, P. (). Secondary analysis of archived data. In: Seale, C., Gobo, G., Gubrium, J.F., Silverman, D. (ed.) *Qualitative Research Practice* (pp. 297-313). London, Thousand Oaks, New Delhi: SAGE Publications.
- Ćwirynkało, K., Włodarczyk-Dudka, M., Arciszewska, A. (2015). Zadowolenie rodziców ze wsparcia udzielanego w szkołach dzieciom z niepełnosprawnością. *Wychowanie na co dzień*, 3(252), 47-55.
- Ćwirynkało, K., Żyta, A. (2014). Dlaczego edukacja włączająca nie zawsze jest najlepszym rozwiązaniem? Doświadczenia i plany edukacyjne wobec dzieci z zespołem Downa w relacjach matek. *Szkoła specjalna*, 3, 186-201.
- Flick, U. (2010). *Projektowanie badania jakościowego*. Warszawa: PWN.
- Gibbs, G. (2011). *Analizowanie danych jakościowych*. Warszawa: PWN.
- Gasteiger-Klicpera, B., Klicpera, C., Gebhardt, M., Schwab, M. (2013). Attitudes and experiences of parents regarding inclusive and special school education for children with learning and intellectual disabilities. *International Journal of Inclusive Education*, 17 (7), 663-681.
- Gudkova, S. (2012). *Wywiad w badaniach jakościowych*. In: D. Jemielniak (ed.), *Badania jakościowe. Metody i narzędzia*. T. 2 (pp. 111-129). Warszawa: PWN.
- Husserl, E. (1989). Nastawienie nauk przyrodniczych i humanistycznych. Naturalizm, dualizm i psychologia psychofizyczna. In: Krasnodębski, Z. (Ed.), *Fenomenologia i socjologia* (pp. 53-74). Warszawa: PWN.
- Johnston, M. (2014). Secondary Data Analysis: A Method of which the Time Has Come. *Qualitative and Quantitative Methods in Libraries (QQML)*, 3, 619–626.
- Kaniok, P.E. (2011). *Poczucie powołania małżeństwa a udział ojców w opiece nad dzieckiem niepełnosprawnym i w jego wychowaniu*. Opole: Uniwersytet Opolski.
- Kimbar, J. (2015). *Macierzyństwo w obliczu głębokiej sprzężonej niepełnosprawności intelektualnej dziecka-studium przypadku trzech matek*. Unpublished BA thesis. Olsztyn: Uniwersytet Warmińsko-Mazurski.
- Kvale, S. (2010). *Prowadzenie wywiadów*. Warszawa: PWN.
- Kwaśniewska, G. (2005). *Rodzina dziecka z przepukliną oponowo-rdzeniową*. Lublin: Wyd. UMCS.
- Long-Sutehall, T., Sque, M., Addington-Hall, J., (2010). Secondary analysis of qualitative data: a valuable method for exploring sensitive issues with an elusive population? *Journal of Research in Nursing*, 16(4) 335–344.
- Marton, F. (1981). Phenomenography – describing conceptions of the world around us. *Instructional Science*, 10, 177-200.
- Paulston, R.G. (1993). Pedagogika porównawcza jako pole nakreślania konceptualnych map teorii paradygmatów. In: Kwieciński, Z., Witkowski, L. (Ed.), *Spory o edukację. Dylematy i kontrowersje we współczesnych pedagogiach* (pp. 25-50). Warszawa-Toruń: IBE, Edytor.
- Pisula, E. (1998). *Psychologiczne problemy rodziców dzieci z zaburzeniami rozwoju*. Warszawa: Wyd. UW.
- Pisula, E. (2007). *Rodzice i rodzeństwo dzieci z zaburzeniami rozwoju*. Warszawa: Wyd. UW.



- Quasir, A., Riaz, A., Sohail, A. (2015). Co-morbidity of mental health problems among working and non-working mothers of children with intellectual disability. *Journal of Pakistan Psychiatric Society*, 12(4), 18-21.
- Rubacha, K. (2008). *Metodologia badań nad edukacją*. Warszawa: Wydawnictwa Akademickie i Profesjonalne.
- Rudek, I. (2007). *Od niechęci do akceptacji. O wychowaniu dzieci do tolerancji wobec osób niepełnosprawnych*. Kraków: Impuls.
- Schalock, R.L., Borthwick-Duffy, S.A., Bradley, V.J., Buntinx, W.H.E., Coulter, D.L., Craig, E.M., Gomez, S.C., Lachapelle, Y., Luckasson, R., Reeve, A., Shogren, K.A., Snell, M.E., Spreat, S., Tassé, M.J., Thompson, J.R., Verdugo-Alonso, M.A., Wehmeyer, M.L., Yeager, M.H. (2010). *Intellectual disability: Definition, Classification, and Systems of Supports* (11th Edition). Washington: American Association on Intellectual and Developmental Disabilities.
- Skorek, E., (2000). *Stosunki koleżeńskie dzieci z zaburzeniami mowy i ich szkolne uwarunkowania*. Zielona Góra Lubuskie Towarzystwo Naukowe.
- Spitzer, M. (2017). *Jak uczy się mózg*. Warszawa: PWN.
- Szczepański, P. (2017). *Adaptacja matki do problemu niepełnosprawności intelektualnej dziecka*. Unpublished BA thesis. Olsztyn: Uniwersytet Warmińsko-Mazurski.
- Twardowski, A. (1999). Sytuacja rodzin dzieci niepełnosprawnych. In: I. Obuchowska (ed.) *Dziecko niepełnosprawne w rodzinie*. (pp. 18-54). Warszawa: WSiP.
- Walker, S., Dunbar, S., Meldrum, K., Whiteford, C., Carrington, S., Hand, K., Berthelsen, D., Nicholson, J. (2012). The transition to school of children with developmental disabilities: Views of parents and teachers. *Australian Journal of Early Childhood*, 37 (3), 22-29.
- Webster, A.A., Carter, M. (2007). Social relationships and friendships of children with developmental disabilities: Implications for inclusive settings. A systematic review, *Journal of Intellectual and Developmental Disability*, 32(3), 200-213.
- Zamkowska, A. (2014). Pozycja społeczna dziecka słabo słyszącego w klasie integracyjnej i jej uwarunkowania. In: K. Bieńkowska, K. Wereszka (ed.) *Tradycja, teraźniejszość i perspektywy w polskiej surdopedagogice*. (pp.41-52). Warszawa: Wyd. Szkoła Wyższa im. Bogdana Jańskiego.
- Żylińska, M. (2013). *Neurodydaktyka. Nauczanie i uczenie się przyjazne mózgowi*. Toruń: UMK.
- Żyta, A. (2011). *Życie z zespołem Downa. Narracje rodziców, rodzeństwa i dorosłych osób z zespołem Downa*. Kraków: Impuls.



Treatment of criminals with disabilities in prison – opportunities and constraints in Polish penitentiary system

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Abstract

According to the Convention on the Rights of Persons with Disabilities states (CPRD, 2006), people with disabilities are defined as „those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others” (Art.1). Nonetheless, they form a unique group that are overlooked in many areas of life due to lack of or inadequate systemic support (Dogbe et al., 2016). One of these areas is the penitentiary system. International literature, especially from Western Europe and the United States provides a lot of data on prisoners with disabilities. Little is known, however, about the phenomenon in other countries, including Poland. This paper is aimed to fill this gap. The need for various forms of treatment of certain groups of prisoners has been expressed by various authors for years. In case of prisoners with disabilities it can be considered of even greater value. There are about 78 thousand prisoners in Poland and official statistics show that about 6% of them have at least one type of disability, mainly physical, sensory (visual and hearing) and speech impairments (Szłęzak-Kawa, 2014). Furthermore, some studies show that the prevalence rates of various minor impairments, for example intellectual deficits are much higher than this (Dąbkowska, 2017). The authors investigated the statistical data on the prevalence of different types of disabilities among prisoners in Poland, the analysis of their situation, forms of support available for them, the role of professionals in supporting the prisoners as well as the effectiveness of the system in supporting them. Implications based on the literature and statistics reviews are also analyzed.

Key words: prison, disability, criminals, treatment, penitentiary system

Introduction

As the Convention on the Rights of Persons with Disabilities states (CPRD, 2006), people with disabilities are defined as „those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others” (Art.1). People with disabilities form a unique group that are sometimes overlooked in many areas of life due to lack of or inadequate systemic support (Dogbe et al., 2016).

The subject of the present paper are prisoners with disabilities. International literature, especially from Western Europe and the United States provides a lot of data on prisoners with disabilities (numbers, types and causes of disabilities, forms of treatment/rehabilitation, effectiveness of programs available for them and others). Nonetheless, little is known about the phenomenon in other countries, including Poland. This paper is aimed to fill this gap by analyzing scant but various sources that deal with the phenomenon.

The prevalence rates of disability among prisoners in Poland

The prevalence rate of disabled people has been steadily increasing and constitutes around 15% of the world population (Dogbe et al., 2016). As the results of the European Health Interview Survey – (EHIS) show, in 2014 about 3.8 million disabled people lived in Poland and 7.7 million found it difficult to perform everyday activities (this group is considered to be biologically disabled), so the population of people with disabilities in Poland oscillates between 10-20% (Biuro Pełnomocnika..., 2015). Similar tendency is present within prisoners’ population. In Poland, there are about 78 thousand prisoners in general and official statistics from 2014 show that 4283 of them (about 6%) had at least one type of disability (Szłęzak-Kawa, 2014). The number increased and in 2017 there were 4827 of prisoners with at least one type of disability (Niepełnosprawni..., 2017). Although the analysis of the above mentioned data indicates that the prevalence rates of disability are lower among prisoners as compared to general population, it is also worth noting that according to some studies (e.g. Dąbkowska, 2017; Reingle et al., 2016) there is a number of prisoners who are not diagnosed as disabled but do have or report some impairments. Also, research from other countries suggest that people with disabilities are over-represented in prisons (Mackay, 2015, Dogbe et al., 2016, Reingle et al., 2016).



Types of disabilities among prisoners in Poland

As far as the types of disabilities of inmates in Poland are concerned, the statistics show that on 13 October 2014 out of 4283 inmates with disabilities, 1203 – had a motor disability, 750 – a visual impairment, 543 – a physical disability – arms, 352 – a hearing impairment, 280 – a speech impairment, 116 – other forms of noticeable disabilities and 1597 – had an unnoticeable disability (Szłęzak-Kawa, 2014). In comparison, most recent data from 10 July 2017 indicate that generally there were 4827 inmates with disabilities and out of them 1320 – had a motor disability, 799 – a visual impairment, 592 – a physical disability (arms), 356 – a hearing impairment, 250 – a speech impairment and 2168 – an unnoticeable disability (Niepełnosprawni..., 2017).

The data indicates that physical, sensory (visual and hearing) and speech impairments are most common noticeable disabilities among prisoners in Poland. It is also worth noting that some serious physical disabilities are rather uncommon. For example, on 17 September 2014, there were 42 prisoners moving on wheelchairs, 258

– on crutches (Szłęzak-Kawa, 2014). However, some studies show that the prevalence rates of various minor impairments, for example intellectual deficits, are much higher than this (Dąbkowska, 2017). In her study, Dąbkowska (2017) examined 114 sexual abusers – inmates of Polish penitentiary institutions. Having conducted Wechsler test with the participants, she stated that the vast majority of them were characterized by non-harmonious development. The least developed cognitive skills – on a level of an intellectual disability – included: academic knowledge, arithmetic skills and working memory. The data also showed that the inmates' abstract thinking was on a low level. The analysis of their files of criminal cases as well as the findings on their cycle of life research indicated that the deficits in their intellectual functioning were mainly of environmental origin.

The higher prevalence of intellectual disability among prisoners as compared to general population might indicate that this type of disability can be one of the reasons for committing crimes. According to Ciosek (2001, p. 210) limitations in intellectual functioning are not a source of a crime itself, but may facilitate antisocial behavior. These people often have a feeling of being harmed and inferiority complex, which might result in adapting the attitudes of ungodliness, jealousy, and hostility towards other people. Such attitudes can cause and manifest in aggressive behaviour, as well as theft and destruction of property. Furthermore, criminal activity of this group of people can also be associated with their credulity, suggestiveness and the need for a relationship with a stronger personality, which may lead to subordinating to persons who are already depraved (Ciosek, 2001).

It is also worth noting that a high prevalence of disability among prisoners might be connected with the phenomenon of self-aggression and self-harm among this group of people. As Braun (2013) notices, we can distinguish two different groups among them: one consists of prisoners who had disability before incarceration, the other group are prisoners who became disabled while being imprisoned as a result of illness or self-harm behaviors (Braun 2013).

In comparison, in Ghana the commonest disability was physical (81.8%), followed by visual, hearing, speech, mental and albinism. As far as the causes of disabilities are concerned, the vast majority of them were acquired (95%). Most of the disabilities were the result of trauma (68.8%), infection (16.7%) and drug-related mental disabilities (Dogbe et al., 2016). Similarly, in the US, about 3 in 10 federal states and federal prisoners and 4 in 10 local jail inmates had disabilities (hearing, vision, cognitive, ambulatory, self-care, independent living) (Jennifer et al., 2015). Another study (Reingle et al., 2016) indicates that over 40% of prisoners report a disability, most commonly, learning disability. In England and Wales it was estimated that 36% prisoners had disability (18% with anxiety and depression, 11% with physical disability, 8% with both). More women reported they had a disability (55%) than men (34%) (the authors claim that women were overrepresented in the anxiety and depression category). Prisoners with a disability more often admitted that they used drugs and alcohol, and they experienced abuse or observed violence during their childhood (Cunniffe, et al., 2012).

It also needs to be emphasized that some types of disabilities among prisoners (or adults in general) are difficult to identify without conducting psychological tests. One of them is an intellectual disability. The prevalence rates of intellectually disabled people among prisoners vary significantly across studies, but the analysis of international research suggests that it is between 7 and 10% (Hallenbach, 2017). Other studies, however, suggest that the percentage of prisoners with intellectual disabilities is small, and, for example, in Australia, reaches 1.3% (Holland & Persson 2011), and seem to be consistent with the prevalence of intellectual disabilities within the general population. Nonetheless, it is important to recognize prisoners with intellectual disabilities because they have special social needs and are at risk of having some health problems e.g. heart disease, hearing impairment (Dias, et al., 2013). Furthermore, sometimes intellectual disabilities are connected with Autistic Spectrum Disorders that



cause additional problems (Paterson 2007). Problems with empathy can cause delinquencies but very often such types of disorders (autism, Asperger syndrome, Pervasive Developmental Disorder) are not recognized in the prison population (Robinson et al. 2012, Geluk et al. 2012). Definitely, this group of prisoners should be especially supported in the process of transition out of prison (Bhandari, et al., 2015).

The situation of prisoners with disabilities in Poland

An inmate with a disability requires an adjusted cell, appropriate rehabilitation, special treatment and various other adjustments. Concurrently, a prisoner with a disability should not be isolated from other able-bodied prisoners (Rada Europy..., 2011; Bulenda 2011).

This, however, still seems to be a goal rather than a reality. As Szlęzak-Kawa (2014) convinces, there are no penitentiary institutions in Poland that would be fully adjusted. The lack of or insufficient architecture adjustments is partly due to financial barriers but also low numbers of inmates with severe physical disabilities that require major adjustments. For example, taking into account that there are 155 penitentiary institutions and about 40 prisoners moving on wheelchairs, in a lot of these institutions money is spent on other, usually more urgent, purposes first. As a consequence, in 2014 only 84 cells (for 248 people) were fully adjusted to the needs of prisoners with physical disabilities (Szlęzak-Kawa, 2014). The numbers did not increase much in the following years since on 10 July 2017 there were 98 cells (for 297 prisoners) fully adjusted to the needs of inmates with physical disabilities (Cele..., 2017).

Not only do the physical adjustments are essential as far as the situation of prisoners with disabilities is concerned. It is also important to consider their social status in a group of prisoners. In Poland prisoners create an informal social system in which people with a disability are at risk of being at the lowest level (e.g. Szaszkiewicz, 1997; Ciosek, 2001; Moczyłowski, 2002; Przybyliński, 2005).

For years Polish prisoners have been facing a destructive phenomenon that is in contraposition to the process of resocialization of sentenced persons. This is the phenomenon of prison subculture, which is also known as „the other life”. Within the community of prisoners – with varying degrees of intensity depending on the place and time – three subcultures of prisoners can be distinguished, i.e. (1) „stand-up guys” („cant-guys”, „the man”) – 1st league, (2) „non-cant guys” („losers”, „non-man”) – 2nd league and (3) „victims” („punks”, „fags”,

„catchers”) – 3rd league. This is a traditional division within „the other prison life”, but the groups mentioned above are not the only groups organized by persons deprived of their freedom. For example, one of the youngest and so far not very well-diagnosed group is a group of „smoothies”. The most influential group, however, from the point of view of the prison subculture are „stand-up guys”, called „cant guys” or „the man”. They usurp the right to a leadership role and consider themselves as the most important in the subcultural prison world. They perceive themselves as aristocrats among others who should – as they claim – subordinate to them. As a result, they consider the others (who are out of their elite) to be worse and less important. They have their inmate code (a set of values and norms) which needs to be followed and if anyone disobeys it, this can lead to tragic consequences. It seems they are in the minority nowadays, but their prison life is still based on the strength and exploitation of others, potentially weaker prisoners. The next group, which is basically not involved in subcultural relations, usually with a desire to complete a jail sentence quietly, are „non-cant guys”, also called

„losers”, „lower-class men” or „non-man”. There are large numbers of them, but because of lack of internal consolidation and guiding ideas as well as an indeterminate group goal and a consolidated leadership, this group cannot prevail in a prison subculture. The last group are „victims” (also called „punks”, „fags”, „whores” and with other degrading expressions). This is the group into which prisoners with disabilities are most likely to be placed. Inmates that belong to the group are perceived very negatively and treated disrespectfully by the whole community in prison. They are often humiliated and deprived of their humanity. They are basically at the bottom of the prison hierarchy where they face numerous difficulties. They are inmates who function and live in separate places in prison and are unlikely to meet other convicts. There is a number of reasons why one might join this group and be considered as a „punk”. In particular, they include: sexual crimes, atypical sexual preferences, intellectual deficits, unsettled financial commitments, testifying against fellow inmates in court, earlier connections with the judiciary, the police, or the prison service (Przybyliński, 2005, p. 27-43).

According to Petruk (1994, p. 135) in the group of „victims” there are (a) prisoners with psychological and physical deficits that determine their tendency to subordinate, (b) convicts who are physically fit but have severe



mental deficits, and their fecklessness is so visible that even a physically weak person can bully over them, (c) inmates that are physically weak and have no psychic disorders but who have been raped by members of another group or are said to have been raped. It shows that this group of prisoners needs special support.

Similarly, studies from other countries also suggest that the situation of prisoners with disabilities is more difficult than the situation of non-disabled inmates and it does not refer specifically only to the conditions in prison. As Reingle et al. (2016) indicate, prisoners with at least one disability come from more disadvantaged backgrounds and have more criminogenic risk factors than prisoners without disabilities. For example, prisoners with intellectual disabilities are known to be more susceptible to bullying, segregation, anxiety and depression (Murphy et al., 2017). They also report a high prevalence of poly -drug use, unsafe tattooing, unsafe sex and HCV infection, although differences between this group and „mainstream“ prison population turned out to be non-significant (Bhandari et al., 2015). Another study shows that prisoners with hearing and mobility impairments often lack access to various forms of support and rehabilitation which deprives them of their rights to progression of the conditions (Hauland, 2015).

Supporting prisoners with disabilities

It is often stated in literature that there are two purposes of serving a sentence : one is punishing a person who has been found guilty of a crime and the other is rehabilitation to prevent repeated crime (Hauland, 2015). This means that, on the one hand, a sentenced person is a subject of certain security measures and restrictions and, on the other hand, he or she needs to be offered some opportunities to educate, get involved in various tasks and/or work so that he or she did not commit other crimes in the future.

Among thousands of prisoners in Polish penitentiaries and remand centres there are those who undoubtedly require specific treatment and need to be provided with the right conditions during their incarceration. People with a disability/ disabilities who have broken the law and have been found guilty of crimes belong to this group. This is not only due to the disability itself but also because they often join an informal group of „victims“ and thus become victims of harassment from other convicts.

In the Polish penitentiary area, prison service have intensified their activities focused on persons with

different types of disabilities in recent years . In accordance with the current Ordinance No. 19/16 of the General Director of the Prison Service dated from 14 April 2016 (Zarządzenie..., 2016), the procedures for conducting penitentiary activities focused on prisoners with specific needs resulting from disabilities were regulated. The initiatives should encourage social inclusion and adaptation of persons with disabilities to independent living. § 55 sec. 2. states that the following penitentiary activities referring to prisoners with disabilities should be conducted in particular:

- „1) sensitizing the general population of inmates to the special situation of people with disabilities and developing the attitude of acceptance and respect for otherness;
- 2) undertaking actions aimed at eliminating prejudices and stereotypes about people with disabilities;
- 3) active inclusion in all the forms of resocialization programs as well as cultural and educational activities available for all the convicts;
- 4) employing, vocational training and enabling participation in sports activities, taking into account medical recommendations referring to an individual’s state of health;
- 5) organizing occupational therapy when possible;
- 6) supporting the linguistic identity of deaf people through the creation of sign language learning opportunities;
- 7) co-operating with the prison service on implementing health promotion programs;
- 8) organizing vocational courses to qualify convicts to become carers of disabled people;
- 9) cooperating with institutions and non-governmental organizations whose activities are aimed at helping people with disabilities“ (Zarządzenie..., 2016).

In Polish prisons a number of different special programs focusing on supporting persons deprived of their freedom are implemented every year (Marczak, 2009). Generally, they refer to three groups of stakeholders: (1) prison staff workers, (2) able-bodied prisoners and (3) prisoners with disabilities.



1. Supporting prison staff workers

Braun (2013) claims that unfavorable situation of disabled prisoners is connected with insufficient skills and knowledge of the staff in prison. According to the author, the penitentiary staff need some training in dealing with prisoners with disabilities and supporting them in the field of rehabilitation. They also need more intensive cooperation with specialists: psychologists, special educators, sign language translators etc. This can lead to improve situation of prisoners with disabilities both in prison and later on, after leaving the prison.

Successively in Polish prisons, adequate trainings are provided for correctional officers working in penitentiary and therapeutic units, whose aim is to train them how to work with a group of prisoners with disabilities and respect their rights under isolation. To give an example, in 2016, 230 trainings for 3670 officers and other Prison Service workers were organized in penitentiary units (information obtained from the Penitentiary Bureau of Central Management of Prison Service – Biuro Penitencjarne Centralnego Zarządu Służby Więziennej in Warsaw).

2. Programs for prisoners (both without and with disabilities)

Actions are also directed towards the prison community. The Prison Service promotes educational meetings and programs for resocialisation, antidiscrimination, teaching tolerance, respect and acceptance. In 2016 there were 159 programs like that and 2438 convicts took part in them. Prisoners from various penitentiaries participated in volunteering work in the Hospices and in the Social Assistance Houses where they had an opportunity to work with people suffering from illnesses, dying or disabled (2016 – 57 programs and 416 participants) (information obtained from the Penitentiary Bureau of Central Management of Prison Service – Biuro Penitencjarne Centralnego Zarządu Służby Więziennej in Warsaw). In this context, it should be pointed out that the project entitled „Voluntary service of convicts in Poland” was submitted to the competition organized by the European Commission's Directorate General for Justice, Freedom and Security and the Council of Europe's Directorate-General of Human Rights and Legal Affairs and received the European „Crystal Scales of Justice” prize for innovative practice in civil justice organisation and procedure in the courts of Europe in 2009 (Kryształowa..., 2009).

Interesting initiatives include vocational and social trainings for people at risk of social exclusion, with a particular emphasis on people with disabilities. In 2016, there were 166 convicts with disabilities who were employed in Polish jails. Out of this number 64 persons had a paid employment and 102 persons worked free of charge (in accordance with the Article 123a of the Executive Penal Code) (information obtained from the Penitentiary Bureau of Central Management of Prison Service – Biuro Penitencjarne Centralnego Zarządu Służby Więziennej in Warsaw).

The prison staff workers are also trying to organize support for disabled prisoners through the involvement of other prisoners. It is important to choose an appropriate cellmate who wants to support a disabled person. Nonetheless as the practice shows – it is difficult. For many prisoners this is a huge challenge, others are discouraged by a disabled person's attitude, his/her expectations and claims (Braun, 2013). Some of them are passive, focused on their disability and do not want to engage in proposed activities by prison's staff (Łupińska, 2012). Sometimes disabled prisoners refuse to be involved in therapeutic system.

Some programs are also focused on convicts' professional work with people with disabilities. The examples include such programs as 'Duet', 'Four Seasons' and 'Bona', thanks to which prisoners learn to fulfill social roles by working with people with disabilities (Marczak, 2009, p. 58). It is plausible that thanks to working and interacting with people with disabilities, convicts „develop positive self-esteem, sense of meaning and purpose of life through the experience of helping and being needed. Through mutual contacts (a convict – a person with a disability), the isolation and monotony of the lives of the convicts as well as the disabled are broken. In this way, the prisoner becomes a partner and a companion of the disabled person. Thanks to spending time with people with disabilities, the convict has an opportunity to acquire skills in the care of people with disabilities and to fulfill basic social roles. These activities should direct inmates towards changing themselves and should also be a powerful impetus for observing and then constituting in their minds skills and abilities necessary for social functioning after leaving the prison” (Marczak, Przybyliński, 2010, p. 227).

Activities carried out in penitentiaries and remand centres in Poland result from implementing § 55 sec.

3. of Ordinance No. 19/16 of the General Director of the Prison Service of 14 April 2016 (Zarządzenie..., 2016) according to which physically disabled convicts who cannot live independently and require support need to be provided with the help of prisoners with appropriate qualifications as carers of the disabled. As a consequence, trainings for able-bodied convicts are organized. In 2016 25 special trainings were attended by 227 convicts who



were qualified as carers of the disabled or the elderly (information obtained from the Penitentiary Bureau of Central Management of Prison Service in Warsaw).

3. Programs directed specifically to prisoners with disabilities

There are also some specific forms of treatment offered to prisoners with disabilities. Although they are not always common, they can be examples of good practice. This can be illustrated by a penitentiary institution in Bydgoszcz, which is the only prison in Poland with a sector for prisoners who are visually impaired, especially those who lost their eyesight. It was founded in 1985 and its aim is to prepare inmates to live in a new situation (after partial or thorough eyesight loss). Therapeutic activities conducted in this institution include:

- Spatial orientation training – this form of support is considered to be essential because mobility problems can lead to other negative consequences, e.g. sense of inadequacy, deterioration of self-esteem and total dependency on others (see: Hojan, et al., 2012). The courses last 50 hours, takes place in residential buildings and on walking squares and finish with an exam after which prisoners come back to prison. The program is financed by the Fund for Postpenitentiary Support and Help for the Disadvantaged (Szłęczak-Kawa, 2014; Braun 2013);
- Teaching Braille – a tactile system used for reading and writing by blind and visually impaired people (Braun 2013);
- Social and practical skills training – mobilizing inmates to take actions to receive a disability pension, attend a spatial orientation course and/or join the Polish Association for the Blind (Szłęczak-Kawa, 2014).

Other penitentiary institutions also offer such programs as:

- Art therapy – especially in a treatment of intellectually disabled prisoners (Kurlak, 2016, Florczykiewicz 2012);
- Speech therapy programs for inmates with aphasia or other speech impairments – the aim of such programs is to improve participants' communication (including verbal communication) skills (Szłęczak-Kawa, 2014).

Unfortunately, there is no systematic knowledge on prisoners' with disabilities access to various forms of treatment and activities in Poland.

A study from Norway (Haualand, 2015) shows that inmates with disabilities (hearing and mobility impairments) often fail to take part in rehabilitation activities like education, work or group activities. As a consequence, they are more likely to experience isolation than prisoners without disabilities. It is a real problem especially for prisoners who have problems with communication (deaf or hard of hearing, with aphasia). As Miller's research (2004) shows, this group is very diverse even if we focus only on the deaf community. The prisoners' linguistic competences (in sign language and speaking) as well as their level of literacy should be recognized.

IMPLICATIONS

The analysis of the data presented above allows the authors to make several implications. First of all, there is a need for systemic knowledge on the situation of prisoners with disabilities in Polish penitentiary system. A cross-sectional study could be conducted in order to gain information on the numbers of inmates with disabilities, types and causes of disabilities they have, their experiences, needs and access to various forms of support. Second, practices of screening prisoners for disabilities would be of great value. This is especially important in case of some hidden forms of disabilities, e.g. intellectual (see: Murphy et al., 2017). Third, there should be more focus in prisons to provide opportunities to educate, work and group activities to all prisoners, including those with disabilities as the lack of such access may lead to more acute feeling of isolation (Haualand, 2015). In various treatment programs (e.g. alcohol and drug treatment programs) agencies responsible for their organization should try to meet the needs of all prisoners (McGillivray, 2016). Third, certain forms of rehabilitation aimed specifically at prisoners with disabilities should be offered since they form a group that is disadvantaged and more susceptible to bullying, depression or anxiety (Murphy et al., 2017). Moreover, they are identified as an at-risk group for recidivism which may be due to both their pre-incarceration experiences and limited vocational and work-related treatment in prison (Reingle, et al., 2016). There is a need for governmental and non-governmental agencies to develop policies that would improve the quality of life of prisoners with disabilities.



REFERENCES

- Bhandari, A., Dooren, K., Eastgate, G., Lennox, N., & Kinner, S. (2015). Comparison of social circumstances, substance use and substance-related harm in soon-to-be-released prisoners with and without intellectual disability. *Journal of Intellectual Disability Research*, 59(6), 571-579.
- Biuro Pełnomocnika Rządu ds. Osób Niepełnosprawnych. Dane demograficzne (2015). <http://www.niepelnosprawni.gov.pl/index.php?c=page&id=78&print=1> (3.07.2017).
- Braun, P. (2013). Osoba niepełnosprawna w izolacji penitencjarnej. *Niepełnosprawność – zagadnienia, problem, rozwiązania*, II/2013(7), 129-151.
- Bulenda, T. (2011). Komentarz do Rekomendacji Nr R (98) 7 dotyczącej etycznych i organizacyjnych aspektów opieki zdrowotnej w więzieniu. *Przegląd Więziennictwa Polskiego*, 72-73, 287-290).
- Cele mieszkalne dla poruszających się na wózkach inwalidzkich oraz dla niepełnosprawnych fizycznie w dniu 10-07-2017. (2017). Centralny Zarząd Służby Więziennej. Biuro Informacji i Statystyki. Centralna Baza Danych Osób Pozbawionych Wolności Noe.NET.
- Ciosek, M. (2001). Psychologia sądowa i penitencjarna. Warszawa: PWN.
- Convention on the Rights of Persons with Disabilities (2006). <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf> (11/06/2016).
- Cunniffe, Ch., Van de Kerckhove, R., Williams, K., Hopkins, K. (2012). Estimating the prevalence of disability amongst prisoners: results from the Surveying Prisoner Crime Reduction (SPCR) survey. *Ministry of Justice. Research Summary*, 4/12, 1-8.
- Dąbkowska, M. (2017). Kompetencje poznawcze sprawców przestępstw seksualnych i ich doświadczenia seksualne w dzieciństwie. In press.
- Dias, S., Ware, R.S., Kinner, S.A., Lennox N.G. (2013). Physical health outcomes in prisoners with intellectual disability: a cross-sectional study. *Journal of Intellectual Disability Research*, 57(12), 1191-1196.
- Dogbe, J., Owusu-Dabo, E., Edusei, A., Plange-Rhule, G., Addofoh, N., Baffour-Awuah, S., Sarfo-Kantanka, Hammond, C., Owusu, M. (2016). Assessment of prison life of persons with disability in Ghana. *BMC International Health and Human Rights*, 16(20), 1-6.
- Florczykiewicz, J. (2012). Warsztaty twórcze w resocjalizacji skazanych z niepsychotycznymi zaburzeniami osobowości. *Szkola Specjalna*, 3, 121-132.
- Geluk, Ch.A.M.L., Jansen, L.M.C., Vermeiren R., Doreleijers, T.A.H., van Domburgh, L., de Bildt A., Twisk, J.W.R., Hartman C.A. (2012) Autistic symptoms in childhood arrestees: longitudinal association with delinquent behavior. *The Journal of Child Psychology and Psychiatry*, 53:2, 160-167.
- Hellenbach, M., Karatzias, T., Brown, M. (2017). Intellectual Disabilities Among Prisoners: Prevalence and Mental and Physical Health Comorbidities. *Journal of Applied Research in Intellectual Disabilities*, 30(2), 230-241.
- Haualand, H. (2015). Punished and isolated: disabled prisoners in Norway. *Scandinavian Journal of Disability Research*. Supplement, 17, 74-87.
- Hojan, E., Jakubowski, M., Talukder, A., Wereda, H., Furman, A., Ewertowski, R., Skrodzka, E., Perz, P., Pękala, P., Bogusz, E., Lubawy, H., Tomaszewski, F., Czechyra, B., Orczyk, M., Szymański, G., Niewiarowicz, M., Hojan-Jezierska, D., Jezierska, A. (2012). A new method of teaching spatial orientation to the blind. *Acta Physica Polonica*, 121(1-A), 5-8.
- Holland, S. & Persson, P. (2011). Intellectual disability in the Victorian prison system: characteristics of prisoners with an intellectual disability released from prison in 2003-2006. *Psychology. Crime and Law*, 17, 25-41.
- Jennifer, B., Maruschak, M.L., Berzofsky, M.I. (2015). Disabilities among prison and jail inmates, 2011-12. In: Report from US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Kryształowa Waga Wymiaru Sprawiedliwości dla Polski (2009). Retrieved from <https://ms.gov.pl/pl/archiwum-informacji/news,1063,10,krysztalowa-waga-wy-miaru-sprawiedliwosci-d-la,ht ml> on 16/07/2017.
- Kurlak, I. (2016). Więzienna służba zdrowia w trosce o stan osób przewlekle chorych, zaburzonych i niepełnosprawnych. *Forum Pedagogiczne*, 1, 283-296.
- Łupińska, A. (2012). Łamiemy bariery. *Forum Penitencjarne*, 4, 24.
- Mackay, A. (2015). Human rights protections for people with mental and cognitive disability in prisons. *Psychiatry, Psychology & Law*, 22(6), 842-868.
- Marczak, M. (2009). Resocjalizacyjne programy penitencjarne realizowane przez Służbę Więzienną w Polsce. Kraków: Oficyna Wydawnicza "Impuls".
- Marczak, M., Przybyliński, S. (2010). Osoba pozbawiona wolności w pracy z osobami niepełnosprawnymi - projekt niekonwencjonalnych działań resocjalizacyjnych. In: A. Krause, K. Materny, J. Rzeźnicka - Krupa (ed.) *Życie z niepełnosprawnością – wyzwania edukacyjne, rehabilitacyjne i normalizacyjne*. (p. 223-232). Gdańsk: Fundacja Rozwoju Uniwersytetu Gdańskiego.
- McGillivray, J.A., Gaskin, C.J., Newton, D.C., Richardson, B.A. (2016). Substance Use, Offending, and Participation in Alcohol and Drug Treatment Programmes: A Comparison of Prisoners with and without Intellectual Disabilities. *Journal of Applied Research in Intellectual Disabilities*, 29(3), 289-294.



- Miller, K.R. (2004) Linguistic Diversity in a Deaf Prison Population: Implications for Due Process. *Journal of Deaf Studies and Deaf Education*, 9(1), 112-119.
- Moczydłowski, P. (2002). *Drugie życie więzienia*. Warszawa: Oficyna Wydawnicza Łośgraf.
- Murphy, G.H., Gardner, J., & Freeman, M.J. (2017). Screening prisoners for intellectual disabilities in three English prisons. *Journal of Applied Research in Intellectual Disabilities*, 30(1), 198-204.
- Niepełnosprawni osadzeni w jednostkach penitencjarnych w dniu 10-07-2017. (2017). Centralny Zarząd Służby Więziennej. Biuro Informacji i Statystyki. Centralna Baza Danych Osób Pozbawionych Wolności Noe.NET.
- Paterson, P. (2007). How well do young offenders with Asperger syndrome cope in custody? Two prison case studies. *British Journal of Learning Disabilities*, 36, 54–58.
- Petrak, E. (1994). Drugie życie wśród skazanych recydywistów w ocenie wychowawców i oddziałowych – na przykładzie Zakładu Karnego w Chelmie. In: *Materiały (referaty, sprawozdania) z Konferencji nt. Podkultura więzienna w Aresztach Śledczych i w Zakładach Karnych*. Centralny Ośrodek Szkolenia Służby Więziennej, Kalisz 17-19 października 1994, (p. 131-144). Kalisz: Wydawnictwo Centralnego Zarządu Zakładów Karnych Ministerstwa Sprawiedliwości.
- Przybyliński, S. (2005). *Podkultura więzienna - wielowymiarowość rzeczywistości penitencjarnej*. Kraków: Oficyna Wydawnicza „Impuls”.
- Rada Europy, Komitet Ministrów, Rekomendacja Nr R (98) 7 Komitetu Ministrów dla państw członkowskich dotycząca etycznych i organizacyjnych aspektów opieki zdrowotnej w więzieniu (przyjęta przez Komitet Ministrów 8 kwietnia 1998 r. podczas 627. spotkania wice ministrów). (2011). *Przegląd Więziennictwa Polskiego*, 72-73, 273-286.
- Reingle, G., Jennifer, M., Cannell, M.B., Jetelina, K.K., Froehlich -Grobe, K. (2016). Disproportionate Prevalence Rate of Prisoners With Disabilities. *Journal of Disability Policy Studies*, 27(2), 106-115.
- Robinson, L., Spencer, M.D., Thomson, L.D.G., Stanfield, A.C., Owens, D.G.C., Hal, J., Johnstone, E.C. (2012). Evaluation of a Screening Instrument for Autism Spectrum Disorders in Prisoners. *PLoS ONE* 7(5): e36078.
- Szaszkiewicz, M. (1997). *Tajemnice grypsarki*. Kraków: Wydawnictwo Instytutu Ekspertyz Sądowych.
- Szlęzak-Kawa, E. (2014). Niepełnosprawni też siedzą. *Forum Penitencjarne*, 11(198), 13-15.
- Zarządzenie Nr 19/16 Dyrektora Generalnego Służby Więziennej z dnia 14 kwietnia 2016r. w sprawie szczegółowych zasad prowadzenia i organizacji pracy penitencjarnej oraz zakresów czynności funkcjonariuszy i pracowników działów penitencjarnych i terapeutycznych oraz oddziałów penitencjarnych (2016).



Advantages and downsides of children ICT use in Spain: the parent's perspective

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Abstract

This paper aims at understanding the expectations of a group of parents, about possibilities and problems Information and Communication Technologies (ICT) present for their children. The article consists in a qualitative study, through the in-depth interview technique. Participants were twenty fathers and mothers with children from 9 to 18 years of age, studying at private and state schools of Teruel (Spain). All of them are concerned about the subject, because have been selected after attending several discussions and classes about technologies and students organized by cultural and educational associations. Computer Assisted Qualitative Data Analysis Software (CAQDAS) was used, by means of Atlas.ti7 program. The findings show a similar amount of advantages lightly higher than the number of downsides. Parents appreciate ICT mainly as a way of communication and cooperation, in addition to entertainment. Regarding daily downsides, the fundamental ones are related to the deterioration of social and family environment, different levels of addiction –in a broad sense- and the uncertainty they notice to face with possible damages, because of the difficulty to foresee and control. In conclusion, due to the fact that nowadays ICT make impossible a strict monitoring of their potential risks, parents must improve their teaching and training skills to prevent unwanted effects, and empower their children with autonomy and self-control. The best way for it could be precisely the strong communicative components associated with parent-children relationship. The benefit for having interviewed only involved parents is at the same time its major limitation; even though further research will be necessary, these results shed light on one of the most interesting issues related to ICT: the key role of family.

Keywords: Education, Family role, Influence of technology, Student empowerment, Communication skills.

Introduction

The importance of a positive family relationship in the long term for children development is a common place showed in recent research (Preston et al., 2016; Calvo, 2011; Albertos et al. 2016) because reinforces cohesion enhancing social parent support, generates a positive self-concept of the child, improves their academic performance, and limits different conflicts and problems of behavior. In this sense, Information and Communication Technologies (ICT) appear to be ambivalent regarding family environment, because are able to increase communication among their members and deteriorate at the same time the traditional direct contact.

And so we could expect that parents acquired a special role as mediators in a proper ICT use. In this sense, there are many authors that focus on the necessity of a critical learning, beyond the technical one. The main issue is to empower children to deal with risk (Pereira, 2016); an active parent supervision is required when they are younger (Plowman et al. 2012), and even when they grow as adolescents (Hernando, Oliva, & Pertegal, 2012; Lindqvist, Kostenius, & Gard, 2012), because, despite knowing what is good for them, not always do they act in a healthy manner.

Recent research complaints about the lack of more studies related to the implication of parents (Lau & Yuen, 2016), family dynamics involved (Gomes-Franco & Sendín-Gutiérrez, 2014), the role of these technologies in families (Kalibová, 2016) or the specifically ICT use for family communication (Rudi, Dworkin, Walker, & Doty, 2015; Hernández-Prados, López-Vicent, & Sánchez-Esteban). And at the same time a paper written in 2012 (Baytak, Akbiyik, & Usak) already pointed out some features of the matter, such as neutral attitudes of parents, their deep concerns and worries about internet, waste of time and playing games, the necessity of some norms and conditions, and their doubts about ICT integration for a better instruction.



There is, however, more literature about the importance of educational style by parents. First of all, the digital context of our technological society entails a multiplicity of models (Bauman, 2012) and a tendency to get lost under an excessive quantity of information (Mínguez-Vallejos & Hernández-Prados, 2013) or being diverted by technological unleashing to a neoliberal perspective (Gordo, Parra & D'Antonio, 2013; Díaz-Mohedo & Vicente-Bújez, 2011). Parent's authority suffers from the superiority of new ways to be informed, and become useless only forbidding in the face of ICT risk for children. The proper attitude is now to give example, show prestige and a good balance between loving and demand (Rumayor, 2016; Tejedor & Pulido, 2012; Plaza-de-la-Hoz, in press). So, different researchers gather findings about the best educational style for parents to deal with ICT at home: joining fondness and control (Cerezo, Casanova, & de-la-Villa, 2011; Osoro & González-Camara, 2016), in a less hierarchical negotiation (Haddon, 2012), neither permissive, nor authoritarian, but in a democratic style.

However quantitative investigations reveal a lack of training from parents of younger children (Manzano, 2016; Fraga & Duarte, 2015), possibly due to an absence of appropriated competence and little supervision and control (Expósito & Manzano, 2013; Berrios, Buxarrais, & Garcés, 2015; Muñoz-Miralles et al., 2014), or a state of unconsciousness about the risks involved (Sureda-Negre, Comas-Forgas, & Morey-López, 2010; Chele, Lucinschi, & Stefanescu, 2014). Gentzler et al. (2011) even suggest a possible link between social-networking sites as a way of communication with parents and higher levels of isolation, distress and family argument.

But, what about the main positive characteristics of these technologies? Indeed communication is considered in some articles as a mean of increase family connections and cohesion (Cortada, Badilla, & Riera, 2012; Walker & Rudi, 2014; Torrecillas-Lacave, Vázquez-Barrio, & Monteagudo-Barandalla, 2017); but on the other hand, as a manifestation of a socio-cultural gap (Garrido-Lora, Munté-Ramos, & Busquet, 2016) that needs digital literacy intergenerational (Aguilar-Ramos & Urbano, 2014) in order to provide children with the ability to face problems (Garmendia, Casado, Martínez, & Garitaonandia, 2013; Muñoz-Miralles et al, 2016), self-regulation and autonomy (Gairín et al, 2014; Gil, 2012).

Regarding lights and shades ICT present in family context, this article focus on the parents perspective about pros and cons these technologies offer to their children today and in the future, and which measures could be the best way to empower them.

Method

The qualitative methodology used to deal with the aim of this paper takes into account the context of Grounded Theory, whose key point consists in obtaining theories and hypothesis from data in an inductive way, more than checking previous theories (Gibbs, 2013). The technique chosen was the interview with parents to produce data, and their further processing by means of Computer-assisted qualitative data analysis software (CAQDAS), with ATLAS.ti7-data management tool.

The interest was centered in families having two or more children using technologies at home, and concerned about their consequences. The sample came from people attending conferences about ICT and their influence in children and adolescents, received in high schools or cultural associations. Twenty of them agreed to be interviewed, and the interviews ranged in duration from forty five minutes to an hour and a half. All participants gave fully informed consent for recording their talk.

Statistical generalization is not the intention of qualitative method and the validity of its data is based on other basis, adding a sort of more comprehensive understanding that enlighten quantitative results from other studies (Corbetta, 2003, Yin, 2006). In this way, it is the singularity of situations and participants



with their proper circumstances which enables a deeper meaning, and so can be useful and always available for the scientific community.

Families of this sample have between 2 and 4 children, an average of 4.5 members, 0.7 points more than the average of families with children in the city (3.8) (Instituto Aragonés de Estadística [IAEST], 2016). The average age of parents is 52.6 for fathers and 48.7 for mothers. Parents selection have prioritized quality over quantity and so it is thought to be wide enough (Stake, 2007).

Guidelines of interviews were prepared based on other researchers: Naval, Sádaba and Bringué (2003) about youth and ICT, and Hernández, López and Sánchez (2014) about communication, ICT and families. The main areas questioned were ICT use at home, expectations about ICT, influence of ICT (in social relations, family and learning), adverse effects, and training.

According to its aim, this article focuses on the sort of advantages and fears ICT symbolize for parents. The data obtained from semi-structured dialogue was systematized in order to content analysis. The study of conversations transcribed follows this type of analysis, categorizing in the face of different areas of interest mentioned, as well as their connection in several levels of semantic relation (Gürtler & Huber, 2007).

The use of ATLAS.ti7 program has been conducted to a previously word analysis, and then to the codification process, highlighting the frequency of categories, showing their importance, even though the main approach is qualitative not quantitative.

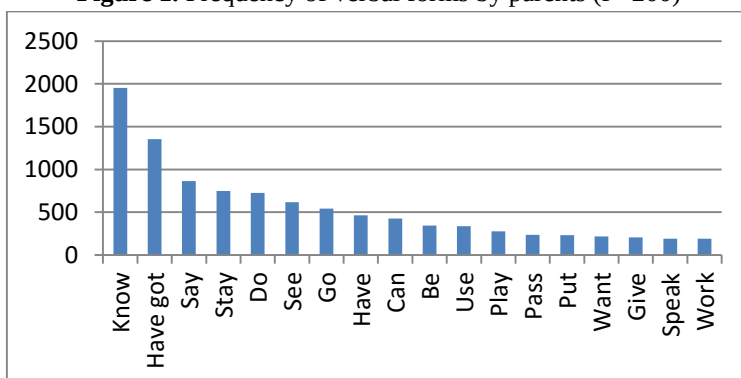
The reliability of data is supported regarding the process of systematization and analysis of information through methodological work (Flores, 2003). The findings are showed classified by means of Figures and corresponding tables including verbatim examples from declarations of participants.

Findings

A first study about terminology has been performed through word cruncher by means of Atlas.ti7 program. So we realize which are the main interests of parents, generally speaking, related to what kind of people, and regarding the technological area.

The full recount of words reveals 80653 terms; once the irrelevant ones are removed (adverbs, prepositions, etc.) those words semantically related can be brought together. For the sake of clarity three figures have been distinguished: verbal forms (Figure 1), groups of people (Figure 2) and technological words (Figure 3).

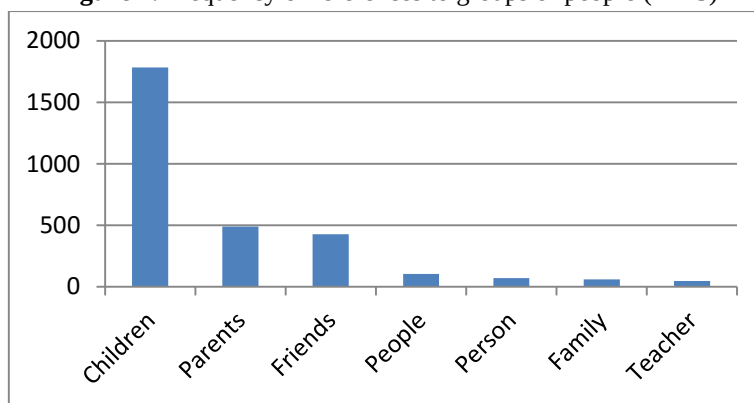
Figure 1. Frequency of verbal forms by parents (f >200)





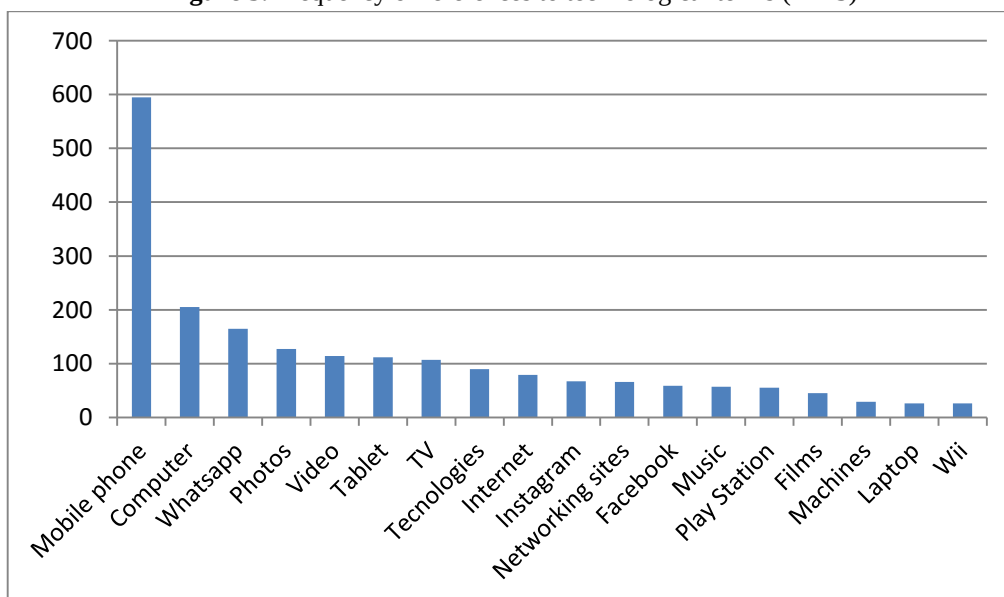
The analysis of frequencies indicates some interesting points such as the relevance of knowledge (1952 replays) and communication (“say” has 865 replays), among the most referenced verbal forms in discourses. ICT are useful devices to gather information about the world, and for staying in contact. Another detail is the more importance given to entertainment (“play”, with 278 replays), compared to “work” (191), taking into account younger children of the sample and the centrality of home over school. In fact, parents find ICT for working most appropriate for older children.

Figure 2. Frequency of references to groups of people ($f > 45$)



If different groups of people becomes the focus of our interest (Figure 2), we can observe the orientation to children (1783 allusions), especially the own sons and daughters (771). This could have been expected, as the main concerns of any parent are their children. But just after themselves (489 references) the relevance of peers (“friends”, 428) is showed, whilst “teachers” only have 47 references. Dealing with ICT it seems to parents that young people are protagonists ahead of parents and, above all, of teachers. What fits with their perception that kids have a better knowledge of these tools.

Figure 3. Frequency of references to technological terms ($f > 25$)





As for the technological area (Figure 3), we can observe the great relevance mobile phone has (595 references), the double than computer (205); some parents even comment that their sons barely use the family computer.

“...it’s a fact that they use the computer less often” (Lourdes, P3-938);

“at the weekend...they don’t turn on the computer at all, don’t use it” (Ann, P4-049)

The first networking site mentioned is without discussion Whatsapp (165 allusions), and the two main uses are taking photos and watching videos (127/114 references, respectively). Therefore, children are using their smart phones as computers, mainly for sending messages through Whatsapp, and for entertainment.

The following analysis will consider the process of coding and subsequent relations between codes. Establishing codes is a first step after reading the text to think about their interpretation (Gibbs, 2013). As deductive codes we have determined “advantages” and “drawbacks” ICT present to parents, and explained along the interviews. Besides these codes, the analysis reveals other ones, inductively, as manifested in Table 1. First of all, after counting of references the balance is slightly in favor of the positive aspects of technologies (53.8%) according to the negative ones (46.1%).

Table 1. Conceptual and *in vivo* codes

ICT advantages	ICT drawbacks
Communication/cooperation	Family and social deterioration
Entertainment	Abuse and dependency
Homework	Lack of control
Information	Thoughtlessness of repercussions
Working	Desactivation of effort
Control	Immaturity
Motivation	Bullying
Technical ease	Waste of time
Implication	Cause confusion
	Insecurity
	Scattering of attention
	Damaging contents
	Others (Sight harm, Lost of privacy, Technical issues)

Advantages pointed out by parents (Table 2)

More than 40% of references related to positive aspects deal with communication code. ICT open all kind of forms to spread contacts, keep them when people were already acquaintances, and cooperate in many ways. Less than a half of these references are the allusions to entertainment (19.4%), what tell us that parents perceive ICT as the new form their children find to spend their free time.

“they’ve always had many toys at home and barely have used them, however they have played a lot of Wii games... and all kind of technologies, despite so expensive it is, but they play with them” (Matilda, P1-028)

The same amount of references aims to do homework, get information and working (8.5%), though the influence of the parent’s use is greater here, at least regarding their will of keeping up with the news and their job. The next level is depicted by control code (3.8%), including the parent’s concern about what their children do or where they are, and as a way of being informed in case of problems. By contrast the less important codes are those of motivation, implication and technical ease (up to 2%).

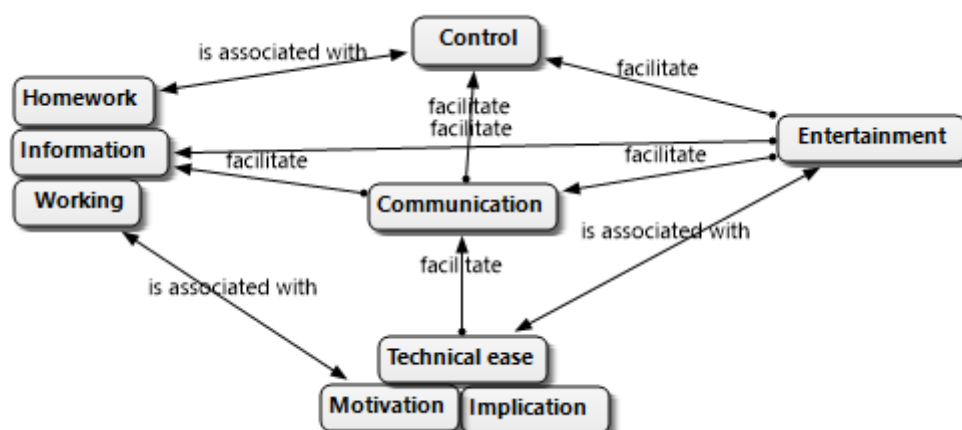
Table 2: Advantages parents notice due to ICT use: 598 (53.8%)



Code “Advantages” Subcategory (level 2)	Rate	Sample text
Communication/cooperation	255 42,6%	“Right now Jesus is connected with George, with Jack, and with I don’t know who... and they are playing with those games of...” (Pilar3, P8-102)
Entertainment	116 19,4%	“She likes to see cooking videos, videos about making hairdos, or choreographed dancing... videos for girls” (Lorraine, P7-108)
Homework	51 8,5%	“Perhaps she sends a message to her friends saying ‘I don’t understand that, and so on...’ and then they start explaining the exercise each other...” (Pilar2, P6-096)
Information	51 8,5%	“and it is what we say: ‘what it’s not on the Internet, doesn’t exists’, and basically it’s true; right now you want to look for whatever... you go on to the Internet, and you find a lot of things...” (Pilar, P5-193)
Working	49 8,2%	“those who don’t know how to handle a computer are not going to find a job anywhere” (Jack, P4-104)
Control	23 3,8%	“It’s very useful to have her more controlled... and I know whom she phones, at what time she makes a phone call, which messages she sends... her expenses... I have her controlled” (Gerhard, P3-031)
Motivation	12 2%	“I think it’s more entertaining, if you want to search something, I think it is, and look at this, if you have to study something, or see something, you watch it on screen, and so you learn it better than seeing it on paper...” (Mary, P2-235)
Technical ease	8 1,3%	“The ease to access to whatever knowledge, i.e., you can enter webs of History, Science, Geography, everything... it’s like an encyclopedia” (Allen, P1-172)
Implication	2 0,3%	“They (her daughters) were who learnt how to record, to select, to search...” (Matilda, P1-021)

If we put together all this codes through semantic relations (Figure 4), communication gets the central place, due to its character of facilitation for homework and control; at the same time, it increases with entertainment –online games-, and the attractiveness ICT add through motivation and technical ease. In the end, all these codes tend to produce or improve communication or are implemented through a better use of communication skills.

Figure 4. Semantic network related to positive codes.





Drawbacks pointed out by parents (Table 3)

When it comes to speaking about fears parents show about ICT regarding their domestic environment, the main worry is the deterioration of family and social relations (21.5%). We have put together both aspects because reveal a similar pattern: the online contact prevails over direct contact (having dinner, staying with friends, attending a social meeting, etc.), though parents focus on the family side. As a consequence of this issue the following code is abuse and dependency (16.4%); parents speak of obsession, excessive concentration, forgetting the passing of time, the need to answer immediately all messages, being hooked, even addiction; all those circumstances facilitate cases of bullying.

“What I’ve noted sometimes is that anxiety, or frustration of saying ‘I want to play and I can’t’; how is it called? anger, frustration, anxiety? I don’t know” (Paul, P9-296)

Another downside reflected in discourses is the difficult to control (13.5%) facing the openness of the Internet and the variety of ways children can access to everything the web hosts, behind the parent’s backs. In this same group we can include the deficit of training parents recognize, the immaturity of children and the insecurity they experiment. If we put together the tendency to an excessive use and the lack of control, the result can be damaging contents, sight harm, and misunderstandings, fears that parents refer to. Another group of negative aspects are related to working, mainly the demotivation of effort (6.7%), along with wasting time and scattering of attention. Finally, unconsciousness (8.2%) of repercussions and loss of privacy are semantically related to immaturity and can entail problems for both, peers and family.

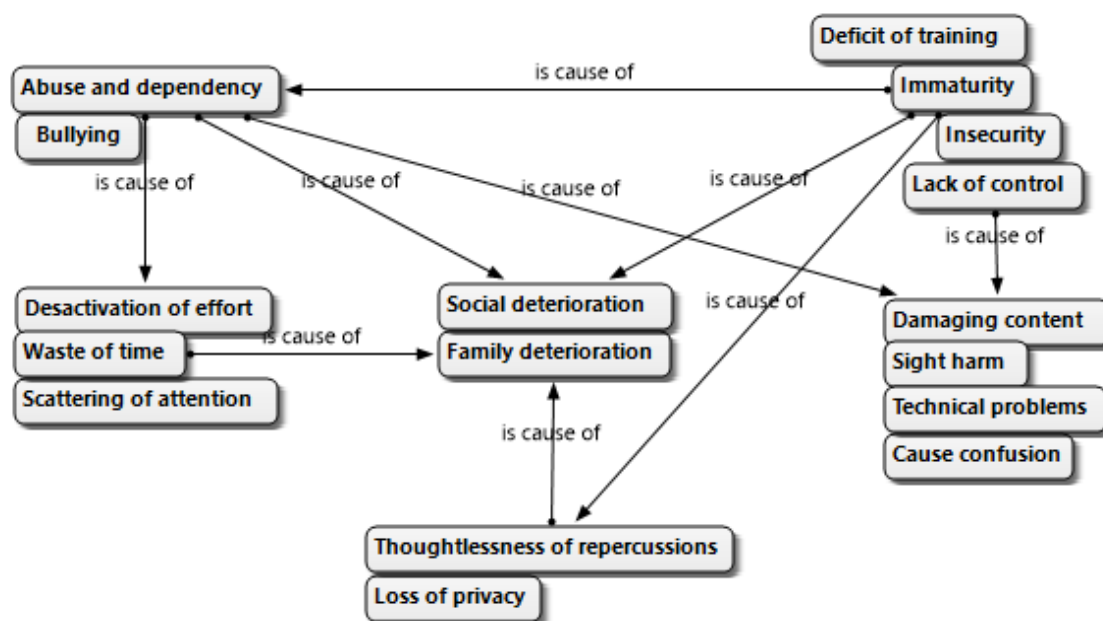
Table 3: Difficulties parents notice due to ICT use: 512 (46.1%)

Code “Downsides” Subcategory (level 2)	Rate	Sample text
Family and social deterioration	110 21,5%	“you have to fight...’get the mobile phone out of here, switch it off, leave it’... and have to say it twenty times” (Pilar2, P6-098)
Abuse and dependency	84 16,4%	“In fact, when their smart phone has broken they get desperate, totally crazy, because their mobile phone has broken” (Jack, P4-224)
Lack of control	69 13,5%	“It’s a constant tug-of-war, in which parents have everything to lose, because when you get home tired from work, you don’t feel like fighting with your kids” (Allen, P1-159)
Thoughtlessness of repercussions	42 8,2%	“They are unconscious about the transcendence what you write has, because it’s never deleted” (Lorraine, P7-138)
Desactivation of effort	34 6,7%	“If you ask him later... he hasn’t got a clue, because he only wrote it down and nothing else... simply to get out of homework” (Pilar4, P10-195)
Deficit of training	26 5%	“The problem is that parents don’t know clearly what a mobile phone is, it’s not a toy, that’s the problem, and for young people is an icon, something forbidden” (Paul, P9-358)
Immaturity	20 3,9%	“It’s a problem of the lack of personality, education or training the person managing that device has” (John, P5-094)
Bullying	20 3,9%	“It’s a fact that they always bully the weakest kids” (Victoria, P8-158)
Waste of time	19 3,7%	“nowadays they are all in Instagram, so many photos and so on... to me is a great waste of time, and so I don’t like networking sites at all” (Frederick, P2-080)
Cause confusion	18 3,5%	“I have a bad experience with Whatsapp and I really realize that it cannot be used for... telling certain things... that way” (Pilar2, P6-069)
Insecurity	14 2,7%	“There are some people that show themselves as they are, and you notice right away, and other people don’t” (Pilar3, P7-123)
Scattering of attention	13 2,5%	“If you surf on the Internet and go from page to page, at the end you don’t do what should have...” (Matilda, P1-180)
Damaging contents	10 1,9%	“They can go on the Internet, where some networking sites and other things can be dangerous” (Pilar, P5-195)
Sight harm	4 0,8%	“I fight with them... saying that they are nearsighted, because I’ve risked my sight due to computers..., but they ignored me” (Manuel, P6-103)
Loss of privacy	4 0,8%	“I don’t get any sense that people upload photos for everybody and see you and what you are doing” (Mary, P2-086)



These semantic relations are showed in Figure 5. Social and family relations are placed in a central position being affected by an excessive use of ICT, unconsciousness and immaturity of children. Abuse and dependency seems to be also the main origin of others issues such as deficit of attention and effort along with wasting time. So, any measures that may be adopted must take into account both, the primary cause and the ultimate consequence.

Figure 5. Semantic network related to negative codes.



Conclusions and Recommendations

As an exploratory study about the parent's perspective of children ICT use, the first conclusion is that communication is in the centre of both, advantages and downsides. It is the need of keeping in contact with their peers what forces parents to give them access to ICT.

"...the motive?... they are constantly demanding it (mobile phone), a lot of times, because all their friends already have it..." (Joachim, P8-038);

"it's a fact that if they haven't got a mobile phone, they don't feel 'cool'" (Constance, P9-223).

It is the possibility of being in contact what makes parents feel secure about their children; and it is the improvement of communication what challenges them to educate kids about these new technologies, facing the declining of the quality of communication itself that ICT use entails.

Parents recognize their lack of training, even the failure to control every chance for youngsters to misuses ICT and get harmed. At the same time, it is clear they notice the irreversibility of our network society and its demand for technological skills. An active supervision not always is possible to implement, and much less when adolescents. So they grab every possible opportunity for fruitful teaching, when children enjoy playing online games, get together through networking sites, complain about more time to play, misbehave in family meetings, etc.

"Sometimes they have taught us things, and other times we have taught them" (Paul, P9-206);

"...with her I'm always worried, saying over and over... 'watch out for what you upload, what kind of photos..., this one out!'... and insisting her that everything remains..." (Pilar2, P6-053)



So, their educational task is, as always, tiring, demanding, even exhausting. On the one hand, they feel that cannot resign to their duty as the main reference for their children, establishing (at least, verbally) norms and limits they reckon as reasonable and healthy, above all taking into account the immaturity of preteens; but on the other hand regarding the potentiality of these tools, their accessibility and range, it is very difficult to avoid all risks or secure a full control. So, communication emerges as an excellent, if not the only, way to orientate children in managing ICT, time, spaces, contents, and so on.

“You cannot avoid it, and besides they are very boring... but it must cost him something, and so, what am I getting? that he has to read, to read quite a lot (before using the tablet)” (Paul, P9-075)

It is interesting to observe that parents develop in this sense a democratic style as previous researchers have pointed out, dealing with norms, problems and different situations, but always facing good results from homework and school reports of their children. Many of them assure not to imagine how they acted in case their kids were bad students. Therefore, the question is if the possible supervision and above all, the constant training, even the fight to delay the purchase of devices, have been the better conditions for good results, confidence, and absence of great problems, related to ICT; or perhaps these are lucky parents whose children are naturally predisposed to a good use of ICT, despite all the available risks.

What seems to be clear is that committed parents often talk with their children, insist on basic norms to be performed by kids themselves, are conscious about a necessary autonomy for the young together with their evident lack of experience, and are able to generate confidence in case of serious problems.

“I don’t know how many things remains of all that I usually say to her, and I say to her a lot...” (Lorraine, P7-392);

“It’s a problem of education... because you cannot be in front of her every time she writes something in Whatsapp, it’s impossible... it cannot be avoided” (Gerhard, P3-229);

“...in the end, it is they who have to do, to realize... to know what is good or bad” (Manuel, P6-060);

“it’s never sounded an alert because they’ve tried to enter such a website... we speak sincerely with them and so far it works” (Jack, P4-118)

To sum up, the key role of parents is proven, by means of a good use of the main characteristic of ICT: communication skills developed from the very beginning, not in a technical sense, nor a critical one only, but in order to build properly their own character. Because every child is different needs different measures to be implemented by intense dialogue.

“about my daughters, more than the age is the character... they are quite different, in every respect, how to dress and behave..., in their relations...” (Gerhard, P3-117)

“Nancy has always been more prudent, from the beginning, I think that it’s the way of being each one” (Pilar2, P6-075)

“girls are different, the problem is... they don’t want to play, are more sociable, and so, my daughter doesn’t have a mobile phone, and when she has, I don’t know what are we going to do” (Paul, P7-147)

“Carla use it more for works, George for watching and enjoying... videos about how can you do...” (Jack, P4-144)

But this issue, the training of children’s character through ICT use at home could be the aim of another article.

References

- Aguilar-Ramos, M.C., & Urbano, A. (2014). La necesidad de alfabetización digital e inter-generacional en la familia y la escuela. *Didáctica, Innovación y Multimedia (DIM)*, 28, 1-16.
- Albertos, A., Osorio, A., López-del-Burgo, C., Carlos, S., Beltramo, C., & Trullols, F. (2016). Parental knowledge and adolescents' risk behaviors. *Journal of Adolescence*, 53, 231–236
- Bauman, Z. (2012). *Sobre la educación en un mundo líquido*. Barcelona: Paidós.
- Baytak, A., Akbiyik, C., & Usak, M. (2012). Parents' Perception over Use of ICT in Education. *Technics Technologies Education Management-Ttem*, 7(3), 1158-1167.
- Berrios, L., Buxarrais, M. R., & Garcés, M. S. (2015). ICT Use and Parental Mediation Perceived by Chilean Children. *Comunicar*, 23(45), 161-8. DOI <http://dx.doi.org/10.3916/C44-2015-17>



- Calvo, A. M. (2011). Educación de competencias informáticas en adolescentes de secundaria del siglo XXI: una responsabilidad compartida entre la escuela y la familia. *Apertura. Revista de Innovación Educativa*, 3(2), 108-119
- Cerezo, M. T., Casanova, P. F., Manuel, J., & de la Villa, M. (2011). Estilos educativos paternos y estrategias de aprendizaje en alumnos de Educación Secundaria. *European Journal of Education and Psychology*, 4(1), 51-61. doi: 10.1989/ejep.v4i1.76
- Chele, G. E., Lucinschi, D. L., & Stefanescu, C. (2014). Ethical Aspects of Internet Derived Information Utilization in Adolescents: The Role of Family and Education. *Procedia-Social and Behavioral Sciences*, 149, 164-168. DOI: 10.1016/j.sbspro.2014.08.181
- Corbetta, P. (2003). *Metodología y técnicas de investigación social*. Madrid: McGraw Hill-Interamericana de España S.A.U.
- Cortada, M., Badilla, M. G., & Riera, J. (2012). Socio-pedagogical impact of an Educational Innovation Project Supported by ICT. *Aula Abierta*, 40(1), 129-144
- Díaz-Mohedo, M. T., & Vicente-Búñez, A. (2011). Los jóvenes como consumidores en la era digital. *Revista electrónica interuniversitaria de formación del profesorado*, 14(2), 127-134.
- Expósito, J., & Manzano, B. (2013). Escuela TIC 2.0: aprendizaje del alumnado de primaria en contextos educativos y socio familiares. *Revista Electrónica de Tecnología Educativa*, 45, 1-11.
- Flores, M.A. (2003). Investigar (com) os professores: reflexões sobre uma pesquisa longitudinal. *Perspectiva*, 21(2), 391-412.
- Fraga, F., & Duarte, A. (2015). La perspectiva de las familias de un centro educativo digital con modelo 1 a 1: implantación del Proyecto E-DIXGAL como desarrollo del Plan Escuela 2.0 y el Proyecto Abalar en Galicia. *INNOVACIÓN EDUCATIVA*, 25, 309-325. DOI: <http://dx.doi.org/10.15304/ie.25.2826>
- Gairín, J., Castro, D., Díaz, A., Rodríguez, D., Mercader, M., Bartrina, M.J., Mozo, M., & Sabaté, B. (2014). Estudio sobre los usos y abusos de las Tecnologías de la Información y la Comunicación en adolescentes. *Seguridad y medio ambiente*, 135, 18-29
- Garmendia, M., Casado, M.A., Martínez, G., & Garitaonandia C. (2013). Las madres y padres, los menores e Internet. Estrategias de mediación parental en España. *doxa.comunicación*, 17, 99-117.
- Garrido-Lora, M., Munté-Ramos, R.A., & Busquet, J. (2016). De las TIC a las TRIC Estudio sobre el uso de las TIC y la brecha digital entre adultos y adolescentes en España. *Anàlisi: quaderns de comunicació i cultura* 54, 44-57. DOI: 10.7238/a.v0i54.2953
- Gibbs, G. (2013). *El análisis de los datos cualitativos en investigación cualitativa*. Madrid: Morata.
- Gil, J. (2012). Utilización del ordenador y rendimiento académico entre los estudiantes españoles de 15 años. *Revista de Educación*, 357, 375-396. DOI: 10.4438/1988-592X-RE-2011-357-065
- Gomes-Franco, F., & Sendín-Gutiérrez, J.C. (2014). Internet as a Haven and Social Shield. Problematic Uses of the Network by Young Spaniards. *Comunicar*, 43(22), 45-53. DOI <http://dx.doi.org/10.3916/C43-2014-04>
- Gordo, A., Parra, P., & D'Antonio, S. (2013). Niños, familias y educación digitales: el nuevo tridente para la convergencia de la sociedad de la información en España. *RASE: Revista de la Asociación de Sociología de la Educación*, 6(2), 228-258.
- Gürtler, L., & Huber, G. L. (2007). Should we generalize? Anyway, we do it all the time in everyday life. In L. Gürtler, K. Mechthild & G.L. Huber (Eds.), *Generalization in Qualitative Psychology* (pp.17-35). Tübingen: Verlag Ingeborg Huber.
- Haddon, L. (2012). Parental mediation of internet use: Evaluating family relationships. In E. Loos, L. Haddon & E. Mante-Meijer (Eds.), *Generational use of new media* (pp. 13-30). Farnham: Ashgate.
- Hernández, M., López, P., & Sánchez, S. (2014). La comunicación en la familia a través de las TIC. Percepción de los adolescentes. *Pulso* 37, 35-58.
- Hernández-Prados M.A., López-Vicent, P., & Sánchez-Esteban S. (2014). La comunicación en la familia a través de las TIC. Percepción de los adolescentes. *Pulso*, 37, 35-58.
- Hernando, A., Oliva, A., & Pertegal, M.A. (2012). Variables familiares y rendimiento académico en la adolescencia. *Estudios de Psicología*, 33 (1), 51-65
- Instituto Aragonés de Estadística [IAEST] (2016). Retrieved from <http://www.aragon.es/DepartamentosOrganismosPublicos/Institutos/InstitutoAragonesEstadistica>
- Kalibová P. (2016). The role of ICT in contemporary families. In *SHS Web of Conferences* (Vol. 30). EDP Sciences. DOI: 10.1051/shsconf/20163000036



- Lau, W.W., & Yuen, A.H. (2016). The relative importance of paternal and maternal parenting as predictors of adolescents' home Internet use and usage. *Computers & Education*, 102, 224-233. <http://dx.doi.org/10.1016/j.compedu.2016.09.002>
- Lindqvist, A.K., Kostenius, C., & Gard, G. (2012). "Peers, parents and phones"—Swedish adolescents and health promotion. *International Journal of Qualitative Studies on Health and Well-being*, 7, 17726 - <http://dx.doi.org/10.3402/qhw.v7i0.17726>
- Manzano, B. (2016). Cibercultura, TIC y redes sociales: nuevas formas de comunicación para las familias. *Pixel-Bit. Revista de Medios y Educación*, 49, 195-206. doi:<http://dx.doi.org/10.12795/pixelbit.2016.i49.013>
- Mínguez-Vallejos, R., & Hernández-Prados, M. (2013). Hacia otra educación en la sociedad del conocimiento: cuestiones y propuestas pedagógicas. *Teoría de la Educación. Educación y Cultura en la Sociedad de la Información*, 14(3), 191-210.
- Muñoz-Miralles, R., Ortega-Gonzalez, R., Batalla-Martinez, C., Lopez-Moron, M., Manresa, J.M., & Torán-Monserrat, P. (2014). Access and use of new information and telecommunication technologies among teenagers at high school, health implications. JOITIC Study. *ATENCION PRIMARIA*, 46(2), 77-88
- Muñoz-Miralles, R., Ortega-González, R., López-Morón, M.R., Batalla-Martínez, C., Manresa, J.M., Montellà-Jordana, N., Chamarro, A., Carbonell, S., & Torán-Monserrat, P. (2016). The problematic use of Information and Communication Technologies (ICT) in adolescents by the cross sectional JOITIC study. *BMC Pediatrics*, 16(1), 140. DOI 10.1186/s12887-016-0674-y
- Naval, C., Sádaba, C., & Bringué, X. (2003). *Impacto de las Tecnologías de la Información y de la Comunicación (TIC) en las relaciones sociales de los jóvenes navarros*. Pamplona: Gobierno de Navarra. Instituto Navarro de Deporte y Juventud.
- Osorio, A., & González-Cámara, M. (2016). Testing the alleged superiority of the indulgent parenting style among Spanish adolescents. *Psicothema*, 28(4), 414-420. doi: 10.7334/psicothema2015.314
- Pereira, S. (2016). The Portuguese programme 'one laptop per child' and its impact on families: a study on parents' and children's perspectives. *Observatorio (OBS*) Journal*, 10(1), 107-124.
- Plaza-de-la-Hoz, J. (in press). Teachers as authorities and New Technologies: changes, challenges and chances. *Revista Complutense de Educación*, 29(1). <http://dx.doi.org/10.5209/RCED.52281>
- Plowman, L., Stevenson, O., McPake, J., Stephen, C., & Adey, C. (2012). Parents, pre-schoolers and learning with technology at home: some implications for policy. *Journal of computer assisted learning*, 27(4), 361 -371 DOI: 10.1111/j.1365--- 2729.2011.00432.x
- Preston, K. S. J., Gottfried, A. W., Oliver, P. H., Gottfried, A.E., Delany, D.E., & Ibrahim, S.M. (2016). Positive Family Relationships: Longitudinal Network of Relations. *Journal of family psychology*, 30(7), 875-885. DOI: 10.1037/fam0000243
- Rudi, J., Dworkin, J., Walker S., & Doty, J. (2015). Parents' use of information and communications technologies for family communication: differences by age of children. *Information, Communication & Society*, 18(1), 78–93, <http://dx.doi.org/10.1080/1369118X.2014.934390>
- Rumayor, M. (2016). El problema de la autoridad en la familia frente al reto de las redes sociales. *Teoría de la Educación; Revista Interuniversitaria*, 28(2), 75. DOI: <http://dx.doi.org/10.14201/teoredu20162827592>.
- Stake, R. (2007). *A arte de investigação com estudos de caso*. Lisboa: Fundação Calouste Gulbenkian
- Sureda-Negre, J., Comas-Forgas, R., & Morey-López, M. (2010). Internet Access by Minors at Home: Usage Norms Imposed by Parents. *Comunicar*, 34, 135-143. DOI: 10.3916/C34-2010-03-13
- Tejedor, S., & Pulido, C. (2012). Challenges and Risks of Internet Use by Children. How to Empower Minors? *Comunicar*, 39(29), 65-72. DOI: 10.3916/C39-2012-02-06
- Torrecillas-Lacave, T., Vázquez-Barrio, T., & Monteagudo-Barandalla, L. (2017). Percepción de los padres sobre el empoderamiento digital de las familias en hogares hiperconectados. *El profesional de la información*, 26(1), 97-105. <https://doi.org/10.3145/epi.2017.ene.10>
- Walker, S.K., & Rudi, J.H. (2014). Parenting across the social ecology facilitated by information and communications technology: Implications for research and educational design. *Journal of Human Sciences and Extension*, 2(2), 15–32.
- Yin, R. (2006). Case Study Methods. In J.L. Green, G. Camili, P.B. Elmore (Eds.), *Handbook of Complementary Methods in Education Research* (pp. 111-122). Mahwah: Erlbaum.



Investigating Cultural Competencies of Elementary Teachers

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Abstract

Over the years, the competencies of teachers have been enhanced and standardized, and teacher education programs have been changing in many countries while many art and sports classes have been eliminated. Elementary teachers differ from other teachers because they are responsible for more than one subject, and thus they need to adopt multi-disciplinary and inter-disciplinary approach based on a wide range of competencies. The aim of this research is to determine cultural competency level of a sample group of eighty-seven elementary teachers and to analyze the reasons for their lack of competencies. The research was undertaken using a mixed method. The quantitative analysis consisted of two parts. One part comprised demographic information about the participants such as gender, age, parent's education level, the type of school the participants graduated from, and their professional experience. The other part included data on cultural competencies such as the number of visits to cinemas, museums, concerts, and theaters together with the number of books the participants had read in a year. In the qualitative analysis, the reasons for attaining cultural competencies were investigated using face-to-face interviews. The results were discussed in the following parts.

Keywords: cultural competencies, elementary teachers, teacher education

Introduction

This research drew inspiration from the discussion with pre-service elementary teachers that only six out of seventy have seen a theater play in the previous month and they talked about their behavior to watch theater was passed especially through their mothers during their childhood period. One week later, I addressed the question "Are you taking your students to museums or theaters?" to elementary teachers who were attending my science master course. All of them answered as "No." Also they indicated that even with second grade students, they were doing mathematic lectures by solving multiple choice questions during elective courses. Elementary teachers differ from other teachers because they are responsible for more than one subject, and thus they need to adopt multi-disciplinary and inter-disciplinary approaches based on a wide range of competencies. Researchers investigating teacher competencies and qualifications have emphasized that increasing the competencies of teachers will result in students being better educated and more qualified for further study and work life. The Organization for Economic Co-operation and Development [OECD] (2012) noted that teachers need to help students acquire not only the skills that are easiest to teach and test but more importantly ways of thinking (creativity, critical thinking, problem-solving, decision-making and learning), ways of working (communication and collaboration), tools for working (including information and communications technologies), and skills concerning citizenship, life, and career together with personal and social responsibility relating to the success of modern democracies. The role of the elementary teachers in the aspects of modelling and reflecting in acquisition of cognitive, psychomotor, and affective skills that are rather fundamental for the academic success of a student, especially in the upcoming years, is an indisputable fact. Alterations in family, school, education system, and society within today's rapidly changing socio-cultural structure add new extents to the competencies expected from elementary school teachers, in fact from all teachers. In many countries, teacher qualifications are being redefined, certain standards are being introduced and teacher training programs are amended for future teachers as particularly art classes are being eliminated in education programs. For example in the USA (MCTS, 2012), the competencies of teachers on application of knowledge and skills were indicated with the statement that "Teachers need to be able to impart global skills and dispositions on learners, particularly in the areas of problem solving, curiosity, creativity, innovation, interpersonal skills, the ability to synthesize across disciplines, global awareness, ethics, and technological expertise. There is an emphasis on cross-disciplinary skills, including communication, collaboration, and critical thinking as teachers must design learning experiences that draw upon multiple disciplines" (p.6). In this statement, cross-disciplinary skills, interpersonal skills, multiple approaches for students with different cultures, language, and disabilities are vital competencies for teachers. Adding new lessons to faculty of



education's curriculum or applying different methods and technics is not adequate for the use of these competences. Like many other countries, children from families with low socio-economic level, the youngsters who were raised in small cities and towns, enroll in education faculties. Moreover, faculties of education have been founded in many cities that are not culturally sufficient, especially after 2006. I believe that competencies especially related with cross-disciplinary, communication, collaboration, and critical thinking skills can be achieved with the cultural skills of teachers who read books, playing instruments, who are related to art, sports, theater, and museum. Gunduz (2014), Arnon & Reichel (2007) indicated that the personal skills of teachers were more vital competencies rather than professional skills on behalf of young students. Smith (1995), commented that teachers and teaching need to be creative to engage students in learning and Holt (1964), pointed out 'creative classrooms' which reflect the teacher's knowledge, enthusiasm, and responsibility to motivate students about learning. Teachers personal skills related to cultural competencies are vital factors for the creativity of teachers in order to produce creative classrooms and environment, and for ability to use different instructional strategies depending on culture and properties of students, contextualization of concepts with daily life, asking good questions to improve critical thinking skills of students. Also, if self-efficacy level of teachers depending on music, art, sports are high, they will improve the self-efficacy of student's cultural competencies. Therefore, the aims of this research are to see the competencies of elementary teachers in the case of cultural competencies and to analyze reasons into three themes; individual, socio-cultural and educational system.

Problems of this research:

- 1-What was the level of cultural competencies of elementary teachers in the case of sports, playing an instrument, going to concerts, museum, theatre, and cinema, and reading habits?
- 2- What were the effects of their bachelor education on their cultural competencies in the case of social clubs, cultural trips, and vision improvement?
- 3-What were the relations between cultural competencies and age, professional experience, education level, types of undergraduate institution, education level of the mother and the father?
- 4-Were they finding themselves sufficient about cultural competencies?
- 5- What were the reasons behind inadequacy in cultural competencies of teachers?
- 6- What are their requirements to improve their cultural competencies?

Teacher's competencies

The meaning of competence is the capability, specific knowledge which provides the power to do the job (tdk.gov.tr). Competency is the professional knowledge, skills, and attitudes that are necessary to perform the specific task in a professional field, performing the expected roles along with qualitative and quantitative qualifications, gaining knowledge and abilities to do a behavior (MoNE, 2008). The roles of teachers and schools are changing, and thus expectations about them too: Teachers are asked to teach in increasingly multicultural classrooms, integrate students with special needs, use ICT for teaching effectively, engage in evaluation and accountability processes, and involve parents in schools (OECD, 2009). Also OECD (2011) noted that "teachers need to help students acquire not only 'the skills that are easiest to teach and easiest to test' but more importantly, ways of thinking (creativity, critical thinking, problem-solving, decision-making and learning), ways of working (communication and collaboration), tools for working (including information and communications technologies), and skills around citizenship, life and career and personal and social responsibility for success in modern democracies." The teacher competencies including knowledge, skills, values and attitudes may need different contents depending on societies, in other words nations (EC, 2013). The elementary teachers are differentiated from other teachers because they are responsible for more than just one subject. This requires the teacher to have multi-disciplinary and inter-disciplinary approaches based on competency. Researchers working on teacher competencies and qualifications emphasized that increase in competencies of teachers as content knowledge level, acquisition of certifications, year of experience, and reading skills will cause to a more qualified education for students (Tas, 2004; Barnett, 2002; Darling-Hammond, 2000; Gozutok, 1995 and Gurkan, 1993). Also teaching standards require not only a basis of knowledge in the areas of study and instruction, but also a greater understanding of pedagogy, child development, and methods of evaluation (Korthagen, 2004). There were several



studies up to the present, from the first years of the Republic (1982, 1989, 1993, 1995, 1996, and 1998) about teacher training with an experience of over 150 years in Turkey. In addition to these studies in 2002, the quality of the teaching profession reevaluated in the sub-headings; general competencies, general culture, specific field, and training and teaching competencies (Demiral, Baydar & Gonen, 2010). In year of 2006, Ministry of Education [MoNE] identified the competencies as general competencies and specific field competencies for all teachers, and they were collected into a book by MoNE in 2008. In the book, there were six main competencies, thirty-one sub-competencies, and 233 performance indicators for general competencies of all teachers (MoNE, 2008).

The competencies mentioned in the book that were related to this research were:

- Extracurricular activities: Teachers plan, organize, and implement the activities to visit theaters, museums, factories, and parks for the students according to their age and the aims of learning facilities.
- Making the school a culture center: Teacher plan, apply, and support the facilities to make the school culture center of region.

The competencies related with elementary teachers were:

- Art and aesthetic: having general knowledge about fine arts, using art facilities during learning processes, applying aesthetic vision in learning environment.
- Improve Linguistic skills: gaining and ingratiating students with reading habit.
- Physical Education and Security: improvement of dance figures within the music and development of individual and knowledge and ability for team sports.

Which factors affect the development of cultural competencies?

When we look at the factors affecting cultural competencies that the teacher have, we can sort them in the following order; education level (undergraduate, post graduate, in service training), institutions of education received (village institutes, teaching schools, teacher high schools, regular high schools), the area that the person has grown up in (rural, urban region), education status of the person's family, socio-economic status, friends one contacts with, work and social environment. Bourdieu & Passeron (1964) indicated that the economic capital is directly associated with the possibility that one is able to receive higher education, and with the departments one chooses to pursue in higher education. This situation still preserves its effectualness for many world countries and Turkey. While trying to determine the factors affecting cultural competencies of teachers in this study, teacher education will be emphasized with the obtained results. In this context, the teachers who participated in this research were questioned about the educational status of their parents, the reasons of not being able to improve their competencies on areas such as art, sports, music, and reading. The attempt to explain this extent of the research will be through the concepts of economy, capital cultural capital, and social capital. Economic capital is the accumulation, and source of economy for each individual. Class structure based on division of the economic capital, even if it gets complicated at times in the process of dividing this capital, reflects the class differences generally in a way to process it in a parallel fashion, reproduces, and legitimizes them (Bourdieu & Passeron, 1970). It is stated that economic level indicators, along with being acknowledged as one's income, occupancy, and education (White 1982), can change with factors as health data (Smith 1999), total population in the family, inclusion of grandparents to the family (Bradley & Corwyn, 2002), therefore, socio-economic indicators change according to culture and ethnic groups (Williams & Collins, 1995). The socio-economic level data in this study are confined with the education status of the mother and the father. Cultural capital is an attainment which begins with linguistic and physical skills we acquire starting from each of our childhood periods, consisting of knowledge and skills that we accumulate benefiting from art, science and such products. Social capital, on the other hand, is an attainment formed of social links between people, the connection among people within social relationships, affiliation to groups, and privileges, trust, respectability and such values arising from given correlations. The interaction between these three versions of capital describe the role of an individual in social life and these three capitals usually show parallel development and tendencies to one another (Bourdieu & Passeron, 1970; Wacquant, 2007). The economic, cultural, and social capital acquired are the factors that determine the social origin of a person. In social origin, education life reflects on one's acquirements and outputs from professional life and even from private



life. Students who are the utilizer of this system are a product of the system at the same time, and all attitudes and competencies obtained in all education periods carry the characteristic of all past acquirements (Bourdieu & Passeron, 1964, p.31). For example, cultural capital cannot be established by going to the theatre, museum or concert only when the school organizes or just attending these social events seldom, but by going them regularly (Bourdieu & Passeron, 1964, p.37-38). It has been ascertained that the high school students from bourgeoisie of Paris go to the museum and theatre without any compulsion, and read any book as they wish since they naturally acculturate with the culture of their families, and that the acculturation in reading, museum visiting, and teaching programs in school are not artificial yet sustainable (Bourdieu & Passeron, 1964). In this context, it can be hypothesized that teachers also reflect features of the social class they belong to in everything that defines the relation they pursue with the education system. However, teacher and school environment gain importance in order to improve cultural competencies of especially students at young age in the extent which exploring, modelling and repetition are significant in forming a behavior in human. It also has been identified by a number of researchers that these skills, though within certain limits, mediate and enhance academic achievement (Jennings & DiPrete, 2009; Lamm, 2000). In this study, through analyzing the reasons of cultural competencies of teachers, suggestions for solutions have been asserted.

How do cultural competencies of teachers affect the teaching in primary schools?

Vygotsky, one of the pioneers of social constructivism theory, aside from adopting ideas put forward by Piaget's, argues that learning does not solely occur through cognitive processes, but it should also include social, cultural and material processes. (John-Steiner & Mahn, 1996). Depending on socio-cultural perspective, Vygotsky asserted that human learning cannot be understood without the social and cultural forces. In Vygotsky's view, individuals use physical, cultural, and psychological tools to learn and to regulate their activities, and their language. Conceptual and cultural learning occurs through dialogue in what he called a 'Zone of Proximal Development (ZPD)'. "Young people learn under the guidance of their teachers, peers or families, or in collaboration with peers (Vygotsky, 1978, p.86)." Through this perspective teachers are the most reflecting model and guidance for the young students. Lamm (2000) indicated that the one of the four core competencies of teachers to be a good teacher is: acculturation which means that good teacher is a provider of culture. They must be cultured people, with a wide range of general knowledge who are well acquainted with the wealth of culture and its values and be able to convey these to students. The acculturation mentioned here coincides with the teacher competencies partaken in MoNE (2008) stated above. If the teachers, especially in kindergarten and elementary schools, are well equipped with music, sports, art, museum visits, theater plays, and reading skills, how do they affect their students? Having high levels of cultural competencies not only for elementary teachers but for all teachers will contribute them to establish a connection between daily life and learnt concepts, to use creative and different instructional strategies, and most importantly preparing fun classes corresponding to social lives of students.

Making music is a cognitive process (Wilson, 2007) which enables "pattern recognition and development, mental representations of what is observed or imagined, allegorical and metaphorical representations, careful observation of the world, and abstraction from complexity" (Sousa, 2006, p. 26). The students in pre-school and elementary school have the highest capacity to increase neural connection with the activities such as dancing, singing, and drawing engaging all senses (Wilson, 2007). Playing an instrument especially before the age eight stimulates many parts of the brain including left and right parts, it leads to creativity and Tramo (2001) indicated music education can improve math, reading, and spatial skills. Even though all those affects musical education, it also improves children's physiological and psychological development.

Keen reading habits, as it contributes to the logical development of the individual and to the economic growth of the system the individual inhabits in (Phillip, 2005), causes the ability to think fast, and thus the ability to find solutions fast (Ozdemir, 1997), to learn many things about life without experiencing it, to learn more about negative incidents or state of affairs before encountering with them (Leppanen, Aunola & Nurmi 2005). Cunningham & Stanovich (1998) indicated that students who started reading early read more over the years and



their comprehension skills and cognitive development were developed better than the others. Teacher candidates who read more have better writing skills (Benevides, 2006). In many studies, while it has been discovered that the family is influential on adopting reading habits, it has been determined that teachers are also influential on students acquiring reading habits (Myette, 2006) through their experiences about reading books, their guidance to students, inclination of students towards reading and feeling of motivation (Baccus, 2004). Arıcı (2005) remarks that 57, 3 percent of the students claimed that they obtained the concept of reading from their teachers. In the same survey, the rate of those who claimed that they gained the habit by observing their mothers is 17, 9, and from their fathers is 13,4. Thirty-five percent of students says their teachers are the ones who gave them their first book (p.61). An individual's education received in childhood period from home, school, and environment of childhood period play important roles in improving reading habits (Yılmaz, 2006). Batur, Gulveren & Bek (2010) revealed in the study they carried with 420 teacher candidates that female students have more positive attitudes toward reading than male students. According to the study conducted by Ari & Demir (2013), it was put forward that the ratio of teacher candidates reading an average of 0 to 7 books was approximately 58,3 percent, the ratio of candidates reading 8 to 12 books was 23,4 percent, and the ratio of candidates reading 12 books and above was 18,3 percent. Moreover, it was implied that the reading competencies of teacher candidates were not at a sufficient level. When sorts of the read books were examined, it was specified that 28, 8 percent was themed love-affection, 27,6 percent was adventure-science fiction, 17,6 percent was self-help books, 13 percent was religious books, 7,9 percent was history books, and 5 percent was art-culture themed books.

In the theory of self-efficacy asserted by Bandura, there are four sources as mastery experiences, vicarious experiences, verbal persuasion, and physiological state. Mastery experiences signify the past achievements of an individual. If an individual achieved a task in the past, he or she will think that it can be achieved again. Vicarious experiences signify an individual's analogical evaluation of his or her own performance as against other people's performances. Observing people with outstanding performance can enhance one's self-efficacy belief, whereas observing people with low performance can reduce this belief. Verbal persuasion defines motivating verbal messages coming from the influential people (such as mother-father, teacher, friend, etc.) in one's life. However, these messages should be received from dependable people and be realistic in order to enhance self-efficacy belief. Physiological state signify one's evaluation regarding whether or not the physical environment of the individual is suitable to perform a task. If the individual evaluates this environment as positive/sufficient, his or her self-efficacy belief enhances, when a negative/insufficient evaluation reduces the self-efficacy belief (Feltz & Chase 1998). Researches indicate that primary school teachers think that they cannot perform in physical education classes as they should, in other words they find themselves insufficient in this respect (Beydogan & Sirin, 1998; Pehlivan, Donmez & Yaşat 2005). It has been observed that according to teachers, the foremost cause behind not being able to perform properly is absence of gym, equipment, and material. These results show how determinant is physical state in terms of self-efficacy (Ipek & Bayraktar, 2009). The main objective of physical education and sport classes are to help improving each student's movement capacity by ensuring education and training through physical effects of students, nomitaly their movements. Physical education have features as equipping children with knowledge and skills, forming a healthy life, developing psychomotor skills of school students, instilling rules and strategies (Sirinkan & Gundogdu, 2011).

In the report of 'The Arts and Human Development' (2011) , it was stated that young children who have the opportunity to learn and participate in the arts develop critical thinking and metacognitive skills and can learn to think creatively. Furthermore, there is a fundamental assumption that this type of art engagement promotes changes in the brain, which, in turn, support creative thinking and creative expression (p.18). The twenty-first century teacher, in addition to being a technician who conveys the existing information to new generations in the best possible way, has to be someone who is creative so as to produce knowledge. It is important how much the teacher assigned to train creative individuals are trained to be creative through this program. If it is a fact that education is a whole and that science, technic, and arts are all equally significant for education of an individual, it naturally cannot be anticipated for a primary teacher to be creative who was trained without studying such lessons as



philosophy, sociology, and aesthetics even on a basic level (Ilhan, 2003). Furthermore, painting class, which is scheduled only one hour a week in primary education, is described as restrictive, hampering (Demirci & Katiranci, 2003).

Method

The research was done by mixed method. Creswell and Plano-Clark (2007) defined mixed methods research as a set of designs and procedures in which both quantitative and qualitative data were collected, combined, and analyzed in a single study or series of studies. Only one form including structured questions was used for interview questions. The quantitative part included two parts. The one part was composed of demographic information about the participants like gender, age, education level of mother, education level of father, types of graduated school, professional experience. The other part included data about cultural competencies like number of books read, number of visits to cinema, museums, concerts, and theater that participants attended in one year. Qualitative data were obtained from the open-ended questions to see the reasons of cultural competencies

The participants who were elementary school teachers (n= 87) were selected randomly from the primary schools of Istanbul during an education seminar of a researcher with their own volunteering. The demographic data about participants were given in Table 1.

Table 1. The demographic data of participants

Gender	Female	63	72.4%	Age	20-25	25	28.7%
	Male	24	27.6%		26-33	35	40.2%
	0-5	22	25.3%		34-41	17	19.5%
	6-11	24	27.6%		42-	10	11.4
Professional Experience	12-17	11	12.6%	Kinds of Graduated Schools	Education Institute	5	5.7%
	17-22	6	6.9%		Education Faculty	33	37.9%
	22- 27	6	6.9%		Science and Literate Faculty	41	47.1%
	Bachelor's Degree	66	75.9%		Other	8	9.2%
Education Level	Master	17	19.5%	Education Level of the Mother	Non-educated	4	4.6%
	Doctorate	1	1.1%		Literate	7	8.0%
	Other	3	3.4%		Elementary School	35	40.2%
	Non-educated	1	1.1%		Secondary school	12	13.8%
Education Level of the Father	Literate	2	2.3%	University	High school	20	23.0%
	Elementary School	29	33.3%		University	9	10.3%
	Secondary school	19	21.8%				
	High school	19	21.8%				
	University	17	19.5%				

The data were collected through an interview which was prepared with the addition of advices from a sociologist researcher who was a professor and an expert in the area of culture. The interview including quantitative questions and open-ended qualitative questions were done by face to face with the participants who were elementary teachers in 2 months period in the year of 2015. Quantitative data were obtained from the open-ended questions like: Are you playing any instrument? Do you have any certification on any sport branch? The qualitative data were removed from the same open-ended questions like: 'If yes, which instrument? Are you using this property in your activities with your students? Can you give examples? If No, would you please explain your reasons? Would you like to



play an instrument? (If it is yes) Why didn't you learn? The sample of questions like; How many times did you go to museum in this year? Can you say their names? Did you take your students to any of them? Why?

The quantitative data were analyzed by SPSS statistic program to see the general percentages of cultural competencies of teachers, t- test to compare cultural competencies with demographic information and variance analysis. The content analysis was done by a researcher with two other experts that are specializing in qualitative research. Depending on open and cross coding analysis three themes were identified: individual reasons, socio-economic reasons and education systems. All themes were managed using the Miles and Huberman reliability formula (1994). Reliability = Consensus / (Consensus + Disconsensus) was used and reliability was calculated as averaging 92%. This result indicates that codes of researchers were reliable. Teachers were identified only by using numbers like 5 or 87.

Results

Quantitative results

In this part generally cultural competency level of elementary teachers were tried to be determined in the order of interview questions and also relations between cultural competencies of teachers with age, professional experience, education level, kinds of undergraduate school, education levels of the mother and the father.

Table 2. The percentages and frequencies of answers.

	Yes		No	
	f	%	f	%
Do you have any certificate in any sport field?	23	26.4	64	73.6
Are you playing any musical instrument?	29	33.3	58	66.7
Are you applying music instrument into your class?	15	17.2	72	82.8
Are you related with chess, ebru art, photograph, theater, dance, ceramic facilities?	60	69.0	27	31.0
Did you visit any museums last year?	51	58.6	36	41.4
Did you go to the cinema last year?	64	73.6	23	26.4
Did you go to any theater plays last year?	31	35.6	56	64.4
Did you go to any concerts last year?	39	44.8	48	55.2
Did you go read any book in last year?	73	83.9	14	16.1
Do you have any facility with students' extracurricular activities?	52	59.8	35	40.2
Did you attend any social clubs during your bachelor education?	39	44.8	48	55.2
Did you attend any cultural trips during your bachelor education?	36	41.4	51	58.6
Did your bachelor education contribute your vision on sports, arts, culture?	39	44.8	48	55.2
Do you find yourself sufficient about cultural competencies?	29	33.3	58	66.7

As shown in the table 2, 23 (%26, 4) participants have certificates in one area of sports, while 64 of them ((%73,6) have no certificates. 29 (%33,3) of them were playing an instrument but only 15 of them (%17,2) were applying these abilities in their classes. 60 (%69) participants indicated that they were related with one of the activities like chess, marbling, art, photography, theater, dance, ceramic facilities. 51 of them (%58,6) were going to museum and only 18 of them were visiting museums with their students. 64 of them (%73,6) were going the cinema, other 23 (%26,4) were not going. 31 elementary teachers (%35,6) were going to theater in a year but 56 participants (%64,4) did not go to theater in last year. 39 participants (%44,8) were attended a concert while 48 (%55,2) of them did not attend any concerts in last year. %16, 1 percent (f=14) indicated that they did not read any books, 73 of them (%83, 9) read one or more books in a year. %59.8 percent (f=52) were doing extracurricular activities. 39 (%44, 8) of the elementary teachers were joined a social club and 51 of them (%58, 6) didn't join any cultural trips during their bachelor education. The %44, 8 of them (f=39) mentioned positive improvements of their bachelor education on their cultural competencies. They answered the question "Are you feeling adequate about cultural competencies?" as: 29 of them said (%33, 3) "Yes", 58 of them (%66, 7) said "No".



Table 3. The results of t- test between gender and cultural competencies of participants.

	Gender	N	$\bar{X}$	S	t	P
Sports Certificate	Female	63	0.23	0.42	.849	0.401
	Male	24	0.33	0.48		
Musical Instrument	Female	63	0.34	0.48	0.512	0.612
	Male	24	0.29	0.46		
Application on class	Female	63	0.17	0.38	0.087	0.931
	Male	24	0.16	0.38		
Individual Interest	Female	63	0.71	0.45	0.769	0.447
	Male	24	0.62	0.49		
Museum Visit	Female	63	0.63	0.48	1.465	0.151
	Male	24	0.45	0.50		
Cinema	Female	63	0.79	0.40	2.011	0.047*
	Male	24	0.58	0.50		
Theater	Female	63	0.39	0.49	1.275	0.206
	Male	24	0.25	0.44		
Concert	Female	63	0.49	0.50	1.329	0.187
	Male	24	0.33	0.48		
Book	Female	63	0.88	0.31	2.075	0.041*
	Male	24	0.70	0.46		
Extracurricular Activities	Female	63	0.66	0.47	2.102	0.042*
	Male	24	0.41	0.50		
Social Club	Female	63	0.44	0.50	.114	0.910
	Male	24	0.45	0.50		
Cultural Trip	Female	63	0.44	0.50	0.934	0.353
	Male	24	0.33	0.48		
Vision Improvement	Female	63	0.42	0.49	.587	0.561
	Male	24	0.50	0.51		
Competency	Female	63	0.33	0.47	0.000	1.000
	Male	24	0.33	0.48		

*p< .05

There was a significant difference between the gender of elementary teachers and the cultural competencies concerning going to cinema ($t(87) = 2.011, p < .05$), reading book ($t(87) = 2.075, p < .05$) and doing extracurricular activities ($t(87) = 2.102, p < .05$). The female teachers have higher average than males in these three properties. There was no significant difference in other activities; sport certifications, museum visits, musical instruments, theater, concerts and individual interests.

Table 4. The result of t-test between cultural competencies and their graduated bachelor school.

	Graduated School	N	$\bar{X}$	S	t	p
Certificate for Sport	Sci-Lit Fac	60	0.26	0.44	0.072	0.943
	Education Faculty	27	0.25	0.44		
Music Instrument	Sci-Lit Fac	60	0.38	0.49	1.476	0.144
	Education Faculty	27	0.22	0.42		
Application on class	Sci-Lit Fac	60	0.21	0.41	1.635	0.106
	Education Faculty	27	0.07	0.26		



Individual Interest	Sci-Lit Fac	60	0.68	0.46		
	Education	27	0.70	0.46	.188	0.851
	Faculty					
Museum Visit	Sci-Lit Fac	60	0.65	0.48		
	Education	27	0.44	0.50	1.779	0.082
	Faculty					
Cinema	Sci-Lit Fac	60	0.73	0.44		
	Education	27	0.74	0.44	.072	0.943
	Faculty					
Theater	Sci-Lit Fac	60	0.35	0.48		
	Education	27	0.37	0.49	.180	0.858
	Faculty					
Concert	Sci-Lit Fac	60	0.40	0.49		
	Education	27	0.55	0.50	1.336	0.188
	Faculty					
Book	Sci-Lit Fac	60	0.80	0.40		
	Education	27	0.92	0.26	1.480	0.142
	Faculty					
Extracurricular Activities	Sci-Lit Fac	60	0.58	0.49		
	Education	27	0.62	0.49	.405	0.687
	Faculty					
Social Club	Sci-Lit Fac	60	0.41	0.49		
	Education	27	0.51	0.50	.869	0.389
	Faculty					
Cultural trip	Sci-Lit Fac	60	0.36	0.48		
	Education	27	0.51	0.50	1.305	0.198
	Faculty					
Vision Improvement	Sci-Lit Fac	60	0.33	0.47		
	Education	27	0.70	0.46	3.412	0.001*
	Faculty					
Competency	Sci-Lit Fac	60	0.35	0.48		
	Education	27	0.29	0.46	0.493	0.624
	Faculty					

*p< .05

Depending on the t-test results between cultural competencies and graduated bachelor school of participants, which was shown on Table 4, there was no significant difference between the participants graduated from education faculty and faculty of science and literature, but there was a significant difference ($t(87) = 3.412, p < .05$) between participants graduated from faculty of science and literature and education faculty as to their bachelor education's improvising to their vision.

Table 5. The variance analysis results of cultural competencies depending on professional experience of participants.

		<i>KT</i>	<i>Sd</i>	<i>KO</i>	<i>F</i>	<i>p</i>
Certificate for sport	Between groups	1.797	6	.300	1.584	.162
	Intra-group	15.122	80	.189		
	Total	16.920	86			
Music Instrument	Between groups	2.417	6	.403	1.905	.090
	Intra-group	16.917	80	.211		
	Total	19.333	86			
Application in the class	Between groups	.950	6	.158	1.105	.367
	Intra-group	11.463	80	.143		
	Total	12.414	86			
	Between groups	.776	6	.129	.580	.745



Individual interest	Intra-group	17.845	80	.223		
	Total	18.621	86			
	Between groups	.856	6	.143	.564	.758
Museum Visit	Intra-group	20.247	80	.253		
	Total	21.103	86			
	Between groups	2.608	6	.435	2.429	.033*
Cinema	Intra-group	14.312	80	.179		
	Total	16.920	86			
	Between groups	1.143	6	.191	.810	.565
Theater	Intra-group	18.811	80	.235		
	Total	19.954	86			
	Between groups	2.832	6	.472	2.021	.072
Concert	Intra-group	18.686	80	.234		
	Total	21.517	86			
	Between groups	.613	6	.102	.734	.623
Book	Intra-group	11.134	80	.139		
	Total	11.747	86			
	Between groups	.214	6	.036	.138	.991
Extracurricular Activities	Intra-group	20.706	80	.259		
	Total	20.920	86			
	Between groups	2.180	6	.363	1.503	.188
Social Club	Intra-group	19.337	80	.242		
	Total	21.517	86			
	Between groups	2.186	6	.364	1.540	.176
Cultural trip	Intra-group	18.918	80	.236		
	Total	21.103	86			
	Between groups	3.680	6	.613	2.751	.018*
Vision Improvement	Intra-group	17.837	80	.223		
	Total	21.517	86			
	Between groups	.692	6	.115	.495	.810
Competency	Intra-group	18.641	80	.233		
	Total	19.333	86			

There was no difference between the cultural competencies and the professional experience (0-5 years, 6-11 years, 12-17 years and 18-22 years, 22-) as shown in table 5. The significant differences ($F(6, 80) = 2.751, p < .05$) were obtained in the case of vision improvement and going to cinema related with their professional experience. As result of post-hoc test, the young teachers (0-5 years) believed that education faculties provided their vision improvement and they were going to cinema more than others.

Table 6. The variance analysis results of cultural competencies depending on bachelor, master, and doctorate education level of participants.

		<i>KT</i>	<i>Sd</i>	<i>KO</i>	<i>F</i>	<i>p</i>
Certificate for sport	Between groups	.102	3	.034	.168	.918
	Intra-group	16.817	83	.203		
	Total	16.920	86			
Music Instrument	Between groups	.466	3	.155	.684	.565
	Intra-group	18.867	83	.227		
	Total	19.333	86			
Application in the class	Between groups	.442	3	.147	1.022	.387
	Intra-group	11.971	83	.144		
	Total	12.414	86			



	Between groups	.106	3	.035	.159	.924
Individual interest	Intra-group	18.514	83	.223		
	Total	18.621	86			
Museum Visit	Between groups	1.527	3	.509	2.158	.099
	Intra-group	19.577	83	.236		
	Total	21.103	86			
Cinema	Between groups	1.740	3	.580	3.170	.029*
	Intra-group	15.180	83	.183		
	Total	16.920	86			
Theater	Between groups	1.052	3	.351	1.540	.210
	Intra-group	18.902	83	.228		
	Total	19.954	86			
Concert	Between groups	1.150	3	.383	1.562	.205
	Intra-group	20.367	83	.245		
	Total	21.517	86			
Book	Between groups	.445	3	.148	1.089	.358
	Intra-group	11.302	83	.136		
	Total	11.747	86			
Extracurricular Activities	Between groups	.769	3	.256	1.056	.372
	Intra-group	20.151	83	.243		
	Total	20.920	86			
Social Club	Between groups	1.278	3	.426	1.748	.164
	Intra-group	20.239	83	.244		
	Total	21.517	86			
Cultural trip	Between groups	.914	3	.305	1.252	.296
	Intra-group	20.190	83	.243		
	Total	21.103	86			
Vision Improvement	Between groups	1.278	3	.426	1.748	.164
	Intra-group	20.239	83	.244		
	Total	21.517	86			
Competency	Between groups	.610	3	.203	.901	.444
	Intra-group	18.724	83	.226		
	Total	19.333	86			

According to table 6, there was no significant difference between education level (bachelor, master, and doctorate) and the cultural competencies of participants. There was only significant ($F(3, 83) = 3.170, p < .05$) difference between education level (bachelor, master, doctorate) and going to cinema. The teachers having master and doctorate degree were going to cinema more than the others.

Table 7. The variance analysis results of cultural competencies depending on mother's education level of participants.

		<i>KT</i>	<i>Sd</i>	<i>KO</i>	<i>F</i>	<i>p</i>
Certificate for sport	Between groups	1.252	5	.250	1.295	.274
	Intra-group	15.667	81	.193		
	Total	16.920	86			
Music Instrument	Between groups	.805	5	.161	.704	.622
	Intra-group	18.529	81	.229		
	Total	19.333	86			
Application in the class	Between groups	.308	5	.062	.412	.839
	Intra-group	12.106	81	.149		
	Total	12.414	86			



Individual interest	Between groups	.498	5	.100	.446	.815
	Intra-group	18.122	81	.224		
	Total	18.621	86			
Museum Visit	Between groups	2.872	5	.574	2.552	.034*
	Intra-group	18.231	81	.225		
	Total	21.103	86			
Cinema	Between groups	2.564	5	.513	2.893	.019*
	Intra-group	14.356	81	.177		
	Total	16.920	86			
Theater	Between groups	1.615	5	.323	1.427	.223
	Intra-group	18.339	81	.226		
	Total	19.954	86			
Concert	Between groups	2.562	5	.512	2.189	.063
	Intra-group	18.956	81	.234		
	Total	21.517	86			
Book	Between groups	1.244	5	.249	1.919	.100
	Intra-group	10.503	81	.130		
	Total	11.747	86			
Extracurricular Activities	Between groups	2.493	5	.499	2.191	.063
	Intra-group	18.427	81	.227		
	Total	20.920	86			
Social Club	Between groups	.231	5	.046	.176	.971
	Intra-group	21.287	81	.263		
	Total	21.517	86			
Cultural trip	Between groups	1.081	5	.216	.875	.502
	Intra-group	20.022	81	.247		
	Total	21.103	86			
Vision Improvement	Between groups	1.350	5	.270	1.084	.375
	Intra-group	20.167	81	.249		
	Total	21.517	86			
Competency	Between groups	.323	5	.065	.275	.925
	Intra-group	19.010	81	.235		
	Total	19.333	86			

Table 7 shows the significant difference between the mother's education level and teachers museum visit ($F(5, 81) = 2.552, p < .05$) and going cinema ($F(5, 81) = 2.893, p < .05$). When the mother's education level is increasing from primary school, secondary school, and to the university degree, the number of teachers attending the cinema and museum was increasing. There was no significant difference between mother's education level and sport certificate, playing music instrument, theater, extracurricular activities, concert and individual interest of primary teachers.

Table 8. The variance analysis results of cultural competencies depending on father's education level of participants

		<i>KT</i>	<i>Sd</i>	<i>KO</i>	<i>F</i>	<i>p</i>
Certificate for sport	Between groups	.725	4	.181	.917	.458
	Intra-group	16.195	82	.197		
	Total	16.920	86			
Music Instrument	Between groups	.400	4	.100	.434	.784
	Intra-group	18.933	82	.231		
	Total	19.333	86			
Application in the class	Between groups	.512	4	.128	.881	.479



	Intra-group	11.902	82	.145		
	Total	12.414	86			
Individual interest	Between groups	.290	4	.072	.324	.861
	Intra-group	18.331	82	.224		
	Total	18.621	86			
	Between groups	2.063	4	.516	2.221	.074
Museum Visit	Intra-group	19.040	82	.232		
	Total	21.103	86			
	Between groups	.378	4	.095	.469	.758
Cinema	Intra-group	16.541	82	.202		
	Total	16.920	86			
	Between groups	.614	4	.153	.651	.628
Theater	Intra-group	19.340	82	.236		
	Total	19.954	86			
	Between groups	1.078	4	.270	1.082	.371
Concert	Intra-group	20.439	82	.249		
	Total	21.517	86			
Book	Between groups	.169	4	.042	.299	.878
	Intra-group	11.578	82	.141		
	Total	11.747	86			
Extracurricular Activities	Between groups	1.208	4	.302	1.256	.294
	Intra-group	19.712	82	.240		
	Total	20.920	86			
	Between groups	1.178	4	.295	1.188	.322
Social Club	Intra-group	20.339	82	.248		
	Total	21.517	86			
	Between groups	.826	4	.207	.835	.507
Cultural trip	Intra-group	20.277	82	.247		
	Total	21.103	86			
	Between groups	.047	4	.012	.045	.996
Vision Improvement	Intra-group	21.470	82	.262		
	Total	21.517	86			
	Between groups	.779	4	.195	.861	.491
Competency	Intra-group	18.554	82	.226		
	Total	19.333	86			

There was no significant difference between father's education level and the cultural competencies of participants as shown in Table 8.

Qualitative results

In this section, the research concerns as the reasons of inadequate cultural competencies, why teachers were finding themselves inadequate and the requirements to improve their cultural competencies were tried to be answered.

Table 9. The reasons of inadequate cultural competencies

Quantitative results	Individual reasons	Socio-cultural	Education System
64 (73.6%) participants had no certificates of any sports	3-I attended a course but receiving a certificate was not my aim, I had no interest in any kind of sports	8.My family does not have enough financial power 11.Nobody motivated me 18.There was no sport club	33.Unfinished exams 57. No opportunities in the schools, We



		27-I wanted but my age was too old to start any branch of sports, I had health problems		had no ball to play with
58 participants	(66.7%) couldn't play any instruments	12 There was no time, 18.I couldn't be successful 54.I have no ability	8: I had no money to buy any instrument 26: I should have started at an early age We weren't discovered	52. There was no support during the university education period
27 participants	(31%) weren't related with dancing, ceramic, theatre, photography, chess, local arts.	I am not talented, it never interested me. I feel like now it is too late. I think of practicing photography and such. My partner really wants to learn dancing so we might start folk dancing.	These things require money, we are paying mortgage, it is hard to buy these supplies on one salary, I wanted to play chess a lot but no one has taught me	We were not familiar with anybody practicing these stuff around us, and nobody guided us. We had to finish School first, there was family pressure about it. I wanted to play chess a lot but noone has taught me.
30 participants	(41.4%) didn't go to any museum.	I do not like it, I get bored in a museum when I do not have the knowledge. I cannot find time I do not have the habit	Our teachers organized trips to other cities but I could not attend We had no money Some of its entrance fee is expensive I work at a private course in the weekends	Our teachers didn't take us to there much either There was no museum in where I grow up, The legal procedure to take kids to museum is too much like permission, transportation, Controlling student in museums is quite tiring
48 participants	(55.2%) didn't attend any social club or cultural activities during bachelor education.	I am not quiet social. I was involved as much as my own means let me.	I have studied in a period when a lot of student upheavals were happening, the clubs were not active in our university Because I studied outside of city Faculty was away from the campus	Our School was not that successful about clubs We didn't have a multidirectional education system I didn't study in a University that was very active There was not such activities in our schools Our School wasn't equipped properly, they didn't encourage the students



48 (%55) participants didn't go concert.	<i>I cannot find time.</i>	<i>Costs are high, It is hard for us to go by family Returning to our residence is not easy at nights</i>	
23 (%26.4) participants didn't go to cinema.	<i>I do not have the habit. Theatre is a culture and unfortunately I don't have it</i>	<i>We have to pay a rather high cost to afford it if we go by family</i>	<i>We could not attain the habit because we were constantly studying for exams</i>
56 (%64.4) participants didn't go to theatre.	<i>My partner doesn't like it and it affects me too I don't have the time to read I like Turkish movies and subtitles are tiring</i>	<i>I work at an extra job, I don't have the time Our house is located far away from these facilities Books are very expensive</i>	
14 (%16.1) participants didn't read any books.	<i>I watch dubbed version on TV</i>	<i>I watch movies online</i>	
58 (%66.7) participants didn't find themselves adequate about cultural competencies	<i>11: Because I believe one has to be more equipped 67: I have to contribute myself a lot more things, I believe teachers have to be competent in every field, 55: I'm not equipped about this subject, because I didn't train myself properly in schools....</i>	<i>81: Children from high-income group can get education on many subjects, as you look into lower classes impossibilities (financial-moral) come to existence</i>	<i>55: Because I couldn't raise myself sufficiently and schools are also unsuccessful (in training students and education) 75: Faculty of education is not adequate for artistic and cultural activities, I consider myself not educated sufficiently, I wasn't educated about these competencies in university</i>
Their requirements	<i>12: To be guided at an early age for these activities 24: To be certificated to improve oneself culturally and be beneficial to students Swimming, tennis courses to be initiated 15: No exam stress 9: To have the time</i>	<i>12: For schools to have more opportunities 13: To have money 24: To have the sports facilities</i>	<i>51: To be guided toward sports or arts in high school or in university 9: To be active in these activities instead of living focused to school</i>

Conclusion

The teacher competencies related with the cultural properties like concert, cinema, art, music , reading skills are reflecting students cultural development were grounded from family structure , social structure, and education system. All the results will be discussed in the light of literature. The fact that the teachers participating in this research were graduated from faculty of science and literature or faculty of education did not make a significant difference in terms of cultural competences. Teachers with only 0 to 5 years of experience emphasized that faculty of education has contributed expanding their vision. When cultural competencies by gender is analyzed, it can be



seen that there has been a significant difference in favor of women only for going to the movies, reading, and extracurricular activities. When we look into reading habits of teachers, %16.1 percent of participants ($f=14$) indicated that they didn't read any books, 73 of them (%83.9) read one or more book in a year and also female teachers were reading more than male teachers. While Batur, Gulveren & Bek (2013) found the reading capacity of teacher candidates to be not adequate, and they ascertained that women also read more books than men among teacher candidates. Aslanturk & Saracaloglu (2011) found that reading habits of pre-service teachers was at intermediate level. Therefore, similar results were obtained in class teachers as the case here. The results obtained are thought-provoking in terms of representing a model to form reading habits in students by the teacher (Myette, 2006; Baccus, 2004). When attitudes of teachers towards visiting museums are analyzed, it has been determined that participant go to museums ($n=51$); however, they happen to be rather unsuccessful in taking students to museums. The reason for this has been implied as the intense procedure to get the necessary permissions, and the difficulty to keep the students in control. The education in museums, the stimulating function of museum materials, in addition to coincide with behavioral approach theory in terms of draw attention of the visitors, respond to cognitive enhancement approach in terms of providing an active exchange among student and the surrounding, to the theory of multiple intelligences as it enables learning for many types of intelligence, to exploratory learning approach, which enables learning through inactive, iconic and symbolic designs as in the science museums (Cited: Onur, 2012). The understanding that museum visits are early acquired behaviors (Bourdieu & Passeron, 1964) has also been discovered in this study While the occupational experience, gender, age, postgraduate education, the attendance to faculty of science and literature or to faculty of education of teachers do not influence the frequency of Museum visits, it has been found out that as the education level of the mother increased the ratio for teachers to visit museums also escalated. Likewise, as the education level of the mother increased the ratio of going to the movies also escalated. The habit of going to the cinema has been found to be at a higher rate within the participants continuing their undergraduate, masters, and doctorate education, and in young teacher with 0 to 5 years of professional experience. When we examined the music competencies of the teachers participating in this research, it was determined that fifty-eight of the teachers did not play any musical instruments and forty-two teachers did not go to any concerts within a year. They stated their reasons as lack of time, being untalented, and lack of support. It has been implied that seventy-two teachers do not use any skill about music during their lessons. Teachers who cannot be educated to be qualified with the required qualities for various reasons in the education programs in which they are graduated from either do not include music lessons to their teaching schedule at all or teach music class on in accordance with their own understanding, outside of the purposes and principles of the program in the schools they work. In order for classroom teachers to become qualified on music education and training, it is necessary to increase the number of class hours, to organize seminars about the programs and courses for instrumental/vocal education (Kucukoncu, 2007). When competencies of classroom teachers in the field of sports are examined, it is determined that sixty-four teachers did not hold any documents like certificates showing any sports competencies. The fact that participants thought that they were not guided to the sports at an early age demonstrates that our consciousness about playing sports as a society is also not sufficient. Sports are significant for psychological and social development as well as physical development. We must also be aware that in children growing up with sports, self-confidence formation, teamwork, and competence of taking responsibility also improve. Looking into the undergraduate program of classroom teaching, it can be seen that Physical Education class in the second year is four hours and Physical Education and Game Teaching in the third year's spring semester is 2 hours a week. Teachers have expressed its reasons, the fact that they did not have the ability and their schools or university's lack of facilities with such statements as "there were no balls in School", "clubs were insufficient", and "the faculty was located far from the main campus". Similarly, as sixty teachers were interested in one of the activities such as chess, ceramics, marbling, photography, theater, dance, twenty-four of these teachers used these proficiencies during their lessons. Furthermore, studying the rate of participation to University social club activities throughout their bachelor education, it was determined that forty-eight teachers did not attend any social club activities during their undergraduate education. The reasons behind this were predicated to be socio-economic and efficiencies of universities with such statements as 'I have studied in a period when a lot of student upheavals were happening, the clubs were not active in our university'. Necessity of art classes in faculty of education, demand to



increase elective courses, insufficiency of University club activities reveal that the auxiliary budget should be reserved by university administration for these kinds of trainings. Moreover, it put forth that social support of local authorities, in which the University is located, has importance.

The most significant cause for teachers to feel incompetent is their low self-efficiency believes. When we look into the reasons for not being able to improve their cultural competencies generally, participants stated the facts that they feel like they are too late, they do not trust themselves about their abilities, they do not have the time or they just are not interested in. Socio-economic reasons; on the other hand, were stated as the education level of the family, not having the financial possibility throughout their education life and not having the opportunities in the place lived in. When taking part in the profession, again the same phase of financial possibility inadequacy comes into prominence. For example, “I’m paying for home mortgage, I cannot afford to buy required supplies with single salary, and I work as a course teacher at weekends.” Analyzing its affects in terms of education system, the causes coming to forefront are the examinations in their student lives, not being guided by their teachers efficiently, financial and social impossibilities. Herein, again the effects of the economic capital, social capital, and cultural capital come forward (Cited; Yücel et al.; 2013, Bourdieu and Passeron, 1970, Wacquant, 2007). Gelbal (2008) attained such findings that success has increased with increasing opportunities at home, the level of mother’s education has had a significant effect on success and, success decreased with the increase in number of siblings one had. Despite these results, the fact that there were teachers improving their competencies throughout their undergraduate education with claims as “I have attended many activities owing to school’s central Location.”, “It contributed watching theatre plays and reading books” depicts that undergoing circumstances can be altered as long as teachers are willing to improve themselves in fields like sports and arts. Training teachers with high self-efficiency culturally and thus becoming a positive model for their students in increasing self-efficiency (Bandura, 1982) will bring solutions to statements of teachers processed in this research as “I wanted to play chess very much but no one has taught me”, “There were not anyone to guide me sufficiently”, “Our talents were not discovered”, “There were no one around us that practiced these”. Influence of sports competencies of learning environments on improving academic success and attitudes of student conducted in this survey is also significant in terms of questioning equipment of education faculties (Fraser, 1998 Despite the detailed and complex nature of this research, and its underwhelming results obtained, I have abiding belief that when we train qualified teachers, we will be able to train qualified students (Bourdieu & Passeron, 1964). As Mellou indicated (1996), young children’s creativity can be nurtured through educational settings in three respects: creative environment, creative programs, and creative teachers and ways of teaching.

Recommendations

For primarily improving cultural competencies of teachers, it is advised for universities to increase the number of sports, arts and culture classes in the educational program especially for preschool and classroom teacher candidates (education at museums, crafts, etc.), diversification of elective courses or to ensure to be certificated on sports, arts and culture, infrastructure and social opportunities of university administration of education faculties (provision of supplementary budget for equipment, classroom, lecturer recruitment, cultural trips, and such activities), to provide economic support to social clubs. It is suggested to initiate certification programs by cooperating with universities, especially with the ones that have fine arts faculty, and for universities to show support on site and costs, as with the city theatres of local authorities, on behalf of teachers who are active in the profession. It is recommended for school administrators to support classroom teachers in conveying teachings through using competencies to students in free activity classes.



References

- Akyol, H. (2005). *Turkish primary school writing teaching*. Ankara: Pegem A Yayıncılık
- Ari, E. & Demir, M.K. (2013). Evaluation of reading habits of elementary school teacher candidates, *Journal of Language*, 1(1), 116-128.
- Arıcı, A.F. (2005). *Reading status of primary education second grades students*, Dissertation doctorate thesis, Erzurum, Ataturk University
- Arnon, S. & Reichel, N. (2007). Who is the ideal teacher? Am I? Similarity and difference in perception of students of education regarding the qualities of a good teacher and of their own qualities as teachers. *Teachers and Teaching*, 13(5), 441-464. doi:<http://dx.doi.org/10.1080/13540600701561653>
- Aslanturk, E. & Saracoglu, A. S. (2011). Comparison of the classroom teachers and the candidate classroom teachers' reading interests and reading habits. *Anatolian University Journal of Social Sciences*, 11(1), 155-176.
- Baccus, A.A. (2004). *Urban Fourth and Fifth Grade Teachers' Reading Attitudes And Efficacy Beliefs: Relationships To Reading Instruction And To Students' Reading Attitudes And Efficacy Beliefs*. United States: Degree of Doctor of Philosophy.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist*, 37(2), 122.
- Barnett, W.S. (2003). Better Teachers, Better Preschools: Student Achievement Linked to Teacher Qualifications, *Preschool Policy Matters*, 2. New Brunswick, NJ: NIEER.
- Batur, Z., Gulveren, H., Bek, H. (2010). A research on reading habits of teacher: Sample of Usak Education Faculty, *Usak University Social Science Journal*, 3(1), 32-50. Retrieved from <http://dergipark.ulakbim.gov.tr/usaksosbil/article/view/5000035935/5000034857> on May 2016.
- Benevides, T.L. (2006). *Personel reading habits and literacy instruction in pre-service teachers*. Canada: Nipissing University.
- Beydogan, H. O., & Sirinkan, A. (1998). Physical education sports need and satisfaction level in primary education 1st Sport congress, Ataturk Education Faculty, Erzurum.
- Bourdieu, Pierre & Passeron, Jean-Claude (1964). *Leshéritiers [The heirs]*. Paris: Editions de Minuit.p.31,37,38
- Bourdieu, Pierre & Passeron, Jean-Claude (1970). *La reproduction (the reproduction)*. Paris: Editions de Minuit.
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual review of psychology*, 53(1), 371-399.
- Creswell J.W. & Plano Clark V.L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Cunningham, A. E., & Stanovich, K. E. (1998). The impact of print exposure on word recognition.
- Ilhan, Ç., A. (2003). Elementary Teacher training programs and Art Education. Gazi education Faculty Journal, 36(1-2), 13-24.
- Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, 8(1). doi: <http://dx.doi.org/10.14507/epaa.v8n1.2000>
- Demiral, H., Baydar, F. & Gonen, I. (2010). Opinions of pre-service teachers about classroom teacher special field qualifications, 9th National elementary teacher symposium. 20-22 May 2010. Elazığ Firat University
- Demirci Katırcı, M. (2003). How arts education should be. *National Education Journal*, 16.
- European Commission [EC]. (2013). Supporting teaching competence development. *Education and Training*. Retrieved from http://ec.europa.eu/education/school-education/teacher-cluster_en.htm on 9 May 2017
- Feltz, D. L., & Chase, M. A. (1998). The measurement of self-efficacy and confidence in sport. *Advances in sport and exercise psychology measurement*, 65-80.
- Fraser, B. J. (1998). Classroom environment instruments: Development, validity and applications. *Learning Environments Research*, 1(1), 7-34. Retrieved from <https://link.springer.com/content/pdf/10.1023%2FA%3A1009932514731.pdf> on July 2016
- Gelbal, S. (2008). Gelbal, S. (2008). The effect of socio-economic status of eighth grade students on their achievement in Turkish. *Education and Science*, 33(150), 1-13. Retrieved from <http://eb.ted.org.tr/index.php/EB/article/view/626/96> on October 2016.



- Gozutok, F. D. (1995). *Democratic Attitudes of Teachers*, Ankara: Ekin Press
- Gunduz, M. (2014). *Primary school students' thoughts about efficient teacher* *Yeni Yuzyıl University Education Faculty Journal*, 11(1), 114-128. Retrieved from <http://dergipark.ulakbim.gov.tr/yyuefd/article/view/5000121330/5000111860> on May 2016.
- Gurkan, T. (1993). *The relationship between self-concept with teacher attitudes of primary school teachers*. Ankara: Sevinc Press
- Holt, R. R. (1964). Imagery: The return of the ostracized. *American Psychologist*, 19(4), 254-264. doi:10.1037/h0046316
- Ipek, C., & Bayraktar, C. (2009). Preservice classroom teachers' attitude and self-efficacy towards physical education course. *Ahi Evran University Education Faculty Press*, 10(2), 67-84.
- Jennings, J. L., & DiPrete, T. A. (2010). Teacher effects physical and behavioral skills in early elementary school. *Sociology of Education*, 83(2), 135-159. doi: 10.1177/0038040710368011
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational psychologist*, 31(3-4), 191-206. doi: 10.1080/00461520.1996.9653266.
- Korthagen, F. A. (2004) In search of the essence of good teacher: towards a more holistic approach in teacher education, *Teaching and Teacher Education*, 201, 77–97. doi: <https://doi.org/10.1016/j.tate.2003.10.002>
- Kucukoncu, Y. (2007). *Music Education*. Ankara: Ilke Press
- Lamm, T. (2000). *In the ideological whirlpool: education in the twentieth century*. Jerusalem: Magnes.
- Leppänen, U., Aunola, K., & Nurmi, J. E. (2005). Beginning readers' reading performance and reading habits. *Journal of Research in Reading*, 28(4), 383-399. doi: 10.1111/j.1467-9817.2005.00281.x
- Mellou, E. (1996). Can creativity be nurtured in young children?. *Early child development and care*, 119(1), 119-130.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage Publications
- Ministry of National Education (MoNE). (2008). *Teacher competencies- General and specific field competencies*, Ankara. Retrieved from <http://otmg.meb.gov.tr> on 1 March 2015.
- Model Core Teaching Standards [MCTS], (2012). Key Themes,p.6. Retrieved from <http://www.hanoverresearch.com/wp-content/uploads/2012/12/Hanover-Research-Teacher-Professional-Development-for-Common-Core-Standards-Transition.pdf> on May 2016.
- Myette, S. (2006). *Finding a Great Read: Book Selection Strategies for Sixth Grade Silent Reading* (Doctoral dissertation, Pacific Lutheran University).
- The Organization for Economic Co-operation and Development [OECD], (2012). *PISA in focus 18: Are students more engaged when schools offer extracurricular activities?* Paris: OECD. Retrieved from <https://www.oecd.org/edu/pisa%20in%20focus%20n18%20%28eng%29--v05.pdf> on 8 August 2015.
- The Organization for Economic Co-operation and Development [OECD], (2009). *Creating Effective Teaching and Learning Environments. First Results from TALIS*. OECD Publications, Paris. Retrieved from <http://www.oecd.org/dataoecd/17.51.43023606.pdf> on 8 august 2014.
- The Organization for Economic Co-operation and Development [OECD], (2011). *Preparing teachers and developing school leaders for 21st century – lessons from around the world* (Background Report for the International Summit on the Teaching Profession). Retrieved from <http://www.oecd.org> on 5 May 2015.
- Onur,B. (2012). *Contemporary Museum Education and Development*. Ankara: Imge Press.
- Ozdemir, E. (1997). *Critical Reading*. Ankara: Umit Press.
- Pehlivan, Z., Donmez, B. & Yasat, H. (2005). Elementary teachers' views on physical education. *Gazi Physical education and Sport Sciences Journal*,3, 51-62.
- Smith, F. (1995). Let's declare education a disaster and get on with our lives. *Phi Delta Kappan*, 76(8), 584.
- Smith J. P. (1999). Healthy bodies and thick wallets: the dual relation between health and economic status. *J. Econ. Perspect.* 13(2), 144–166.Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3697076/pdf/nihms461647.pdf> on August 2016
- Sousa, D. A. (2009). How the arts develop the young brain: Neuroscience research is revealing the impressive impact of arts instruction on students' cognitive, social, and emotional development. *School Administrator*.



- Retrieved from <http://www.novatocharterschool.org/wp-content/uploads/How-the-Arts-Develop-the-Young-Brain.pdf> on 5 April 2015
- Sirinkan, A. ve Gundogdu, K. (2011). Perceptions of Teachers about Physical Education and Sport Course Curriculum and Plans for Primary Education. *Elementary Education Online*, 10(1), 144-159. Retrieved from <http://dergipark.ulakbim.gov.tr/ilkonline/article/viewFile/5000037988/5000036846> on 8 March 2016
- Tas, M. A. (2004). Determination of education standards for social science teacher education. *Journal of the Faculty of Educational Sciences*, 37(1), 28-51.
- The Arts and Human Development (2011). *The arts and human development: learning across the lifespan," a convening by the national endowment for the arts in partnership with the USA*. Department of Health and Human Services, March 14, 2011, Washington, DC. Retrieved from <https://www.arts.gov/sites/default/files/TheArtsAndHumanDev.pdf>.
- Tramo, M. J. (2001). Music of the hemispheres. *Science*, 291(5501), 54-56. doi: 10.1126/science.10.1126/SCIENCE.1056899
- Türk Dil Kurumu [TDK] (2011). *Contemporary Turkish Dictionary*. Retrieved from <http://www.tdk.gov.tr> on 2 January 2015.
- Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children*, 23(3), 34-41, p.86
- Wacquant, L. (2007). Territorial stigmatization in the age of advanced marginality. *Thesis Eleven*, 91(1), 66-77.
- White, K. R. (1982). The relation between socioeconomic status and academic achievement. *Psychological Bulletin*, 91(3), 461-481. doi: 10.1037/0033-2909.91.3.461
- Williams, D. R., & Collins, C. (1995). US socioeconomic and racial differences in health: patterns and explanations. *Annual review of sociology*, 21(1), 349-386.
- Wilson, A. (2007). *Northern Soul: Music, drugs and subcultural identity*. Cullompton: Willan.
- Yılmaz, Z., A. (2006). The reading habit of elementary school teacher candidates. *Elementary Education Online*, 5(1), 1-6, 2006. Retrieved from <http://ilkogretim-online.org.tr> on May 2016



Professional learning of leadership as a prerequisite for kindergarten development

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Abstract

The demands of leading an educational institution are increasingly growing and are becoming more complex. Nevertheless, preparation for leadership, either at the initial level of education or professional training, is still largely at an inadequate level in the Republic of Croatia. It is often reduced to personal experience of the educational staff, i.e. to *ad hoc* dealings with complex managerial challenges. In this paper we discuss the most common forms of professional learning about leadership and its disadvantages, as well as the possibilities of conceptualizing the conditions for better professional learning of leadership. These include encouraging the culture of learning at the institution itself, which involves a large number of subjects, not just the principal. In particular, we highlight the value of professional learning of leadership at the institution itself, and this includes professional expertise of the employees and it is incorporated into the day-to-day practices of the institution that relies on the power of the group of other employees. Such forms of leadership learning take into account different structures and institutional contexts of the institution, as well as the value of employee co-operation. In this paper we present the action research we undertook in a number of kindergartens. Action research is a specific type of empirical research that is carried out with immediate pedagogical action. This is a scientifically based change of the pedagogical process in which the main organizers and creators of this process appear simultaneously as researchers. In that sense, it was based on the connection and collaboration between the members of the academic community and practitioners as equal partners. The aim of this research was to become acquainted with and to improve the quality of leadership in the real context of the institution, which means that the research and the learning opportunities of leadership that grew out of this research were highly personalized. In this regard, employees were enabled to experience the research of the quality of their own leadership in the real context of the institution and the integration of various skills required for continuous questioning and (self)evaluation. The results of this research are noticeable in acquiring new knowledge and improving the management process in kindergartens involved in the research. At the same time, the results could also represent the basis for redesigning the program of professional learning of leadership by competent institutions. In that sense, the kindergarten could become a learning center for better practice and quality leadership, through formalization of the approach that has been developed through its own practice.

Keywords: action research, learning culture, leadership, kindergarten

Introduction

Although the demands of leadership in an educational institution are becoming increasingly complex, leadership preparation, either at the initial level of education or vocational training, is still inadequate (Hujala et al., 2013). This preparation for leadership is often reduced to the personal experience of working in an institution without a proper foundation in modern theory and research practice. Leadership skills are self-implied, which is the result of the misguided belief that leadership is taught “along the way.” Therefore, there is a growing need for adequate vocational guidance for leadership, i.e. the formation of a “new generation of leaders,” which is a major challenge for the relevant structures of the educational system. Most countries recognize that this issue implies the need for a deep-rooted change of these structures and a reconsideration of the program of initial training and permanent learning about leading educational institutions. Although terms such as “training” and “development” are used in the context of the professionalization of leadership roles⁴, Anderson and Cawsey (2008) prefer the term “learning” when it comes to institutional leadership. This is explained by the fact that it covers a wider spectrum of formal and informal activities than those previously mentioned.

In educational institutions, leadership is a multi-dimensional and multi-faceted concept, strongly determined by the features of the institution itself, but also by the leader’s values, goals, beliefs, and skills. All this needs to be taken into account when shaping the concept of professional learning about leadership. Typical forms of ineffective leadership learning are, according to O'Brien (2007), one-off workshops held outside the institution, as well as all other courses developed around the idea of separating learning from the workplace and the

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⁴ The principal and other leadership personnel within the kindergarten are considered as leaders.



immediate experience gained from it, especially those that are organized as one-time encounters. Instead, the aforementioned author apostrophes the value of leadership learning in the workplace, i.e. learning through experience and professional expertise of leaders, which permeates everyday practice.

Contemporary conceptions of leadership, which include dealing with situations of uncertainty and ambiguity, contradictions and paradoxes (Duignan, Anderson and Cawsey, 2008) require such approaches to professional learning which would prepare them for dealing with uncertainties, ambiguities, and contradictions. For these reasons, the content and methods of contemporary professional learning of leadership differ significantly from the outdated ones, which are often reduced to the consumption of executable leadership programs. Good quality leadership training programs should take into account the different structures and institutional context of the institution, values of cooperation (Davis et al., 2005), and specific (existing) skills of leaders. This requires the connection and co-operation between various professional associations, practitioners, and members of the academic community as equal partners, whose task it is to design professional leadership programs as well as to evaluate their quality.

Therefore, some of the basic characteristics of the contemporary approach to learning about leadership are to keep it in the real context of the institution and for it to be personalized. This should take place in the real context of the institution in order to enable leaders to integrate different skills and to provide the possibility of continuous discussion and (self)evaluation. The advantage of such an active way of professional learning about leadership is also to give each leader a sense of guidance and practicing leadership in an authentic, i.e. unique way. The primary advantage of such a form of learning is what happens in an environment that is familiar and relatively comfortable (MacKay 2006). This cannot be accomplished quickly, easily or through informal intervention; instead it requires long-term and systematic building of the learning culture within it.

The most popular contemporary concepts of leading an educational institution can be summed up into two main theses. The first of these, emphasized by Fullan (2010), is that leadership must be focused on creating conditions in which the value of learning equally applies both to the individual and the collective. The second, highlighted by Lambert (according to Anderson and Cawsey, 2008), stems from the idea that leadership of an educational institution is much broader than actions made by a single person, the definition of its role, and the set of individual procedures. On the contrary, it is incorporated into the community of the educational institution as a whole, which requires the common responsibility of all employees to achieve a common purpose. For this reason, the learning need for leadership refers not only to the principal but to a much larger number of employees among whom tasks, influence, and power are distributed. Leadership is not the property of a person, but is distributed throughout the organization and therefore represents a group function (Dinham, according to Anderson and Cawsey, 2008, Southworth, 2010, Yukl, 2006).

One of the most powerful strategies for learning about leadership is **action research** (Cohen et al. 2007; Somekh, 2006; Koshy, 2009), which contributes to the development of higher levels of organizational abilities through solving real problems and within the context of the institution. Quality strategies of such an understanding of learning include the development of key knowledge, specific activities, and practices that benefit the institution, i.e. ensure the development of deeper understanding and conceptual expertise of the leader. They include the development of a wider repertoire of understanding and skills related to the concepts and practice of running the institution itself as well as all other processes of leadership within it.

Method

With regards to the theses presented in the introduction, we chose action research as a methodology for simultaneous research and improvement of the educational practice, with particular emphasis on the processes of leadership as its main component. Action research is aimed at bridging the gap between theory and practice, i.e. overcoming the limitations of traditional research to influence or improve the practice (Cohen et al., 2007). This is the reason why it is always carried out in realistic situations, i.e. in the educational institution itself. This characteristic of action research coincides with the view of a number of authors (Malaguzzi 1998, Rinaldi 2006), according to whom there is only one place where effective professional development of the educational staff can take place – in the institution itself.



During action research, participants are encouraged to question, problematize, and modify their own leadership practices, to build a deeper understanding of this phenomenon, and to assume responsibility for actions geared towards developing its quality. In other words, it helps them to better understand the essence and meaning of their own activities related to leadership, i.e. to raise awareness of the values on which it is based. There is often a great discrepancy between the practitioners' proclaimed attitudes and realistic actions, i.e. between what they say and what they do (Gobo 2011). They can declaratively opt for different contemporary ideas and concepts, and in practice do something that is contrary to them. Precisely the development of research and reflexive competences allows the leaders to gradually build the quality of their leadership, and consequently new leadership theories.

Various contextual conditions of kindergartens and some special leadership skills that determine the quality of leadership were the subject of our research. Given the specific characteristics of the educational practice, namely nonlinearity, complexity, and unpredictability (Kinsler and Gamble 2001; Strozzi 2002) as well as its holistic nature, we relied on an interpretative, i.e. holistic, naturalistic, and phenomenological research approach that relies on qualitative research methods.

Holistic characteristics of the qualitative research approach enabled us to observe the whole, i.e. the interactive action of various contextual factors in the institution and some special skills of leaders who specifically define and shape the processes of leadership within it. The qualitative approach allowed us to recognize the authentic characteristics of different institutions, since each of them represents the web of a multitude of interactively linked organizational structures determined by their culture. Namely, the culture of a given kindergarten represents the framework that determines what is considered to be feasible and desirable or impossible and undesirable, which does not have to hold true in another kindergarten (Vujičić 2011). Precisely for these reasons, leadership characteristics in different kindergartens, and ultimately the quality of these processes, are very different.

In this paper, quality leadership constraints will be considered as ***contextual conditions of the kindergarten*** (room structure, social relations, organization of time, and deeper values of cultural institution) and some ***special leadership skills*** (building the vision and articulating the direction of institution development, encouraging continuous professional development of employees, the skill of mobilizing the staff's existing energy, and the skill of developing purposeful collaboration).

With this research we wanted to establish the existing quality of the process of kindergarten leadership and to gradually improve the possibilities of its development, since quality can only be changed from the inside, based on identifying the problems and solving the need for change within the institution itself (Kinsler and Gamble 2001). The aim of our research was not only to establish the existing quality of the leadership process but also to train leaders to conduct research and gradually improve the quality of leading.

For these reasons, we opted for action research, as a methodology for simultaneous research and change of the educational practice, which relies solely on the development of research and the practitioners' reflexive skills, as well on the holistic approach to improving their practice (Cohen et al 2007). Namely, "action research is a specific type of empirical research that is carried out with immediate pedagogical action. It is a scientifically based change of the pedagogical process in which the main organizers and creators of this process appear simultaneously as researchers" (Bognar and Matijević 1993, 285).

We undertook action research in two kindergartens⁵, i.e. in eight facilities, during three pedagogical years, and included their principals, members of professional teams (pedagogues and speech therapists), kindergarten teachers, and in some segments even the children. During the research, we collected the data directly, i.e. by participating in observations and discussions with the subjects of the educational process, as well as by obtaining various ethnographic records, such as photos, videos, transcripts of their conversations, and other narrative forms. We paid special attention to the collection of the research participants' discussion transcripts, which were used at all stages of the research as a basis for a joint analysis, i.e. reflections with all subjects involved in the research.

⁵ Kindergartens "Didi" near Zagreb and "Čarobna šuma" from Križevci.



During the action research we relied on the Lewin spiral model (according to Kemmis and McTaggart 1981) consisting of several cycles of planning, action, and results evaluation. Thus, we started by reviewing concrete conditions and establishing the existing state of practice with an emphasis on the quality of leadership. Based on this we made decisions in collaboration with the leaders on the general action plan. This then led to making concrete and feasible steps and jointly devised ways of tracking their effects as a basis for new planning. Each initial plan was revised in light of new information, forming the foundation of new actions. Thus, during the research, we followed and supported the advancement of different contextual conditions and some special leadership skills that influence the quality of leadership, which we will elaborate in further text.

Findings, Result and Conclusions

The initial quality of the teaching process in the kindergartens involved in our research was different, and it also differed after three years of research. However, in each of them there is an evident rise in quality, given its specific abilities and characteristics, and the different skills of the leader. In this paper, we will not describe in detail particular stages of the research, as this would exceed the given working framework. Here we will show the most important insights we have gained, for which we feel that they have more powerful implications for the quality of managing a kindergarten.

During this research we established that the quality of kindergarten leadership is greatly determined by the contextual conditions of the institution and some special skills of the leader.

a. Contextual conditions (room structure, social relations, organization of time, and deeper values of cultural institution)

During our research, we found that different contextual conditions are significantly, i.e. reciprocally correlated to the quality of leadership and that this impact can be observed in both directions. Different contextual conditions of kindergartens (and in each kindergarten individually) determine the possibilities of educational work within them in a number of ways, thereby shaping the business of the kindergarten and all its pedagogic processes in a particular way. At the same time, the way in which kindergartens and pedagogical processes are managed affects the change or retention of existing structures of kindergartens. In this respect, the prospect and quality of leadership determines the ability of leaders to understand the structure of kindergartens and their impact on the quality of practice, and to align their personal way of leading with the significance of these structures. This particularly applies to the structure of social relations and the deeper value levels of kindergartens, i.e. employees' attitudes and beliefs. The leader's failure to understand this dimension of the institutional context, i.e. the mismatch between the leader's expectations and those of the staff, i.e. their current abilities, competences and motivation, mostly results in such forms of leadership that often additionally aggravate the current condition. At the same time, understanding and appreciation of the existing situation in this part of the context is the basis for designing such forms of leadership that have a positive impact on the development perspective - both of the institution and the leadership process. Thus, we have confirmed our assumption that quality leadership is contextually defined and that access to the leaders' professional learning should be contextually diversified, i.e. personalized.

b. Special leadership skills

During our research we found that some special leadership skills strongly determine the quality of the kindergarten and other pedagogical processes in it. Each of them will be briefly described.

We were convinced that *building a vision* and *articulating the direction of institutional development* are among of the most important preconditions for successful leadership. Namely, we found that the staff is motivated to achieve those goals that are of particular importance to them. Therefore, the goal of successful leadership identifies not only those goals that are important to the institution itself but that this should be done in a manner that some employees can engage in achieving goals by identifying them as their own. Otherwise the goals of the institutions do not have a motivational value and the prospects of their achievement are greatly reduced. In this regard, as demonstrated in our research, the art of leadership is expressed through the measure in which the leader can focus on the individual and collective work of the staff, and together identify and articulate the vision in accordance with the group's goals. Of course, the perspective of these processes is also determined by the level at which the leader has an articulated vision, i.e. the level at which he understands which direction of institutional development is worthwhile. These leadership competences can be quite different, even within the same institution. What is particularly important for our research was that declarative orientations of the leader



regarding the vision and the direction of institutional development can greatly vary in relation to what they do in their practice, which can be completely different from their declared vision and direction. For this reason, during our research, special attention was directed not only at the ways in which the institution's vision of development can be enhanced, but also at strengthening the reflexive skills of the leader.

Orientation to foster continuous professional development of employees is a particularly important skill of leaders, regardless of the function which they play within the institution and at what level of hierarchy they are acting, because continuous learning is *conditio sine qua non* of the contemporary educational institution and applies to all its employees. During our research, we found that leadership aimed at encouraging professional learning of a particular employee or a certain number of employees has a lesser effect than leadership aimed at fostering a learning organization as a whole. Namely, leadership directed at fostering the learning of the entire organization leads to the creation of its stability and it significantly enhances development opportunities. We have also come to the conclusion that creating infrastructures that enable researchers to explore forms of learning has a greater potential than those that occur once or occasionally. And finally, those forms of learning that are continuous and take place in the institution itself have a more powerful potential of developing the employees' professional competence and institutional development. Such forms of professional training of employees also strengthen the common vision of kindergarten development. All three aspects of promoting professional development of employees reflect, to some extent, the motivation, preferences, and competences of leaders who decide on them. That is why we are highlighting them here as special leadership skills.

We also identified *the skill of mobilizing the staff's existing energy* as an indicator of successful institutional leadership. Namely, during this and several previous researches (Slunjski, 2011, 2015) we came to the conclusion that people cannot be changed by force, nor can they be forced to work better. Likewise, we came to realize that motivating people with rewards has a limited impact on their work, as it can only lead to short-term changes. In this regard, we focused in particular on the ways in which a leader can empower the existing inspiration of the staff as a possible driver of longer-term changes. We found that a leader can do this by empowering them through a sense of purpose, i.e. by encouraging the staff to engage in activities which they consider as meaningful. Likewise, we found that leadership is effective to the extent that it provides the staff with a sense of contribution to some improvement. Over a longer period of time we were convinced that such an approach to leadership contributes to the institution's capacity for new improvements. Finally, we noticed that a leader could mobilize the existing energy of his employees by securing a certain degree of autonomy in order for them to gain and practice the experience of (self)assessing the achieved progress. Our research has shown that leadership focused on empowering intrinsic motivation of employees directly increases the collective capacity of the institution, thus creating the foundation of sustainable change in the long run.

And finally, *the skill of developing purposeful collaboration* in the collective has proven to be particularly important for the quality of kindergartens and all processes in it. On the path to institutional development, the co-operation among people in the institution is particularly important because the interconnection and exchange of information between employees can facilitate the learning of new knowledge and the formation of productive processes. However, not every co-operation is useful for the development of an institution; in fact some forms of connecting and collaborating with the staff on institutional development may have a destructive effect. In this regard, the quality of leadership, as we were repeatedly reminded during our research, is the ability of leaders to recognize and strengthen the functioning of the team and the groups working on introducing positive changes, thereby enhancing the collective development capacity of the institution. The measure in which the leader encourages purposeful cooperation is reflected in two mutually connected forces of change: knowledge of employees about innovative ideas and practices, and the development of their common identity. We have noted that the success of leaders in encouraging these processes, i.e. the development of a collaborative culture of kindergartens, largely determines its authenticity, i.e. the consistency of its proclaimed attitudes with the actions it undertakes. We consider providing support to leaders to heighten and discourage this discrepancy as one of the most important goals of our research.

Recommendations

This research shows that the contextual conditions of the institution strongly determine the quality of leadership and are at the same time under its direct influence. We have also come to understand that the quality of leadership determines several special skills of leaders, namely, building the vision and articulating the direction of institutional development, orientation to foster continuous professional development of employees, and the art



of developing purposeful collaboration within the collective. The common characteristic of all leadership skills is that they cannot be gained through direct teaching or developed in a short period of time. On the contrary, this is a long-term process of forming the conditions and processes that will lead the leaders to acquire such skills. Also, in order to develop them it is necessary to build upon the research and reflective skills of leaders in practice so as to overcome the possible discrepancy between declarative and realized values and practices.

The perspective of these processes is also determined by the depth of the common understanding of all employees within the institution, which cannot be achieved either by one-off or individual forms of training. On the contrary, it can be achieved on the basis of the colleagues' insights and expertise, which are used to confirm success or correct what needs to be corrected, relying thereby on the very strength of the group and common learning. That is why we can conclude that the development of leadership skills in everyday practice, which has a continuous and explorative character, needs to be built for the development of the quality of leadership. Performing action research has proved to be one of the more effective strategies for developing such skills, and, on the other hand, as a possible way of building new knowledge and practice theory that are derived from practice.

References

- Anderson, M., Cawsey, C. (2008). *Learning for Leadership: Building a School of Professional Practice*. Camberwell, Victoria: ACER Press.
- Bognar, L., Matijević, M. (1993). *Didaktika*. Zagreb: Školska knjiga.
- Cohen, L., Manion, L., Morrison, K. (2007). *Metode istraživanja u obrazovanju*. Zagreb: Naklada Slap.
- Davis, S.; Darling-Hammond, L., LaPointe, M., Meyerson, D. (2005), *School Leadership Study: Developing Successful Principals*, Stanford Educational Leadership Institute, commissioned by the Wallace Foundation, Stanford, California.
- Fullan, M. (2010). *Motion leadership: The skinny on becoming change savvy*. Thousand Oaks, CA: Corwin Press.
- Hujala, E., Waniganayake, M., Rodd, J. (2013) (eds). *Researching Leadership in Early Childhood Education*. Tampere: Tampere University Press.
- Kemmis, S., McTaggart, R. (ur.) (1981). *The Action Research Planner*. Geelong, Victoria: Deakin University Press.
- Kinsler, K. & Gamble, A. M. (2001). *Reforming Schools*. London, New York: Continuum.
- Koshy, V. (2009). *Action Research for Improving Practice*. London, Thousand Oaks, New Delhi: Paul Chapman Publishing.
- MacKay, K. (2006). *Ask for a superhuman school leader? Receive a succession crisis*, Teacher, issue 168, April, pp. 48–49.
- Malaguzzi, L. (1998). *History, Ideas, and Basic Philosophy – An Interview with Lella Gandini*. In: Edwards, C. P., Gandini, L., Forman, G. (eds.). *The Hundred Languages of Children - The Reggio Emilia Approach, Advanced Reflections*. London: Ablex Publishing Corporation, 49-97.
- O' Brien, W. (2002). *Zašto se gnjaviti?*. U: Senge i dr. (ur.), *Peta disciplina u praksi- strategije i alati za gradnju učeće organizacije*. Zagreb: Mozaik knjiga, 8-10.
- Rinaldi, C. (2006). *Dialogue with Reggio Emilia*. London, New York: Routledge.
- Slunjski, E. (2011). *Kurikulum ranog odgoja – istraživanje i konstrukcija*. Zagreb: Školska knjiga.
- Slunjski, E. (2015). *Izvan okvira*, Zagreb: Element.
- Somekh, B. (2006). *Action Research, a Methodology for Change and Development*. Maidenhead, Berkshire: Open University Press.
- Southworth, G. (2010). *Developing Leadership Development*. In: Davies, B., Brundrett, M. (Eds.), *Developing Successful Leadership*. Dordrecht, Heidelberg, London, New York: Springer, 177-194.
- Strozzi, P. (2002). *Daily Life at School: Seeing the Extraordinary in the Ordinary*. U: Giudici, C., Rinaldi, C. (ur.), *Making Learning Visible - Children as Individual and Group Learners*. Reggio Children, str. 58-77.
- Vujičić, L. (2011). *Istraživanje kulture odgojno-obrazovne ustanove*. Rijeka: Sveučilište u Rijeci, Zagreb: Mali profesor.
- Yukl G. A. (2006). *Leadership in Organizations*. Upper Saddle River, NJ: Prentice-Hall.



The sustainable pedagogical approach for resolution of problems in pre-school education

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Abstract

Objectives: to identify and recognize the analysed problems of childhood pedagogy in Master's theses, to detect the actualized contradictions in upbringing and education of the modern child as well as to reveal the practical opportunities in execution of sustainable pedagogical approach. Problem of the Research: Implementation of the pedagogical strategy that supports sustainable development in pre-school education. Research Methodology: Implemented research of evaluation, by systemizing the scope of Liepaja University Master research problems to be solved within the context of childhood pedagogy and by assessing the within Master thesis applied pedagogical approaches of children upbringing and education. Research Methods: theoretical comparative analysis, content analysis of Master theses. Research Base: theoretical sources, defended Master theses of 25 students. Research Findings: systematized conceptual theoretical insights and empirical experience in realization of sustainable pedagogical approach within the process of developing child's personality that reveals the essence of upbringing and educating activity and influences the quality of pedagogical cooperation in the modern institution of pre-school education. The paper focuses on the prevailing contradictions among pedagogical practices as well as describes the pedagogical approaches in resolution of the current problems in Latvia pre-school education.

Keywords: upbringing, child as value, child-focused approach, sustainability, pre-school education.

Introduction

The quality of education is an important precondition for sustainable development of society. Nowadays the ongoing social transformation of society and family has a significant impact to childhood research studies in social sciences around the world, which largely proves the unique status of child as a value. Childhood is a specific period of human life, and its research leads to a series of unknown and unconscious research dimensions. In the sphere of research, the complicated childhood phenomenon attracts with its uniqueness, dynamism and unpredictability, as well as with its social and pedagogical topicality.

The European Union and national documents, such as ETUCE Policy on Early Childhood (2012), NAP 2020, Guidelines for the Development of Education for 2014-2020, Sustainable Development Strategy of Latvia until 2030, emphasize that in the childhood pedagogy it is crucial to improve the teaching and learning environment and the educational content so that it is in conformity with the contemporary requirements in order to promote creativity of pre-school teachers and children, to provide cooperation between the pre-school educational institutions and families and to enhance the professional competence of teachers.

The pedagogical practice reveals various contradictory views of how adults (parents and teachers) see children's life activities and their self-fulfilment opportunities, which often points at teachers' lack of awareness, incomprehension, and confusion, sometimes indifference and even avoidance of responsibility, creating ongoing problem situations in the upbringing process. It often causes unnecessary destructiveness and aggression in the adult and children's mutual relationship system leaving negative consequences in the process of forming a unique child's personality, as well as creates soil for frustrations forming the foundation for the development of childhood complexes, the consequences of which are felt in the later stages of life. Preschool education teacher A.Grinberga (2013) in her Master's thesis (MT) points out that today's children are stressful and get tired quickly; they are having difficulty with discipline and compliance to the rules often due to the parents' misconceptions about all-permissive education. But pedagogue A.Brauna (2013) suggests that in the pedagogical practice "it is common to face the situations when the child is uncertain about how to handle the present



situation, as maybe to date no one in the family has spoken with him/her about the existing phenomenon or behaviour, or paid attention to it" (Brauna, 2013, 6).

To a large extent the future of society depends on how the children are raised. Every child is born with endlessly wide developmental potential and opportunities. For a full development and growth, a person not only needs a multi-faceted, creative and harmonious pedagogical process that does not limit the children's possibilities for expression, but also competent and motivated educators, positively stimulating and supportive pedagogical activities, as well as development-promoting social environment. In order to allow and help the children to develop their individuality, it is required to have an appropriate educational environment, unconditional parental love, responsibility and active participation in the work of pre-school educational institutions, as well as purposefully planned and guided collegial cooperation of pre-school teachers. The sense of responsibility at all levels of pedagogical activity promotes the need for a personality to develop and gain knowledge, and to acquire on daily basis such roles as parents and educators that help the children to grow up free and happy so that they can become members of sustainable society.

In the Master's theses of practicing pre-school teachers, different pedagogical approaches and strategies are analysed offering professional solutions to problems of childhood pedagogy. A pre-school teacher J.Kehre-Baika, describing the possibilities for promoting children's creativity, says that "in order to develop the children's self-initiative for seeking the knowledge and acting creatively on their own, it is necessary to create an appropriate learning environment and provide a diverse material-technical basis" (Kehre-Baika, 2014, 5). According to the pre-school education teacher M.Culkstane (2014), it is pedagogically important to respect the needs of the child. In order to implement a child-centred approach the teachers must know the individual development of each child (Dalecka, 2016). In turn, A.Engele (2015) believes that it is important to improve the methods and tools of teaching, as well as to introduce innovations in the lessons making them interactive. The above mentioned ideas confirm the value of pedagogical beliefs on upbringing of children for promoting and securing the maximum capacity of the child.

The purposeful qualitative analysis of childhood research and the systematization of the research data for the purposes of educating the parents and ensuring the quality of the family education processes is one of scientifically based ways of how to purposefully influence the formation of the young parents' attitude towards their child as a unique value and how to raise the public awareness about the topical issues of children development, promoting the increase of adult responsibility both when solving family and society related problems in the context of sustainable development of the society.

The aim of this publication is to reveal and characterize the childhood pedagogy problem issues analysed in Master's theses, to identify the contradictions and practical possibilities of children's upbringing and education while implementing the sustainable pedagogical approach.

The novelty this empirical research can be characterized by the following aspects: for the first time in Liepaja University a targeted qualitative and hermeneutic analysis of 25 Master's theses (MT) is carried out for the research purposes in order to clarify and systematize the problems and solutions of childhood pedagogy actualized in the MT, as well as pedagogical ideas of practicing pre-school teachers – the authors of MT are summarized, which provide insights in the dimensions of childhood pedagogy problems and allow to set out the prospects of potential goals and tasks for pedagogical work in order to promote the sustainability of society.

The research basis and methods

In the contemporary scientific discourse, the childhood education research is strongly influenced by the predominant qualitative research approach, which is still purposefully accepted encouraging discussions amongst the teachers on the research methods: "when revealing the child as an active subject in his or her life's environment, also the discussion expands on methodological approaches and methods in the childhood research"



(Špona & Jermolajeva, 2015, 15). The methodology for this particular study is based on the qualitative research traditions, as it focuses on exploring the pedagogical experience of pre-school teachers in cooperation with the children and their parents. In the research process an assessment research study is conducted, systematizing the range of childhood pedagogy problem-issues raised by LiepU Master's level students in educational sciences and assessing pedagogical approaches of children's upbringing and education described in the Master's theses.

Methods of research: theoretical comparative analysis, content analysis of Master's theses. The basis of research: theoretical sources, 25 defended Master's theses. The pedagogical observations show that the child's behaviour varies substantially even in the same environment and under the same conditions, and the interpretation of these differences forms the research basis, encouraging adaptation of individual research approach to each situation. The specialization and professional competence of childhood pedagogy researchers greatly influence the research context and focus emphasizing the importance and potential of qualitative research, because the qualitative approach, in contrast to the quantitative, focuses on in-depth, comprehension and comparison, as well as characterization of individual traits. This approach assumes that "the most important aspect of internal structures is the representation of each person's individual history, which the person constructs, based on the particular experience of his/her life" (Kropļijs & Raščevska, 2004, 17). As the qualitative research design tends to dominate in the studies of childhood pedagogy problems, and as also evidenced by the analysis of Master's thesis elaborated in Liepaja University, various employed theoretical and empirical methods give opportunity to pre-school specialists to analyse and summarize the research information in the topical dimensions of childhood pedagogy.

It is important for the authors of this publication to become acquainted and to describe the understanding and ideas of the Master's students – practitioners involved in the field of pre-school professional activities about the potential improvement of practical childhood pedagogy activities. Therefore, the content analysis of MT (verbal reporting forms) was chosen as the research method because it is the social and psychological-pedagogical interpretation of the research data obtained by Master's students that offers and reveals their specific understanding and vision on how to solve pedagogical problems. The following general guidelines for analysing the qualitative data were chosen: the themes of the MT, research subjects, research objectives, hypotheses, conclusions and recommendations. The goal of the hermeneutical analysis of the statements expressed by Master's students is to understand what exactly the authors have stated as their pedagogical ideas and vision, as well as what changes and innovations they see needed in their work. This means that the authors of this article, interpreting the research data, take into account the specific objectives, content and particular conclusions and recommendations of each Master's paper.

In Liepaja University, the problem issues of child development and upbringing are addressed in five Master's level study programmes – in accordance with the specific research context of each programme. These programmes are: in the field of higher academic education – Master of Educational Sciences in Pedagogy (hereinafter MESP), but in the field of higher professional education – General Education Teacher (GET), Career Consultant (CC), Social Work (SW) and Music Therapy (MT).

Conceptual theoretical findings of childhood pedagogy

One of the four priorities identified under Agenda 21 was "Education, Public Awareness and Training for Sustainability". The task manager for this process and for conducting the educational work of the CSD is UNESCO. One of its key responsibilities is teacher education, which is seen as one of the most significant areas for action. Further background of the project is outlined by Hopkins (2001). The purpose of the project undertaken by UNESCO on behalf of the United Nations (UN) is to re-orient teacher education to address sustainability.



Pre-school is a part of early childhood education, but it is vitally connected to primary education. In any case, pre-school can be defined as a phenomenon too. This is based on 1) the analysis of psychological theories of early development, learning theories and didactic theories, 2) the ideas of philosophers/pedagogues, and 3) analysis of definitions of modern early childhood education specialists, which allows presenting a new systemic definition of pre-school. Pre-school in life means pre-school practice (care, education, and teaching), preschool-oriented science (preschool as a part of ECE field of science), pre-school as a subject, pre-school thinking united in a comprehensive system, and an object for research. The systems model facilitates the determination of an object for research, helps to develop pre-school theory, plan pre-school teaching, develop pre-school practice and outline pre-school thinking. The new dimension of the pre-school concept – the pre-school thinking – will be the link between theory, practice and the subject in a way that will exclude any contraposition between them (Härkönen, 2003).

The purpose of childhood research is to promote the understanding of the developmental stage of children and adolescents in the context of various education issues. The actual discourse of "children's research" has emerged at the beginning of the 20th century as a "children's research movement", when important research studies were conducted on psychology of children's development (Hall, 1907). The socially constructed understanding of childhood encouraged studying childhood as a specific period with emphasis on child's social rather than developmental structure. In the childhood research process an interdisciplinary and integrated approach, so acknowledged in today's research, was introduced at the end of the 20th century (Baacke, 1993). The two aforementioned approaches form the basis for implementing a sustainable pedagogical approach in the pre-school.

Today's pedagogy of childhood is based on the notion that already in pre-school age it is important to help the children to acquire the world of human values in a targeted and systematic way in connection with their social status, types of activity and the main content of age-related sensitivity (Коломинский, 2007, 39), since today's children learn democracy from their very young age, but democracy means the equality of rights and opportunities. Utilization of the child's potential goes hand in hand with the child's self-initiative, which is one of the basic principles of democracy. When educating the young generation of a democratic society, pre-school teachers can model the child's behaviour that promotes self-initiative and also create an environment that gives the child the opportunity to initiate his/her own activities (Hansena, Haufmane & Saifers, 1998, 17). This means that when a teacher invites the child to choose from a variety of activities, the child is offered a variety of choices. When a child is helped to choose a particular activity and engage in it, the importance of self-initiative is encouraged. The self-assurance, which a child builds when choosing an activity, which has allowed learning or creating something, is a manifestation of his/her personal self-initiative and the value of choices.

However, this is possible only in an environment which provides the child the opportunities to cooperate, to solve problem situations, to find answers to the questions of interest while negotiating, and where the teacher focuses on how the child feels, responds, and works together with other children or adults. Supporting the wishes, interests and strengths of the child and the teacher's ability to analyse these criteria are the most important aspects of modern childhood pedagogy: "In environment where the teacher encourages children to act in accordance with their interests, children develop a strong sense of meaning and self-initiative" (Hansena, Haufmane & Saifers, 1998, 26). It is also fully in line with the ideas of developing a sustainable society. Education for sustainable development in its broadest sense encompasses the improvement of the quality of primary education, the reorientation of education towards sustainability, the promotion of civic awareness and education in all groups and sectors of society.

The social aspect of the sustainable development concept of the society stresses pedagogical attitudes as the aspect of pedagogical interaction, which includes feelings, images, thoughts about the child, and the pedagogical activity in general. First of all, every child feels it as an emotional experience. Secondly, it is the portrait of a child that a teacher has created. Thirdly, these are thoughts and judgments about the child. Pedagogical communication is teacher's behaviour which creates, changes, and develops his/her relationships with children



(Коломинский, 2007, 39). The environment of democratic pedagogical relationships is an important part of sustainable development. The teacher promotes the child's new revelations and the process of learning – he/she asks, supports, encourages and purposefully contributes to the implementation of teaching guidelines, creates and develops an environment in which individual findings are obtained ensuring continuous dialogue with the learners.

Looking from the perspective of children's rights and opportunities, the classroom space of the contemporary pre-school educational institution is an environment in which the child discovers and explores the surrounding world, learns the basic regularities of nature and society development, takes on different roles and develops social skills, cares about others, and takes responsibility. In turn, teachers are responsible for matching the environment with the needs, showing respect for children's ideas and using them when drawing up a curriculum. They also collaborate with children, observe them, listen to their conversations, record and evaluate their observations when planning and personalizing the future work with children.

However, each new step in the child's personality development is directly determined by the previous step – all what was formed and achieved in the previous stage (Виготский, 2003, 192), and it is rooted in the attitude change of the child towards the environment, in particular – in change of the needs and desires that drives the child's behaviour. When moving from one developmental stage to the next, the child generates new needs, new motives, because the child's behaviour is determined by revaluation of previous values and by changing his/her attitude towards the environment.

Also pedagogue A.Mudrik (2006), describing personality as a pedagogical concept, on the one hand examines it as the child's attitude towards the world but on the other hand as an attitude towards oneself, because the attitude reveals the personality development influenced by external conditions (environment, upbringing) and simultaneously reflects the systemic personality development in this environment. The child's attitude towards oneself greatly affects his/her attitude towards the surrounding world and determines the self-realization ways and aspects, but self-realization ways and aspects affect the child's attitude towards the outside world and towards oneself. So the attitude marks "the conditional stability of a person and at the same time also his/her potential for change or development" (Мудрик, 2006, 10). As the child develops, he/she perceives the impact of those external conditions that he/she encounters – the child not only perceives these conditions, but also to a certain extent transforms them, and only then the external conditions become his/her own – internally accepted and learned. In this way, the child learns the culture of society, its norms and values, which directs the development of his personality, including self-confidence, self-determination and self-assurance. Thus, a child can be analysed as a subject of self-development (Мудрик, 2006, 17).

The constructivist theoretical approach focuses on individual competencies. The child actively constructs the knowledge that takes place in a social context. A socially constructed childhood is a new theoretical perspective that supports the concept of a capable and independent child's image. The capable child's image concept transforms the goal of upbringing from obedience to advancement of the child's capacity, which take place in cooperation between the children and adults and in respectful family relationships, when the child him/herself actively constructs his/her daily experience. A capable child is perceived by adults as a human person who is aware of his/her needs and rights, and who is a competent and independent constructor of his/her own identity (Dinka, 2014, 16-17). All developmental qualities of the child are equally important in the personality formation process of a future citizen.

The previously mentioned childhood pedagogy knowledge reveals the diverse and complex nuances of the upbringing and education of modern children, which requires pedagogical competence, dialogic relationships for child development (Herzka, 1989), individualization and socialization oriented towards the formation of the unique personality of child, because "upbringing is a common path ..." (Roge, 2008, 7).



Research results and discussion

The empirical data was collected analysing the content and problem-issues of the Master's theses elaborated and defended in previously mentioned study programmes of Liepaja University, Faculty of Education, and Social Work, looking at the research topic, the research subject and the theoretical analysis of the criteria that characterize the dimensions of childhood pedagogy problems and their solutions. For the analysis and comparison of empirical findings on childhood pedagogy problems (CPP, see table 1), 25 Master's theses, defended in the period from 2012 to 2016, were selected, which in the terms of thematic selection and the essence of the content are in line with the context of childhood pedagogy research (see 1 Table.).

Table 1. Amount of defended master's thesis

Study programme	2012	CPP	2013	CPP	2014	CPP	2015	CPP	2016	CPP	CPP together
MESP	7	1	9	3	12	3	-	1	-	-	8
GET	2	-	11	1	7	3	11	9	2	2	15
CC	11	-	11	-	11	2	6	-	-	-	2
SW	14	-	11	-	12	-	12	-	-	-	-
MT	1	-	6	-	1	-	7	-	-	-	-
Together:	35	1	38	4	43	8	36	10	2	2	25

As it is seen in Table 1, from the total number of Master's thesis (MT) analysed for this study ($N = 154$), 25 of them are dedicated to exploring childhood pedagogy issues, characterizing and analysing the problems related to life, development, education and upbringing of pre-school children, focusing on the uniqueness of their personality and the importance of quality assurance in the pedagogical processes of pre-school. According to the data summarized in Table 1, the choice of the MT topics each year increases in the direction of actualization of humanistic and child-centred pedagogy (CPP), thereby confirming that amongst professionals there is an adequate understanding about the importance of the early years of the child's life and about the insufficient use of this period for child's self-realization and development of his/her potential. The thematic and content analysis of the MT was implemented in January 2016, when the defence of MT took place only in one study programme, which explains the small number of defended theses in 2016, but both of these thesis were elaborated analysing the problem issues of childhood pedagogy.

In the child-centred approaches of contemporary pedagogy each child seen as a "skilled, inquisitive, responsible, and free member of society, who must be treated with respect. The child him/herself manages his/her own learning process. Respect and trust contribute to the children's desire to learn, become independent and responsible" (Rudzroga, 2016, 49).

These 25 selected MT analyse childhood pedagogy problems and understanding of the formation of child's personality, reflecting it also through the keywords, which characterize the child as a unique individuality and draw attention to the child's emotional states and the development of creative imagination and fantasy. The MT, which focus on childhood pedagogy issues such as children's needs and their fulfilment, emotional self-expression and well-being, explore the promotion of emotional communication, free and creative child's activity, social interaction skills, the system of pedagogical techniques for reducing communication difficulties, implementation of the individual approach, the child's self-initiative to seek knowledge and work creatively, their achievements.

The MT devote much attention to the pedagogical competence and professional dialogue of pre-school teachers, as well as to the motivation to collaborate and to promote the team work that is necessary for ensuring the quality of the upbringing process and is one of the most important keys for solving holistic upbringing problems and ensuring the feedback. As it is emphasized by A.Brauna, the author of a MT, in the pedagogical practice it is

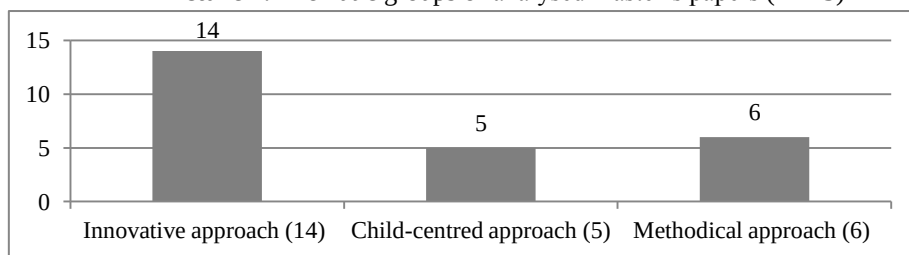


important to “educate with a true belief that all what is done is the best and the most needed for the children for their personality development as well as for the future life in the society” (Brauna, 2013, 57).

The contradictory nuances of pedagogical practice described in MT clearly reflect the range of issues to be addressed in the pedagogical process. For example, A.Grinberga expresses a grounded criticism analysing the pre-school and primary school teachers' opinions on possibilities to assess children's achievements: "The current assessment system of children's skills, abilities and knowledge is very fragmented, it is not organized and there are no criteria specified which must be described in the child's assessment when graduating a pre-school educational institution" (Grinberga, 2013, 66). Pedagogue A.Grinberga, supporting the need for assessment models in the transition period from pre-school to primary school, theoretically develops and also appropiates in practice a physical fitness assessment model "Pre-school learner's achievements in sports" for learners of Liepaja pre-school educational institution.

Analysing the MT, which correspond to the field of childhood pedagogy according to their content and research subject as well as the aim of the research, all papers provisionally can be classified in three thematically unified groups (see Figure 1). The MT of the first group (6 papers) reflect on methodological directions of pre-school educational institutions and specific topicalities. The MT of the second group (14 papers) reveal, describe and appropiate the innovative approaches of implementation of pre-school education curricula. The MT of the third group stresses the promotion of child's individuality development in the pre-school pedagogical process in the context of a holistic child-centred approach.

Picture 1. Thematic groups of analysed master's papers (N=25)



Although it is possible to classify the MT in three thematic groups according to its basic direction and defined research subjects (see Figure 1), it is necessary to note that their content analysis confirms the social and pedagogical topicality of the chosen problem issues and also the offered solutions, as well as it shows the link with the theoretical research and practical orientation of solving the childhood pedagogy issues. As M.Culkstane suggests, in order to promote the children's intellectual and mental well-being in pre-school education establishment, it is important to promote their interest to explore and be curious, engage them in play, but the pedagogues must be mindful, emotionally open and knowledgeable" (Čulkstāne, 2014, 51).

The authors of MT, analysing the innovative approaches of implementation of the pre-school education curricula, in their research focus on the topical issues of contemporary pre-school education: pedagogical collaboration in the upbringing of pre-school children (2013), a system of pedagogical approaches for reducing communication difficulties of pre-school children with autistic spectrum (2014), pedagogical activities for ensuring the emotional well-being of the child in a pre-school educational institution (2014), pedagogical work with hyperactive children in a pre-school educational establishment (2014), outdoor activities in the environmental education (2015), opportunities for ensuring the variability of didactic methods for developing reading and writing skills at pre-school age (2015), quality perfection when implementing the integrated pre-school curriculum content (2015), the team work in pre-school educational institutions (2015), the project method for implementing child-centred approach in pre-school educational establishment (2015), the implementation of individual inclusive education programs in the pre-school (2015), a learning portfolio for



assessing the individual growth of pre-school children (2016), and the implementation of the pedagogical approach “Forest School” in pre-school educational practice (2016).

Summarizing the ideas of methodologically innovative approaches, it is possible to agree with J.Kehre-Baika’s opinion that not only in artistic, but in all practical pre-school lessons "the use of non-traditional forms develops creativity in children – courage to make mistakes, open-mindedness, sense of security. Freedom, fantasy and imagination provide children with an unconventional artistic activity that opens the door to a world full of wonders, and encourages the children to engage in activities" (Kehre – Baika, 2014, 62).

Researching the possibility of ensuring the variability of didactic methods in pedagogical practice for acquiring reading and writing skills at pre-school age, pedagogue A.Engele (2015) states that the obtained data shows that there are still some pedagogues in certain preschool institutions who relate to the child as a learner who needs to be given the information as much as possible in accordance with the requirements of the programme, the frontal teaching methods are selected – similar to a school, the control is used paying more attention to the learning material but less to each child’s psychic, physical and social needs for self-assurance, communication, changing of roles, and active, free and creative activities, which are essential ingredients for each lesson. The personal work experience of this author confirms that the pre-school teacher is able to cross over from information, organization, control and examination approach exercised in November to counselling, assistance and observation exercised in January, thus making the learning process for children more interesting and more engaging. As feedback, children reflect on their positive emotions in different ways when assessing their activities: with drawing smiles, jumping, raised hands, etc. (Engele, 2015, 52 - 57).

For ensuring the quality of education and for perfection of children’s cognitive processes and individual growth, the pedagogical initiatives of the teachers are not enough. I.Grīsle (2015) points at complex didactic tasks saying that "in order to improve the implementation quality of the integrated pre-school programme, it is necessary to review if the content is relevant with the psychological and physiological peculiarities of pre-school children: the quantity and complexity of tasks do not stimulate the quality of education" (Grīsle, 2015, 62).

Development and approbation of new pedagogical approaches and methods prove their productivity: "When implementing the project method, the benefit for children is promotion of independent thinking and assessment skills, which include: independence from other opinions, the search for one’s own personal truth, the ability to logically arrange one’s own thoughts, formulate and argument them, as well as develop self-education skills, ability to listen, understand the opinions of others, and cultivate patience" (Merca, 2015, 57).

According to six authors, for ensuring the quality of preschool education a special attention should be paid to the methodological work of the pre-school educational institution. In this group of MT, the professional responsibility spheres and possibilities of pre-school methodologists are described, and the research studies are related to the development of emotional interaction skills of the children, the improvement of pedagogical competence of pre-school teachers, satisfaction with work and assessment of the work quality, and to the issues of ensuring the collegial co-operation.

The authors of MT who pay purposeful and nuanced attention to promotion of child’s individuality development in the pre-school pedagogical process implementing the child-centred approach in practice, reveal the pedagogical correction possibilities of aggressive behaviour of pre-school children, describe the possibilities for assessing the pre-school children’s physical fitness in the pedagogical practice, analyse the pedagogical value of toys for personality development of pre-school children, explore how the understanding about professions develops in pre-school age, and address the child’s behaviour correction options in the mixed age groups of pre-school education institutions.

The aim of education for sustainable development is to develop young people’s knowledge, values and competences that are essential for the development of society. Promotion of sustainability and sustainable development must be at the heart of all educational programs – a significant and integral part. Education is the



greatest hope and the only practical option for building a sustainable future. It is the teacher education institutions that must become the courageous agents for bringing the change in education and in the society in order to ensure as sustainable future as possible. The secret of growth and development is learning in cooperation with the forces of change: "The future of the world is the future of learning" (Fulans, 1999, 7).

Conclusions and recommendations

In the pedagogical process the sustainable development of society is ensured by implementation of various educational perspectives. It is manifested through individualized child-centred and development-oriented approach which ensures the understanding of society and nature as united, inter-disciplinary and integrated approach in acquiring the learning content, and implementation of democracy for promoting the social and civic factors in the school environment.

In the context of sustainable development of education, the topicality of contemporary child-centred pedagogy is the development of child's capacity, learning to live in democratic society since the early years and developing such important personality traits as self-initiative, self-regulation, citizenship, tolerance, empathy, responsibility, emotional and social intelligence, curiosity, creativity, etc.

Using their professional competence and implementing the ideas and values of sustainable development of society, the pre-school education teachers become the mediators between the accumulated cultural and historical experience of humankind and the children by encouraging and supporting their self-development in knowledge acquisition journey, developing their talents, abilities and skills, and by developing attitudes towards moral, ethical and aesthetic values, towards oneself, the surrounding environment and the society.

In their Master's theses the authors research, analyse and discuss important and topical issues of pedagogical practice: the innovative and pedagogical approaches for implementing the pre-school education curriculum, reflecting on of how the concept of sustainable development of society and the child-centred pedagogical approach are applied in praxis, and about professional development possibilities of the professionals of pre-school institutions.

The analysis of these selected MT confirmed that in the pedagogical practice when solving the childhood pedagogy problems, the essential elements are: coherence in requirements, succession ensuring the child's development, highlighting the dialogue between parents and teachers, promoting collaboration motivation and the team work, promoting the development of understanding, personal attitudes, and practical activities in supporting the sustainability of society.

The pedagogical ideas expressed by the authors of MT reflect and confirm their beliefs, proved in practice, about the uniqueness of each child's development and the need for children's self-initiative in their search for personal identity, emphasizing the need for the conformity of pre-school education and upbringing methods and forms to ensure the development of children's capability, independence, and creativity in modern pedagogical practice. Identification and assessment of interactions between child's upbringing, education and socialization processes in the context of globalization opens up unlimited opportunities for further research studies in the field of childhood pedagogy.

The future challenges and the developmental processes that take place in society determine the need for accepting the diverse intellects and individual growth opportunities as well as for promotion of multidimensional learning styles and development of new competences, which, in turn, require new personality traits and attitudes, courage and self-initiative for ensuring the sustainability of society in the aspect of intercultural diversity and interaction, enrichment of cultural traditions and learning languages, in social integration and inclusion and the development and implementation of inclusion as a principal approach to education and society as a whole.



References

- Baacke, D. (1993). Sozialökologische Ansätze in der Jugendforschung. In: Krüger, Heinz, H. (Hrsg.) *Handbuch der Jugendforschung*. Opladen: Leske + Budrich, S. 135-157.
- Brauna, A. (2013). *Pedagoģiskā sadarbība pirmsskolas vecuma bērnu audzināšanā*. Maģistra darbs. Liepāja: Liepājas Universitāte.
- Čulkstāne, M. (2013). *Pedagoģiskā darbība bērna emocionālai labizjūtai pirmsskolas izglītības iestādē*. Maģistra darbs. Liepāja: Liepājas Universitāte.
- Daļeckā, M. (2016). *Mācīšanās portfolio pirmsskolas vecuma bērnu individuālās izaugsmes izvērtēšanai*. Maģistra darbs. Liepāja: Liepājas Universitāte.
- Dinka, I. (2014). *Bērna tēla sociālo transformāciju atspoguļojums bērnistabā*. Promocijas darbs. Rīga: Latvijas Universitāte.
- Enģele, A. (2015). *Didaktisko metožu variativitātes nodrošināšanas iespējas lasīšanas un rakstīšanas prasmju apguvei pirmsskolas vecumā*. Maģistra darbs. Liepāja: Liepājas Universitāte.
- ETUCE Policy Paper on Early Childhood Education. ETUCE – European Region of Education International 2012 Regional Conference in Budapest on 26-28 November 2012. <http://www.csee-etu.org/images/attacments/ETUCEPolicyPaperonECEEN.pdf>
- Fulans, M. (1999). *Pārmaiņu spēki*. Rīga: Zvaigzne ABC.
- Grinberga, A. (2013). *Pirmsskolēna fiziskās sagatavotības vērtēšana pedagoģiskajā praksē*. Maģistra darbs. Liepāja: Liepājas Universitāte.
- Grīslē, I. (2015). *Integrētās pirmsskolas mācību programmas satura īstenošanas kvalitātes pilnveides iespējas*. Maģistra darbs. Liepāja: Liepājas Universitāte.
- Izglītības attīstības pamatnostādnes 2014. – 2020. gadam*. Rīga: Izglītības un zinātnes ministrija. Pieejams www.likumi.lv/doc.php?id=266406
- Hall, G.S. (1907). The contents of children's minds on entering school. In: G.S.Hall et.al. *Aspect of Child Life and Education*. Boston: Ginn, pp.1. – 24.
- Hansena, K. A., Kaufmane, R. K., Saifers, S. (1998). *Izglītība un demokrātijas kultūra: Bērības pieredze*. Rīga: Sorosa fonds Latvija.
- Higgins, P., Kirk, G., Perfect, H. (2003). Sustainability Education and Teacher Training in Scotland. *Journal of Teacher Education and Training*, Volume 2, pp. 15-24.
- Hopkins, C. (2001). Reorienting teacher education to address sustainability. *Environmental Education*, 66, 8-
- Härkönen, U. (2003). The New Systems Theory of Early Childhood Education and Preschool as a Frame of Reference for Sustainable Education. *Journal of Teacher Education and Training*. Volume 2, pp. 25-38.
- Kehre – Baika, J. (2014). *Netradicionālo darba formu pielietojums vecākā pirmsskolas vecuma bērnu mākslinieciskajā darbībā*. Maģistra darbs. Liepāja: Liepājas Universitāte.
- Herzka, H.S. (1989). *Die neue Kindheit. Dialogische Entwicklung – autoritätskritische Erziehung*. Basel: Schwabe & Co.AG.
- Kropļis A., Raščevska M. (2004). *Kvalitatīvās pētniecības metodes sociālajās zinātnēs*. Rīga: RaKa.
- Latvijas Nacionālās attīstības plāns 2014. – 2020. gadam*. Pārresoru koordinācijas centrs. Pieejams http://www.nap.lv/images/20121220_NAP2020_Saeima_apstiprin.pdf
- Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam*. Pieejams <http://www.pkc.gov.lv/images/LV2030/Latvija2030.pdf>
- Merca, L. (2015). Projekta metode bērncentrētas pieejas īstenošanai pirmsskolas izglītības iestādē. Maģistra darbs. Liepāja: Liepājas Universitāte.
- Roge, J. Ū. (2008). *Bērniem nepieciešamas robežas*. Rīga: Jumava.
- Rudzroga, B. (2016). „Meža skolas” pedagoģiskās pieejas realizācija pirmsskolas izglītības praksē. Maģistra darbs. Liepāja: Liepājas Universitāte.
- Špona, A., Jermolajeva, J. (2015). Bērns. Bērība. Sasniegumu pētīšana. No: Špona A., Jermolajeva J., Stangaine I., Siliņa – Jasjukeviča G., Tauriņa A., Medne D., Līduma A., Randoha A., Augstkalne D., Vigule D. *Bērna sasniegumu veicināšana pirmsskolā*. Rīga: RaKa.
- Виготский, Л. С. (2003). *Психология развития ребенка*. Москва: Эксмо.
- Коломинский, Я.Л., Плещачова, Н.М., Заяц, И. И., Митрахович, О. А. (2007). *Психология педагогического взаимодействия*. Учебное пособие. Под руководством Я. Л. Коломинского. СПб.: Реч, 2007, С. 39.
- Мудрик, А.В. (2006). *Психология и воспитание*. Москва: Московский психолого-социальный институт.



Workplace bullying - coping strategies of teachers

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Abstract

The present study is based on research regarding bullying in the workplace, specifically aimed at elementary schools teachers in the Czech Republic. The sample consisted of elementary school teachers who had been exposed to regular bullying by their colleagues or superiors for at least half a year. Based on in-depth interviews and subsequent coding and categorization of statements, the main aim of the research was to reflect the strategies used by teachers as victims of workplace bullying used to defend themselves and resolve aggression from their colleagues. These can be classified into passive strategies (such as non-response, misplaced problem, humour) which are the most common forms of defence against escalating aggression, and active defence strategies (e.g. engagement of leadership, legal defence), which were found to be rather uncommon.

Keywords: School, school climate, aggression, bullying in the workplace, defence strategy

Introduction

Modern schools are expected to be democratic, humane and liberal institutions, which provide an appropriate environment for the education and personality development of adolescents. At the same time, there are numerous circumstances that prevent or make it difficult to achieve these expectations, such as loose morals and changed life values, decreasing teacher authority, increasing student aggression with teachers becoming the victims.

The quality of the educational process is closely linked with the overall school climate and interpersonal relationships; a frequent term in relation to the school environment is mobbing, i.e. a form of mental attacks between colleagues. It is obvious that the presence of this negative phenomenon in the school environment is a serious ethical problem, which may significantly affect the quality of the school climate and functioning of the school as an educational institution.

Mobbing is generally defined as a specific form of bullying which takes place between individuals in similar social positions. In some countries, for example in Poland or Germany, this term is used as an equivalent of bullying in various forms, but in terms of understanding and establishment of the concept in Czech professional terminology, bullying does not fully encompass the principle of mobbing and these two cannot be confused. For the purposes of general understanding, a possible Czech equivalent of the term is *workplace bullying*; in a narrow context mobbing is used to describe mental violence between persons in identical or similar occupational positions. This model is based the concept of mobbing in German-speaking countries (see for example Leymann, 1993; Leymann, 1996; Vartia, 2003); where the understanding of the term is closest to the Czech Republic. The principal differences between bullying and mobbing are in three areas: the environment and society where mobbing primarily takes place, the form of aggression in relation to the victim, and the features of the attack. The differences are summarized in the following table.

Table 1. Features of bullying and mobbing

In Terms Of	Bullying	Mobbing
ENVIRONMENT AND SOCIETY	Takes place in simple societies such as schools (between children), or military environments	Takes place in developed social environments with a more elaborate system of social relations
FORMS OF AGGRESSION	Represents simpler forms of aggression consisting mainly of physical attacks	Predominantly mental attacks with mostly mental and psychosomatic injury
ATTACK SPECIFICS	More impulsive, spontaneous, more primitive, apparent	Cunning, insidious, less conspicuous, hidden, more difficult to prove compared with physical violence



Although the concepts of bullying and mobbing need to be distinguished, in terms of their nature they have a few common features that are crucial to the focus of the present text. Both represent humiliating behaviour of an individual or a group towards another individual (or a group), who is unable to avoid this situation, and is unable to use effective defence mechanisms. Both have the following features:

- Repeated, long-term hurting;
- Helplessness, inability to defend oneself;
- Asymmetry (Einarsen, Raknes, & Mathiesen, 1994; Einarsen, Hoel, Zapf, & Cooper, 2011).

This issue is therefore a serious problem and phenomenon, which includes violation of social norms associated with limiting fundamental human rights with possible tragic consequences for the victim and the victim's personality. The term mobbing was spread particularly by a German professor Heinz Leymann (1932-1999), who lived and worked in Sweden from 1955 and in the early 1980s worked as a doctor and psychologist and took care of patients with communication and relationship issues in the workplace. He performed observations together with Anneli Gustafsson between 1982 and 1983 in Sweden and concluded that in many cases employees were like a pack attacking their colleague at work (Leymann, 1996; Einarsen et al., 2011).

In a broader sense, mobbing is understood as a form of psycho-terror in the workplace; in a narrower sense, this term denotes mental attacks with the mentioned features by persons in a similar occupational position. A specific form of mobbing is *bossing*, whose initiator is a superior employee. Bossing is considered a more dangerous form of psycho-terror in the workplace because the primary duty of a leading employee is to ensure favourable working conditions for subordinate employees. As a result of their position, superiors have a degree of power over their subordinates, which they abuse in the case of bossing. In such position and with respect to the expectations from such function this behaviour is unacceptable (cf. Beňo, 2003, p. 10, 126). According to literature, another form of mobbing, which is not so frequent, is *staffing*. In the case of staffing, subordinate employees organize attacks in order to discredit or destroy their superiors, management, or all HR or corporate policy (Kratz, 2005, p. 16).

The above mentioned knowledge on mobbing suggests that this is a form of mental maltreatment with systematic, deliberate and especially repeated attacks on an individual. This form of psycho-terror uses discriminating and degrading approach, excessive criticism, ridicule, and minor or major intrigue, which the victim is unable to prevent by means of usual volitional mechanisms. The victim's mental balance is disrupted, which is reflected in work performance and might lead to serious personality integrity disorders in the *mental* area (depression, concentration disorders, self-doubt, anxiety, and even psychiatric syndromes with suicidal thoughts), *psychosomatic* area (cardiac and blood circulation disorders, astringent breathing, headache, neck pain, back pain, skin diseases and diseases of the gastrointestinal tract), *psychosocial* area (inability to establish social relationships and ties, isolation, degradation of interpersonal relationships, distrust, disruption of private life, etc.) and last but not least in the *economic* area in the form of decreased work performance, increased morbidity and associated high treatment costs (Cakirpaloglu, Šmahaj, Dobešová Cakirpaloglu, & Zielina, 2017; Huber, 1995, Svobodová, 2008). The authors also state that the consequences of mobbing are devastating both for the victims of mobbing and for the whole society, especially in economic terms. Paradoxically, the consequences are also reflected in the aggressor's personality – fear of being revealed and punished, atypical social ties and dubious pleasure from the suffering of others result in a lack of concentration on work, and their actions lead to a dysfunctional working environment.

Given this definition of mobbing, the following crucial question is formulated: Can the phenomenon of mobbing be considered a problem affecting the environment of elementary schools? The issue has been previously addressed by the authors of the present paper in different research studies (Zábrodská & Kvetoň, 2012; Cakirpaloglu et al., 2017).

For illustration purposes, the conclusions of a quantitative study by Čech (2011) are mentioned below:



- Throughout the period of their teaching career, 29.7% of teachers felt to be victims of some of the forms of workplace bullying (from colleagues, superiors, or both); 17.2% of teachers were victims of mobbing and 23.1% of teachers were exposed to mental pressure from superiors (9.9% repeatedly). It is important to define the criteria for differentiating between individuals who are bullied and who are not. For these purposes, loose and stringent criteria are applied. According to the loose criterion, an employee is subject to at least one negative act once a week for a period of six months (Leymann, 1996). According to the stringent criterion, an employee has been subject to two negative acts at least once a week during the past six months (Mikkelsen & Einarsen, 2001).
- Of all teachers subject to mental terror, 33.9% were subject to mobbing and 43.3% to bossing for a period exceeding one year.
- In accordance with the definition of mobbing, 18.4% of teachers were subject to some form of bullying, 9.3% of all respondents representing the teaching population in the Czech Republic were exposed to mobbing and 14.3% to bossing.
- In the academic year of 2008/2009, 10.6% of teachers were exposed to mental attacks according to the loose mobbing criterion; of this group an identical number of teachers (7.1% of teachers, N=78) were subject to mobbing and bossing, i.e. they felt to be victims of psycho-terror in their current workplace.
- In accordance with the definition of mobbing pursuant to the stringent criterion, 5.8% of teachers were exposed to bullying, of this group 3.7% were subject to mobbing and 4.1% to bossing of all respondents involved in the research.

Considering the fact that the results have not changed significantly during the period of less than 8 years after the research, in the context of the entire population of teachers there are thousands of teachers, whose personality is regularly subject to mental attacks by their colleagues and superiors. It is clearly a serious ethical issue with negative effects on the school environment and the whole society. In the case of the teaching profession, this issue is even more serious compared with other professions, mainly because the following takes place:

- Abusing power and superior position (in the case of bossing) by those who have been entrusted with responsibility for the functioning of the school including the school climate and interpersonal relationships;
- Abusing education, brainpower of teachers and serious ethical misconduct regarding the teachers' mission in the society;
- Discriminating victims in the workplace including possible serious consequences for the victim in the mental, psychosomatic, psychosocial and economic areas;
- Violating fundamental human rights;
- Secondary consequences in terms of the quality of the educational process and transfer of interpersonal conflicts between teachers to students.

The results suggest that the mentioned adverse phenomena occur in elementary schools, present a burden for many teachers and are a cause of not only serious personal problems, but also affect the quality of the teacher's performance including teacher-student relationships. The results indicate a necessity to seriously address the issue; therefore a logical step was to carry out a qualitative survey on the phenomenon of mobbing in elementary schools. On the basis of the previous research, a total of 13 teachers were selected who had been victims of bullying in the workplace and who had provided their consent with their participation in a follow-up research study, the results of which are presented in this paper.

Research objectives

The main objective of the research was to perform a qualitative assessment and analysis of the responses of elementary school teachers who have personal experience with workplace mobbing. These content analyses were used to identify specific defence strategies of teachers against these undesirable forms of behaviour.



Method

In the present qualitative research, the data collection method was a semi-structured interview. The collected data were processed by means of the embedded theory method with subsequent data decoding for the purposes of data interpretation, conceptualization and subsequent integration. Three types of coding were used in the context of the embedded theory method – open, axial and selective. The validity of the research was ensured by means of triangulation through multiple-source statements (Gavara, 2010, p. 149), for example correspondence, police records, newspaper articles, etc.

Sample

The research sample consisted of 13 elementary school teachers who had personal experience with workplace bullying. This was deliberate sampling characterised by the following criteria: regular bullying behaviour by colleagues or superiors, at least once a week for a period of at least six months. As already mentioned, this research is a follow-up of a quantitative research on mobbing in elementary schools (Čech, 2011), one of the outcomes of which was identification of teachers as victims of mobbing.

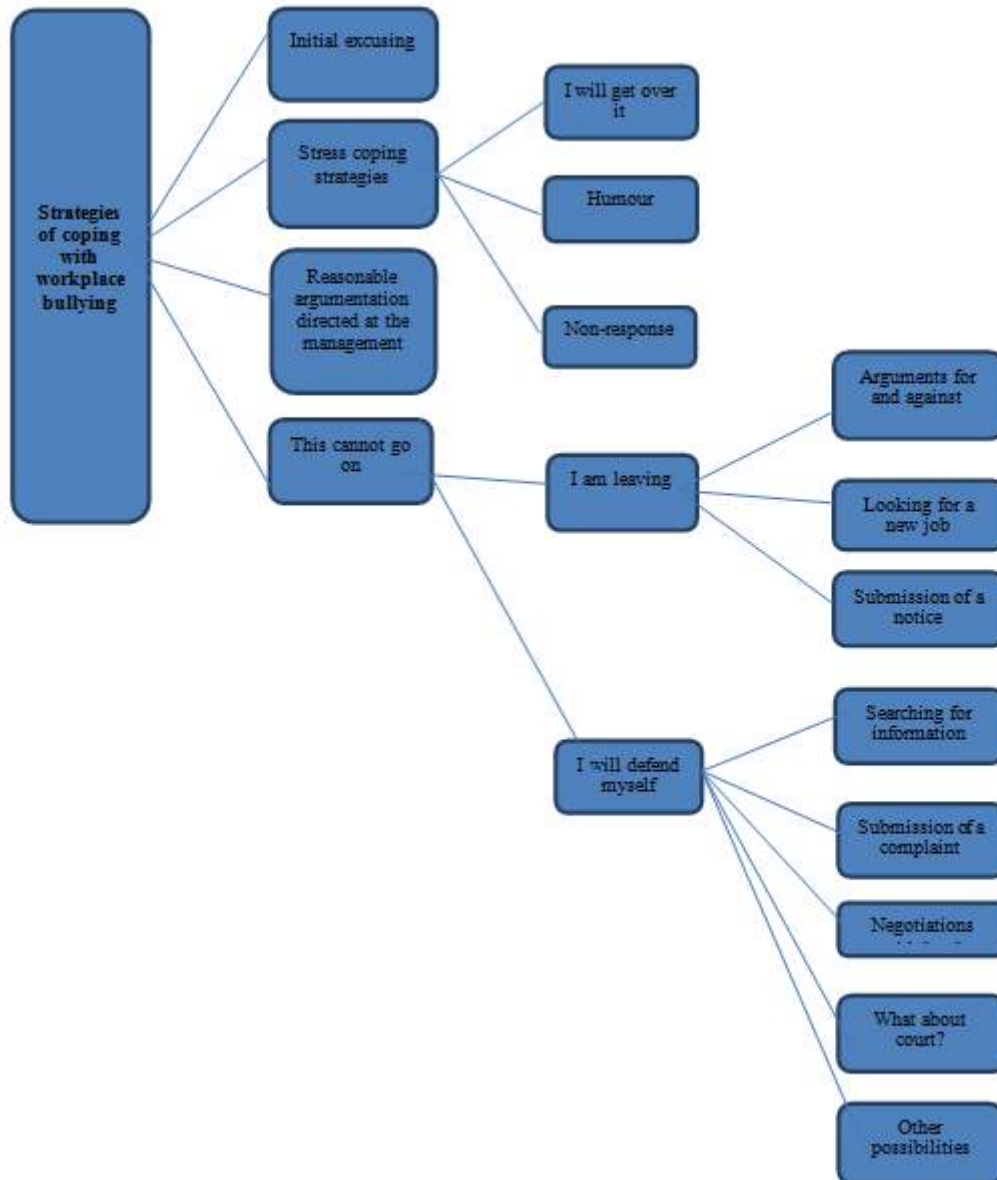
The analysis focused on data excerpts and core statements that contain regularities and repeating statement patterns. In some cases, less frequent categories of statements are analysed, but any such case is duly justified.

Regarding the fact that this is a relatively extensive qualitative research study, only a part of open coding is presented. It should be noted that the victims of bullying are also affected by other intervening variables acting from their external environment, which are not directly related to the bullying behaviour but have a determining or modifying effect on the actions and behaviour of the victim.

Results, conclusions and recommendations

Based on an analysis of the teachers' responses, three main categories of coping with bullying behaviour were identified; these strategies were used especially in the initial stages of mobbing and bossing, when the teachers believed that everything can be resolved in a usual way by means of negotiation. The categories are as follows: *'Initial excusing'*, *'Coping strategies'* and *'Reasonable argumentation directed at the management'*. After a reasonable solution is found to be ineffective, the victim proceeds to the category *'this cannot go on'* and either leaves or takes various defence strategies. The arrangement of the categories and subcategories is clearly shown in the following diagram (see Graph 1.)

Graph 1. Strategies of coping with workplace bullying



Analysis and categories and subcategories

Category: Initial excusing

One of the first reactions of teachers to workplace bullying is *initial excusing of the aggressor, refusing to believe the situation and efforts to quickly overcome this unfortunate period*. Victims usually believe that everything will turn better again. These are usual reactions used in coping with minor or major problems, both in occupational and personal life. They are based on an assumption that the other person is actually good, but only this time it does not work. This may also include adaptation to a stressful environment, which may use unconscious defence mechanisms such as trivializing, denial, rationalization of aggressor's behaviour, etc.



(Pugnerová, Kvintová, 2016). This initial excusing is obvious especially in victims who had known the aggressor for a long time and where bullying developed creepily under the influence of multiple factors. In contrast, in the case of problems with a new superior, teachers usually do not use these excusing and adaptation strategies.

Category: Stress coping strategies

Once teachers find out that various attacks are not rare but fairly common, they start to reconcile themselves to the situation and try to *cope by means of usual adaptation mechanisms* to avoid stress as much as possible. These ways of coping with these situations that are difficult in terms of communication were used not only at the beginning of the attacks but throughout the whole period; the strategies often changed or overlapped and new strategies were gradually added – these were deliberate actions in order to cope with the adverse situation and protect oneself. The main stress coping behaviours included ‘I will get over it’, ‘humour’ and ‘non-response’.

Subcategory in the category ‘Stress coping strategies’: I will get over it

One of the first usual ways of coping with unpleasant situations is ‘*I will get over it*’. This type of behaviour is characterized by acceptance of authoritative leadership although it is unpleasant, because this is the simplest and least energy-demanding way of coping with the situation. Such acceptance of the situation and an effort to forget about the unpleasant part was the most dangerous type of behaviour, because the victims knew very well that if they had defended themselves, it could have had serious implications, including dismissal.

Subcategory in the category ‘Stress coping strategies’: Humour

Another very effective means of coping with stress is *the use of wit humour and laughter*. These relief strategies were reported by the respondents but it should be noted that they were used at the beginning of bullying or at the end, when the respondents felt relief, e.g. in the case of planned termination of employment. When the attacks were most intensive, they were most tormenting for the victims and laughter came only after some relief.

Subcategory in the category ‘Stress coping strategies’: Non-response

Another method, which is similar to avoidance but has a stronger escape tendency, is maximum possible non-response. This includes non-responding to attacks, getting out of the aggressor’s way, not provoking any conflicts, not even by well-intentioned activity. Some victims learned to cope in this way (Karel), but most victims began to resolve the problem in an active way.

Category: Reasonable argumentation directed at the management

The boundary that marks violation of a person’s dignity is individual. This boundary of dignity also depends on what a person might lose if the boundary is exceeded. Younger teachers ‘have nothing to lose’ and at the same time for this reason they do not usually tolerate bullying behaviour, especially in the long term. On the other hand, older teachers with decades of experience need longer time to pluck up the courage to defend themselves against the attacker or to use constructive argumentation. Reasonable argumentation directed at the management does not automatically imply direct defence and declared war on the management, but rather a preparatory step – assertive communication with clear requirements. Both directly to the attacker or indirectly to the attacker’s closest collaborators. The purpose of this argument is to try to understand the situation, settle the triggering conflict and determine acceptable conditions for all parties.

Category: This cannot go on

Once the situation has reached a critical point and mobbing or bossing started to have *a negative effect* not only on work, but also *on personal life and especially the victim’s health*, the respondents began to think about what to do next. The first thought was obvious: ‘*This cannot go on. I must do something, otherwise it will destroy me.*’ But it was not quite clear which of the possible solutions was the right one, whether to escape or counter attack. Some teachers immediately began to consider voluntary termination as the only possible solution. However, some teachers considered termination as the last option. After the aggressor went beyond their internal boundary,



they decided to defend themselves and searched for help. It should be noted that in many cases both options mingled and these teachers thought about which one is the correct one.

Subcategory in the category ‘This cannot go on’: *I am leaving*

Leaving school was seriously considered by most of the respondents. However, they suggested that this step was extremely difficult to take. It was preceded by a long period of *considering arguments* about the appropriateness of this solution, followed by active *searching for a new job* and only then *submitting a notice*. In some cases, the teachers did not take all three steps, because sometimes the situation was resolved by communicating the intention to leave, sometimes leaving was the only possible alternative.

Subcategory in the category ‘I am leaving’:

❖ *Arguments for and against*

According to the teachers, the main arguments and counter arguments in relation to submitting a notice included *consideration of the risk of unemployment* and financial security of the family, complying with family duties and plans. Some of the circumstances that the respondents considered in different ways included to have or not to have children at university, to be or not to be a single parent. In addition to concerns about the financial security of the family, an important role was taken by the *continuity of professional work* carried out by the teacher, *established professional position and naturally friendly relationships and ties*. Another aspect was the need to repay thousands of crowns for courses that the school had paid in return for teachers’ commitment to stay and teach for a certain number of years. However, the greatest *motivation to leave* was mainly *a peaceful and happy life without stress and fear*, which was usually stronger than all other counter arguments.

❖ *Looking for a new job*

In the case of many teachers, submitting a notice was preceded by *searching for a new job* and a certain security. This means that during the period of attacks, some teachers actively searched for schools offering a job. In one case, the escape from hell was not a new job but maternity leave.

❖ *Submission of a notice*

It could be assumed that once the teachers decided for the solution *I am leaving*, they submitted a notice but this was not always the case. Some teachers, who had been looking for a new job, did not eventually submit a notice because the local government had changed the school management. Others, who believed in a change until the last moment, submitted a notice and thus finished their fight against the aggressors and evil. Here, the submission of a notice is a clear manifestation against inappropriate behaviour; especially in the case of multiple notices the teachers later used this to prove the truth. In the interviews, the respondents confirmed their attitudes by pointing to other colleagues leaving and thus pointed to a cyclic problem.

Subcategory in the category ‘This cannot go on’: *I will defend myself*

The second way of responding to excessive load, mental attacks and long-term stress caused by bullying is the previously mentioned *defence*. Many teachers did not know what to do in an inappropriate situation, so their first reaction was to collect information. At the same time they approached various institutions with a complaint about the head teacher’s behaviour and asked for help. They also informed the local authority, took court action, collected evidence, turned to the Ministry of Education, media and non-profit organizations. This was all performed under growing intensity of bullying, daily attacks in work and under the scrutiny of the public. In all of the subcategories under this subchapter, there are many more complex statements, but only a few were selected and simplified for clarity reasons.



Subcategory in the category ‘I will defend myself’:

❖ *Searching for information*

One of the first activities of those respondents who felt to be in the right and believed in standing against the attacker was to search for information about the phenomenon that they were experiencing. For this purpose they used primarily the Internet, where some of them came across a non-profit organization that deals with mobbing and bossing. Here they also found the most information. Another source of information was legal advice, which is mentioned in the subcategory ‘*What about court?*’ It should be noted however that an important aspect in this context is the period in which bullying was experienced. This is greatly influenced by modern communication technologies, which bring sufficient information unlike the totalitarian period or the period right after the revolution.

❖ *Submission of a complaint*

When the teachers decided to do something about the situation, they had to file a complaint to receive moral, formal, legal and financial satisfaction. The teacher’s complaint and supporting documents were submitted to the School Authority (i.e. local government), Czech School Inspectorate, Regional Authority, and the Labour Inspectorate. The responses of these institutions were different, but mostly, with few exceptions, without much success.

❖ *Negotiations with local authority*

As was previously mentioned in the subchapter *Reaction of the Mayor*, negotiations with the school authority took a long time and some teachers believed they would be successful. These negotiations were constantly disrupted by other influences – by the aggressor, who tried to thwart these efforts by identifying them as slandering, by the local government as a result of various reasons and pressures, sometimes even by the trustworthiness of the aggressor, etc. In one case, the situation could not be resolved by the local Department of Education, who believed that the case should be referred to the court.

❖ *What about court?*

The issue of court proceedings was mentioned by the respondents several times. However, only in one case the victim succeeded and won a court case assisted by a non-governmental non-profit organization. Another legal action was allegedly taken by a respondent’s colleague, but the respondent did not take the action himself.

According to other respondents, they thought about a legal action and even consulted a lawyer. However, the lawyer warned about the complexity of the legal action, excessive length and a low chance of succeeding. This made most of the teachers abandon the idea of resolving the matter by means of a court case.

Nevertheless, many teachers followed the recommendations for a possible court case. Collect evidence, make a copy of everything, be able to prove everything. Although many believed that a court proceedings would be difficult, they were willing to present a large body of evidence, records and pictures during the interview on this issue. This was likely in response to the fact that they encountered considerable distrust, or kept the information just in case.

❖ *Other possibilities*

Besides negotiating with the aggressor, representatives of the local authority, school inspectorate or other controlling authorities, the teachers also used other ways of addressing this difficult situation. Especially after all other options failed. Some teachers have experience with *negotiations with the Deputy Minister of Education* and the Department of Complaints, others contacted the *Ombudsman for human rights*. Some teacher frequently thought about or contacted the media, etc.

To conclude, it is obvious that mobbing (including the form of bossing) is a serious ethical issue, which affects the life of current schools and significantly influences the personality of the teacher-victim and the teacher’s



work performance and private life. The research suggests that the teacher's reactions to workplace bullying are different with respect to other circumstances of their professional and personal life (age, gender, taking care of the family, possibility to find a new job, existential dependence on the current job, etc.); most of the cases have a similar development but a different result.

Having stated this, the issue is surely not resolved. For the purposes of prevention it is recommended to increase the teachers' awareness, not only in terms of the phenomenon itself, but mainly in terms of defence mechanisms and knowledge of legal norms. Therefore, the authors of the present paper believe it is necessary to investigate this phenomenon, inform about the results and implement them into the curricula of undergraduate teacher training. At the same time, each school should adopt an ethical code for teachers and acknowledge mobbing as an unacceptable form of behaviour in a school environment.

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References

- Beňo, P. (2003). *Můj šéf, můj nepřítel?* Brno: ERA.
- Borská, I. (2005). Mobbing a bossing–jak se bránit. *Personální a sociálně právní kartotéka*, 8, 8-10.
- Cakirpaloglu, P., Šmahaj, J., Dobešová Cakirpaloglu, S., & Zielina, M. (2017). *Šikana na pracovišti v České republice. Teorie, výzkum a praxe*. Olomouc: Univerzita Palackého.
- Čech, T. (2011). *Mobbing jako negativní fenomén v prostředí základních škol*. Brno: Masarykova univerzita in cooperation with MSD.
- Einarsen, S., Hoel, H. Zapf, D., & Cooper, C. L. (2011). The concept of bullying and harassment at work: The European tradition. In: Einarsen, S., Hoel, H. Zapf, D., Cooper, C. L. (eds.), *Bullying and harassment in the workplace*. London: Taylor & Francis, 3-40.
- Einarsen, S., Raknes, B. R. I., & Matthiesen, S. B. (1994). Bullying and harassment at work and their relationships to work environment quality: An exploratory study. *European journal of work and organizational psychology*, 4(4), 381-401.
- Gavora, P. (2010). *Úvod do pedagogického výzkumu*. Brno: Paido.
- Huber, B. (1995). *Psychický teror na pracovišti. Mobbing: Rádce*. Vydavatel'stvo Neografie.
- Kratz, H. J., Bedrnová, E., & Nový, I. (2005). *Mobbing: jak ho rozpoznat a jak mu čelit*. Management Press.
- Leymann, H. (1993). Mobbing–Psychoterror am Arbeitsplatz und wie man sich dagegen wehren kann (Mobbing–psychoterror in the workplace and how one can defend oneself). *Reinbeck: Rowohlt*.
- Leymann, H. (1996). The content and development of mobbing at work. *European Journal of Work and Organizational Psychology*, 5(2), 165-184.
- Mikkelsen, E. G., & Einarsen, S. (2001). Bullying in Danish worklife: Prevalence and health correlates. *European Journal of Work and Organizational Psychology*, 10, 393-414.
- Pugnerová, M., Kvintová, J. (2016). *Přehled poruch psychického vývoje*. Praha: Grada.
- Svobodová, L. (2008). *Nenechte se šikanovat kolegy-Mobbing-skrytá hrozba*. Praha: Grada.
- Vartia, M. (2003). *Workplace bullying: A study on the work environment, well-being and health*. [on-line]. Unpublished dissertation propositions. Helsinki. [cit. 11-8-2015].
- Zábrodská, K., & Květon, P. (2012). Šikana na pracovišti v prostředí českých univerzit: výskyt, formy a organizační souvislosti. *Sociologický časopis/Czech Sociological Review*, 48, 641-668.



The incidence of workplace bullying in Czech teachers

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Abstract

Workplace bullying is a subtle manifestation of disturbed relationships in the workplace and it is considered an extreme type of social stressor at work. The present study verifies a psychological survey on a sample of N = 258 teachers in the Czech Republic, using a questionnaire of negative acts NAQ-R (Negative Act Questionnaire-Revised) and a status questionnaire. According to stringent evaluation criteria, the highest prevalence of workplace bullying of 7.75% was determined by means of behavioral measurement; according to self-evaluation measurement the prevalence was 2.33%; the lowest prevalence of workplace bullying of 1.94% was obtained by combining the behavioral and self-evaluation measurements.

Keywords: workplace bullying, prevalence, NAQ-R, victimization

Introduction

During the past 20 years, workplace bullying has become a widely discussed and examined issue. The terminology concerning this issue is not unified. Various terms are used such as bullying, harassment, mobbing, or abusive behaviour. The authors tend to incline to the definition used in English-speaking countries, i.e. workplace bullying, although in the Czech Republic the commonly used term is mobbing (Čech, 2011). Workplace bullying represents a serious form of harassment, which is considered an extreme type of social stressor in a work environment (Zapf, 1999). According to Leymann, such behaviour represents hostile manifestations of aggression in the workplace; an employee is systematically exposed to hostility from one or more individuals, while experiencing helplessness and fear of being excluded from the group of co-workers (Leymann, 1996, p. 168). Another definition is presented by Einarsen et al. (Einarsen, Hoel, Zapf, & Cooper, 2011, p. 22), according to whom this behaviour involves harassment, offending and social exclusion of an employee or negative influencing of the employee's work. An activity can be considered bullying if such behaviour is regular (e.g. once a week) and repeated (e.g. during the past 6 month). During this escalating process, the victim is getting into an inferior or subordinate position and is the target of constant negative activities (Einarsen, Hoel, Zapf, & Cooper, 2011). Research studies emphasise a relationship between workplace bullying and negative health-related consequences for the bullied individual, such as a high level of psychological distress, a generally lower level of health (e.g. Høgh, Hansen, Mikkelsen, & Persson, 2011), and mental issues such as depression, anxiety disorders, or post-traumatic stress disorders (e.g. Nielsen & Einarsen, 2012; Cakirpaloglu, Šmahaj, Dobešová Cakirpaloglu, & Zielina, 2016; Leymann, 1996). In addition to the impacts mentioned above, research studies reveal other correlations, specifically between workplace bullying and absenteeism (Nielsen & Einarsen, 2012), decreased organizational commitment (Hoel & Cooper, 2000), a lower level of work satisfaction (e.g. Nielsen & Einarsen, 2012; Kvintova, Dobesova Cakirpaloglu, & Sztokowski, 2017), and last but not least a higher staff turnover.

Studies on the prevalence of workplace bullying point to a large variability between countries and within individual countries. These differences in the estimated prevalence of workplace bullying are often associated with methodological, conceptual, organizational or cultural differences, which are specific to various research studies. The generally reported value is 1 to 4% of bullying between employees (Zapf & Gross, 2001). However, this estimate differs by countries and continents, for example in Sweden the prevalence is 3.5 % (Leymann, 1996), in Denmark 2 to 4% (Mikkelsen & Einarsen, 2001), in Norway 11 to 18% (Nielsen, Skogstad, Matthiesen, Glasø, Aasland, Notelaers, & Einarsen, 2009), in Spain 18.9% (Carretero & Luciano, 2013), in Ireland 6% daily and 17% occasionally (O'Moore & Lynch, 2007), in the UK 50% (Rayner, 1997), in Austria



7.8% (Niedl, 1996). In the USA 38 to 90% (Glendinning, 2001) or 27% (Workplace Bullying Institute, 2014), in Turkey 56.2% (Akar, Nilgün, & Sarvan, 2011), in Japan 15% (Giorgi, Ando, Arenas, Shoss, & Leon-Perez, 2013).

From a methodological perspective, in surveying the prevalence of bullying behaviour in the workplace it is important to define the criteria for differentiating between individuals who are bullied and who are not. For these purposes, loose and stringent criteria are applied. According to the loose criterion, an employee is subject to at least one negative act once a week for a period of six months (Leymann, 1996). According to the stringent criterion, an employee has been subject to two negative acts at least once a week during the past six months (Mikkelsen & Einarsen, 2001). The application of this definition significantly decreases the prevalence of workplace bullying. For example, a meta-analytical review by Nielsen et al. (2010) indicates that the above mentioned criteria resulted in an average prevalence of mobbing of 12% in Scandinavian countries and 14% in other European countries. As far as the prevalence of mobbing in the Czech Republic is concerned, research is rare, especially in terms of the teaching profession. The estimate of the overall prevalence of mobbing in the Czech Republic is 7.79% (Cakirpaloglu et al., 2016), while in the group of academic staff in Czech universities the prevalence is 7.9% (Záborská & Květoň, 2012). A unique research study on workplace bullying was performed among elementary school teachers. The study applied the stringent criterion and reported a bullying prevalence of 5.8% among teachers in the academic year of 2008/2009 (Čech, 2011). Of this group, 3.7% of the respondents reported being bullied by colleagues in an identical or similar position; 4.1% of the respondents indicated being subject to bossing, i.e. the initiator of systematic aggression was the headteacher or another superior employee.

Research objective

The main objective of the present research study is to extend the database of knowledge on the issue of workplace bullying and to determine the prevalence of mobbing in a specific sample of employees – elementary and secondary school teachers in the Czech Republic. A partial objective is to identify the most frequent forms of mobbing in the monitored sample.

Method

To identify the prevalence and forms of workplace bullying the Negative Acts Questionnaire-Revised was used (referred to as NAQ-R), which includes a total of 23 items (Einarsen, Hoel, & Notelaers 2009). This questionnaire can be administered individually or in groups. The advantage of the NAQ-R questionnaire is time effectiveness and an opportunity to measure two complementary aspects of mobbing, i.e. behavioural and self-evaluation. The behavioural measurement criterion forms the basis of items 1 to 22 of the NAQ-R and focuses on selected manifestations of negative behaviour in the workplace. A specific feature of these items is that their formulations do not include any indication that they measure mobbing. The responses are indicated on a five-point Likert scale, suggesting the frequency of bullying behaviour, i.e. how often the respondents have encountered this type of behaviour during the past six months. While the behavioural criterion is included in the first 22 items, the 23rd item focuses on self-evaluation measurement. The respondents are asked to describe their own experience or perception about whether they feel as victims of mobbing according to the theoretical definition specified in the introductory part in item 23. In this respect, meta-analytical studies confirmed that estimates of the prevalence of workplace bullying based on self-evaluation are usually lower than estimates based on behavioural measurement (Agervold, 2007; Nielsen, Matthiesen, & Einarsen, 2010). A possible explanation is that subjective assessment includes additional factors such as personality traits or defence mechanisms, but also refusal to perceive oneself as a helpless and defenceless victim. By combining the behavioural and self-evaluation approaches according to the stringent criterion, a combined estimate is achieved. The advantage of this approach is a more accurate estimate and a lower number of errors; this applies especially to overestimation or underestimation of the number of bullied employees (Nielsen et al., 2009, Cakirpaloglu et al



2016). In the present research, the method of double translation was used to ensure content quality of the NAQ-R questionnaire. The English version of the NAQ-R questionnaire was translated to Czech and then back to English. The translation of the questionnaire and its application in the research was approved by the authors of the questionnaire in advance. Individual versions of the translation were compared with respect to language and cultural differences. Cronbach's alpha for 22 items of the Czech version of the NAQ-R questionnaire achieved $\alpha = 0.94$; this confirms a high degree of reliability of this method and the fact that it can be reliably used for measuring mobbing also by means of a smaller number of items.

Research sample

The research sample comprised a total of 258 respondents. The sample included elementary and secondary school teachers, citizens of the Czech Republic, aged 21 to 68 years, who were employed at the time of data collection. In total, the sample included 67 men and 191 women. The average age was 42.23 years (ME 42; SD 11.03). The average period of employment in the current position was 14.8 years. In terms of the respondents' academic degree, 11 individuals (4.25%) had a secondary school graduation certificate, and 247 respondents (95.55%) had a university degree. In terms of the type of school facility, 80 respondents (30.89%) worked in elementary school and 178 individuals (68.99%) were secondary school teachers.

Research study

Data collection was conducted in 2016-2017 by means of online surveying. The electronic version of the questionnaire was administered using the SurveyMonkey system, which meets the methodological and research criteria of online research relevance (high degree of security, archiving and encoding during data transfer, access via generated password, etc.) A total of 661 respondents were invited to participate; of whom 258 fully completed the questionnaire.

Methods of data processing and analysis

In the first stage, the data were transformed into an xls format compatible with MS Excel 2013, which can easily handle data exported from the electronic questionnaire. During the second stage, the data were formally and logically checked. Incomplete questionnaires or questionnaires with logical contradictions or incorrectly completed fields were excluded. Further data processing was performed using the STATISTICA programme, version 12. This stage was followed by the calculation of significant descriptive statistic values, especially the arithmetic mean, standard deviation, analysis of variance and mean error.

Findings

The first part presents the basic findings concerning the numbers and proportions of mobbing of elementary and secondary school teachers in the Czech Republic. Considering the total number of 258 NAQ-R questionnaires, Table 1 includes three categories of mobbing prevalence – behavioural, self-evaluation and combined. In addition, for each category of mobbed individuals, both the loose criterion (at least one negative act at least once a week for the past six months), and the stringent criterion (twice or more) are specified.

Table 1. Prevalence of workplace bullying of teachers according to behavioural, self-evaluation and combined measurement (loose and stringent criterion)

total	Behavioural estimate				Self-evaluation estimate				Combined estimate	
	Loose criterion		Stringent criterion		Loose criterion		Stringent criterion		Stringent criterion	
N	n	%	N	%	n	%	n	%	n	%
258	45	17.44	20	7.75	33	12.79	6	2.33	5	1.94

Legend: Loose criterion - at least one act once a week, stringent criterion - at least two acts once a week, combined criterion - combination of the stringent behavioural and self-evaluation criteria



In terms of percentage, the highest prevalence of workplace bullying was suggested under the loose criterion. The behavioural measurement suggested 17.44% of bullied individuals, while the self-evaluation estimate was significantly lower (12.79%). Significantly lower prevalence values in the same order were suggested by the stringent assessment criterion. Accordingly, the highest prevalence of bullied individuals was suggested by the behavioural measurement (7.75%), followed by self-evaluation (2.33%). The lowest workplace bullying prevalence was suggested by the combined estimate (1.94%), which was a combination of the behavioural and self-evaluation approach. The reason for using the combined estimate was to avoid overestimation or underestimation of the number of mobbed employees, which regularly occurs as a result of biased interpretation of the results using the behavioural or self-evaluation measurement. The combined approach allows more sensitive identification of the core group of mobbed individuals, who meet both criteria of the phenomenon (Cakirpaloglu et al., 2016, Nielsen et al., 2009).

An analysis of the different forms of workplace bullying identified the most frequent types of bullying of elementary and secondary school teachers. These included the most frequent types of behaviour with a frequency of Daily or Weekly. The most frequent forms of workplace bullying were '*Spreading rumours and excessive amount of work*'. Both types of behaviour were experienced by 5% of the respondents. Other acts included '*Repeated exaggeration of mistakes and work-related humiliation and ridicule*'. Both types of behaviour were experienced by 4% of the respondents. In contrast, the following forms of workplace bullying were not reported at all: *intimidation (pointing the finger, violation of personal space...), playing tricks, excessive ridicule, sarcasm, threats or physical violence*. This does not mean that these forms of behaviour were not observed by the respondents, but they were not frequent enough to be included in the defined mobbing criterion.

The mentioned typical forms of bullying of teachers do not considerably differ from those investigated by Čech (2011), who (using a different method of assessment) reported the following frequent forms of attacking a victim: *insufficient appreciation of the victim's work* (reported by 55.2% of all bullied teachers), *continuous criticism of work* (53.7%), *ridicule and gossip* (43.6%), *assigning nonsensical tasks or assigning no tasks* (36.9%) and *ignoring the victim* (29.9%). The following responses exceeded a twenty percent threshold: *assigning duties not matching my qualifications* (29.3%) and *offensive and humiliating statements* (21.3%). Other forms (*shouting at the victim or continuous interrupting, criticism of the victim's private life, verbal, telephone or written threats*) are less typical and are usually slightly below ten percent, but are undoubtedly significant. A satisfactory finding of the mentioned research is that the least frequent types of workplace bullying among teachers include serious behaviours such as *sexual overture or making sexual proposals, assaulting as a result of religious or political convictions or assigning harmful work*. Threats of physical violence are represented by a negligible number of cases amounting to less than one percent. This finding is fully consistent with all mentioned definitions of workplace bullying and bossing as a form of psychological violence, where threats of physical violence occur in exceptional cases.

Limitations

The Internet as an instrument for relevant data collection has some limitations, which need to be considered in the interpretation of the results. This primarily relates to the motivation for participation in a research study on mobbing; in this case the questionnaire was completed by less than a half of the 661 individuals who were invited. Some limitations are also caused by the selection of the questionnaire instrument for researching a complex and sensitive phenomenon such as mobbing. Although the Negative Acts Questionnaire (NAQ-R) has satisfactory psychometric features, the method of questioning cannot discern motivational, emotional and other mental processes of the main actors of mobbing. The results obtained by means of the NAQ-R questionnaire from various countries may be misleading in performing comparisons due to socio-cultural differences (e.g. Scandinavian countries, Italy, Japan, South Korea, Turkey, etc.)



Results, Conclusions and Recommendations

The main objective of the research study was to identify the prevalence of workplace bullying in a sample of respondents comprising elementary and secondary school teachers. The research instrument was the revised version of the Negative Acts Questionnaire NAQ-R, which offers two methods of measurement – behavioural and self-evaluation approach, which can be further classified by the loose (Leymann, 1996) and stringent (Mikkelsen & Einarsen, 2001) criterion. The prevalence of workplace bullying differs according to the criterion used (loose or stringent). Moreover, the prevalence of workplace bullying is affected by the application of the behavioural or self-evaluation measurement approach. The highest prevalence of bullying is associated with the behavioural loose measurement, which suggested 17.44% of mobbing in a sample of 258 teachers. This finding is consistent with an empirical estimate by Eurofound 2015, according to which the Czech Republic together with Austria and Finland are among EU countries with the highest prevalence of mobbing (Giaccone, Nunzio, Fromm, & Vargas, 2015). In the previously mentioned research study, Čech (2011) reported the proportion of teachers exposed to aggression in elementary schools in 2009 of 10.6% judged by the loose measurement. The difference might be caused by the application of a different non-standardized tool and a more compact sample (elementary school teachers). However, if the stringent criterion is applied to the prevalence of workplace bullying using the behavioural measurement, the proportion of bullied individuals decreases significantly to 7.75% in comparison with the original estimate. Similar findings were suggested by most foreign studies that used the same NAQ-R questionnaire. For example, in the above mentioned research, Nielsen et al. (2010) reported the average prevalence of workplace bullying of 12% in Scandinavian countries and 14% in other European countries. Similarly, Giorgi et al. (2013) reported 15.2% of mobbed employees in Italy. The estimated prevalence of mobbing in the Czech Republic according to the self-evaluation measurement is significantly lower, both in terms of the loose (19.82%) and stringent (11.19%) criterion (Cakirpaloglu et al., 2016), which is consistent with the general tendencies to underestimate the severity of mobbing, as reported by foreign authors (Nielsen, Matthiesen, & Einarsen, 2010; Høgh, Hansen, Mikkelsen & Persson, 2012; Buunk, Franco, Dijkstra & Zurriaga, 2016). Čech (2011) used a different questionnaire and reported the already mentioned proportion of 5.8% of bullied individuals in the school year of 2008/2009. The prevalence values indicated in the present study might also have been decreased in the context of the self-evaluation approach especially by non-acceptance of the image of a helpless and defenceless victim by the bullied employees, which is jointly suggested Nielsen et al. (2010) or Agervold (2007). The measurement of the behavioural and self-evaluation tier of workplace bullying in the NAQ-R offers a combined estimate under the stringent criterion. An empirical advantage of this approach is a reduced number of errors, which occur during standard interpretation of the results of different measurements; this applies especially to overestimation or underestimation of the number of bullied employees (e.g. Agervold, 2007; Nielsen et al., 2010). The combined estimate in the present research achieved a value of 1.94% of bullied teachers. These are a group of employees who face frequent hostile acts in the workplace and at the same time identify themselves with the role of a victim. Similar results based on the combined workplace bullying measurement using the NAQ-R were presented in an extensive study by Cakirpaloglu et al. (2016), who reported bullying in 7.79% of employees; a meta-analytical study by Nielsen performed in 2010 suggested that this method of measurement ensured finer classification of the group of bullied individuals.

During the past 20 years, workplace bullying has become a widely discussed and examined issue. Workplace bullying represents a serious form of harassment, which is considered an extreme type of social stressor in a work environment (Zapf, 1999). According to Leymann, such behaviour represents hostile manifestations of aggression in the workplace; an employee is systematically exposed to hostility from one or more individuals, while experiencing helplessness and fear of being excluded from the group of co-workers (Leymann, 1996, p. 168). An activity can be considered bullying if such behaviour is regular (e.g. once a week) and repeated (e.g. during the past 6 months). The main objective of the present research study is to extend the database of knowledge on the issue of workplace bullying and to determine the prevalence of this type of behaviour in a specific sample of employees – elementary and secondary school teachers in the Czech Republic. A partial objective is to identify the most frequent forms of workplace bullying in the monitored sample. The research instrument was



the revised version of the Negative Acts Questionnaire NAQ-R, which offers two methods of measurement – behavioural and self-evaluation approach, which can be further classified by the loose (Leymann, 1996) and stringent (Mikkelsen & Einarsen, 2001) criterion. The prevalence of workplace bullying differs according to the criterion used (loose or stringent). Moreover, the prevalence of workplace bullying is affected by the application of the behavioural or self-evaluation measurement approach. The research sample comprised a total of 258 respondents. The sample included elementary and secondary school teachers, citizens of the Czech Republic, aged 21 to 68 years, who were employed at the time of data collection. In total, the sample included 67 men and 191 women. The average age was 42.23 years (ME 42; SD 11.03). The average period of employment in the current position was 14.8 years. In terms of the respondents' academic degree, 11 individuals (4.25%) had a secondary school graduation certificate, and 247 respondents (95.55%) had a university degree. In terms of the type of school facility, 80 respondents (30.89%) worked in elementary school and 178 individuals (68.99%) were secondary school teachers.

According to stringent evaluation criteria, the highest prevalence of workplace bullying of 7.75% was determined by means of behavioral measurement; according to self-evaluation measurement the prevalence was 2.33%; the lowest prevalence of workplace bullying of 1.94% was obtained by combining the behavioral and self-evaluation measurements. An analysis of the different forms of bullying identified the most frequent types of workplace bullying of elementary and secondary school teachers. These included the most frequent types of behaviour with a frequency of Daily or Weekly. The most frequent forms of workplace bullying were '*Spreading rumours* and *excessive amount of work*'. Both types of behaviour were experienced by 5% of the respondents. Other acts included '*Repeated exaggeration of mistakes and work-related humiliation and ridicule*'. Both types of behaviour were experienced by 4% of the respondents. In contrast, the following forms of workplace bullying were not reported at all: *intimidation (pointing the finger, violation of personal space...), playing tricks, excessive ridicule, sarcasm, threats or physical violence*.

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References

- Agervold, M. (2007). Bullying at work: A discussion of definitions and prevalence, based on an empirical study. *Scandinavian journal of psychology*, 48(2), 161-172.
- Akar, N., Nilgün, A., & Sarvan, F. (2011). Causes, dimensions and organizational consequences of mobbing: An empirical study. *Ege Academic Review*, 11(1), 179-191.
- Buunk, A. P., Franco, S., Dijkstra, P., & Zurriaga, R. (2017). Mobbing in schools and hospitals in Uruguay: prevalence and relation to loss of status. *Journal of interpersonal violence*, 32(5), 623-634.
- Cakirpaloglu, P., Šmahaj, J., Dobešová Cakirpaloglu, S., & Zielina, M. (2017). *Šikana na pracovišti v České republice. Teorie, výzkum a praxe*. Olomouc: University Palacky.
- Carretero, N., & Luciano, J. V. (2013). Prevalence and incidence of workplace bullying among Spanish employees working with people with intellectual disability. *Disability and health journal*, 6(4), 405-409.
- Čech, T. (2011). *Mobbing jako negativní fenomén v prostředí základních škol*. Brno: Masarykova univerzita in cooperation with MSD.
- Einarsen, S., Hoel, H. Zapf, D., & Cooper, C. L. (2011). The concept of bullying and harassment at work: The European tradition. In: Einarsen, S., Hoel, H. Zapf, D., Cooper, C. L. (eds.), *Bullying and harassment in the workplace*. London: Taylor & Francis, 3-40.



- Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised. *Work & Stress*, 23(1), 24-44.
- EUROFOUND (2015). Violence and harassment in European workplaces: Extent, impacts and policies Dublin. Retrieved June 14, 2016 from: <http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/violence-and-harassment-in-european-workplaces-extent-impacts-and-policies>, 26. 5. 2015
- Giaccone, M., Nunzio, D., Fromm, A., & Vargas, O. (2015). Violence and harassment in European workplaces: Extent, impacts and policies. Dublin. Retrieved September 15, 2016, from <http://www.eurofound.europa.eu/observatories/eurwork/comparative-information/violence-and-harassment-in-european-workplaces-extent-impacts-and-policies>.
- Giorgi, G., Ando, M., Arenas, A., Shoss, M. K., & Leon-Perez, J. M. (2013). Exploring Personal and Organizational Determinants of Workplace Bullying and Its Prevalence in a Japanese Sample. *Psychology of Violence*, 3(2), 185-197.
- Glendinning, P. M. (2001). Workplace Bullying: Curing the Cancer of the American Workplace. *Public Personnel Management*, 30, 269-286.
- Hoel, H., & Cooper, C. L. (2000). *Destructive conflict and bullying at work*. Manchester: Manchester School of Management, UMIST.
- Hogh, A., Hansen, Å. M., Mikkelsen, E. G., & Persson, R. (2012). Exposure to negative acts at work, psychological stress reactions and physiological stress response. *Journal of psychosomatic research*, 73(1), 47-52.
- Kvintova, J. Dobesova Cakirpaloglu, S., & Sztokowski, R. (2017). Social network use and pre-service teachers life satisfaction and self-esteem, In: *INTED2017 Proceedings*, (pp. 2935-2941). Valencia, Spain.
- Leymann, H. (1996). The content and development of mobbing at work. *European Journal of Work and Organizational Psychology*, 5(2), 165-184.
- Mikkelsen, E. G., & Einarsen, S. (2001). Bullying in Danish worklife: Prevalence and health correlates. *European Journal of Work and Organizational Psychology*, 10, 393-414.
- Niedl, K. (1996). Mobbing and well-being: economic and personnel development implications. *European Journal of Work and Organizational Psychology*, 5, 239-249.
- Nielsen, M. B., Matthiesen, S. B., & Einarsen, S. (2010). The impact of methodological moderators on prevalence rates of workplace bullying. A meta-analysis. *Journal of Occupational and Organizational Psychology*, 83(4), 955-979.
- Nielsen, M. B., Skogstad, A., Matthiesen, S. B., Glasø, L., Aasland, M. S., Notelaers, G., & Einarsen, S. (2009). Prevalence of workplace bullying in Norway: Comparisons across time and estimation methods. *European journal of work and organizational psychology*, 18(1), 81-101.
- Nielsen, M. B., & Einarsen, S. (2012). Outcomes of exposure to workplace bullying: A meta-analytic review. *Work & Stress*, 26(4), 309-332.
- O'Moore, M., & Lynch, J. (2007). Leadership, working environment and workplace bullying. *International journal of organization theory and behavior*, 10(1), 95-117.
- Rayner, C. (1997). The incidence of workplace bullying. *Journal of Community & Applied Social Psychology*, 7(3), 199-208.
- StatSoft, Inc. (2013). STATISTICA (data analysis software system), version 12. www.statsoft.com.
- Workplace Bullying Institute (2014). U.S. Workplace bullying survey. Retrieved from: <http://www.workplacebullying.org/multi/pdf/WBI-2014-US-Survey.pdf>.
- Zábrodská, K. (2011). Mobbing ve vysokoškolském prostředí: zkušenosti ze zahraničního výzkumu. *Československá psychologie*, 15(4)
- Zábrodská, K., & Květon, P. (2012). Šikana na pracovišti v prostředí českých univerzit: výskyt, formy a organizační souvislosti. *Sociologický časopis/Czech Sociological Review*, 48, 641-668.
- Zapf, D. (1999). Organisational, work group related and personal causes of mobbing/bullying at work. *International journal of manpower*, 20(1/2), 70-85.
- Zapf, D., & Gross, C. (2001). Conflict escalation and coping with workplace bullying: A replication and extension. *European Journal of Work & Organizational Psychology*, 10(4) 497-522.
- Zapf, D., Escartín, J., Einarsen, S., Hoel, H., & Vartia, M. (2011). Empirical findings on prevalence and risk groups of bullying in the workplace. *Bullying and harassment in the workplace: Developments in theory, research, and practice*, 2, 75-106.



Evaluation of customer relation management formation in the retail trade enterprises in the Baltic countries

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Abstract

The sphere of retail trade has always played significant role in every country national economy. The grounds of success of a retail trade enterprise is formation of customer satisfaction and loyalty to the enterprise. Process of attracting new customers involves spending more money and energy. In order to retain existing customers and ensure their loyalty, one of the basic tasks of the enterprise is to know the factors that influence their satisfaction and the satisfaction level itself. Market globalization influences retail trade enterprises more and more, this makes them look for possibilities to ensure and raise their competitiveness. To identify factors of competitiveness the authors put forward the goal to research the measurement methods of satisfaction and loyalty in retail trade enterprises. To reach the goal the authors employ the monographic method to explore the theoretical background of the satisfaction and loyalty; besides that the authors analyze the tendencies of the retail trade in Latvia and by the means of the expert interviews, the customer and manager surveys help the identification of the application level of the satisfaction and loyalty research in the retail trade companies in Latvia. The present article will give the retail trade enterprises understanding of necessity of research in the process of customer satisfaction formation and its specific features in the retail trade sector. The authors have summarized the existing approaches and defined their approach to application of satisfaction and loyalty measurement. The authors conclude that by using customer satisfaction and loyalty research, it is possible to manage the customer attitude formation, and this can be one of the instruments for ensuring competitiveness.

Keywords: customer, retail, research methods, customer satisfaction, loyalty

1. Introduction

Market globalization influences retail trade enterprises more and more. This makes them to look for solutions how to ensure their competitiveness and development. In the contemporary situation of market saturation with products, the main task for enterprises is becoming competitive. Orientation to customer satisfaction is customer-oriented approach of company management. There are various criteria and principles in determining customer satisfaction; still they have a common aim, i.e., supporting the competitive and sustainable sales enterprise development. In the scientific literature related to the field of interest (Fornell, 1992: 6 - 21; Prass, (b.g.); Fischbein, 1967: 389 - 400; Vavra, 1997: 384 - 385; Brandt, 1987: 61 - 65; Shostak, 1987: 34 - 43; Gummesson, Kingman-Brundage, 1992: 101 - 114; Bitner, 1993: 358 - 370) we can find several sources, models and methods of customer satisfaction evaluation. The current research focuses upon the application of customer satisfaction evaluation in the retail trade. It is important because the customer satisfaction evaluation and measurement fulfills such interrelated functions:

- information gathering about customer satisfaction and quality level of the offer;
- determining cases of dissatisfaction in order to eliminate them in due time;
- determining positive and negative results of customer satisfaction in order to work out methods for staff stimulation and punishment.

By acquiring knowledge about customer satisfaction level and applying this knowledge to practice, enterprise earns customers' trust can significantly raise its competitiveness. To identify the factors of competitiveness the authors put forward the goal to research the measurement methods of satisfaction and loyalty in retail trade enterprises. To reach this goal the following tasks are to be solved:

1. To analyze the theoretical aspects of customer satisfaction and loyalty research methods.
2. To characterize the retail trade sphere and its development in the Baltic countries.
3. To determine the use of customer satisfaction research in the Baltic retail trade enterprises by the means of survey.

In order to determine tendencies in evaluation of customer satisfaction in the Baltic countries and put forward proposals for its improvement, we have conducted survey of managers of retail trade enterprises. There are such limitations of the current research: it concerns mostly methodological aspects; therefore, size and location of the enterprises included in the survey have not been taken into account. Research data were collected between January 1 and March 1, 2017 by applying the following methods: the logically constructive one to carry out comparison of empirical results with theoretical conceptions; the graphical one for visual interpretation and analysis of research data, as well as customer survey. The methodological background of the article consists of publications of foreign authors (R. Brandt, M. Fishbein, T. Vavra and others) on customer relation formation factors and processes.

2. Methods of customer satisfaction research

The satisfaction of the economic category is an element of the system of customer relationship management. In order to determine competitiveness of an enterprise and its underlying factors both from theoretical and practical perspectives; it is necessary to evaluate the system of customer relation management as such and its particular elements. The next step is carry out evaluation of the results of existing system of customer relation management according to specific criteria, in order to determine system advantages and disadvantages and to make decision about future actions (to improve the system, to leave it intact, to stop the operation, etc.)

In the special literature, we can find several resources, models and methods to evaluate the customer satisfaction. It is important, since the evaluation and measurement of customer satisfaction fulfill these closely related functions:

- information gathering about customer satisfaction and quality level of the offer;
- determining cases of dissatisfaction in order to eliminate them in due time;
- determining positive and negative results of customer satisfaction in order to work out methods for staff stimulation and punishment.

Analysis of publications in the field (*Fornell*, 1992, 6–21; *Prass*, (b.g.); *Fischbein*, 1967, 389–400; *Vavra*, 1997, 384–385; *Brandt*, 1987, 61–65; *Shostak*, 1987, 34–43; *Gummesson*, *Kingman–Brundage*, 1992, 101–114; *Bitner*, 1993, 358–370), make it possible to conclude that all sources of information regarding evaluation and measuring the customer satisfaction can be divided in two broad groups:

- 1) Processed data – previously gathered information for different research aims;
- 2) Primary data – first time information gathered for the purpose of specific project.

The table 1 depicts specific sources of information according to both groups of data. 1.

Table 1. Data sources for evaluation and measuring customer satisfaction

Processed data sources (performance indicators of the company)	Primary data sources (qualitative and quantitative investigations)
Turnover	Customer survey
Market share	Expert survey
Income	Staff survey
Expenses	Observation
Profit	In-depth interview
Liquid assets	Focus group discussion
Fixed assets	Data base of complaints
Other indicators	Customer survey

Table 1 depicts only data sources that allow gathering necessary information. Nevertheless, it is very important to process and analyze data in order to make conclusions and apply them in practice.

Table 2 reflects the main methods for processing and analysis of primary data of customer satisfaction.

Table 2. Methods for processing and analysis of customer satisfaction

Primary data gathering sources	Methods of primary data processing and analysis
Customer survey	Determination of customers' attitude to product/brand (M. Fishbein's model)
Expert survey	Determination of importance of satisfaction factors within overall satisfaction. Determination of penalty/reward factor
Observation	Service Blueprinting
Staff survey	Analysis of contact situation
Interviews	Method of sequential events
Focus group discussion	Critical incident technique
Customers' complaint data base	Processing and analysis of customer complaints

Surveys of customers and experts can be used to evaluate their attitude toward company product/brand in general and to its specific characteristics.

Attitude is the assessment of a product/brand and hence - a background for choice of possible action. Attitude can be characterized as positive, negative or neutral one. Of course, each enterprise is interested in the stable positive attitude to its products/brands; still competitors' activities have to be taken into account as well. Therefore, it is appropriate to carry out the research to find out customers' attitude to product quality, assortment, situation of brands and consumption that all create a definite satisfaction level.

Instability of the attitude means that, it can easily change from the positive to the neutral or even the negative one. For instance, the customer dissatisfied with the specific product/brand would buy something different altogether in future. If the attitude is stable, it characterizes the customer satisfaction level. The Fishbein's quantitative model is very useful for calculation of it. (Fishbein, 1967, 389–400):

$$A = \sum_{i=1}^n b_i e_i, \quad (1)$$

where:

A – attitude to product/brand;

b_i – stability of attitude, that the product/brand exhibits the quality i ;

e_i – evaluation of the quality i of the product/brand;

n – a number of significant qualities.

This model rests upon two basic elements:

- 1) **The stability of attitude** – the level of trust in the particular qualities of the product/brand and its interaction with the customer satisfaction;
- 2) **The evaluation of the product/brand qualities** – customers' views about significance of the product/brand qualities within the overall satisfaction.

The method of identification of significance of the satisfaction factors within the overall satisfaction consists of division of the factors into two groups (Vavra, 1997, 384–385):

- The explicit factor significance;
- The implicit factor significance.

The explicit and implicit significance dimensions of the product/brand are determined by the regression analysis of the survey results, by correlating levels of satisfaction with particular qualities of the product/brand and the overall satisfaction. (Vavra, 1997, 384–385) In the retail trade it can consist of the product quality, the assortment, the placement of goods on shelves, the variety of service offered by the enterprise.

Division of factors according to their explicit and implicit significance makes it possible to determine three groups of factors underlying the satisfaction/dissatisfaction:

- 1) The expected attributes, that form provision of minimal needs of the enterprise offer;
- 2) The desired attributes create customers' satisfaction, if performance is up to the expected level, and dissatisfaction if expectations are not met; thus customer satisfaction is directly dependent on the expected level of performance

- 3) The exciting attributes are not specifically required and expected by the customer; lack of these attributes does not lead to dissatisfaction, whereas their presence can raise satisfaction level above the expected satisfaction level.

Division of the satisfaction/dissatisfaction attributes into three groups can be accomplished through involvement of consumers. By processing and analyzing survey results, it is possible to create a matrix where the explicit and implicit significance of attributes are juxtaposed with three factors underlying the satisfaction/dissatisfaction. (Vavra, 1997, 384–385).

The research of satisfaction/dissatisfaction factors and their evaluation serve to identify the advantages and disadvantages of the enterprise in order to make correct decisions in the realm of customer relations. R. D. Brandt proposes another method of evaluation of the satisfaction/dissatisfaction factors. The background of the method is a hypothesis that penalty factors are the attributes of the company offer the lack of which or the poor performance (for instance, low quality of the produce) inevitably cause customers' dissatisfaction. Whereas reward factors are such characteristics of the company offer that raise satisfaction level and the lack of which do not have a significant impact on it? (Brandt, 1987, 61–65).

The principal aim of the method is to identify penalty/reward factors by the means of customer survey and regression analysis. Moreover, in the process the well-known Likert five-point scale (from "very dissatisfied" to "satisfied") is replaced by the value "0", but other assessments by the value "1". Whereas in determining the reward satisfaction factors the Likert scale (from "very satisfied" to "satisfied") is replaced by the value "1", but other assessments with the value "1". Consequently, the penalty satisfaction factors include only the lowest assessment, but the reward satisfaction factors – only the highest assessments.

Three methods of the evaluation of customer satisfaction based on surveys (see. table 2) can be applied also to the retail trading, but there are features of the realm to be taken into account. Firstly, there are specific satisfaction attributes. Secondly, we have to pay attention to characteristics of the target audience (different segments, loyalty degree, etc.). Thirdly, the methods have certain disadvantages:

- survey results depict each customer's subjective opinion, that can change in the foreseen future;
- scientifically valid survey (representation of respondents, differentiation of the target audience, periodicity, etc.) can be quite costly therefore often inaccessible to the small and medium sized enterprises;
- survey provides information mostly about the situation in the concrete enterprise, but it doesn't give opportunity of comparison with situation in other enterprises, including the competing ones.

Other customer satisfaction assessment and measurement methods are based on observation and company staff surveys. These methods are based on an analysis of the contact situation between consumers and employees of the company. Following the identification of the contact points, all possible contact situations between the buyers and the company's personnel are systematically recorded (for example, in a supermarket they may have contacts with personnel related to the search for products, cashier at the cash register, employees of the information office, etc.). For this purpose it is appropriate to use the Service Blueprinting method. (Shostak, 1987, 34–43) The company must set up a service process diagram that graphically reflects the various contact situations between the buyer and the company's employee. In addition, the entire service process is divided into two zones, in which the diagram divides the so-called Line of Visibility:

Zone 1 reflects the service process visible to consumer

Zone 2 reflects the service process hidden from consumer.

Identification of contact situations enables to calculate their number in the service process, to analyze the staff performance in each contact situation, to evaluate the environment of a particular service and to compile a process improvement plan.

The Blueprinting method is also suitable for the company (including retail) staff education and training. The data resulting from the use of the Blueprinting method serves as the basis for **a method for analyzing a contact situation**, the aim of which is to find out how all contacts in the service provision process are realized, from the point of view of the consumer (Barth, et. al., 1994, 40). For this purpose, all real contacts/events are divided into two groups

- 1) ordinary or normal events;
- 2) critical or extraordinary events.

Data sources can be the passive non-participation or active participation observation. Customers who are being monitored may be aware of it (open observation) or do not be aware of it (hidden observation).

In the case of passive non-participation observation, the researcher records the obvious events of the service process (for example, in the retail sector - a line at the cash register) and makes conclusions about the existing problems and/or failures. The advantage of the method is that the observer can capture the manifestations of the subjective consumer satisfaction, but the disadvantage is that there are such contact situations that cannot be observed without knowing it by the subjects. Consequently, both consumers and employees of the company, knowing that they are being monitored, can act differently than usual.

In the case of the active participation in the services process, the observer participates as a buyer (Silent Quest), simulating a real situation. Taking into account the fact that the staff is not aware of the observation to be carried out, the results are more effective. However, the result may be influenced by the subjective perception of the observer's situation, and not all aspects of service quality are covered.

Data obtained by the means of the Blueprinting method constitutes the basis for a sequential event method grounded in the belief that a service process consists of a series of subsequent events or contact situations (Stauss & Weinlich, 1996, 49-58). Each event or contact situation can lead to the satisfaction or the dissatisfaction, which ultimately leads to an assessment of all service process.

From the Blueprinting data the researcher selects only the most significant contact situations from the point of view of the consumer; they are separated by the Line of visibility and marked with certain symbols or images. Data can be gathered by the means of consumers' interviews with open structured questions (explaining the definitions and concepts if needed) or discussions in focus groups that are formed, for example, from visitors to the store. The customers involved in the research are given relevant material that enables them to remember the whole process of the service process and to express their thoughts about positive and negative events, feelings and problems encountered in the contact situations.

The advantage of the sequential event method is the acquisition of relatively complete and specific information on individual aspects of service quality and the causes of quality problems. However, the method also has drawbacks - it is time consuming and relatively expensive, which limits the periodicity of its use, and complicates the processing of non-standard response data.

Critical incident technique applies both to positive (especially satisfactory) and negative (especially dissatisfactory) events (Bitner, et al. 1990, 71-84). The planned in-depth interviews with consumers are used for the data collection, the consumers are asked to share their especially positive and negative experience related to company service process. This method differs from the method of sequential events with the content of the questions – the consumers are not asked to remember the entire service process, but rather - to describe some positive and negative situations only. Before the interview, it is very important to prepare the substantiated questions so that the consumers' narrative would contain material necessary for the service evaluation:

- events must relate to a specific "consumer-company staff" interaction;
- events should reflect the contact situation that led to a degree of satisfaction or dissatisfaction;
- reflection must be detailed and meaningful so that the interviewer's treatment can be fixed and processed.

After the event is determined, there follows its evaluation, that is, events are divided into the thematic groups, highlighting the most common positive and negative contact situations.

The critical incident method provides specific information on shortcomings and positive experiences in the company service process that are important for decision-making on improvement measures. However, the method also has weaknesses - complex processing of interviews and relatively high costs, which limit the frequency of service evaluation. In order to research the company service process in the retail trade, it is possible to apply all methods of the satisfaction assessment and measurement, based on such sources of information as observation, interviews, discussion in focus groups, etc.; still the following conditions must be taken into account:

- each method has both advantages and disadvantages. Sometimes shortcomings can be addressed (for example, using a combination of methods), but sometimes there are no such opportunities (for example, due to the lack of human resources and/or lack funds). Therefore, before using any method, it is necessary to calculate its usefulness and utility for the company;
- all satisfaction assessment methods, based on the research of the service process, can render only partial information about satisfaction of visitors to any trading venue, that is, factors that depend on the activities of the company's staff. Nevertheless, in the retail sector, due to its specific character, there are factors that only partially dependent on the retailer (for example, the impact on the producer or the discontinuation of cooperation in the case of supply of low quality products) or they do not depend at all (for example, the location of a supermarket). Therefore, it would not be appropriate to limit oneself to the study of the service process, but it is imperative to use satisfaction assessment methods based on a broad survey of respondents, processing and interpretation of results.

In order to determine the satisfaction level, it is possible to compile the **data base of consumers' complaints**, to process and analyze them thereof.

The study conducted within the limits of the USA program *Technical Assistance Research Program* (TARP) (Brand, 1987, 61–65) demonstrates that approximately 95% of the dissatisfied consumers avoid submitting their claims due to various reasons. Thus, a possibility of submitting the claim depends on the significance of the problem for the consumer, on the expected result, on the psychological factors, etc.: consumers who complain often remain loyal to the company even if their problems are not resolved. It can happen in such cases, for example, awareness that solving a problem does not depend on the company's staff, not willingness to harm employees, etc. On the other hand, it would also be unreasonable to underestimate the need for the creation and use of a complaint database. Most dissatisfied consumers do not complain, but go to the competitor without revealing their reasons for dissatisfaction. It is therefore important that most dissatisfied consumers address their concerns in the form of complaints. The above-mentioned TARP study shows that most consumers complaining remain loyal to the company if their problem is resolved and disseminate positive information about the company through the word of mouth communication.

Unfortunately, many company managers try to motivate their employees to avoid taking complaints altogether or to make the process of complaining more difficult, they tend to scale down the significance of the problem or to solve it only partially. Hence, the negative effects (consumers' leaving, negative information about the company) are not being averted at all.

Assessment and measuring of loyalty perform such functions:

- provision of information about the level of consumer loyalty to the company/product/brand;
- identification of the cases of the decreased loyalty, in order to determine the causes and evaluate the tendency;
- identification of the cases of the increased loyalty, in order to determine the causes and support this tendency.

3. Retail trade and its development features in the Baltic countries

The retail trade is an intermediary (a channel of distribution) between producers and/or retail traders that deliver goods to consumers. The retail trade ensures customer service in traditional shops, outside them and on the internet sites, that is, the retail trade ensures service or complex of intangible products that cannot be in possession of the buyer. Therefore, to satisfy customer's needs, the retail trade has to influence producers and whole traders (orders and transactions), as well as to cooperate with them. The retail trade adds definite value to the tangible products – goods since it ensures sorting, prepacking, packing of goods and so on. Besides that, selling goods of other producers using their brand name, the retail traders add to them the definite value.

It follows from specific features of the retail trade that customers have to be satisfied both with tangible (goods) and intangible (service) products. This influences practically the whole process of satisfaction management. The degree and intensity of this influence depend on the level of service (supermarket or shop of exclusive items, etc.), mode of sales (traditional shop, sale outside the shop) and other factors.

In order to comprehend the situation in the sphere of retail trade in the Baltic countries, the attention is paid to one of the macroeconomic indicators of the retail trade – the product value. It is the amount of production or services rendered, including changes in inventories, and fixed assets and intangible assets produced by own means minus the goods and services purchased for resale. (Latvijas Statistika gadagrāmata 2013, 297) Figure 1 depicts the volume of production value and development trends in the Baltic countries.

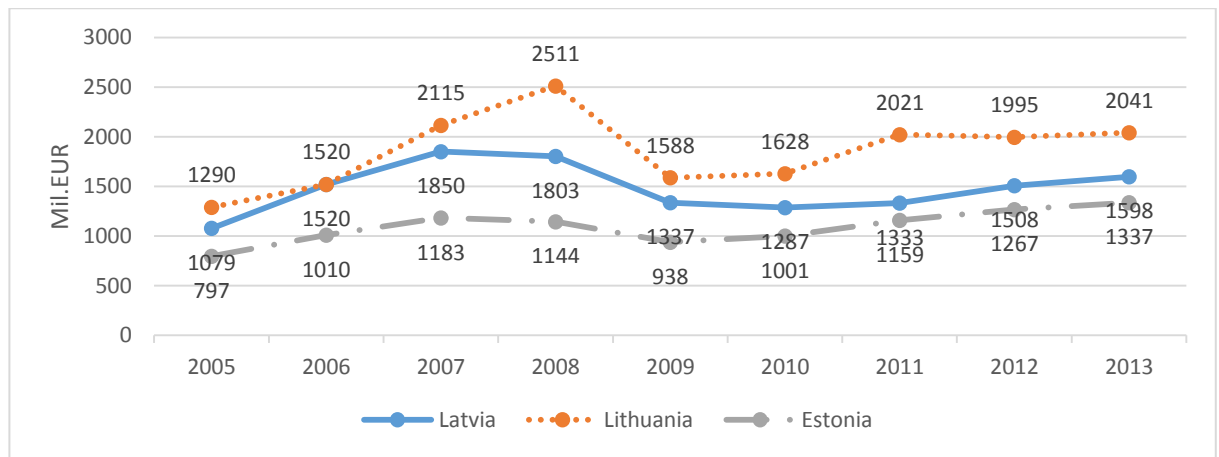


Figure 1. Production value in the retail trade in the Baltic countries from 2005 till 2014 (mil. Euro). (The figure was created on the basis of data from the Latvian Statistic Yearbook, 2014, 297 and n www.eurostat.eu)

Assessing development of the value of production in the Baltic countries within the time period in question, we can conclude that in Lithuania there was a rapid development in the years between 2005 and 2008, the deep fall (for 37%) in 2009, the growth till 2011, and finally, the rather stable development from 2012 till 2014. Nevertheless, even in 2014 this indicator did not reach the level of 2008. In Latvia after a period of rapid development between years of 2005 and 2007 there starting with 2008 already was a downslide, the growth was determined only in 2011, although the level of 2007 was not reached even in 2014. Estonia also experienced the drop of the value of production, but not as drastic as Lithuania and Latvia. Consequently, the pre-crisis level (the one of 2007) was attained already in 2012. Despite the different volumes of production (which is explained by the different population and, accordingly, the turnover in the Baltic countries), there are essentially similar trends in the development of indicators; this can be seen in the figure 1. Despite the current total retail growth rates, internal competition within the industry is growing. On this basis, retailers need a tool to ensure competitiveness and create a buyer's desire for re-purchase and continuous relationship with the company, product, and brand.

4. Use of customer satisfaction research in retail trade enterprises of the Baltic countries

During the time period between 1 January, 2017 and 1 March, 2017 there was carried out a survey of the retail trade enterprise managers of the Baltic countries. The survey questions were designed on the basis of theories of the determination and measurement of customer satisfaction. The sample consisted of 127 leading specialists of the retail trade enterprises. All filled out questionnaires were admitted as valid for the current research.

The survey results shows that 92% of the surveyed Baltic retail trade enterprises have carried out the customer satisfaction research within last 5 years, but 18% of the enterprises have not done that unfortunately. Asked about the way how these surveys are conducted, representatives of companies who are undertaking customer satisfaction surveys, 43% answered that the company conducts these studies itself, 1% said that they employ only research agencies, and 56% admitted that they do both – they render the service of the agency and do research themselves.

Table 3. Methods of customer satisfaction evaluation

Methods of customer satisfaction evaluation	% of all (127) respondents
Customer survey	98
Expert survey	24
Observation	73
Staff survey	17
In-depth customer interviews	8
Focus group discussions	2
Formation of customer data base, its processing and analysis	67

According to the identified research methods the retail trade enterprises use to investigate customer satisfaction we can see that the most popular method (98%) is the customer survey, it is followed by the observation (73%) and the formation of customer data base, its processing and analysis (67%), whereas the least popular method is the focus group discussion (2%).

In order to evaluate customer satisfaction with data processing, analysis and interpretation, as well as the use of results for performance improvement the respondents were asked to evaluate these indicators according to the Likert scale in 10-point system, where 1 means very bad, but 10 – very good. Then the mean was calculated at 3, 78 ($\bar{X} = 3, 78$), that can be regarded very low. Overall, we have to admit that there is quite large amplitude of evaluation, this point at different situation in different enterprises.

Apart from that, the respondents had opportunity to evaluate the situation in the sphere of customer claim processing and analysis in the enterprise. The situation here appears to be more positive in comparison with situation in the realm of research data analysis. Here the Likert scale was used as well known in 10-point system, where 1 designates very bad, but 10 – very good. The mean was calculated at 5, 07 ($\bar{X} = 5, 07$), that is a little above the average; here also is a high variation in amplitude, since there are differences in claim processing and claim analysis in the enterprises.

Conclusions and Recommendations

The company staff responsible for evaluating and measuring the consumer satisfaction has to use both the processed and the primary data (see table 1). In order to determine the consumer satisfactions and the satisfaction attributes, one can use consumer surveys, in-depth interviews, expert surveys, observation, company staff surveys, focus group discussions and customer complaint databases.

The important step in the customer satisfaction research, apart from the actual surveying of them, is the analysis and interpretation of the results that helps to identify the underlying factors influencing the increase/decrease of the customer satisfaction.

The findings of the research can be broken down into the satisfaction/dissatisfaction factors, penalty/reward factors or into the attitude of buyers according to the Fishbein model. One can also employ the contact analysis method or the sequential event method that can be relevant at the retail level particularly for the evaluation of the service process, since the service process in retailing can be viewed as subsequent events and series of contact situations. Through in-depth interviews with buyers, the critical event method can be used to identify both positive and negative events in the shopping process. There are no positive or negative data analysis and evaluation methods, but it is important to choose the most appropriate approach for problem identification or resolution.

The retail trade is an intermediary between manufacturers or wholesalers and buyers of goods with a significant role in each national economy. In order to understand the retail development in the Baltics, a macroeconomic indicator of the value of production in the period from 2005 to 2014 (see Figure 1) was considered, indicating the amount of service that retail sales add to the sales process. The value of production in all three Baltic countries is very similar to retail, and it can be seen that the retail sector is developing in a similar way to the overall economy of these countries.

A survey of 127 Baltic retailers demonstrates that 92% of them have performed customer satisfaction surveys, while 18% have not made any customer satisfaction surveys that would enable them to identify the factors for competitiveness. By asking questions about conducting research, it was found that 43% of companies carry out these studies on their own, 1% use only research agencies, and 56% of studies are joint ventures of the research agencies and companies.

In order to determine the consumer satisfaction, the retail companies in the Baltics most often use the consumer survey (98%), followed by the observation (73%), the database formation, the processing and analysis of the customer complaints database (67%) and the expert survey (24%), but the least used methods are the company staff surveys (17%), the in-depth customer interviews and the discussions in focus groups (2%). These results point at the situation that companies opt for the methods that require less effort to carry out this research, but do not always allow themselves a deeper insight into the problem.

A very critical situation is the field of data processing and analysis, the respondents evaluated this with the mean value of 3,78 and in the case of processing and analyzing customer complaints in the company, respectively - 5,07 according to the 10-point Likert scale. This demonstrates the dramatic nature of the situation, still also opens up a possibility by identifying the factors of customer satisfaction in order to develop the further action plans for creating a long-term relationship with customers. Such a system can serve as the basis for the competitiveness of the retail company.

The authors of the present study recommend that, based on the results of the research, the retail companies develop the customer satisfaction research plan for a particular time period, critically evaluate their ability to carry out research independently and, if necessary, choose a research agency. It is also important to define the suitability of the research method for the problem identification, as well as to assess the suitability of the methods for data analysis and interpretation. In conclusion, it is important to develop a plan for improvement, taking into account the shortcomings identified in the research.

References

- Barth, K., Dender, S. (1994). *The is H. J. Hotel Marketing: Strategien Marketing- Mix, Planning, Controlle*. Wiesbaden, s. 40.
- Bitner, M. J., Booms, B. H., Tetreault M. S. (1990). *The Service Encounter: Diagnosing Favorable and Unfavorable incidents*. Journal of Marketing, Nr. 1. pp. 71–84.
- Bitner, M. J. (1993). *Managing the Evidence of Service*. The service Quality Handbook, New York, pp. 358–370.
- Brandt, R. D. (1987). *A Procedure for identifying value- Enhanced Service Components Using Customer Satisfaction Survey Data*. Add Value to Your Service, American Marketing Association, Chicago, pp. 61–65.
- Fishbein, M. A. (1967). *Behavior Theory Approach to the Relations in Attitude Measurement. Reading in Attitude Theory Measurement*. New York, John Wiley & Sons, 1967, pp.389–400.
- Fornell, C. (1992). *A National Customer Satisfaction Barometer: The Swedish Experience*. Journal of Marketing, January, pp. 6–21.
- Gummesson, E., Kingman- Brundage, J. (1992). *Service Design and Quality: Applying Service Blueprinting and Service Mapping to Railroad Services*. Quality Managementing Services, Assen, pp.101–114.
- Latvijas Statistikas gadagrāmata (2013). Rīga, 297. lpp.
- Prass, B. (b.g.). *Explaining Consumer Decisions Making through Evaluation Process Models*. Marketing: Neue Ergebnisse aus Forschung Praxis, Wiesbaden, s. 145–161.
- Shostak, G. L. (1987). *Service Positioning through Structured Change*. Journal of Marketing, vol. 51, pp. 34–43.
- Stauss, B., Weinlich, B. (1996). *Die Sequentielle Ereignismethode – ein instrument der prozessorientierten Messung von Dienstleistungsqualitaet*. Der Markt, Heft 1, No. 136. s. 49–58.
- Vavra, T.G., (1997). *Improving Your Measurement of Customer Satisfaction: A Guide to Creating, Conducting, Analyzing and Reporting Customer Satisfaction Measurement Programs*, WI: ASQC Quality Press, Milwaukee, pp.384–385.



Lean management application analysis in small and medium-sized enterprises (SME) in Latvia

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Abstract

Globalization trends are one of the major causes of general changes in the world and one of the most visible consequences of globalization is rapid market growth. In these market conditions, companies focus on ensuring their competitiveness. In today's business environment, there are no uniform standards or models that provide business development and effective use of existing resources. There are different standards, models, systems of management support; however, the unifying criterion of these systems is a satisfied customer and reduced costs that provide long-term competitiveness. Thus, lean management and enterprise competitiveness have become decisive growth factors in ensuring sustainable development of SMEs. In order to identify factors enhancing the competitiveness of SMEs, the authors of the current article have explored the basic factors of lean management. To achieve the goals set the authors have examined the theoretical background of the lean management using the monograph or descriptive method, analysing SME sector development tendencies in Latvia, and empirically researching the application of lean management in the Latvian SMEs. This study will give companies an understanding of the theoretical and real factors of the lean management. Analysing theoretical aspects, the authors have defined the unified approach to lean management from the viewpoint of its essence. Finally, the authors conclude that lean management factors can be used by enterprises to manage processes and is one of the instruments in ensuring competitiveness of enterprises.

Keywords: lean management, small and medium-sized enterprises (SME), competitiveness

1. Introduction

Globalisation is one of the most significant grounds for overall changes in the world and one of the most visible consequences of globalisation is the rapid growth of the market. Over the last few years global problems and global socio economic processes have ever increasingly affected small and medium enterprises directly or indirectly (hereinafter SMEs). On the one hand enterprises have access to open markets worldwide but on the other hand the pressure of competition has intensified. Therefore lean management has become a deciding growth factor for ensuring the sustainable development and competitiveness of SMEs. Since the start of the transformation process in Central and Eastern European countries about more than 20 years ago the economies of these countries have undergone huge changes. These processes could only be compensated by the impressive boom of emergence of small and medium sized enterprises. These dramatic changes were faced in particular by countries such as Latvia, Lithuania, Estonia, Bulgaria, Romania, Slovakia and the Czech Republic where no form of private enterprise existed before the start of these economic changes. In fact SMEs formed the basis of their economies. SMEs comprise the majority of all enterprises in Latvia, Europe and the whole world. With the growing significance of global competition questions arise regarding the long term activities and development of SMEs as they form the basic element of the economic system and the sustainable development of the country and the region is dependent on their ability to function in the long term. How competitive SMEs are in global and EU markets has an immeasurable significance in ensuring overall economic development and growth in the level of the welfare of inhabitants. Taking into account the dynamic nature of modern business environment, issues related to the long term operations of SMEs have become a priority as the efficient management of technology, infrastructure and human capital significantly enhances the economic growth prospects of enterprises as well as the national economy. In the long term in order to ensure the competitiveness of SMEs and their development, lean management has to become a priority for each and every individual enterprise in their move towards a low-carbon and resource-efficient economy. The long-term existence of any enterprise is dependent on its ability to use resources rationally and make a profit. Enterprises face problems as a result of improper, incompetent action or even due to their inaction. SME operations have been constantly studied and analysed. Economic and statistical research of SME operations, scientific publications and surveys conducted by entrepreneurs help identify key issues that impact the



development of SMEs. However, there are not many fundamental research projects on the development prospects of SMEs in rapidly changing environment in Latvia in contrast to the majority of other European and World countries. It is necessary, therefore, to carry out comprehensive research of SME operations using the latest statistical data and scientific publications to gain in depth insight of all SME problems and possibilities of preventing them. The present research will help identify strategic tasks related to the introduction of lean management concepts in SMEs that would enhance their competitiveness and ensure their long term development. The goal of the research is to evaluate the level of use of lean management principles in Latvian SMEs.

The following tasks were determined to achieve the goals:

1. Analyse the theoretical base of lean management principles;
2. Characterise the significance of SMEs for the EU and Latvian national economy;
3. Identify the prerequisites for the introduction of lean management principles and enhance the level of use in Latvian SMEs.

Research limits: The management of 167 Latvian SMEs of the private sector were surveyed to identify the trends in Latvia and put forward recommendations for the introduction and maintenance of lean management concepts. The following research limits were set taking into account the specific features and multifaceted nature of lean management and its management aspects: lean management issues were studied mainly from the methodological and organisational perspective and the areas of operations, size etc. of the respondent enterprises was not taken into account within the framework of this research. The results of the survey are reflected in the content of this paper. The research period: 1st May 2017 to 1st August 2017.

The following research methods were used: monograph or descriptive method and logical constructivist method – comparison of theoretical material and empirical results; survey of the management of enterprises was carried out to identify the level of use of lean management principles in Latvian SMEs; graphical method – illustrate and analyse visually summarised information; document analysis – research and summary of internal documents of enterprises.

The research works and publications, theoretical and practical concepts of foreign economics scholars and specialists (A. King, S. Ahmadi, J. Wormack, D. Roos, J. Krafcik, G. Taylor, T. Ohno etc.), results of operations of SMEs, assessment of factors influencing them, as well as proceedings of scientific conferences and seminars form the theoretical and methodological base for this research.

2. Theoretical aspects of lean management

The long term existence of any enterprise is dependent on its ability to rationally use resources and generate profit. Problems arise due to improper, incompetent actions even due to inaction and the assessment of these problems are in turn based on a retrospective approach i.e. the analysis of past actions. The system of assessment of actions could significantly impact and provide the support for organisational development of SMEs as it is first of all necessary to understand the existing situation in order to usher in the necessary changes to enhance and improve the enterprise's value creation processes. Efficiency should flow through all the business processes of the enterprise and the overall assessment should be based on criteria that are related to the specific sphere of operations, specific production technology and include not just processing processes but also organisation and management of the enterprise. Regardless of research implemented in the field of assessment of performance of SMEs, all problems are yet to be resolved as specific issues arise for instance at the specific sector level. Moreover, there are several debatable issues, e.g. regarding the possible use of adaptation of performance assessment models worked out for the needs of large enterprises to SMEs. This just proves that research of the above mentioned problems and the search for solutions needs to be carried on. Summarising the concepts put forward by theoreticians and practitioners (King, 1994; Ahmadi, 1997 etc.) regarding the advantages of SMEs and their essential differences from large enterprises the authors wish to underline that all enterprises regardless of their size need to understand the important value generating processes and resources, evaluate the costs related to the creation of value and should orient towards the management of the enterprise's internal operations using lean management concepts.



There is a wide variety of methods and tools that could be used to analyse, organise and enhance an enterprise's internal processes. One of them is the so called lean management approach that distinguishes traditional cost cutting from true efficiency enhancement (Lean manufacturing, b.g.). Lean is not divided into separate tasks but looks at the process flow on the whole identifying how changes in one stage impact all the rest of the stages (Lean primer, b.g.). It is a management method that creates added value for customers with the least amount of resources. This approach has gained popularity worldwide and is widely used in enterprises in various different sectors. The word may have a variety of meanings but if you understand the nature and significance of the approach the name does not matter. The authors offer to use the word Lean further for purposes of clarity. The term Lean was first used in 1998 in John Krafcik's article „Triumph of the Lean Production System”, and its further development and popularity was as a result of the popular book by James Wormack, Daniel Jones and Daniel Roos "Machine that Changed the World" (History, b.g.) in 1991 based on research of the automobile industry conducted at the Massachusetts Institute of Technology. Frederick Taylor's "scientific management" and Henry Ford's manufacturing process innovations laid the foundations for mass production. Sixty years ago, Toyota executive Eiji Toyoda understood that mass production would not work for Japan. Together with his production manager Taiichi Ohno he set up a system that created "Just in time" (Toyota Production System Terms, b.g.). For instance capital insufficiency prompted the creation of flexible set of devices of the right size, their quick set up and customisation. Restrictions on employee lay outs created the basis for the formation of an in-house society and the intensive involvement of employees in the problem-solving process. Thirty years were needed to define the principles and foundations of the system at that time, involving all of Toyota's factories and suppliers. Lean manufacturing, Lean production, also known as the Toyota Production System (TPS) emerged in the 50s of the previous century and its essence is best expressed by the words of the automobile industry giant Toyota's President Fujio Cho: "Other companies try to hire excellent executives to manage chaotic processes. Toyota, in turn, has streamlined its business processes so that ordinary people can achieve outstanding results using them." At the beginning of the 21st century, in a rapidly changing environment, one of the most topical issues reported in various mass media and sparked discussions between politicians and business executives was austerity. Therefore it is no wonder that enterprises are looking for answers to a very essential or even an existential question: how to cut costs without losing the company's competitiveness or its human resources? This question has become the priority for modern day enterprise management – how to organise the enterprise to function more rationally and to achieve more with the same resources? Innumerable conferences and seminars have been conducted and many books have been written on that issue. In a crisis situation, when business volumes and company income are decreasing, the natural reaction of the manager, especially the financial director, is to reduce costs. This is very often understood as limiting the company's budget in equal proportions for almost all positions, incl. human resources. Such optimization is based on the assumption that all the costs that the company had until their reduction equally contributed to the creation of value and therefore, with the decrease in demand the company should evenly reduce all costs. But does everything we do in the company and resources we spend create value for the consumer? We often speak about increasing efficiency when reducing wages or the number of people in the company? But does cutting remuneration or reducing staff also change work processes? Do we review and throw away the apparently non-value-adding activities? In an effort to achieve greater efficiency, companies often (less often in times of crisis) innovate - buy more powerful equipment, more advanced comprehensive software programs, etc. But do we fully utilise the equipment we got as a result of such innovations? One of the answers is the Lean Management approach that differs from traditional cost reduction by true enhancement of efficiency. Lean Management is a practical method to efficiently organize, improve and continuously improve business processes. The introduction of principles covers all processes on the whole, such as production, work with suppliers, partners, and employees and, above all, customers. On the basis of theoretical research results one can say **that the philosophy of Lean Management is to acquire skills of management decision-making on the basis of rational thinking, intuition and practical skills; create an understanding of how a company can shift to lean production and services based on new thinking principles, teamwork, avoidance of various types of waste, innovative approaches to the production process, staff training, and new business relationships.** The long term manager of Toyota Motor Corporation Taiichi Ohno is considered to be the author of the concept of Lean Management although lean principles were used in practice since much earlier times. From the 40s -70s of the 20th century Toyota constantly worked on



the development and improvement of the system creating even more new Lean management methods and principles. Gradually TPS became popular not only in Japan but also in the USA and Western Europe mainly among manufacturing enterprises. However at the end of the 20th century and the beginning of the 21st century an ever increasing number of service providers and state administrative institutions started showing interest towards lean production methods and principles and attempted to adapt those to the service and public administration sector thereby developing a lean management system that would be suitable for organisations that produce, provide services as well as ensure the provision of public services.

Lean production can be described at various abstract levels: it could be defined as a philosophy or as a combination or set of principles. For instance, Womack (Womack, 1994) defined lean management as a business and production philosophy that shortens the time period between ordering and the delivery of supplies with negligible losses in the value of the product flow. The key visions of lean management are based on a set of principles described, for example by Spear & Bowen (Spear & Bowen, 1999.). The prevalent opinion, however, in the description and measurement of lean management is the sequence and instruments that are used to avoid waste (Pil & MacDuffie 1996, Shah & Ward 2003, Li et.al. 2005., Narasimhan et. al. 2006.). Although scientists disagree with the established principles and their number, there is a consensus that there are four key aspects of lean management and often similar sets of principles. There are principles related to quality management, "pull" production, preventive maintenance and human resource management (Flynn et al. 1995, Cua et al. 2001, McKone et al. 2001, Shah & Ward 2003). The empirical research of lean management involves studies that examine the principles individually (Pil & MacDuffie 1996, Narasimhan et al. 2006), factors of combined principles (Flynn et al. 1995., Sakakibara et al. 1997, Cua et al. 2001, McKone et al. 2001), and combined principles (MacDuffie 1995, Shah & Ward 2003). Previous studies looked at issues such as the empirical evolution of lean management constructs (Whetten, 1989, Shah & Ward 2003), organizational factors that influence the implementation of lean management principles (MacDuffie 1995, Shah & Ward 2003) and the link between lean management and operational performance (Flynn et. al. 1995, Cua et al. 2001, McKone et al. 2001, Shah & Ward 2003).

Table 1. Development of Lean management principles (Hines, Holweg & Rich, 2004)

Phases	Mid 1990-2000 Quality, costs and supplies	Mid 2000-2005 Value system	Mid 2005– present Customer oriented competitive value system
Literature topics	Value stream, lean enterprise	Capability at the system level	Promote lean management, Lean six sigma
Focus	Costs based on processes to support streams	Value and costs from tactical to strategic, from integrated to supply chain	Customer oriented values, small volumes, high turnover
Basic business processes	Order execution	Combined processes, order execution and new product development	Unified purchasing, production, order execution process
Industrial sector	Industry generally – often focuses on repeat production	Large and small scale production, stretching in service sector.	Flexible production, changing demand
Main scholars	Lammin (1993), MacBeth & Ferguson (1994), Womack and Jones (1994, 1996), Rother & Shook (1998)	Bateman (2000), Hines & Taylor (2000), Holweg & Pil (2001), Abbas et.al. (2001), Hines et.al. (2002)	Shelden (2005), SAP White Paper (2005), Herox Global Services (2005), Carreira & Trudell (2006), Aberdeen Group (2007), CAroll (2008)

Benefits from lean management concepts must be enhanced by focusing on the lack of any lean principles, e.g. lack of statistical analysis, interaction and optimisation of processes, systematic problem solving. By integrating lean management methods at an enterprise, it is possible to promote production efficiency with precise, timely and decisive information related to production resource planning, production capacity planning and the production schedule. Enterprises have to work out a unified competitive production system model that comprises lean management principles.



It stems from the above mentioned that lean management is a tested method to minimise waste and rationalise operations. Lean management adapts production levels to real customer demand. Lean management is a systematic approach to identify and avoid waste by carrying out constant improvements, product flows consistent to customer demands and tending to achieve the best. Lean management emphasises the organisation of production processes and its constant improvement. The goal of lean management is the prevention of irrational use of time, actions and materials. Summarising lean management is: to correctly identify and increase value, to determine the value stream for each product and to eliminate redundant activities, to create a continuous product flow, to allow the customer to demand value from the manufacturer and to strive for the ideal (Womack, 1996). There are many tools available to implement lean production. Lean management is action oriented; it focuses employees only on activities that add value to the product. Lean management helps in particular to reduce costs and provide a competitive advantage, due to less volume of work in progress, greater inventory turnover, increased capacity, shorter cycle times and higher customer satisfaction. Traditional mass producers can reduce order execution time by 90%, inventory by 90%, quality costs by 90%, and increase productivity by 50%. Lean management can help reduce waste by 40%, reduce costs by 15-70%, reduce the required space and inventory by 60%, increase productivity by 15-40%, while reducing process changes by 60%, and it is claimed that the product order execution time was reduced by 11%, product travel time by 90% and inventory by 82% (Liker & Franz, 2011). A general study of the 72 Australian manufacturing companies allows us to conclude that 66% felt that a strategic advantage was created by adapting lean management and that significant improvement was achieved through competitive positioning on the market (Sohal & Eggleston, 1994). A study on the productivity in the United States and Britain conducted by the Engineering Employers' Federation (2001) - EEF found a clear link between lean production and increased productivity and profitability. Bicheno (1999), Liker (2003) and Womack (Womack, 2003) argue that a number of companies that have adapted lean principles demonstrates its popularity in the car industry (Taj & Berro, 2006). However, everyone adheres to lean principles (Emiliani, 2006). One of the basic principles of lean production is "genchi genbutsu" (from Japanese, which literally means "go and look with your own eyes") (Genchi Genbutsu, b.g.). The essence of Genchi Genbutsu is that only by seeing the on-site production processes themselves, managers have an impression of the true state of affairs, which allows them to make informed decisions and make in-depth conclusions. This is as opposed to the customary practice when managers make decisions based on reports or interpretations by other people. Therefore, managers of lean enterprises before solving a problem, starting production of new products or evaluating the productivity of employees apply the concept of "go and look with your own eyes" that requires observing everything personally (Huntzinger, 2005). Lean management measures include process cycle efficiency, ratio between adding value and not adding value, overall order execution time and inventory turnover. Lean management, however, also has its drawbacks: no statistical analysis, no problem-solving approach, and no emphasis on reducing process variations.

From the lean producer's perspective, the seven traditional losses are: defects, overproduction, transporting, waiting, inventory, motion, over processing; they are collectively known among practitioners as "DOTWIMP". Toyota's production system also usually defines an eighth type of major loss: the underutilization of employees. These traditional forms of production losses are well explained in the "Toyota Way" (The Toyota Way, Richard, Liker, 2004). From this traditional lean management perspective environmental losses are not addressed separately. However, many studies have shown that the transfer of various lean principles can improve business success, for example, MacDuffie (MacDuffie, 1995). A new strategic management system that includes the lean management system and where methodological approaches, management approach, elements of corporate governance structure, analysis methods for strategic issues, strategic elements are worked out is needed to improve the company management system. To improve the strategic management of the company and improve the quality of the strategic plan, it is useful to integrate lean management as an element of the company's management system, which envisages assessing all processes, functions and structures of the company in relation to their need for the company as a whole, for each individual subsystem of the company and the need for this approach at all. Although there are companies that try to implement lean management methods, they cannot be simply copied, because it is a philosophy that requires changes in the culture of a company. Implementing real lean management is only possible if all people in the company have



understood the philosophy of lean management. Without this understanding there is no continuous improvement process, which is one of the most important principles of lean management.

The significance of a market-oriented enterprise culture and flexible planning strategy is also important for SMEs. Alpkın, Yılmaz and Kay have highlighted these factors as ones providing a competitive edge in their scientific publication, pointing out that this allows the company to respond quickly to environmental fluctuations and maintain its competitiveness (Alpkın et al., 2007). The development of SMEs is affected by the lack of skilled labour. Education and training should be even more closely linked to labour market requirements and it is necessary to regularly study and implement changes in education and training programs in accordance with the needs of the labour market as well as attract entrepreneurs in the development and implementation of training programs.

3. The role of small and medium-sized enterprises in the national economy

The huge role of SMEs in economic development is acknowledged across the world. This significance is demonstrated by the annual *Eurostat* statistical data – micro enterprises provide as much work places as all the large enterprises combined (~40%). The European Small Business Act was adopted to support SMEs in 2008. The Act underlines the necessity to support the needs of SMEs, „improve the overall policy approach to entrepreneurship” (EU legal enactments, b.g.). Its main goal is to firstly integrate the thought of small businesses into the process of preparing policy documents, to improve the overall policy approach to entrepreneurship, in particular by promoting the development of small and medium-sized businesses and helping to prevent barriers to its development. Similar to the rest of Europe, SMEs in Latvia form a large part of the economy and play an important role in generating gross domestic product and employment (www.ekonomikasministrija.lv, b.g). The high proportion of small and medium-sized enterprises in both the European Union (EU) and the Latvian economy points out to the need to assess the results achieved by these enterprises. Enterprises, both large and very small, are generally the driving force for economic growth. Economic globalization will scatter value chains around the world. The globalization of value chains affects not just large companies. An ever-increasing number of SMEs are shifting their activities to other places, especially to Asia. Many SMEs are learning new forms of business and looking for specific competences around the world. These developments give rise to complications, especially for SMEs located outside of the metropolitan area.

At present, there are 19,575 companies in Latvia with a turnover ranging from EUR 100,000 to EUR 2.0 million last year, thus meeting the status of a small or medium business. Of these, 12,911 or 65.96% were registered in major cities of Latvia, while more than half of all small and medium-sized Latvian companies were registered in Riga (LR Ekonomikas ministrijas Uzņēmējdarbības vides uzlabošanas pasākumu plāns 2012.gadam, 2012) [Ministry of Economics, Business Environment Improvement Action Plan for 2012, 2012].

The average age of SMEs in Latvia is ten years. Comparing the financial indicators of companies registered in Latvia's largest cities and regions in the past year, it is evident that their average turnover is similar, i.e., the SMEs registered in the districts last year had an average turnover of EUR 437 700, while those in the cities registered a turnover of 449 250 EUR. Significant differences arise from the analysis of profit and loss indicators - the average profit of SMEs registered in the districts last year was equivalent to EUR 16,500 but SMEs registered in cities, despite the higher turnover worked with an average loss of EUR 28930. (LR Ekonomikas ministrijas Uzņēmējdarbības vides uzlabošanas pasākumu plāns 2012.gadam, 2012) [Ministry of Economics, Business Environment Improvement Action Plan for 2012, 2012].

The growth and development of SMEs is an essential prerequisite for Latvia's overall growth and competitiveness in the near future. The development of SMEs is a national policy issue, and Latvia's main task is to increase the proportion of SMEs in the Latvian economy, gradually moving closer to the EU average (50 SMEs per 1000 inhabitants) (www.ekonomikasministrija.lv, b.g). In fact, it is SMEs in Latvia, the basis of the national economy, that are most at risk from various risk factors - both the external and the internal influence of the environment. One of the most important signs of effective and



long-term activity of SMEs is lean management of the company, which includes the coherent operation of the company's internal processes and resources, which is similar to the functioning of a clock: everything is logical; all the parts are essential; they fulfil their functions, which are not duplicated; the owner receives a predictable and positive result over a long period of time - the precise time. Latvia joined the European Charter for Small Enterprises 2002, whose main goal is to create friendly support policies for small and medium-sized enterprises. The Small Business Act of 2008, which was adopted in support of SMEs stated that it was necessary to support the needs of small and medium-sized enterprises, "to improve the overall policy approach to entrepreneurship" (EU legal enactments, bg.).

Interest in managing the problems of SMEs was highlighted in the work of the Bolton Committee established in the United Kingdom (1971), which found that the size of the company was relatively related to the size of the sector in the market and the number of competitors in that particular sector of the economy, and outlined the characteristics of such group of enterprises: 1) relatively small market share; 2) the company has no opportunity to influence the level of market prices; 3) decisions related to the management of the company are taken by the owner personally; 4) employees are barely involved in the decision making process; 5) the business is institutionally independent, but the freedom of decision making may be restricted to its existing participants (family business, corporation). Summarizing opinions of theoreticians and practitioners regarding the advantages of the existence of small businesses and the significant differences from large companies, the authors conclude that all enterprises, regardless of their size, should identify the most important value generating processes and resources, evaluate the costs associated with value creation and focus on cost management using efficiency indicators. As global competition grows, issues relating to quality management of SMEs are becoming more and more important as the company is a key element of the economic system, and the sustainable development of a country or a region is dependent on its ability to function in the long term. This issue becomes particularly relevant in the context of a comprehensive economic downturn. The high proportion of small and medium-sized enterprises in both the European Union (EU) and Latvian economy points out to the need to evaluate the results achieved by these companies with the aim of finding appropriate tools for measuring and managing performance. Taking into account the modern day dynamic business environment, issues of efficient management of SMEs have become a priority because quality management of technologies, infrastructure and human capital can significantly improve the prospects of economic growth both at the individual company as well as national economy level. Factors affecting the performance and effectiveness of SMEs form conceptual impact correlations. In addition to the traditional classification of the factors affecting the company's operation, the effects of factors can be combined with their inherent manifestation and environment that sustain these factors, thereby enabling the identification of performance indicators according to their significance and management of the process of continuous improvement of performance. The impact of certain external environmental factors on the long-term activity of enterprises related to the age of the company is not uniform, as companies in Latvia are located in different regions, their development is cyclical and the influence of one factor can be aggravated or weakened by another factor, as well as there are new factors, whose existence or significance has not been evaluated beforehand.

Table 2. SMEs in Latvia (Table designed in 2011, based on data for 2005– 2009 from Structural Business Statistics Database revised, Eurostat)

	No. of enterprises			Employment			Added Value		
	Latvia		ES-27	Latvia		ES-27	Latvia		ES-27
	No.	Proportion	Proportion	No.	Proportion	Proportion	Billions €	Proportion	Proportion
Micro	70 011	87.7%	92.2%	148 382	27.1%	29.6%	1	16.4%	21.2%
Small	7 313	9.3%	6.5%	144 307	26.4%	20.6%	2	22.8%	18.5%
Average	1 408	1.8%	1.1%	131 148	24.0%	17.2%	2	26.6%	18.4%
SME	78 732	99.8%	99.8%	423 837	77.4%	67.4%	5	65.8%	58.1%
Large	195	0.2%	0.20%	123 743	22.6%	32.6%	3	34.2%	41.9%
Total	78 927	100.00%	100.00%	547 580	100.00%	100.00%	8	100.00%	100.00%



Lursoft IT information on business development trends from 2007 to 2017 shows that the number of small and medium-sized and micro enterprises has increased in recent years. The smallest number of small and medium sized enterprises, as well as micro enterprises, was founded in 2008 and 2009. Starting from 2010, the number of new enterprises has increased considerably.

The national tax policy has a major impact on the activities of SMEs. It must foster business development. Increasing taxes, changing fiscal policy, and a complicated tax and reporting mechanism, which takes a lot of time are a big challenge for entrepreneurs. In a few years, Latvia has lost its competitiveness significantly, because it was necessary to consolidate the budget, raise taxes and dismiss public sector employees, thus affecting unemployment and labour force emigration. Competition has further declined in the Latvian domestic consumer and supply markets. The business environment plays a key role in business development. As indicated by a World Bank study, significant improvements are needed in Latvia in areas such as business start-up, tax payment, foreign trade, contract execution and regulation of legal relations. It is necessary to continue to support the availability of loans for small and medium-sized enterprises, to simplify access to European Union project funds and state support programs in order to provide start-up capital for start-ups, as well as secure funds for investments in business development, introduction of new technologies and implementation of creative ideas.

4. The concept of lean management for SMEs in Latvia

The authors conducted a survey of 167 managers of various companies in SMEs during the period May 2017 - August 2017. The questionnaires were developed based on self-assessment model criteria and were drawn up to identify the use of principles of the lean management concept. The respondents' sample: 167 executives selected on a random basis from databases accessible to the authors. All data obtained from the survey was considered valid for the study. All the identified companies meet all the SME criteria.

The questionnaire for SME managers is divided into three parts: managerial education and competencies and strategic planning of the company. It is possible to evaluate several elements in each section using the Likert scale on a 10-point system, where 1 is very bad, and 10 is excellent. The authors have presented the results of the survey as a summary of two main parts: company management and strategic planning (refer Table 3).

Table 3. Assessment of elements of the lean management concept

Assessment of elements of the lean management concept	Arithmetic mean	Standard error of Mean	Median	Mode	Standard deviation	Skewness	Range	Maximum	Sum
Education and competences of the enterprise management	5.33	0.78	5.00	4.00	2.35	5.5	4.89	9.00	48.00
Strategic planning at the enterprise	3.22	0.70	3.00	2.00	2.11	4.44	7.27	8.00	29.00

As can be seen from the table the arithmetic mean regarding the education and competences of the enterprise management is slightly above the average ($\bar{X}$ = 5.33; Me = 5.00; Mo = 4.00., which could not be regarded as positive to ensure the implementation of lean management concept. Indicators regarding the strategic management of the enterprise (defining objectives, strategy development, etc.) is also very low ($\bar{X}$ = 3.22; Me = 3.00; Mo = 2.00), which indicates very big problems in enterprises in this field.

In order to be able to evaluate real business activities in terms of the lean management concept, the authors of the study reviewed the concept of productivity and its significance. Productivity or



production efficiency/productiveness is a concept in economy that characterizes the relationship between the products (service) produced and the resources used for this purpose. In economic theory, various mathematical models are used to analyse economic development trends. One of the most commonly used model is the production function. It helps analyse the economic development mechanism. In the simplest case - in one factor model - economic development is reflected by the resource-product ratio. In practice multi factor models are typically used for modelling economic processes. One of the historically first models was the Cobb–Douglas production function - a two factor model - where work and capital as factors of production, or resources. The ability of these two factors to promote economic growth characterises productivity at the macroeconomic level. (Sociološki pētījumu metodoloģija, metodika un tehnika, 1981) [Sociological research methodology, Methods and Techniques, 1981].

The production function, or other mathematical models derived from it, are widely used in microeconomics as well. For example, at the enterprise level, different resources, work (human resources), capital (land, buildings, structures, equipment, working capital), energy, etc., with some or the other technology, are combined in the production process, eventually resulting in one or more products which are marketed at a certain price. Productivity in this case can be measured by comparing production costs with revenue. One of the most commonly used ways to estimate the productivity of a particular company is to compare items in its profit and loss account. Items included in the profit and loss statement are also used in the analysis of other performance indicators. (Socioloģisko pētījumu metodoloģija, metodika un tehnika, 1981) [Sociological research methodology, Methods and Techniques, 1981].

The following is a summary of the interviews conducted with company managers and an analysis of their profit and loss calculations:

- All managers acknowledge cost cutting as an advantage provided by the use of lean management elements;
- A small turnover of personnel can be observed in enterprises that apply elements of the lean management concept;
- Processes are organised and it facilitates the work of its employees in enterprises that apply elements of the lean management concept;
- The lean management concept is an effective management tool to ensure competitive performance.

In conclusion, the greatest benefit of the lean management concept is the reduction of costs and increase in productivity.

The concept of lean management is an effective tool for ensuring efficient management of the enterprise. In order to ensure efficiency it is also possible to use the methodology of lean management system which would include the following elements:

- The comprehensive use of innovation and information technology, focusing on the use and development of existing resources.
- Development and assessment of management and personnel competences and development of personnel management audit. In turn, management competence comprises the development of personnel assessment and audit based on employee productivity measurements.
- Process management demonstrates how the company identifies, manages and improves its core processes that are focused on performance. The key aspect of process management is to develop and implement a company strategy and policy that fully satisfies the needs of customers and other stakeholders and creates added value.
- Management skills and knowledge - to increase the company's productivity. The company's manager must be able to formulate and implement the mission, vision and values necessary for the company's long-term development.

Lean management is based on identifying costs, accounting and management, and is one of the most important processes in defining the company's goals, since the opportunity to reduce costs leads to a



reduction in the price of the product, to additional profit due to these savings and to being socially responsible and competitive.

Conclusions:

Several conclusions and recommendations can be put forward by summarising the research results:

1. The concept of lean management is one of the most important factors for ensuring competitiveness of a business and promoting economic growth.
2. The enterprise management can reduce company costs and ensure competitiveness by implementing a lean management system.
3. The authors recommend the review of the definition of EU SMEs so that it includes only small and medium-sized enterprises, which are really in need of support of Funds, because the existing definition of SMEs in the European perspective is too broad and practically includes all companies in the European Union (~ 99%). Consequently, companies that are really small and in need of funding are not always able to access it.
4. The general economic development and welfare of the population of Latvia is directly dependent on the extent to which SMEs are sustainable and competitive in the global market. One of the main problems hindering the development of SMEs in Latvia is the business environment. The competitiveness of the SME sector cannot develop without a business-friendly environment; this is largely determined by the degree to which national tax policies are competitive, capital market, infrastructure, education systems and State aid are effective, as well as by an organised and stable business legislation. Further improvement of the business environment and business support measures are necessary to make use of the full potential of SMEs.
5. Accessibility to financial services hinders the development of Latvian SMEs. Although the possibilities for obtaining external financing have increased significantly in recent times, access to operational and equity financing remains as a major obstacle in increasing entrepreneurial activity and competitiveness of SMEs as well as start-ups.
6. An SME's development strategy for increasing profits and economic growth must be linked to the obligation to create enough jobs, to implement sustainable development and to ensure prosperity. It is important that SMEs develop the promotion of knowledge-based innovation in the future.
7. Due to the large proportion of small and medium-sized enterprises in Latvia, it is necessary to pay attention to efficient self-assessment and promote the implementation of the concept of lean management.
8. Latvian SMEs need to continue to manufacture products with higher added value, using the latest technologies and developing science based products.
9. An essential condition for ensuring sustainable development of Latvian SMEs is the ability to analyse achievements and the desire to continuously improve in order to achieve excellence.
10. The relatively small number of enterprises that have introduced elements of the concept of lean management can be explained by the lack of awareness of the effectiveness of its implementation, and due to the fact that the purpose of the companies have not been defined precisely. It is necessary to develop and implement a unified lean management model based on the objectives and tasks of lean management.
11. In order to implement the principles of lean management in practice, Latvian SMEs need to promote the integration of lean management training in higher education institutions in Latvia.

References

- Ahmad, S., Schroeder, R.G., Sinha, K.K. (2003). The role of infrastructure practices in the effectiveness of JIT practices: implication for plant competitiveness. *Journal of Engineering Technology Management* 20 (3), pp.161–191.
- Alpan, L., Yilmaz, C., Kaya, N. (2007). Market Orientation and Planning Flexibility in SMEs: Performance Implications and an Empirical Investigation. *International Small Business Journal*, Vol. 25 (2), pp. 152–172.



- Bicheno, J. (1999). *The New Lean Toolbox*, Picsie, London.
- Bicheno, John; Holweg, Matthias (2009). *The Lean Toolbox*. PICSIE. ISBN 978-0-9541244-5-8.
- Cua, K.O., McKone, K.E., Schroeder, R.G., 2001. Relationships between implementation of TQM, JIT, and TPM and manufacturing performance. *Journal of Operations Management* 19 (2), pp.675–694.
- Ekonomikas ministrijas mājaslapa, b.g. Retrieved 18.01.2017. <http://www.em.gov.lv/em/2nd/?cat=23394>
- Emiliani, M.L. (2006). Origin of lean management in America: The role of Connecticut businesses. *Journal of Management History*. Vol.12, No.2, pp.167-184.
- ES tiesību akti, b.g. EUR–Lex mājaslapa. Retrieved 17.05.2017. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0394:FIN:LV:HTML>
- Genchi Genbutsu, b.g. Retrieved 14.05.2017 <http://encyclopedia.thefreedictionary.com/Genchi+Genbutsu>
- Hines, P., Holweg, M., Rich N. (2004), *Learning to Evolve - A Review of C 3. History*, b.g. Retrieved 11.05.2017. <http://www.toyotageorgetown.com/history.asp>
- Huntzinger, J. *The roots of lean. Training within industry: the origin of Japanese management and Kaizen*. Unpublished, 2003, available at: [www.lean.org/Community/ Resources/Thinkers Corner.cfm](http://www.lean.org/Community/Resources/ThinkersCorner.cfm) (accessed December 19, 2005).
- Ivanovs, A. et.al. (1981). *Socioloģisko pētījumu metodoloģija, metodika un tehnika*, Zvaigzne, Rīga, p.242.
- King, A. (1994). *Improved Manufacturing Resulting from Learning from Waste: Causes, Importance, and Enabling Conditions*, working paper, Stern School of Business, New York University, New York,
- Krafcik, J. F. (1988). "Triumph of the lean production system". *Sloan Management Review* 30 (1): pp.41–52.
- Lean manufacturing, b.g. Retrieved 24.06.2017. <http://encyclopedia.thefreedictionary.com/Lean+manufacturing>
- Lean primer, b.g. Retrieved 25.06.2017 leanprimer.com/downloads/lean_primer.pdf
- Li, S., Subba Rao, S., Ragu-Nathan, T.S., Ragu-Nathan, B., 2005. Development and validation of a measurement instrument for studying supply chain management practices. *Journal of Operations Management* 23 (6), 618–641.
- Liker, J. (2003). *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer*. McGraw Hill. 398 p. *Contemporary Lean Thinking*, 24(10): pp. 994-1011.
- Liker, J. James K. Franz .*The Toyota Way to Continuous Improvement: Linking Strategy and Operational Excellence to Achieve Superior Performance*. 2011, pp 289-301.
- LR Ekonomikas ministrijas Uzņēmējdarbības vides uzlabošanas pasākumu plāns 2012.gadam, (2012.). 40 pp.
- Lursoft IT SIA, *Mikrouzņēmumu un mazo un vidējo uzņēmumu darbības tendences Latvija 2007-2011 gadā*”.
- MacDuffie, J.P. (1995). Human resource bundles and manufacturing performance: organizational logic and flexible production systems in the world auto industry. *Industrial and Labour Relations Review* 48 (2), pp.199–221.
- McKone, K.E., Weiss, E.N. (1999). Total productive maintenance: bridging the gap between practice and research. *Production and Operations Management* 7 (4), pp.335–351.
- Narasimhan, R., Swink, M., Kim, S.W. (2006). Disentangling leanness and agility: an empirical investigation. *Journal of Operations Management* 24 (5), pp.440–457.
- Ohno, T. (1978). *Toyota Production System: Beyond Large-Scale Production*, published by Diamond, Inc, Toyko, 1978, English translation 1988 by Productivity Press, 1988 p. 176.
- Pil, F.K., MacDuffie, J.P., 1996. The adoption of high-involvement work practices. *Industrial Relations* 35 (3), 423–455.
- Roos, D.; Womack, J. P.; Jones, D.T. (1991). *The Machine That Changed the World: The Story of Lean Production*, Harper Perennial (November).
- Ross, J.E. (1993). *Total Quality Management: Text, Cases, and Readings*. St. Lucie Press, Delray Beach, FL. Sakakibara, S., Flynn, B.B., Schroeder, R.G., p/19.



- Sakakibara, S., Flynn, B.B., Schroeder, R.G., Morris, W.T. (1997). The impact of just-in-time manufacturing and its infrastructure on manufacturing performance. *Management Science* 43 (9), pp.1246–1257.
- Shah, R., Ward, P.T. (2003). Lean manufacturing: context, practice bundles, and performance. *Journal of Operations Management* 21 (2), pp.129–149.
- Sohal, A. and Eggleston, A. Lean production: experience amongst Australian organizations. *International Journal of Operations & Production Management*, Vol. 14, 1994, pp. 1-17.
- Spear, S.; Bowen, H.K. (1999). Decoding the DNA of the Toyota production system. *Harvard Business Review* (September-October), pp.97-106.
- Structural Business Statistics Database revised. Retrieved 17.05.2017. http://ec.europa.eu/eurostat/web/structural-business-statistics/data/database?p_p_id=NavTreeportletprod_WAR_NavTreeportletprod_INSTANCE_Wg8pz4NjomG2&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-2&p_p_col_count=1
- Taj, S. Berol. (2006). Application of constrained management and lean manufacturing in developing best practices for productivity improvement in an auto-assembly plant. *International Journal of Productivity and Performance Management*. Vol.55, No.3/4, pp.332-345.
- Taylor, G. (2008). *Lean Six Sigma Service Excellence: A Guide to Green Belt Certification and Bottom Line Improvement*. New York, NY: J. Ross Publishing, <http://books.google.co.uk/books?id=1VdYNwAACAAJ&dq,2008>
- Toyota Production System Terms, b.g. Retrieved 12.05.2017 <http://toyotageorgetown.com/terms.asp>
- Toyota Production System, b.g. Retrieved <http://encyclopedia.thefreedictionary.com/Toyota+Production+System>
- Whetten, D.A. (1989). What constitutes a theoretical contribution? *Academy of Management Review* 14 (4), pp.490–495.
- Womack & Jones. (1996). *Lean Thinking*. New York: Simon & Schuster, 1996.



Trauma and Its Rehabilitation in Music Therapy Practice

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Abstract

In this research we would like to introduce you to the first results of music therapy research that is done in Latvia. We present the work with a patient who has a secondary hemiparesis after left side head injury with all its implications (motoric aphasia, right side spasticity etc.), emphasizing the importance of parallel/ simultaneous work of rehabilitating team members (speech therapist, physiotherapist, music therapist etc.). In this article we will juxtapose music therapist work results with analysis of literature and methodical concept. **The aim** of research was to address the possibilities of music therapy in brain injury cases, accompanied by the speech engine aphasia, mental retardation of development, variety of emotional disorders, and particularly commonly seen speech, language disorders, as well as memory impairment. The following music therapy method will be used: particular vocal therapy method created by S. Shushardzhan (doctor, music therapist), combined with breathing exercises of Strelnikova – further explained in text.

Key words: trauma, speech, memory, music therapy, rehabilitation

Introduction

Music therapy today has a very broad range of applications. The list of medical problems of neurological patients that can use music therapy includes: memory deficits, problems with balance, problems with motor skills, challenging / aggressive behaviour, sharp or chronic pain, poor attention, decreased vocal projection, severe speech loss, poor motivation, muscle relaxation, Alzheimer's disease, multiple sclerosis, Parkinson's disease, stroke, etc. Music therapy as a therapeutic agent for use in people with neurological disorders has enormous potential because there are different ways how the musical characteristics often cause expected neurological reactions.

The rehabilitation process is different for different patients, and the rehabilitation program has to be individualized, according to specific needs of each particular person. In the rehabilitation process, it is important to utilize the natural rehabilitation possibilities of the organism; and the rehabilitation process of the brain should be maximally quick and effective. The treatment methods and technologies improve rapidly, as also our knowledge about the brain activities advances every year. The goal of rehabilitation is to help a person to achieve the maximal possible level of independence.

It is very important to start rehabilitation early. Practically, it should start in the department of intensive therapy. Early started rehabilitation in department of intensive therapy allows shortening the time of hospitalization. Rehabilitation starts from the moment, when the health condition for the patient becomes stable. Then a patient would start to participate in the rehabilitation program for some hours a day. This program usually includes activities together with rehabilitation specialists (physiotherapist, ergo therapist). The more time has passed after the brain injury, the more patient has to spend time in activities with different rehabilitation specialists. It is important to remember, that not always bigger amount of activities means better results.

In different periodicals and in the works of several authors (Darow and Starmer, 1986; Cohen, 1992; 1993; Aldridge, 2001; etc.) we can find excellent descriptions of use of music therapy methods. In our description we used the publication by Jeanette Kennelly, Leonie Hamilton, and Jill Cross (Kennelly et al., 2001), where experience of several music therapists is summarized.

Singing and conversation – those are two the most direct ways of person's self-expression (Cohen, 1993). Singing allows to express oneself and to use different sound fluctuation possibilities in order to follow the melody and rhythm, at the same time phrasing music and regulating the breathing without a particular concern about it. It can be done easier in a song as in speaking, and that is advantage of music. Also the songs texts contribute to this process, especially in the spheres of articulation and memory.

Speaking about the common mechanism of impact of music therapy methods, the essential is the following. We all have memory where the actual information is stored; similarly, we all have memory or "motoric patterns" for physical movements. With the help of music, these motoric patterns can successfully be "reanimated", called out of memory, even in the cases when muscles or a part of body get paralyzed. A person can lose his/her ability to create



movements, but by stimulating another - similar but neurologically different - physical action, music with its active rhythm can create a spontaneous movement, as the result of which the extremities and joints are not subjected to atrophy and cramps. In the process of treatment music and its particular rhythm can be essential, because it provides the necessary signals for reintegration of movement meaning. Loss of neurological functions can make compensatory mechanisms more active, and one can gain the control over the nonexistent functions. This phenomenon is known as “plasticity of nerves¹.” There are very many alternative nerve connections, which can be used for restoring the behaviour. As D. Aldridge (Aldridge, 2001) states, the neurological function includes involvement of particular nerve connections depending on the type of stimulus and reactions that come as the result of it. People with hemiparesis can “stimulate the alternative motoric “patterns” with the help of correct music/rhythm”. For example, in marching and dancing different schemes of postures are involved, although they both are physical movements. With the help of music therapy it is possible to help the patient to gain back the lost understanding about the movements (Aldridge, 2001).

Keith and Aronson (1975) in their work state that as early as 1736, O.Dalin has described interaction of music and verbal communication in some clinical cases and how they impact each other. There are cases where people could not say a word but could sing hymns and recite well-known prayers. In 1940 Loebell described a case study of a six and a half year-old boy who could not speak but expressed his desires and feeling by humming the beginnings of certain songs. He knew many songs and selected appropriate melodies for each communication in such a manner that pertinent text made obvious what he wanted (Keith and Aronson, 1975).

In the 1970's there were numerous reports of stroke patients, where singing was the catalyst for the return of verbal communication. The same authors, Keith and Aronson (1975) have described a patient who regained functional communication after singing therapy.

Rogers and Fleming (1981) has documented information about a 48 year old woman with severe oral apraxia whose speech first came with music therapy (*Rogers and Flemming*, 1981).

Perhaps the most known method, which integrated speech pathology and music, was Melodic Intonation Therapy (MIT) as first described by Sparks, Helm & Albert (25) and today is also used by music therapists in rehabilitation settings. MIT was developed to assist the global aphasic who had little if any useful language. This therapy relied on the three elements - melodic line, rhythm and points of stress (Baker, 2000).

The use of music therapy to address pediatric speech delay (Seybold, 1971) and disorder (Hibben, 1991) supports the significant role that this discipline has to play in addressing acquired neurological speech and language disorders in children. Both authors concluded that the use of music therapy for such children facilitates interaction in a group setting, the ability to tolerate longer periods of closeness, acceptance of responsibility for behaviours and may help to effect emotional change.

In the literature we also find materials on the use of singing as therapy for patients with traumatic brain injury (1992); and cerebral palsy (1993) etc. Cohen (1992) describes several components for music therapy sessions. The singing interventions reported in his study included: physical exercises to increase relaxation of head neck, shoulders and trunk to improve pre-articulatory movement patterns; rhythmic speech and singing drills using pacing and rhythmic patterns to address disorders of rate; breathing exercises to improve breath control, phrasing and volume; vocal exercises focusing on pitch to improve intonation; vocal exercises focusing on diction to improve articulation and lead to increased intelligibility. Results from Cohen's studies were generally positive with reported changes in rate, pitch variability and intelligibility (Cohen, 1992.; 1993).

In the scientific literature we find information also about role of music therapy in addressing speech disabilities (motor aphasia etc). In the Journal of Australian music therapy, D. Erdonmeza (Erdonmez) has gathered some research material, also in pediatrics, where music therapists (Krauss and Galloway, 1982) have helped children with speech development disorders. Results show that after the therapy there was improvement in speech fluency and rate; voice quality and intonation; vocabulary development, and articulation. Roskam (1979), using music, has improved reading skills and ability to differentiate sound heights in non-verbal communication for 6 – 9 year old children. Other research studies show that children with sensory damages could improve their phonemataical hearing/

¹ **Neural plasticity**, which is also known as neuroplasticity, brain **plasticity**, cortical **plasticity**, and a variety of other names, is the changing of the structure, function, and organization of neurons in response to new experiences. **Neural plasticity** specifically refers to strengthening or weakening nerve connections or adding new nerve cells based on outside experiences. As some areas are damaged or injured, other areas increase activity so that the organism can continue functioning. This is known as **plasticity**. The amount the brain is able to heal itself or maintain function using healthy areas depends on the illness or injury which caused the initial damage and how much of the brain was impacted.



perception with the help of vocalization (Darrow & Starmer, 1986). Staum (1983) has researched the influence of music (rhythm particularly) to movements of children. He has observed that the rhythmical stimuli promote movements of the patients with such illnesses as hemiparesis, spastics and arthritis (Erdonmez).

From all above mentioned, we can gain idea about the wide usage of music therapy in diminishing different disorders (physical, psychical, psychological etc). In every case, music creates active emotional reactions in the patient/ client; its acoustic units influence the emotional centres of the brain. The right hemisphere has the leading role in perception of music (my patient had injured the left hemisphere). It is well known that music influences person's subconsciousness. The musical archetypes are generalized; therefore there is no need for special knowledge or skills for their interpretation. They have genetic roots in every person's consciousness, and that helps children to perceive music better. It is possible that music operates directly to child's subconsciousness. Together with resonance of music, subconscious images intensify and become accessible (*Ворожцова, 2004*).

The process of listening to music requires a very intense activity of the psyche and can create positive emotions. If music is used skillfully in the therapy process, all the negative, torturing and unpleasant affects can be relieved and turned into the opposites.

Aim of our research: To address the possibilities of music therapy in brain injury cases, accompanied by the speech engine aphasia, mental retardation of development, variety of emotional disorders, and particularly commonly seen speech, language disorders, as well as memory impairment; to help a patient with hemiparesis to eliminate the trauma aftereffects, using scientific research materials and doing practical music therapy. **The goal of music therapy was:** to build/ create music therapy relationship; integrate patient's limited expressive abilities; heighten musical self-experience of the patient; improve motoric speech abilities with putting in motion the vocal resonators, fostering differentiation of sound height with the voice, relaxing the patient emotionally. **Research hypothesis:** if in the after-injury period a patient is timely provided with music therapy within the individual rehabilitation program, the aftereffects of injury are diminished, and motoric abilities of the speech are improved.

Materials and Methods

This is research about the case study and music therapist work experience with 10 years old girl, who has obtained her invalidity after cerebral trauma caused by a falling rocket at the fireworks in New Year's Eve. The rocket fell on the girl's head. As the result, the left hemisphere of brain was operated/ trepanned. This heavy trauma created secondary hemiparesis with its implications (motoric aphasia, right side spasticity, motion support disorder etc., as it is later stated in anamnesis. **Doctor's diagnosis:** very severe, open injury of left brain hemisphere; cerebral coma; damage of left side forehead/ temple/ brain-box bones after the injury and trepanation; secondary healing of the wound; subdural collection of liquid in the area of left lobe of forehead; spastic hemiparesis of right side with features of ankylosis in the right side and joint of the elbow; sensor motoric aphasia; organic mood disturbances

We have used ascertaining/single case statistics (individual therapy), and comparative statistics as well. For ascertaining statistics we chose description of anamnesis, medical after-trauma diagnosis, and also the conclusions of physiotherapist and speech therapist that were drawn at the beginning of all the sessions and at the very end. Theoretical (analysis of literature) and empirical research methods: video analysis, observations, music evaluation, listening, diagnosing, analysis and interpretation of results – were used.

The process of music therapy: Length of therapy: six month 20 sessions, session once a week in IBAC (Liepaja Interdisciplinary Center of Children Development)

During process of music therapy we used practical individual music therapy methods: integrating patient's motoric and voice activities in common musical process, improvising in regulating speech and breathing, forming breathing and voice height perception in connection with actuating the head resonators, transferring the state of emotional experiences.

The following music therapy method will be used: breathing and forming perception of sound's height connecting it with putting the head resonators in motion, which is a particular vocal therapy method created by S. Shushardzhan (doctor, music therapist). This method is successfully combined with the breathing exercise of Strelnikova, which helps to achieve the improvement of differentiation of sound's height and also advancement of motoric abilities of speech after cerebral trauma. Russian opera soloist Aleksandra Strelnikova (1912 – 1989) created a new and very fruitful system how to teach breathing. This complex of exercises could be used only by non-medical people, as it was contradictory to generally accepted canons of breathing. Strelnikova was looking for answers to the following questions: where and how to take breath?

The shape of lungs, without going into any anatomical details, is conical: upper parts of lungs are narrower, lower parts – wider. Lungs expand more at the back, where the "lung bags" are located. When inhaling, it is important that air fills up not only the upper part of the lungs but enter also in the lower segments. Strelnikova created exercises,



which would help the air to get in the back (some call it “backpack”), filling the lungs all the way from the top to the bottom, and leading the air to the lung periphery – in small bronchi with alveoli at the end.

At the basis of those exercises there is an active, short, hissing, emotional inhaling through nose, that is done in the movement – bending forward and compressing the thorax. That way air pervades maximally deeper and wider. She was looking for a curing inhalation to treat her lost voice. Going non-traditional path, she discovered that inhalation is more important than exhalation. Her exercises restore the most complicated function of breathing – singing voice (Лавров, 2003).

Russian doctor and music therapist S. Shushardzhan (Шушарджан, 1990) created his vocal therapy method, basing it on previously mentioned exercises. This method helps to put in motion the head resonators, where the sound (vocal) by its vibration does a slight brain massage, which means helping to feed oxygen to the blood and clearly improving brain activity. It is particularly important after cerebral trauma and in the cases of brain plasticity (overtaking compensatory abilities).

As the patient had some particular motoric support disorders, it was necessary to use other therapy forms as well, adjusting them to the breathing therapy method of A. Strelnikova and vocal therapy method of S. Shushardzhan. We used a trampoline, because then we could fulfil the conditions created by Strelnikova – to perform simultaneously vocalizing and physical activities.

Results

To the first session, the girl came on a wheelchair, and with the help of her mother she was taken to the chair next to the drums that she could participate in music therapy session. The girl was shy and confused, but from the very beginnings it was already clear that her intellect after the trauma is not damaged. She did everything with a great interest, and as we later understood from the conversation with her Mom, both of them – the girl and her Mom, had a serious motivation and belief that the girl will be able to walk independently, and also move and speak, and that the therapy process will bring positive results.

Results after music therapy session: vocal resonators are actuated; partial improvement of motoric speech abilities (planning); seldom, but success in ability to differentiate the sound's height with the voice; patient is emotionally relaxed. Now the patient attends music therapy sessions once a week together with patients of Youth Day Centre. She is emotionally more relaxed, able to communicate in the group, call others by name (3-4 syllables). Her right hand is still spastical. She is able to attend school, grade 1, works with computer (she can write words but struggles to pronounce them), visits ergo therapist and physiotherapist. Altogether, the significant diminishment of post-traumatic consequences can be observed, which is certified by speech and language therapists and a physiotherapist as well.

There was no **control research** done, but observations and video analysis give clear evidence about the dynamics of patient's advancement. The conclusions of physiotherapist and speech therapist, as well as the conclusion of medical specialist after the sessions replace the control test and also the control research.

Discussion

Human brain is the most important organ, which provides and coordinates life processes in the body; head injuries can result in brain trauma. The amount of damage depends on the severity of injuries. Brain injury rehabilitation process is different for each specific person. Rehabilitation program must be personalized, appropriate to the particular person's specific needs. Rehabilitation aims to help people achieve the maximum possible level of independence. Significantly, the loss of neurological function may lead to activation of compensator process to partially or completely gain the upper hand over the void function. This phenomenon is known as a "nerve plasticity".

Music, in any case, leads to active emotional reactions from a patient; the language of music's original emotional acoustic units affect the emotional centres of the brain. Music therapy methods and range of applicability is broad, and can be customized virtually for any neurological impairment mitigation. Important is parallel/simultaneous work of the rehabilitation team (speech therapist, physiotherapist, music therapist, psychiatrist, psychotherapist, etc.). This certainly should be done in the early disease period of the patient.

According to the research, children with hand function disorders have also more severe speech disorders. (Tubele and Steinberga, 2004) This case is similar - speech disorders create difficulties for a child to communicate with others, and this fact negatively influences the child development.

The consequences of the brain damage influence the emotional sphere of the teenager very negatively. Particularly severe is a case, when a child has obtained trauma at the age that is mentioned in this case – at the moment of injury the girl was 10 years old. Possibly, her psychological characteristics before trauma were congruent to what was described above, but after the trauma, her development was delayed. 10 months after the trauma, as it is stated in the conclusion of the therapist, the patient understands everything but is very frightened and insecure.



Exactly rapid mood changes and delayed reactions, as well as emotional and willpower disorders were characteristic to our patient. Similarly it was with the patient, when she, after a half a year spent in Rehabilitation centre, arrived at Interdisciplinary Children Development Centre to start her rehabilitation with the specialists, such as children neurologist, Vojta therapist, physiotherapist, music therapist and speech and language therapist. The late (II) stage of rehabilitation would be needed for the patients, who have achieved good results in the early stage and who have shown the progress of their functional conditions. For such people, day centres, ambulatory rehabilitation centres or rehabilitation departments within the health care centres could be very useful.

As it was mentioned in the theoretical part of this work, similar therapy cases were described by Cohen - cases of traumatic brain injury (1992); and cerebral palsy (1993) etc. Various components that Cohen added to his music therapy sessions correspond to our practice of music therapy.

The research results of Cohen were positive and witnessed improvement of articulation, diction and general organization of language/speech. In the research literature we find the description of a case based on Cohen's research, similar to the case with our patient: 12 year-old girl with brain injury, coma situation and language disorders. After a motor vehicle accident she lacked emotional motivation to eliminate the post-traumatic consequences and improve her condition. Music therapist was using previously described work experience of Cohen. Also he was using the songs of the favourite group of the girl - "Spice Girls". Similarly it was with our patient Liana – she relaxed when listened to songs of her favourite group - "Prata Vetra". Liana could not sing, but when she heard familiar Latvian children songs, such as "Maza, maza meitenīte", "Kur tu teci gailīti manu", "Kā rūķītis konfektes stādīja" etc, she expressed her emotions in active and rhythmical body movements. We want to emphasize that in the praxis of therapy each case is individual; therefore discussion can take place only about the basic conceptual issues.

Conclusion

We believe that during the course of this work the hypothesis mentioned in the introduction has been proven. Both theoretical and practical studies have shown that, if during the pre-trauma period an individual was provided with a rehabilitation program that includes music therapy, it contributes to the mitigation of post-traumatic effects, including the promotion of speech motor ability and improvement of memory.

Usage of music therapy with the patients with neurological disorders has a great potential, because it opens many different possibilities of how to get the desired reactions with the help of musical elements. Within this work, the possibilities of music therapy were described in the case of hemiparesis, which is accompanied by motoric aphasia of speech and other secondary implications brought by brain injury: delays of psychical development, different disorders in spheres of emotions and willpower, and especially speech and language disorders. Our conclusion is that music with its rhythmicality and structure can help in promoting the motor speech abilities, as there is a correlation between the severity of the speech defects and the level of hand function disorders.

It is important to acknowledge that the loss of neurological functions can create the activation of compensatory processes, in order to gain control over non-existing functions fully or partially. The compensatory process can be activated more successfully with the help of vocal therapy. It is possible to do a qualitative vocal therapy using breathing exercises of A. Strelnikova.

In any case, music creates active emotional reactions in the patient; the emotionally acoustic units of music language work directly on emotional centres of the brain. There is a wide spectrum of music therapy methods and their usage: it is possible to adjust music therapy for diminishing the consequences of almost all neurological disorders.

The simultaneous work of rehabilitation team members (speech and language therapist, physiotherapist, music therapist, etc.) is crucially important. That has to be started in the early period of the illness.

References

1. Aldridge, D. (2001). *Music therapy and neurological rehabilitation: Recognition and the performed body in an ecological niche*. Music Therapy Today (online), November, available at // www.musictherapyworld.info
2. Baker, F.A. (2000). Modifying the melodic intonation therapy program for adults with severe non-fluent aphasia. *Music Therapy Perspectives*, 18, p.110 –114.
3. Cohen, N. (1992). The effect of singing instruction on the speech production of neurologically impaired persons communication disorders. *Journal of Music Therapy*, 29, 87 – 102.
4. Cohen, N. (1993). The application of singing and rhythmic therapeutic intervention for persons with neurogenic communication disorders. *Journal of Music Therapy*, 30, 81 – 99.
5. Darrow, A. A., Starmer, G. J. (1986). The effect of vocal training on the intonation and rate of hearing impaired children's speech: A pilot study. *Journal of Music Therapy*, 23, 194 – 201.



6. Erdonmez, D. (n.d.). Music Therapy - The Evidence// Sensory Impaired child// CD-R - IV, Witten /Herdecke Univaersitaet
7. Rehabilitation// Music Therapy Today (online), CD-R– III,Witten/Herdecke Univaersitaet.
8. Hibben, J. (1991). Group music therapy with a classroom of 6-8 year old hyperactive learning disabled children.
In Bruscia, K. (Ed) *Case Studies in Music Therapy*. USA, Barcelona Publishers
9. Keith, R. L., Aronson, A. E. (1975). Singing as therapy for apraxia of speech and aphasia: Report of a case study. *Brain and language*, 2, 483 – 488.
10. Kennelly, J., Hamilton, L., Cross J. (n.d.). The interface of music therapy and speech pathology in the rehabilitation of children with acquired brain injury // CD – R. – III, Witten/Herdecke Univaersitaet
11. Rogers, A., Flemming, P. L. (1981). Rhythm and melody in speech therapy for the neurologically impaired.
Music Therapy. 1, 33 – 38.
12. Seybold, C. D. (1971). The Value and Use of Music Activities in the Treatment of Speech Delayed Children. *Journal of Music Therapy*, 8, 102 – 110.
13. Sparks, R. W., Helm, N.A., Albert, M.L. (1973). Melodic intonation therapy for aphasia. *Archives of Neurology*, 29, 130- 131.
14. Tūbele S., Šteinberga A. (2004). *Ievads speciālajā pedagogijā* [Introduction in special pedagogy]. Rīga: Raka, 112 lpp. (in Latvian)
15. Ворожцова, О. А. (2004). *Музыка и игра в детской психотерапии* [Music and play in child psychotherapy].
Москва: Издательство Института Психотерапии. 89 с.(in Russian)
16. Лавров, Н. Н. (2003). *Дыхание по Стрельниковой* [Breathing Strelnikova]. Ростов-на-Дону: Феникс, 191 с.(in Russian)
17. Шушарджан, С. (1990) Музыкотерапия и резервы человеческого организма [Music Therapy and the reserves of the human body]. Москва: Антидор, 363 с. (in Russian)
18. <http://www.metacrawler.com/info.metac/search/web/trauma%2Bof%2Bhead>
19. http://www.onlinelawyersource.com/cerebral_palsy/hemiplegic.html
20. http://www.rehab.lv/lmpb/smadzenju_bojaajuma_iedalijums.htm
21. <http://www.neuroskills.com/index.html>



Rating Agencies: Foreseeing the New Forms of Measuring Political and Credit Risks

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Abstract

The security, credibility and growth of a country, corporation or product are many times measured by ratings given for certain entities, for instance, the risk notations periodically published by major rating agencies. As a matter of fact, the investor's guide their investment strategy by such classifications. The present research enable us to develop a careful "free" review of the 2007/2008 financial crisis causes, consequently we can state that their ratings had some correction problems that would be manipulated by "hidden" interests and "actors". It's required to find out new measurement techniques of the corporate and countries investment risk. To develop our research, we chose to analyze the political and credit risk. Considering the extremely volatile political risk, it would occur in an unexpected concern, as well as, would be supported in a revolution or in riots, and, it would be a change through a Government change and/or laws changes implemented.

Keywords: Political Risk, Credit Risk, Credit Default Swap, Risk Measurement

Introduction

The credit ratings reflect the credibility and strength of a corporation, country or product. In this paper, we will try presenting an alternative to credit ratings to measure that credibility and strength, giving investors a new method of risk measurement, which is based on the CDS market trading, and this new credit rating score is independent of rating agencies. So, we'll try to establish a link between the funds flows and spreads of *credit default swaps*, in order to measure the credit market pulse, to demonstrate that *credit default swap spread* can be used as instrument or tool to measure and anticipate a country's political risk or credit risk.

Types of risks: default risk and political or sovereign risk

Credit risk depends on the creditworthiness or liquidity of the obligee and is "the risk of non-fulfillment of the corresponding obligation by the debtor, also said, therefore, the risk of the counterpart."¹ Credit means reputation or trust, hence credit risk is closely linked to the possibility of breach of the debtor's trust or reputation. The risk will be all the greater when as the evolution of the debtor's situation deteriorates, and even if this deterioration does not necessarily lead to default, it is sufficient that this probability is increased so that there is a credit risk. The nature of this risk cannot be confused with the nature of market risk, since market price variations, whether of shares, bonds or commodities, are expected and inherent in the functioning of the market, while credit risk relates more with the situation that a given credit position assumes in the context of the debtor's financial situation of the obligation, which is a slower and more independent development. Counterparty credit risk means the risk of default by a counterparty in a transaction before the final settlement of the respective financial flows. This risk generally encompasses all the relations between two parties. In the event of default in the fulfillment of one of the obligations it legitimates the valuation in respect of all other transactions that the parties retain. That is, the delay in relation to a credit portfolio operation legitimates a correlation with the other obligations belonging to the credit portfolio relative to that debtor, since the counterparty risk is verified and is related to the debtor and not in relation to a specific obligation. With the exponential growth of the credit default swaps market, counterparty risk increased in parallel. Indeed, one of the major concerns was precisely that the largest *dealers of credit default swaps* served as counterparties to others and therefore were interdependent.

So, regarding the credit risk, the hazard is that the debtor may fail to fulfill his payment obligation. There are many variants that may determine the fluctuation of that risk in each moment.



Understanding and anticipating the credit risk of certain entities becomes vital for the pursuit of any good investment policy. In this regard, Noro said “the last two decades have been characterized by several financial disasters; large institutions collapsed proving that an insufficiency of financial risk management can cause huge losses and ripple effects throughout the financial markets. Quantitative approaches to risk management gained popularity and have been widely adopted. Nowadays firms need to understand their ability to face risks and to manage them carefully. Above all, the financial markets turmoil highlighted the importance of counterparty credit risk which is one of the many complex areas of financial risk”¹.

We speak of political risks whenever the ideologies pursued by a country in terms of investment policies are restrictive or prohibitive, making it difficult to invest abroad and the consequent outflow of capital from the country. We will also consider it as a political risk whenever the internal governance stability of a country is at stake, as is the case at the moment with Brazil.

This political risk is always exacerbated in electoral periods, given that there is always a certain amount of uncertainty that is not compatible with investment purposes. However, even after the election period, the political risk can be maintained, especially when a change of ideology or political party occurs. In these cases, in the initial moments and after the takeover of a government, there is still a considerable degree of uncertainty that increases the political risks, since the elected government does not always recognize and accept the obligations assumed by the previous government.

Political risks still exist in so-called nationalization processes because they are generally burdensome for a country's financial structure.

This risk no longer has its origin in the financial situation of the counterparty, but rather in the location where the counterparty is located, that is, the political risk is affected by reference to the location of the counterpart in the economic area.

Rating Agencies

The rating assigned by the rating agencies presents itself almost as an absolute truth, never questionable, while *gatekeepers* of the financial markets. However, in this particular case, the rating agencies only assume the actual situation of an entity when there is a default situation.

Browning said that “the credit rating agencies play a vital role in the financing of firms in our economy. The difference of a single rating category can often mean a 100 basis point differential. Thus, even the smallest drop in rating category could cost firms very significant amounts in financing”².

In fact, because of the wrong ratings assigned by the rating agencies to certain financial products marketed that were the basis of the systemic risk spread of the negative effects of the financial crisis in 2007/2008 in the United States of America, we believe that this behaviour should be subject to scrutiny by the courts, that is, the responsibilities of the managers of these companies should be ascertained. It is almost practically impossible to continue to have a complacent attitude in relations to the mistakes of the rating agencies, which seem gross in the face of the data that those entities could and should have in order to formulate their ratings. In other words, the

¹ Vide Noro, E. (2017). Models and Methods for Counterparty Credit Risk Measurement, Università Ca' Foscari Venezia, <http://hdl.handle.net/10579/9964>

² Vide Browning, L. (2017). *An Examination of the Association of Firm Credit Ratings with Real Activities Manipulation, Audit Quality, Corporate Governance, and Credit Default Swaps*. (Electronic Thesis or Dissertation). Retrieved from <https://etd.ohiolink.edu/>.



rating given by rating agencies can no longer be overvalued. This raises the need to find new ways of measuring the credit and political risk of certain entities in order to guide investors.

New forms of measuring political and credit risks: *credit default swap*

The *credit default swap*, created by Blythe Sally Jess Masters of JPMorgan Chase & Co. in 1994, translates into a financial instrument used to speculate or *hedge* against the risk of default by a reference entity, which may be a company or a country, allowing the swap of the credit risk of a fixed income product between the parties, where the risk of bankruptcy of the reference entity is transferred from the buyer of the product to the seller of the swap³. The reference entity is not a part to the contract. In simpler terms, the *credit default swap* is used to prevent your buyer from the risk of defaulting on an asset by your debtor. It is essentially designed to avoid credit risk.

The *credit default swap* is a bilateral agreement as it gives rise to obligations for both parties, and the buyer's obligation (*protection buyer*) translates into the obligation to pay a certain amount at certain predetermined periods of time to the seller (*protection seller*).

We can thus define the *credit default swap* as a "*credit derivative contract in which one of the parties - protection buyer - transfers the credit risk associated with an underlying asset - which it may not own - to another party - protection seller - by means of the payment of a premium - a single premium, at the head or staged, which assumes the risk of default on the underlying asset credit.*"⁴.

Credit derivatives make it possible to separate the credit risk from other risks and their value depends on the creditworthiness of a given entity and, in these particular credit derivatives, the underlying asset will be a reference credit and for which the creditor intends transfer to another party the risk of non-performance by the debtor in that legal credit relationship.

Thus, the greater the risk of default by the reference entity or the greater the likelihood of insolvency of that entity, the higher the *credit default swaps* price for that entity. The underlying principle is the same as for example in life insurance, where the higher the age of the insured, the more expensive the insurance premium becomes, which is calculated on the basis of the level of risk.

We ask, do the protection sales people in the CDS have an interest in disclosing "news" that places the reference entity in a critical situation, regardless of whether this corresponds to reality? This situation is made possible by the predetermined information and commissioned by the agents whom it takes advantage of, and the unclear connections of these to certain *rating agencies* were unraveled after the financial crisis of 2007.

In fact, Kiesel and Spohnholtz said that "*the empirical analysis shows that logarithmized CDS spreads and issuer credit ratings by agencies have a linear relationship. The new CRS provides market participants with an alternative risk assessment, which is solely based on market factors, and does not rely on credit rating analysts. The results indicate that our CRS is able to anticipate agency ratings in advance. Moreover, the analysis shows that the trading volume has only a limited influence in the anticipation of rating changes*"⁵.

³ Vide BOLTON, Patrick e OEHMKE, Martin, «Credit Default Swaps and The Empty Creditor Problem», *Review of Financial Studies*, Fevereiro 2011, pp. 2617-2655, available at: <https://www0.gsb.columbia.edu/faculty/moehmke/papers/EmptyCreditors.pdf>, (acedido em 05 de fevereiro de 2015 refer that "In a CDS, the protection seller agrees to make a payment to the protection buyer in a credit (default) event on a prespecified reference asset. In exchange for this promised payment, the protection seller receives a periodic premium payment from the buyer".

⁴ Vide ALMEIDA, António Pereira, *Valores Mobiliários, instrumentos financeiros e mercados*, vol. II, 7ª edição reformulada e atualizada, Coimbra, Coimbra Editora, 2013, p. 88. ISBN 9678-972-32-2191-6.

⁵ Vide Florian Kiesel, Jonathan Spohnholtz, (2017) "CDS spreads as an independent measure of credit risk", *The Journal of Risk Finance*, Vol. 18 Issue: 2, pp.122-144, <https://doi.org/10.1108/JRF-09-2016-0119>



But how then can the *credit default swap* serve to assess whether there is too much risk in investing or not in a particular entity or country? We verified above that this agreement serves to cover a credit risk, that is, that the investor is aware of the risk that his investment does not offer him any return or gain, due for example to the insolvency of the debtor of that return. Thus, the greater the probability that the debtor is unable to meet its obligation and thus realize the investor's gain expectations, the more expensive the credit default swap premium will be on that investing entity. The same reasoning we can carry for life insurance. The higher the age of the most expensive insurer is the life insurance premium, because the risk of death, being uncertain its date, is closer and real, according to the rules of experience and probabilities, that is, it represents a risk premium, so the insurance premium for the protection of this risk is also more expensive⁶.

With this parallelism, we can measure the risk of investing in certain entities, since the more expensive the credit default swap is, the more patent the credit risk is on that reference entity in which it is intended to invest. This reasoning must be considered by investors since the protection seller, when determining the premium payable for the protection they grant through the conclusion of credit defaults, has already determined and analyzed the economic and financial reality in which the referral entity is dipped .

Conclusions

So, after our research, we can formulate some conclusions. One of them is that if the investors don't find or use others methods to measure de credit risk or political risk of a country, corporation or product to select their investments, they are hostage to ratings dictated by rating agencies, which are not always correct as we have seen. Besides, that ratings affect some States investment values.

Thus, it is clear from the foregoing that it is essential to consider new ways of measuring investment risks. For us, credit risk and political risk can be perfectly measured by credit default swaps trade and their respective spreads. The difference between this risk measurement (credit default swap and their spreads, and the ratings assigned by the rating agencies is that this one needs analysts while the first, as the most important, is the market factors, and these elements are independent of those analyst's intervention, moreover, in this new method, the risk fluctuation may be known before the risk notation given by the rating agencies.

We are conscious that this method isn't free of fails, especially if this credit derivative negotiation is abusive; as it would be observed in the US financial crisis in 2007/2008 happened. However, having another risk measurement method is helpful for investors to gauge the timeframe of their investments based on it.

References

- Almeida, A. P., *Valores Mobiliários, instrumentos financeiros e mercados*, vol. II, 7th edition redesigned and updated, Coimbra, Coimbra Editora, 2013, p. 88. ISBN 9678-972-32-2191-6.
- Bolton, P., Oehmke, M., «Credit Default Swaps and The Empty Creditor Problem», *Review of Financial Studies*, Fevereiro 2011, pp. 2617-2655, <https://www0.gsb.columbia.edu/faculty/moehmke/papers/EmptyCreditors.pdf>
- Browning, L. (2017). *An Examination of the Association of Firm Credit Ratings with Real Activities Manipulation, Audit Quality, Corporate Governance, and Credit Default Swaps*. (Electronic Thesis or Dissertation), <https://etd.ohiolink.edu/>
- Kiesel, F., Spohnholtz, J. (2017) "CDS spreads as an independent measure of credit risk", *The Journal of Risk Finance*, Vol. 18, Issue: 2, pp.122-144, <https://doi.org/10.1108/JRF-09-2016-0119>

⁶ Sobre a tese de que o credit default swap se traduz num verdadeiro seguro de crédito, veja-se Teixeira, M. E., (2017) O contrato de swap: o credit default swap e o seguro de crédito., Almedina, <http://hdl.handle.net/11328/1490>



- Noro, E. (2017). Models and Methods for Counterparty Credit Risk Measurement, Università Ca' Foscari Venezia, <http://hdl.handle.net/10579/9964>
- Silva, J. C., “Seguro de Crédito como Seguro de Grandes Riscos: Garantia Indemnizatória Acessória ou Autônoma”, Revista de Direito do Consumidor, vol. 94, Julho/Agosto, 2014, Ponto 2.1.
- Teixeira, M. E., (2017) O contrato de swap: o *credit default swap* e o seguro de crédito., Almedina, <http://hdl.handle.net/11328/1490>



Policy, law and education for human rights in european union: legality and social needs dichotomy

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Abstract

Considering the Human Rights paradigm change in the present century, the international legality, as the education, needs and proceedings, it's important to understand the reasons of this renew human, and consequently social, context, translated in the legality as in the way of living. The terrorist attacks and the extremely security international measures; the anti-Semitic ideology proliferation, the racism and discrimination dangerous rates; *renew* Refugees waves; the economic crisis conducting millions to the real poverty; social capacity absence to understand and (re)act according to the needs, facing the violence and Rights violations are the most important causes of the change analysis of this research. The European Union faces these problems and changings according the Human Rights protection law despite the different difficulties. However, all over the world, there is an important dichotomy between legality and social needs that should be a priority to the “powers” aiming the Human Rights promotion.

Keywords: Human Rights, Education; European Union; Policies; Legality; Dichotomy.

Introduction

The XXI century has changed the Human Rights paradigm by different reasons: terrorist attacks and the extremely security international measures; the anti-Semitic ideology proliferation, the racism and discrimination dangerous rates; *renew* Refugees waves; the economic crisis conducting millions to the real poverty; social capacity absence to understand and (re)act according to the needs, facing the violence and Rights violations.

Considering the evidence of the EU Education for Human Rights policies as a procedure/obligation and a political strategy, it must be a priority assumed developing structured programs.

The present research confirmed the EU Refugees Crisis, which real dimension is not possible to identify now, would be an opportunity to develop the social democratic intervention by pedagogical programs to engage the citizens as a political and social actor within democratic concern. The xenophobia, racism and discrimination are serious problems, EU is facing without the control need, would be decreased by the Human Rights “scientific” knowledge and understanding for humanitarian social general behavior.

According to the needs diagnosed, the political rhetoric is not enough to change Public Opinion but it's a start points to promote an overview and Human (re)conceptualization of contexts and happenings, pedagogically controlled by the reeducation for “new” perceptions, “positions” generating (social and individual) behaviors away of the controversy and negative complexity. So, in fact we have sufficient international, regional and national (EU members) policies for Human Rights Education, but those realities permit to state the legal procedures and social needs dichotomy. It's urgent to act looking for European social development among the national governments connected with EU Institutions, to denounce the violations, identify the realities, developing an Education program for Human Rights structured for the need and achievable results.



Research, study and results

At the present moment, world and Human, research and study the Human Rights, considering the differences, the complex contexts and all the variables, from the Occident to the Orient, it's a central problem and an urgent question to be rethink, legally adjusted, culturally understood, a political priority aligned with the policies within the international, regional and national strategies, object of a structured education for a citizenship with conscious of the realities and the most different manipulations.

Concerning the historical perspective, these questions affecting the Human Rights are charged of complex and "non-understood" (manipulated) meanings and concerns, especially due the missing scientific study about the dichotomy between the legacy and social needs. Consequently, there wasn't an international strategy to develop a real diagnostic to develop the fundamental education to protect and to promote the Human Rights all over the world according each need. Considering the UN system behind, it would be a priority, and despite the legal procedures, some actions and programs aiming the needed education to help millions of people suffering, contribute to solve problems, promote new social behaviors based on certain moments facing the difficult problems and/or human/social crises. However, there wasn't a concerted project to achieve as many people as it would be. So, in the contemporary history this context without Human Rights Education implementation had contributed to deepen the problems at the most different areas, at individual and social levels in the most different world areas.

Nowadays the Human Rights are enounced as never before, but there are serious dangerous human actions with the worst consequences; information spread without the need contextualization, grounded in facts and legal proceedings, as well as the explanation adapted to the target public (individual or groups/societies) in their different realities. So, the Human Rights are in the democratic states Agenda, in the Media priority, in the social (official and non-official) discusses, in the countries, regional groups/Organizations, International Organizations (no or governmental) aims and actions, but, in the terrorist groups discourse as a "flag" to achieve their "recruitment" followers in name of some values completely distorted within the worst objectives. This problem is affecting the non-democratic states, mostly authoritarian, having in fundamental rights in their national legal documents, as in their rhetoric, despite their most condemned violation of the Human Rights.

This way, having in consideration the possibility to determine legally the Human Rights in the United Nations (UN) system, beginning by the Universal Declaration of Human Rights from 10 December 1948 (for *all* Human Beings in the world) as all the UN International legal documents, recognized and adopted by the UN members. However, the fundamental rights are considered those that are legally recognized in each country or regional organization legal order/system, as the European Union.

It's undoubtable that International Relations, the International Policies, with a democratic background, are developed supported in the Human Rights with their values modeling discourses as well as actions promoting reactions. Despite all adversities and problems, by a world vision, it's possible to state that predominately it's not need more laws but their effective implementation, meaning the existing Human Rights legal instruments and judicial articulation and procedures, aiming the effective living within these rights, controlling judicially all violations and punishing those (persons, countries or organizations) who doesn't reach the legacy normative.

Nevertheless, obviously there are many countries/governments that need to adopt in their legislations the Human Rights, democratizing their policies to protect their citizens from all violence, violations and suffering in the most different dimensions.

Though, there are many democratic countries that protect and promote these Rights, but have the challenge of a renew social construction through a rethinking of the criteria of the political, social, economic and cultural actions to implement a democratization by a serious and realistic plan, avoiding the problems known, foreseeing the possible problems, identifying all the "actors" in the society and political "scenery", acting to proceed with a qualified Democracy from all to all citizens. This is a realistic and scientific perception argued, by Laurence



Whithead¹ in a conference in Bucharest 2017², based in the idea that the rule of the world should be the democratic aims by the justice and social system through the legal Rule of the Law, never undervalued the cultural context and system within the political structure and actions. So, the vulnerability of the protection, promoting and implementing the Human Rights system would be in the democratization but in the quality of the Democracy. If it is in the *lower* level, surely the political regime will not be able to achieve the values and rights to an active and protected citizenship.

The present research identified the Geopolitics as an actor in the international relations field contributing positive or negative to the democratization within the policies, implemented, debated, protected or violated. In two points it's possible to identify perspectives:

1. "The physical realities that underpin national and international politics are too often disregarded both in writing about history and in contemporary reporting of world affairs. Geography is clearly a fundamental part of the "why" as well as the "what". It might be the determining factor, but it is certainly the most overlooked."³
2. "We live in a time when democratic nations are in retreat in the realm of geopolitics, and when democracy itself is also in retreat. The latter phenomenon has been well documented by Freedom House, which has recorded declines in freedom in the world for nine straight years. At the level of geopolitics, the shifting tectonic plates have yet to produce a seismic rearrangement of power, but rumblings are audible. (...) Today, as always, democracy is a fragile flower. It requires constant support, constant tending, and the plucking of weeds and fencing-off of the jungle that threaten it both from within and without. In the absence of such efforts, the jungle and the weeds may sooner or later come back to reclaim the land."⁴

The Political Scientists have no doubts about the importance of the Geopolitics, however there are several decisions about the International Relations and the promotion of the Human Rights policies that don't give, or prefer to ignore, the potential of this unavoidable element. So, it's easy to find out some explanations for the success or unsuccessful political, cultural, economic or social measures, at international dimension. For instance, in order to protect as many Human Beings as possible, those who are in the situation of refugees, especially in Europe, would have a different "treatment" if the geopolitical concerns were always been taken in consideration, included in the diplomatic deals, international organizations strategy, the humanitarian, solidarity, the protection and, in particularly, the UN Human Rights legal implementation, it would be prevented millions of deaths and people suffering in all dimensions.

Another illustration is the nowadays fight against Terrorism. There are International Relations and Diplomatic expertizes presenting the "Geopolitics of the Terror(ism)" as a renewed perspective and action proposal aiming to prevent the proliferation of the *hate* but the spread of the *peace* ideology by the understanding of the need of a concerted action and behavior by politics, governments, international organizations and citizens from

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² SCOPE2017 Science of Politics: 4th International Interdisciplinary Conference of Political Research: Democracy in Development – Comparative Perspectives on the Governance of the Public Good, University of Bucharest, Bucharest, Romania, 26-28 may 2017. <http://www.scienceofpolitics.eu> accessed June 4, 2017.

³ MARSHALL, T. (2016) *Prisoners of Geography*. London: Elliot & Thomson.

⁴ "Is the democracy in decline? The Weight of Geopolitics": Article by Robert Kagan in <https://www.brookings.edu/articles/is-democracy-in-decline-the-weight-of-geopolitics/> accessed June 4, 2017.



everywhere in the world. It's not an easy or simple question/action but it has to be considered in by the political decision makers.

Having the focus the Human Rights International context and its system, there are an essential question that exists in the most democratic governments, Organization and it's identified by the societies: Education for Human Rights. It's an apparently simple issue but complex to be understood and especially difficult to be implemented. It's not a new need or question for the International laws and Relations, after the 11/09/2001 (WTC Attacks in New York, USA) with the renewal conceptualization of the Terrorism and the Human Rights protection systems, the Education has been, progressively until now, a matter in the Political agenda: by the International Organizations (Governmental, as United Nations, Regional Organizations, as European Union), the Democratic States/Governments, as well as, by the International Associations and Movements which aim is promote and protect the Human Rights.

It's undoubtable there is a change of the Human Rights paradigm as well the needs of its legal and effective interpretation, by the violence and international and national "legal" violations known or through undisclosed liabilities, there are needs perfectly identified perfectly identifiable. So, there is two different perspectives:

- the needs to achieve the implementation of the policies already approved and recognized juridical and judicially by the Governments (mostly Democratic) that intend to protect and promote the Fundamental and Human Rights. In this case, the need aims to develop the strengthening of the policies / laws as well as the citizenship denouncing the violations and violence sometimes concealed (deliberated or not).
- the needs of millions Human Beings suffering the most different violence and international laws violation, including being murdered and tortured. Ones are legally protected but there are not effective Human Rights mechanisms to defend neither the possibility to denounce or ask for protection. Others are living the states where the Democracy is not a reality, so there is a hard work to develop to achieve the political power, so the education is in two vertices: the political and law changing (hard, complex and sometimes utopia mission) as well as the society knowledge of their Rights (Human and Fundamental) and the strategies of their own protection and all problems denounce.

The world is facing several, serious and worried problems, living not only within the worst contexts, as wars, authoritarian or dictatorships, as well all the severest human living conditions. The declared intervention need for the democratization, in the major human values, aiming to protect as much human beings as possible, solving the major problems. It's an effective *state of the art* in the world society that leaves open a difficult but need way to move on. This should be a mission from and to everyone, but unfortunately there are millions who don't have enough information, who didn't receive any kind of education to be a Human Rights protector, promoter and activist. There is no special movement but the active citizenship and a responsible human action as a mission. This is not idealist but the international law implementation. There is an important role that is part of the International Relations developed in the most different concerns: organizations, countries and special movements would be concerted to aim the most important values that support that relationships. However, the history has showed there the human beings are able to completely change the best and the worst actors in their own protection. In fact, in spite of all the difficulties and hindrances, the humanity showed whenever there are truthful and legitimate wish, with strategies defined, joining the needed and the strong stakeholders, it would need time (long or short) but it is possible achieving different, partial goals, but positive results. The action is the key.

Presently, it's obvious that there are two worlds where we have a life: the real one and the virtual. Both are places to protect and/or to attack the human beings. There are important connections and powerful instruments. Concerning the virtual world, the Humanity has a powerful instrument to achieve millions in seconds. Surely, we cannot say it's all humanity but each one is important. So, it's known the radical groups, as Dahesh, find out the powerful internet social networks to recruit millions, with the worst objectives aiming violence and terrorist actions. So, the Education for Human Rights would have, in this "place", the instrument to achieve has many



people, groups and governments. There is already work developed in this aim, but it would be implemented the effective education work according to the special needs of each world area, political regime, social groups, knowledge level, culture and religious contexts, economic as all different needs but promoting and protecting Human beings, as well as, giving effective instruments to denounce the violation(s). The problem of the investment in this education (by governments and/or societies can be analyze by the Ignacio Ramonet when he states, “We assist to a permanent tension between the “absolutely sovereignty consumer” and the citizens’ wish of the democracy guaranteed”⁵.

So, there are several *actors* who have the responsibility to develop the Education for the Human Rights: International Organizations; the countries: politics and political procedures; social (in all engagements) – in individual action as well in social groups; the pressure groups (known/identified or not) and the Media. The Media, in all communication supports, is one of the most important and powerful instrument to construct the Public Opinion and to develop the social education. Meanwhile, there is two points of view/action based in the manipulation. There are manipulated media and media that manipulate the public. This is dangerous with serious and the worst consequences to the violation of the Human Rights. Despite all kind of the influence groups behind the media, images, texts, speech, ideas and ideologies spread, there is a social education promoting several misunderstood “positions” away of the promotion and protection the Human Rights. The Media is controlled, ones positively, others negatively. Fortunately, there are media who develop their work aiming to proliferate values and rights within the International Law, but, in spite of all national, regional and international laws ruling and controlling, there are too much manipulation defining the media action with human consequences that needs to be identified, legally and correctly controlled, denounced and judicially punished and, obviously, published. There are strengths and interests difficult to identify and denounce; the manipulation in the most different dimensions, but it’s important to be aware of the details aiming prevent be manipulated and all kind of manipulations. In most of the cases we can affirm there is no need of more legal supports but the implementation, juridical and judicial control.

The United Nations have promoted the Education as a priority within the Human Rights, specially through the UNESCO activities. The International Labor Organization stated the education of the values and Human Rights in the labor concerns. The European Union has the Education as a priority, developing legislative procedures to protect and to promote the Human Rights adopted as fundamental rights, listed in the legal documents, especially in the Charter of Fundamental Rights of the European Union. The Arab League adopted the UN Human Rights International Legal Documents, as the Universal Declaration, incorporated in the Arab Legal States. Thus, the International Legal system, recognize not only the Human Rights but having the Education as a mission. Once again, there are countries that adopted and recognize these legal and judicial international instruments but there is violation, mostly, without the consequences previewed by the law, as well as, they aren’t identified or known. As a result, the education is not developed and the violations are not condemned. The results are always the worst to the victims as to the human behavior, based in non-sense/manipulated or false information, would have discrimination, xenophobia, racism, violence and all Human Rights violation as consequence, promoting suffering, murders and all the dangerous political, social, cultural and/or religious misunderstood actions.

Consequently, the research emphasizes another important detail in this important context reinforcing the need of the development and implementing the Education for Human Rights: the discourse and rhetoric. As an important strategy, specially by action of the political, cultural and religious social communication, there are important details that would be misunderstood, generating ideas, behaviors and dangerous attitudes. If there are “innocent” (not planned) discourses/rhetoric without serious or negative consequences, it’s possible to state that huge part of the worst problems, discussed, wrong ideas and opinions, opposite behaviors, not only between citizens but including the International Relations in all the dimensions, have their actions supported in the manipulated or not prepared and clear messages, (or not understandable by those who are the recipients). In theory, these are simple questions, but in the practice, it is important to identify all details, the construction, the non-declare information,

⁵ RAMONET, I. (1997). Geopolítica do caos. Rio de Janeiro: Editora Vozes. p. 139



the messages under the first “image” generate. The subliminal messages/ideas/ideologies are more important than the visible ones. In the Human Rights system field this is so common that it’s a worry to all who study and/or are responsible to understand it. There is too much negative consequences provoked by the manipulated information/communication. So, the development of the education for Human Rights is one of the main strategies with important results. There are too many work to do in this area but despite the complexity, with education adapted to the real needs aiming to achieve as many people as possible with effective results in the understanding, interpreting and acting in line with realities.

After all this explanation, it’s possible to validate the title, in fact there are theories against practices within the democratic education for Human Rights and the International policies. However, to illustrate the ideas exposed and the need of the education for the Human Rights, it’s important to analyze some actual study cases based in complex social and political areas: culture; religion; refugees and terrorism.

Conclusions and recommendations

There is a dangerous ideologies and ideas being spread for all the communication channels, as within simple societies relationships, generating violence, discrimination, racism and xenophobia, as well as, political positions and actions by governments and by European Union.

The entitle “crisis” of the Refugees in the world, and in Europe in particular, would had a different treatment specially since the Arab Spring, political, social and cultural measures avoiding the massive not controlled human movements, the huge and terrifying deaths.

There is no concerted and effective answer to the real and dramatic situation, by the political European powers by the EU and each country, consequently there are millions “lost” in the way to find out a surviving position. Despite all the policies, the international laws – juridical and judicial regulations and actions – the violation of the democratic values and the Human Rights in its essence, there are another serious problem associated: Public Opinion.

Although the inherent freedom and the right of a free position, in fact, there is so many important and fundamental questions that *common sense* as well all those: who doesn’t have legal information, who cannot understand due missing explanation of the international policies and the political behaviors, who doesn’t know the unsustainable contexts that promote the need of escape to be possible to survive, who doesn’t have access to the real numbers of the people dying in seas, deserts, in the way before arriving to the “safe” countries, who doesn’t know the real and (too much) unhuman conditions where millions are living in the Refugees camps, who doesn’t have the correct explanation of the source of the money to help these human beings, especially when it comes from International Organizations, Funds or Associations Non-Governmental.

So, the “corruption is a difficult mix of consequences of a certain mentality, political culture, geopolitics, and economic development”.⁶

The scientific research developed allows to state that the Education for Human Rights is one of the most important support / “Key” for the development of the Democracy in the most different contexts and social realities, as well as, it is the support of the change of the perception and understanding what the Human Rights are and the fight against the violence, violations and human suffering. This is a mission for all actors in the International Relations, an audacious and difficult process, which complexity is involved in the most difficult and hard interests and coercions, but no one (people individually, Organization or Government) can leave this audacious, complex, hard and with all kind of obstacles, as we can save and protect Human Beings. In fact, if we

⁶ RADU, B. & VÉGH, Z. (2017). *Frontiers of Democracy: Embebing Democratic Values in Central and Eastern Europe*. Hungary: Central European University. p. 121



believe and live the Democracy, we understand the political power has responsibilities but all of us are “politics” with our responsibility as citizens, as Humans. We can conclude that we need to go further the “theories” to make Human Rights a reality lived by as people as possible.

This research allows to identify the problem of legality and social needs dichotomy, contributing negative deeply affecting the Human Rights in three dimensions: policy, law and education. The European Union has all legal, social, cultural, social, policies and political structures to protect and promote the Human Rights, not only within the EU members citizens, but by the International Relations. According to the UN system integrated in philosophy and behavior of EU, despite all the Human Rights violations, terrorist attacks, discriminations, etc., denounced, or not, despite the dangerous information manipulation, consciously or by naïf acting, it’s urgent to implement an education strategy to avoid the evolution of social behaviors against these rights, preventing violence and promote knowledge to develop understanding competences to live the real democratic citizenship and Human Rights.

References

- Cunha, P. (2003). Direitos Humanos: Teorias e Práticas. Coimbra: Almedina.
- Fukuyama, F. (1992) O fim da história e o ultimo homem. Lisboa: Gradiva.
- Kagan, R. (2017) “Is the democracy in decline? The Weight og Geopolitics”: article in <https://www.brookings.edu/articles/is-democracy-in-decline-the-weight-of-geopolitics/> accessed June 4, 2017.
- Kornelsen, L. (2014) Stories of Transformation: Memories of a Global Citizenship Practicum. Canadá: ICIE.
- Maalouf, A. (2009) Identidades Asesinas. Madrid: Alianza Editorial.
- Maquiavel, N. (2015) O Príncipe. Lisboa: Bertrand Editora.
- Marshall, T. (2016) Prisoners of Geography. London: Elliot & Thomson.
- Moury, C. (2016) A democracia na Europa. Lisboa: Fundação Francisco Manuel dos Santos.
- Radu, M. & Végh, Z. (2017) Frontiers of Democracy: Embebing Democratic Values in Central and Eastern Europe. Hungary: Central European University.
- Ramonet, I. (1997) Geopolítica do caos. Rio de Janeiro: Editora Vozes.
- Sartori, G. (2003) La sociedad multiétnica. Madrid: Taurus.
- SCOPE2017 <http://www.scienceofpolitics.eu> accessed August 10, 2017.
- SCOPE2017, Whitehead <http://www.scienceofpolitics.eu/scope-2017/keynote-Whitehead> accessed August 10, 2017.



The Formal Model of Publicist Style as a Tool for University Teacher's Competence

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Abstract

The paper analyses auditive records of the spoken speeches of selected lecturers giving lectures at a particular university. The subject of research interest is to observe basic properties of the publicist (oratory) formal model: fineness, objectivity, subjectivity, suggestiveness, clarity and distinctness. Most significantly, all these features are presented through linguistic and extra-linguistic expressive means in speeches of the expedients. The analyses will help evaluate the effect of the speeches – persuasion – on the addressees. The subject of the study is to investigate the current state of the publicist formal model in the analyzed lectures. All these characteristics become a potential model and a motivational factor for future teachers studying at our Faculty. For this reason we need to serve as models to future teachers during their pre-gradual preparation, we must apply all possible optimal tools for developing cultivated teaching style, that becomes a standard model for future generations of Slovak teachers.

Keywords: Formal Model, Publicist Style, Teacher, oratorical style

Introduction

The subject of this study is to determine the current state of the publicist (oratorical) formal model in analyzed lectures. Interpretations of the analyzed audio recordings can offer a certain model of lecturing that can serve as a useful tool for students of teaching subjects during their pre-gradual study and their preparation for the teaching profession.

The paper analyzes audio recordings of the oratorical performances of selected teachers giving lectures at a particular university. The subject of research is to observe basic properties of the oratorical formal model: fineness, objectivity, subjectivity, suggestiveness, demonstrativeness and explicitness. These features are most significantly presented through linguistic and extra-linguistic expressive means in speeches of the expedients. The analyses will help to evaluate the effect of the speeches – persuasion – on the addressees. The analyses can be supported by a standardized questionnaire inquiry among addressees.

A lecturer's verbal performance is a manifestation of his/her oratorical style, of the verbal part of his/her live speech in a particular environment and in a certain situation. Oratorical performances in the academic environment possess the character of a subjective-objective style of public interactions. This character of academic speeches reinforces the pragmatic aim of the lecture as it enables an interaction between the lecturer and the listener while the listener can adequately interfere with the lecture and modify its content as well as the style of the lecturer's discourse. In the study we evaluate the basic characteristics of the oratorical formal model of the teachers' performances. Further, we study the subjective-objective style of university lecturers in the analyzed texts, which possess a higher level of subjectivity. Lecture is a specific form of a dialog between two quantitatively asymmetric "persons" (an individual and a group) while only the former realizes an oral demonstration. The level of subjectivity is determined by the relationship between the lecturer (expedient) and the listener (percipient). Despite the presence of the addressee, the lecture usually has a form of a verbal monologue prepared in advance in writing. The lecturer mediates his demonstration via linguistic and extra-linguistic expressive means – postures, facial expressions or kinetics. There is a rule, that the extra-linguistic means are perceived by the listeners as more personal, attractive and effective. The more conspicuous visual and acoustic means are often used at the expense of the more hidden verbal tools (compare Mistrík, 1997, Findra 2013). However, to increase the efficiency of his/her talk the lecturer can choose from a number of technological, graphic and other tools. In order to achieve percipients' optimal reaction, particular tools and means should be adequately combined.



Problem statement and sub-problems (hypotheses)

In our research we are going to start with the following assumptions:

H1: We suppose that the chosen verbal demonstrations are going to possess basic characteristics of an oratorical formal model.

H2: We suppose that the expressive linguistic means in the analyzed performances are going to correspond with the oratorical subjective-objective style of academic environment.

Partial targets (sub-problems) – to monitor the characteristics of the oratorical formal model in the audio recordings:

1. Subjectivity: reflection, use of expressive and emotional stylistic units, the presence of allegories and figurative expressions
2. Objectivity: the presence of facts, argumentation, the prevalence of neutral, non-indicative linguistic devices
3. Suggestiveness: use of belletristic techniques such as literary description, narrative, artistic and essay-like style (decorative and dramatizing elements), figurative expressions
4. Demonstrativeness: examples, concretization, catchiness (quotations, phraseological expressions, similes, demonstrations)
5. Fineness: the presence of decorative speech elements in form as well as in content (poetic devices, decorative constructions, figurative expressions)
6. Explicitness: repetition of words and expressions
7. Dramatizing tools: polysemic and homonymic expressions, question forms, antitheses, rhetoric questions etc.
8. Addressing the audience: contact words (salutations, dialogical grammatical categories, situational categories, subjective-situational words, conversational speech, dialogs with oneself)

Method

Methodologically we proceeded in three stages: 1. Collecting the research material (with the help of a Dictaphone) from randomly selected lectures of educators at a chosen university, 2. Processing and evaluating the collected audio material using the content analysis of the texts and 3. Collecting and processing the questionnaire data aimed at determining the satisfaction of students with the lecturers' teaching styles.

Population sampling: The research sample consisted of a stratified selection of the basic pool (university teachers of the chosen Faculty of Arts of the University of Ss Cyril and Methodius in Trnava). Altogether we monitored the teaching process of 22 educators from 5 different departments (The Departments of Historical Sciences and Middle-Europe Studies, The Department of Slovak Language and Literature, The Department of Pedagogy, The Department of Philosophy and Applied Philosophy) who taught the teaching study programs during the summer semester of 2016/2017. We studied the linguistic and extra-linguistic elements used during their lectures and seminars and we recorded them using a Dictaphone. These audio recordings were further analyzed through text content analysis. We observed the frequency of linguistic devices that in regards to the recipients demonstrate the signs of the subjective-objective style:

- a) more frequent use of stylistically indicative words
- b) use of correct literary language
- c) use of understandable, clear, unequivocal expressions
- d) belletristic, decorative, expressive-emotional elements or the features of contrast should be used marginally
- e) use of syntactic dynamic elements such as exclamatory clauses or interrogative clauses

Lectures as oratorical texts of the monologic genre will contain:

- a) high standard of contentual, compositional and linguistic form
- b) trichotomic segmentation
- c) prevailing instructional style
- d) new information and knowledge
- e) rich mental content submitted through less complicated expressions and descriptions
- f) syntactic national expressive tendency with prevailing monotone declarative sentences



Acoustic and kinetic extra-linguistic features – in didactic instructional speeches they should be represented:

- a) in a significant proportion
- b) via demonstrative and illustrative tools that incite the listener's visual perception
- c) via clear intonation, articulation, rhythm, pace and pause

In the standardized questionnaires collected from the percipients (addressees of the lectures) we monitored their reactions to the properties of the oratorical formal model of the expedients (lecturers). The questionnaire-type inquiry of students' satisfaction was realized on a pool of respondents counting 52 students of the bachelor and master teaching studies. All data were evaluated by using the statistical mathematical method.

Findings

In our research we recorded the frequency of appropriate argumentation used by the chosen sample of respondents. The lecturers demonstrated highly developed skills in argumentation. The more precise the inventive and dispositive phases are, the more efficient the speech itself becomes. In a scientific speech the memorizing phase is not a necessary part of the educator's preparation for the lecture, because the acoustic realization of our respondents' lectures had the character of a combined speech. It is a type of speech during which the lecturer alternately reads his/her text and freely talks about his/her subjects while relying on his/her concept. In composition the chosen lectures had a character of a classic form of monologic genres, which was in 15 cases (15 various lecturers) interrupted by dialogue genres - discussion and debate. In our recordings we noticed that the unidirectional flow of information from the expedient to multiple addressees, as is common in a classic lecture, was reinforced by the addition of bilateral discussion. This helped to turn the lectures into an efficient form of oratorical performance. We observed a frequent use of dialogue type grammatical categories: all lecturers used the first and the second person category, situational elements: they rarely, but functionally, alternated the tenses and conversational discourse with the listeners or themselves. Another phase we monitored in our research was the stylistic preparation – the style norm of the speeches corresponded to the overall character of the performances. Our recordings have a character of public speeches, public communication, therefore there is a necessary condition to apply linguistic elements adhering to the norms of standard literary language. They also need to be stylistically neutral (corresponding to linguistic stereotype). The most prominent shortcomings occurred in the lexical area. We observed the use of many long term recurring substandard words such as “profesný” (correctly “profesijný” = professional) (it was used 11 times), “dopad” (“vplyv” = influence) (occurred 19 times), “obťažný” (“namáhavý” = difficult) (9 times), “odozva” (“ohlas” = response) (occurred 23 times), “menovanie” (“vymenovanie” = appointment) (3 times), “obdržať” (“dostať” = receive) (2 times), “zahájiť” (“otvoriť” = open) (4 times), “činiť” (“predstavovať” = represent). Inadequacies were found in the stylistic area as well – the frequent use of stereotypical individual formulations or inadequate prepositions including incorrect noun-preposition collocations. When speaking of linguistic inadequacies we should also mention that Slovak language is, from morphological point of view, very inflective. In the recorded texts we have found mistakes caused by the influence of the Czech language as well as the English language (which isn't inflective). Substandard language was sporadically used in some lectures as an element of update, this concerned mainly the use of foreign language expressions. In our recordings they culminated at a level of 1-2 foreign language expressions per paragraph, in general their occurrence did not impede the understanding of the text as a whole. These were mostly internationalisms or neologisms of the francophone or Latin origin.

Lecturers use these foreign language expressions for various reasons: either they suppose that they are speaking to an educated group of listeners having no problem with understanding foreign words or it is a purely pragmatic function, when the instructional style requires the prevalence of foreign technical terms. However, we can also mention one particular case, when a lecturer purposefully used foreign words as a tool of distinguishing himself from common expressions and putting himself into a position of an erudite speaker. Domestic expressions,



however, outnumbered the foreign ones and any new terms were submitted with an explanation and a corresponding domestic equivalent.

Literary and scientific linguistic devices were also frequently used in our instructional speeches. We found out that there were between 10-14 foreign words per one integrated paragraph. Literary expressions had a much lower frequency of occurrence, 1-3 per paragraph. Expressive devices rarely occurred in monologic speeches and their rate of occurrence was 1-2 emotionally-expressive words per integrated paragraph. They were most frequently used when our lecturers slid into a contemplation and during supplementary descriptive passages not bearing any essential scientific information, they were used merely to add certain data with a retardatory character. Similar retardatory character was observed with formulations like: Do you know how this might continue? Do you know the cause of these contingencies? Would you like to know the source of these facts? They, however, caused no barriers in understanding and were not considered disturbing. Students, in fact, appreciated them, because they drew the lecturer closer to them as an individuality with a subjective viewpoint of the issue. This also helped to make the lecture more graspable.

The questionnaires expressing the students' satisfaction with the teaching process of chosen lecturers confirmed that the retardatory passages full of reflections containing expressive words were more common with teachers giving more engaging lectures – 75,5 % bachelor students (BC), 84 % master students (MA). On the other hand, their dissatisfaction rarely stemmed from finding the language substandard, they more frequently criticized negligent and inadequate choice of linguistic devices from the functional point of view. Most students confirmed that teachers only rarely use substandard neutral expressions – 62,5 % BC students, 63 % MA students. It means that many percipients are sensitive to chosen language from both linguistic as well as expressive point of view. However, it is necessary to add that the character of scientific lectures have changed when compared to the past, today a more lively communication and direct improvisation full of creative and interesting observations, although carefully prepared in advance, is preferred. Lecturers are trying to get closer to the listeners also linguistically in order to make their speeches more understandable and attractive. However, this goal should be optimally adjusted to the norms of standard language, so that, as an official public speech, it complies with the conditions of the standard literary language.

From linguistic point of view lectures included in our research predominantly contained devices of the instructional style, therefore it could be stated that the lecturers were aware of the need to use adequate syntactic and lexical structures. Devices used in our recordings were understandable despite containing higher number of technical expressions (on average 10-12 words per 10 sentence paragraph) and various complex parts of speech. All our respondents (22) alleviated the informational saturation and difficulty of their texts by introducing examples and by explaining the technical parts. The more difficult passages were interpreted through auxiliary meta-linguistic formulations such as: it can be compared to...; it is also called...; so called... etc. The students were also able to evaluate the quality of speech, which is considered understandable based on the choice of sentence types, style or logical division and text structure. In our questionnaire 88,5 % of BC students and 84 % of MA students rated the texts as meeting the criteria of textuality with a logical succession. Simple sentences, or a terse style, or long sentences and a lengthy style were reflected in the first questionnaire item. When asked about the use of appropriate sentences (in length and structure) all students reacted collectively with the answer: sometimes. When considering the adherence to the criteria of text cohesion respondents mostly gave an affirmative answer (78 % BC, 70 % MA), which means that the structure of ideas in the texts corresponded to the function and the style of the speech. On the other hand, frequent breaking of the sentences and incongruity of ideas reflected the opinion of 22 % of BC students and 30 % of MA students, when asked about the text cohesion.

In our research we also evaluated the segmentation of instructional speeches. The segmentation serves the purpose of hierarchization of information and differentiation of shared argumentations. In their lectures our respondents used thematic formulations with an aim to emphasize the relevance of the issue. These are formulation such as: this needs to be particularly emphasized..., the most important is..., I want to call attention to this fact... etc.



Contact with the addressee is one of the basic stylistic elements. In a lecture a contact between the lecturer and the listeners is a prerequisite of meeting the basic oratorical function of an instructional text – informativeness. The lecturer leads a dialog with a group which is silent and thus needs to be constantly stimulated and activated. “The student’s passivity during lectures that can have a negative impact on his further individual study is a continually discussed issue. This negative impact can, however, be minimized by giving an optimally performed lecture from the point of content and methodology.” (Sirotová, 2014, s. 59) Both the initial and the final parts of the lecture directly address the listener. For inducing a partner dialog relationship our respondents used salutations such as dear colleagues, dear professional community or dear friends. From 22 respondents only 2 started their lecture without direct salutation or greeting. At the beginning of their lecture all our respondents defined the subject and some (17) also presented a brief outline. In the course of the lecture our lecturers praised the listeners for reacting to the lecture and thus turning it into an interactive dialog. 77 % of the lectures were of this character. Quoting and paraphrasing various professional authors and reputable personalities from related areas of study plays an important role in optimization of understanding and strengthening of the feedback in instructional speeches. Various allusions to important works, events or circumstances related to the subject of the lecture are efficient tools for establishing contact between the lecturer and the listeners. In our research we observed obvious attempts to address the listeners by applying objective arguments and pertinent examples. Factual and objective argumentation and explicit precision reinforce the perception of complicated scientific texts, on the other hand the presence of any esthetic elements tends to weaken it. Our respondents used expressive-emotional elements minimally, however they reinforced the demonstrativeness of their speeches by using various visual, audio or textual materials. Audience addressing can also be reinforced by non-verbal devices, one of the most obvious tool for inducing contact is the eye contact. In our research we had a chance to observe three types of speakers based on their use of non-verbal devices. The first type (31 % of lectures) avidly watched their written concepts and the eye contact with the audience was minimal. Students were given no room to react to the lecture and they were writing down the precious information presented by the teacher. In general this type of speech is considered less efficient and it gives only marginal room to acquiring the audience’s opinion. The second type of lecturers (9 %) gave lectures with an intense eye contact and a minimal anchoring of their eyes to the written text. This type of lecture is popular with students as the level of their activation and perception is high. Students reported only one problem with this type of lecturer, the notes from this lecture are often ill-sorted and they must be consolidated during self-study with the help of literature. Usually it applies, that to become a “par excellence” lecturer requires a long term speaking praxis and that these are usually teachers with long time lecturing and professional experience. The third type of speakers (60 %) can be referred to as combined lecturers, they follow their text, but at the same time keep an eye contact with the audience to verify that the listeners understand what is being said and to determine their opinion. This style seems to be the most suitable for students and they also confirmed it in our questionnaire. At the end of the lecture the lecturers again addressed the audience directly by thanking them for their attention. Another non-verbal tool we were able to observe during our research was the application of kinetics in the lecture room. This simple device helps to significantly encourage visual perception. Steady movement within the space of the lecture room followed by adopting a static position was utilized by 90 % of the teachers, the rest moved from the teacher’s desk closer to the audience only when writing information on the board. All teachers reinforced the non-verbal communication by facial and hand gestures (100 %). Also 100 % of students confirmed this information in their questionnaire answers.

Addressing the audience was also reinforced by linguistic stylization, which helped to eliminate possible communication barriers caused by scientific saturation of the text. In their lectures respondents tried to get closer to the language of their listeners, who, naturally, possessed a lower terminological range than their teachers. In the analyzed texts we also studied the terminological and abstract level of the submitted texts. We found out that the level corresponded with the type of scientific text and that it was compensated by the use of adequate examples and concretizations of the abstract terms. Students confirmed this fact when answering the question if a teacher in his/her lecture gives examples, uses parallels or comparisons. Most students leaned towards the “sometimes” answer (78 % BC, 70 % MA), the other students unambiguously stated that the rest of the teachers “always”



complemented their lectures by using application examples. This proves, that when presenting the basic, bearing information the teachers expanded the volume of their texts by using insertions, allusions and examples. In our research the rate of applying examples was on average 6 per lecture. Other devices that significantly influenced the hierarchization of the lectures were figures such as synonymic repetitions in a smaller paragraph of a text (occurred 12 times), enumeration (in each lecture it occurred on average 13 times). On rare occasions the teachers used indirect denominations (figurative devices), these, however, did not concern the basic information, but were rather an individual statement of the teacher pertaining to the given fact. Limited use of indirect denominations was confirmed by students as well (57 % BC, 56 % MA), the rest of the students stated that teachers never used indirect denominations during their lectures. The lectures were, however, in more cases (12) reinforced by PowerPoint presentations, visual materials (7), tables (4). The black (white) board was used as a common didactic tool (22) as it helps to support the understanding of the scientific text.

In the lectures we clearly observed the use of efficient dramatizing elements in more than half of the respondents (12). So called fifth wheel statements, whose main function is to stimulate the listener's attention, frequently occurred in the lectures. These were formulations like This statement probably requires some specification (8), You may not fully agree with me (1) or You may be surprised to hear what I'm going to tell you (3).

The final part of the lecture is very important, because in it the teacher sums up all essential information and at the same time gives room to making sure, via adequate feedback, that the students understood the text. All our respondents (100 %) reviewed the essential information directly or synonymously. For our respondents this phase represented the period of approximation to the students, because in a partner-like manner they drew nearer to students' perception and the diversification of their opinions about the issue at hand. This dialogic phase was reinforced by the use of inclusive plural and motivated the listeners to barrier-free communication with the teacher and other students. Formulations such as Let's think together... or Try to think yourselves... or Let's look at it together... etc. were often used. Some of our teachers kept direct contact with the students by using feedback type formulations such as: as you correctly pointed out, I appreciate you calling attention to this fact, I see this is still not very clear to you, This issue is unclear, I understand why you are shaking your heads etc. This way students become the center of attention, they appreciate the teacher's approach by a positive evaluation of his work and by thanking him after the lecture, by satisfied expressions on their faces or by positive assessment of the teacher in the continuous questionnaire.

The acoustic realization of scientific lectures must be in principle based on the acoustic norms of the standard language and on the adherence and respect of these norms. For the listener the speech becomes disturbing or indicative if just one of the following speech elements is out of balance: the acoustic intensity (volume), the pitch of the voice (voice intonation, sentence melody, natural feel), pace of speech (speed and dynamics), accent (sentence accent and stress, accent rhythm), pause (functional breaks, correct breathing, color of voice, word production). This includes complying with the articulation and correct intonation and respecting acoustic rules of speech. In school practice "it is necessary to make sure that the spoken communication also adheres to the norms of Slovak language" (Gregorík, 2014, p. 20). The acoustic form of our respondents' performances had several common attributes, some executions were, however, fairly different in this context. Not all teachers articulated their speeches clearly (67,6 %), some shortcomings were also apparent (76.5 %) in the technical execution of the acoustic aspect of the speech (breathing, sound volume). From syntactic point of view teachers executed their texts in longer sections, which resulted in difficulties not merely in understanding, but also influenced the orthoepical realization of the text itself. 63 % of lecturers used on average 3 - 4 syntagmatic constructions in their speeches. The constructions themselves were quite complex. Although the texts corresponded to the logical content structuring, due to the substantial sentence length the lecturers experienced problems with the adequate placement of pitch modifications, which are useful for better hierarchization of essential information and for their semantic explicitness. Therefore, it is advisable for teachers using longer compound sentences to try to substitute them with several simple sentences which are easier to understand. From various syntactic constructions teachers also liked



gerund and participles. Another articulation problem we noticed in the speeches of our respondents was observed in the pronunciation of longer words, many of them had an international word-formative base. During their speeches many of our respondents slid into spontaneous talks that became interrupted during the thinking phase and thus resulted in so called non-functional pauses. To be able to find an appropriate expression in the stream of speech requires a resourceful lecturer. While trying to put their formulations more exactly the teachers were filling the pauses with redundant words, so called fillers or word crutches (compare Kumorová, 2015, p. 113). Most common are: in fact, naturally, yes, of course, therefore, simply etc. The frequency of their use is so common that these words become indicative of many teachers, in some cases we can even talk about a speech mark. Despite being experienced lecturers, all teachers included in our research used fillers. As this was a research of verbal performances, we studied the violation of orthoepic norms – violation of the soft pronunciation (common in standard Slovak language) even in places where the softness was indicated in writing, an incorrectly chosen rising melody of speech in declarative sentences, in place of the falling melody. Our respondents also used an incorrect form of the formal address while addressing their listeners (use of the second person plural in place of the second person singular for respectfully addressing singular people, this is a common way of showing respect in Slovak language – translator's note). Speech problems (apparent mainly in pronunciation) can be easily recognized without deeper linguistic analyses, therefore students had no problem to uncover these inadequacies. Affected intonation or singing was indicated by 26 % of BC students and 21 % of MA student and non-functional pauses by 10,5 % of BC students and 21 % of MA students. Incorrect breathing impeding natural intonation and melody was also observed in some cases. Through acoustic realization of the speech, mainly through adjustment of the speech tempo, the teachers can emphasize the basic pieces of knowledge and call attention to the essential information. In our research teachers rarely utilized the acoustic devices such as the articulation emphasis or the slowing of the speech tempo. This fact was confirmed by 100 % of listeners, who marked two questionnaire items "adequate pauses" and "appropriate tempo" as used only rarely in the educational process. We are of the opinion that the acoustic devices alone are not enough to help better understand the text, but through their rigorous use in the lecture they can significantly reinforce the comprehensibility of the text and the overall understanding of the issue. Language is "part of the culture and culture of the society is reflected in the language – in the style of verbalization, in the word selection, in the tone and intonation, gestures – in accordance with language etiquette." (Smetanová, 2016, p. 224) Our analyses and interpretations of the lecture recordings supported by student's questionnaires containing information about their satisfaction with the teaching style of their lecturers confirmed the validity of our hypotheses. The results of our research established the presence of basic characteristics of the formal model in the analyzed lectures, which correspond to the oratorical subject-object style of academic environment.

Results, Conclusions and Recommendations

Our research confirmed that our lecturers possess many positive attributes. These characteristics influence further educational process of the listeners and at the same time impact the formation of their own future teaching style. Therefore, it is important for the teachers to place emphasis on self-reflection and self-evaluation of their own lectures. In the recordings we were able to observe the characteristics of the formal model. The performances demonstrated high level of objectivity through means like arguments and informatively saturated facts as well as through prevailing neutral, non-indicative linguistic devices. Thanks to these means all lectures contained factual objective argumentation and achieved scientific character. Some lecturers acquired higher efficiency of their performances by including more subjective expressive means such as expressive and emotional stylistic units or figurative descriptions. These means have a character of contemplation and embellish the one-sided dialog by a certain individuality and the lecturer's views, thus bringing some humanizing character to a scientific speech. Bringing higher vividness into the lectures through belletristic and essayistic elements was used infrequently by our lecturers, still, they were able to efficiently alleviate informatively saturated passages, which the students always appreciate. When applying subjective linguistic devices lecturers should avoid using sub-standard language as this may depreciate their performance and be perceived as disturbing (Kumorová, 2015, p. 100)



Addressing the audience as an essential characteristic of the formal model was also present in the analyzed lectures. It helped to reinforce partner-like relationship between the listeners and the lecturer. Contact words such as salutations, dialogical grammatical categories in the first and second person, situational categories with alternating tenses and a conversational speech (including conversing with oneself) prevailed. All these characteristics become a potential model and a motivational factor for future teachers studying at our Faculty. We believe that adopting appropriate teaching style will positively influence the overall quality of the educational process. “A teacher needs to be an expert in his field, he must be a skilled educator and be able to modify his topic to the listeners’ age, to their individual peculiarities, he must be able to effectively communicate with students. He must also be willing to constantly educate himself, to become familiar with the newest trends in order to keep in the loop etc.” (Baranovská – Doktorová, 2016, p. 12) For this reason we need to serve as models to future teachers during their pre-gradual preparation, we must apply all possible optimal tools for developing cultivated teaching style, that becomes a standard model for future generations of teachers.

References

- Baranovská, A. – Doktorová, D. (2016). *Emocionálna inteligencia a tvorivosť učiteľa vo výchovno-vzdelávacom procese*. Trnava: Filozofická fakulta Univerzity sv. Cyrila a Metoda v Trnave.
- Findra, J. (2013). *Štylistika súčasnej slovenčiny*. Bratislava: Osveta.
- Gregorík, P. (2014). *Základy spisovnej výslovnosti*. Trnava: Filozofická fakulta Univerzity sv. Cyrila a Metoda v Trnave.
- Kumorová, Z. (2015). *Základy teórie spisovného jazyka a jazykovej kultúry*. Trnava: Filozofická fakulta Univerzity sv. Cyrila a Metoda v Trnave.
- Mistrík, J. (1997). *Štylistika*. Bratislava: Slovenské pedagogické nakladateľstvo.
- Sirotová, M. (2014). *Vysokoškolský učiteľ v edukačnom procese*. Trnava: Filozofická fakulta Univerzity sv. Cyrila a Metoda v Trnave.
- Smetanová, E. (2016). Jazyk ako nositeľ kultúry. In: *Pedagogica Aktualis VIII. : spoločenská pozícia učiteľa a vplyv na kultúru spoločnosti*. Ed.: Sirotová, M. Trnava: Filozofická fakulta Univerzity sv. Cyrila a Metoda v Trnave, 224-227.
- Smetanová, E. (2009). Učiteľ cudzieho jazyka v podmienkach súčasnej školy. In: *Učiteľské povolanie v podmienkach súčasnej spoločnosti*. Ed.: Danek, J. – Sirotová, M. Trnava: Filozofická fakulta Univerzity sv. Cyrila a Metoda v Trnave, 90-102.



Performed Overviews and Analysis Of Researches in Music Therapy Within The Framework of Master's Papers

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Abstract

In this article we will summarise information about master's papers which include case analysis of various patient groups and the most successful and significant researches. Study programme Music Therapy is available at Liepaja University since 2003. In the time period from 2009 to 2017, 62 professional arts therapists in music therapy have graduated from this study programme. Unfortunately not everybody is working in this profession. Part of graduates combine art/music therapists work with their previous speciality (musician, pedagogue, psychologist, etc). To get arts therapists in music therapy qualification masters students have to take a qualification exam, which includes "role play" of a specific case with a patient or a group of patients and the presentation of master's paper. In this article we will summarise information about master's papers which include case analysis of various patient groups and the most successful and significant researches.

Key words: music therapy, master's papers, research.

Introduction

Study programme „Music Therapy” at Liepaja University (LiepU) was initiated in 2003, as a professional study programme with attainable qualification – music therapy specialist.

In 2006 according to a recommendation made by accreditation commission, programme was transformed to professional master's study programme who's graduates attain master's degree in health care with qualification– arts therapist in music therapy.¹

One of study programme's „Music Therapy” goals is to improve master's students research competence, which is significant also in the future work of professional music therapist. In that way, music therapist performs his professional activities based on scientific evidence.

Music therapy is relatively new health care form in Latvia and master's papers are like outsets for further, more serious scientific research. For this reason, authors considered it very important to share the information about accomplishments in music therapy field in Latvia, and set aim for the research: to summarize and analyze master's papers presented in LiepU Music Therapy study programme during the time period from 2009 to 2016, including information about research themes, working environment, participants, results and conclusions.

While compiling the description, obtained data were summarized in the tables and descriptive statistics were used according to the purpose of the research.

Music therapy in Latvia is defined as one of arts specializations where to solve clients/patients diverse health and social problems and to overcome them individually or in groups, music and its means of expression, music making techniques and activities are used in the context of therapeutic relationships, to express and reflect thoughts, ideas, experiences, feelings, emotions, needs, problems, etc., to achieve changes in emotional state and mind set, more complete physical, emotional and social integration (Paipare, 2011).

¹All arts therapists (visual plastic arts, dance and movement, drama and music) in Latvia have a united profession standard



Research questions:

1. How many and what kind (research topics) researches in music therapy have been completed during the time period from 2009 to 2016?
2. What kind of professional environments, these master's papers have been developed at?
3. Who were the participants of the research (clients, patients, others)?
4. What are the age groups of participants?
5. What are the main results and conclusions of the research?

Research Method

Research is built as an overview of presented master's papers. This work analysis designs and strategies of researches, researched symptoms, working environment, patient groups, summarizes research results and conclusions.

At LiepU master's researches mostly qualitative strategy has been chosen – in 80% of cases, but – quantitative strategy is used in 20% of cases. In researches where quantitative strategy is chosen most frequently used design of research is quasi-experiment – 86% of cases. Mixed research is used in 14 % of cases. In all researches, where qualitative strategy is chosen, the case analysis is used.

Number Of Presented Master's Papers

71 master's paper was elaborated and presented during the time from 2009 to 2013. During the 2009/2010 study year the biggest percentage of master's papers was presented (11.36% of researches or 16 master's papers).

Exception is year 2012 and 2014, when only one master's paper was presented.

Research Themes and Researched Symptoms

Master's papers have tested effectiveness of music therapy in improving mental, physical and social health and in problem solving. Very few, only two researches were studies of professionals: Doctors' and medical personnel's social view on music therapy; Social workers social view on music therapy in Latvia. A study was conducted on the possibilities of using music therapy in the Latvian penitentiary system. Innovative is an attempt to discover and adapt the potential of the use of the Child Psychotherapy Q-SET (CPQ) instrument in music therapy.

Master's papers research the influence of music therapy on:

- music communication skills in children and youth with mild and severe mental disorders;
- spatial orientation abilities in visually impaired and blind children;
- quality of life and cognitive abilities in patients with multiple sclerosis;
- social interaction of children with autism;
- aggression and behavioural disorders in children with hearing impairment and children after cochlear implant (CI) surgery;
- specific speech and language development disorders;
- reducing the anxiety in children with depressive behaviour;
- movement coordination in cases of children cerebral palsy;
- prematurely born children;
- patients after sustained injuries;
- patients after the stroke;
- patients with bronchial asthma;
- work in groups for encouraging communication.

Working Environment

According to the profession standard (Cabinet Regulation No. 461)² (Latvian Medical Law/ Legislation)³, arts/music therapist works in health, education and/or social care, performing their

²Profession standard: www.lm.gov.lv

³Medical practitioner's certification order:

www.akti.lv/naiser/text.cfm?Key=010103201212_1800943&doknos=arstniecibas-personu-sertifikacijas-kartiba



professional activities independently as a part of multi-professional or multidisciplinary team. During the study process, master's students have an opportunity to get to know each of the above-mentioned working environments and choose in which of them to do the research.

Studies in master's papers on the use of music therapy were performed (see image 1):

- in health care facilities – in 30% of cases (The Riga Regional Hospital, National Rehabilitation Centre „Vaivari”);
- in educational institutions - 45% of cases (Liepaja Music Therapy Centre, Special preschool educational institution “Saulespuķe”, Vainode special primary boarding school, Engure high school, Jumprava special primary boarding school, Skrīveru A. Upīša high school, children and youth creative development centre “Namiņš” etc.);
- in social care institutions – 24% of cases (Social day care centres);
- in another field – 1% (in a place of imprisonment).

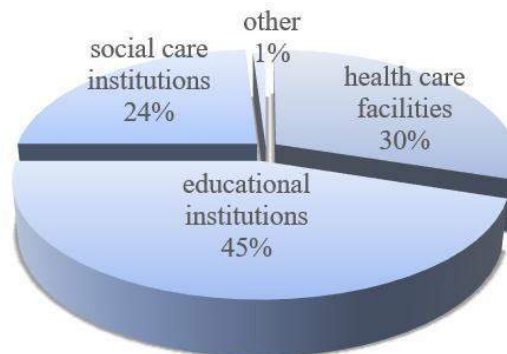


Image 1. Research performing locations

Participants

Research work was performed in both – individual and group music therapy sessions. In 90% of all cases work is performed individually, but 10% – in a group. Number of participants varies from 1 (in individual cases) to 8 participants.

Taking into account the various uses of music therapy interventions, this type of therapy can be adapted to clients/patients with significantly different physical and psycho-emotional state in all age groups. Age of participants varies from perinatal age to senior age group.

Classification of research participants by client/patient diagnosis:

- children with developmental coordination disorders;
 - children with mental development disorders;
 - children with speech and language disorders;
 - children with autism;
 - children with hearing impairments;
 - children with behavioural and emotional disorders;
 - children with genetic diseases;
 - patients with multiple sclerosis;
 - patients after sustained injuries;
 - patients after stroke;
 - patients with depression.
-
- preschool age children;
 - adolescents;
 - adults in working age (18-65 years old);
 - elderly people (>65 years old).

Conclusions and Results Of Researches

Themes of presented master's papers include various working environments, various patient groups and age groups. In almost every work there are difficulties and limitations indicated that



surfaced during the research. Part of music therapy researches are included in LiepU scientific collection of articles “Music Therapy” (Mūzikas terapija, 2014), and are being presented in international conferences for music therapists.

Summarizing the results of the research, it can be concluded that there is a noticeable positive effect of music therapy on the above-mentioned patient groups. This allows us to conclude that music therapy can be indicated in neuro-paediatrics, neuro-rehabilitation, psychiatry, audiology and neonatology.

Research results confirm that music therapy methods are effectively used to improve or expand motor skills, to improve or facilitate motor coordination, to facilitate agility and to reduce spasticity, to differentiate and integrate perception, to improve one's body awareness, to increase attention, to develop planning abilities, to stimulate short-term and long-term memories, to improve contact and communication, to reduce psychosocial symptoms, to reduce autistic spectrum symptoms, to develop non-verbal expression skills, to activate and improve remaining speech abilities.

Recommendations

All master's papers recommend continuing further researches with previously mentioned age groups to ascertain the effectiveness of music therapy in mental, physical and social health improvement and problem solving. It is recommended doing both, qualitative and quantitative studies in all previously mentioned fields with various patient/client groups and to use music therapy as a long-term intervention to gain more complete view on result stability achieved in music therapy.

Authors of master's papers recommend paying attention to informing society about arts therapy possibilities and emphasize the necessity for information and collaboration with field specialists in various symptom reduction in various patient/client groups.

That is why, to strengthen music therapy profession's formation and development in Latvia based on evidence, research authors should participate in research projects, to do long-term researches to acquire results and draw conclusions about stability of music therapy process.

Conclusion

Commonly art therapy for future arts therapists is the second profession. Arts therapy students come from different professional working environments. Their first profession is psychologist, pedagogue, medic, social worker, with art related professional, etc., and they already have some experience in this profession. During the master's study programme future arts therapists learn the professional working rights and ethical issues of a medical practitioner so that after the graduation arts therapists can choose the professional environment appropriate for their desires and qualifications, thus becoming a support for the development of professional activities and professional growth.

Since music therapy is relatively new profession in Latvia authors of master's papers also emphasize the necessity to continue informing the executives and personnel of medical, social care and educational institutions, as well as patients/clients and their parents/caregivers about application possibilities and effectiveness of music therapy methods in various symptom reduction, physical and emotional improvement of psycho-emotional state.

References

Paipare, M. (2015). Development of the music therapy profession in Latvia. *Approaches: MusicTherapy&SpecialMusicEducation, SpecialIssue* 7(1), 127-130.
Retrieved from <http://approaches.primarymusic.gr>

Mārtinsone, K., Mihailova, S., Mihailovs, I.J., Majore-Dūše, I., Paipare, M. (2008). *Mākslu terapija un tās attīstības konteksti(integratīvi ekletiskā pieeja Latvijā)*. Rīga: RSU
Mūzikas terapija: Izglītība un pētniecība, pieredze un prakse. Zinātnisko rakstu krājums (2014).
Sastādītāja M.Paipare, LiePA.

Mākslu terapija dažādām klientu/pacientu grupām. Rakstu krājums (2014). Sastādītāji K.Mārtinsone., E. Krēvica, RSU



Healthy Lifestyle and Wellness of The First-Year Students of Liepaja University, Study Programme Teacher

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Abstract

In Latvia there is a high morbidity and mortality from non-infectious diseases (including cardiovascular diseases, oncological diseases, mental disorders), the development of which is largely influenced by people's lifestyle (eating habits, physical activity and the use of addictive substances). In 2016/2017, there are 1342 students studying in Liepaja University, among them 428 are the first-year students (IZM, 2017, 16). Students form the part of society and their knowledge, skills and attitudes obtained at the University will contribute to Latvia's growth. A healthy and developed society is the basis for the development of each country. The development of Latvian education system is closely related to the changes in all other areas of human activity. An organized life is in a very close interaction with well-organized life experiences – education, and mentally and physically organized people. The Aim of the study: To determine the healthy lifestyle habits and wellness level of the first-year students of study programme Teacher. Research Methodology: survey method, questionnaire consists of 4 blocks - a total of 90 questions, Cronbach's Alpha 0.692. Research sample: N=121 first-year full-time and part-time students of study programme Teacher, age 18-57, average age – 29. Results: Employing the survey, 11 healthy lifestyle components are evaluated, from which the following healthy lifestyle components – physical activity, eating habits and stress management are analysed more closely. Physical activity habits: 71.9 % of students daily perform moderate physical exercises, 34.8% of students exercise very intensively, but 19 % of respondents perform strength-building exercises. Eating habits: 69.3 % of students have three regular meals per day, 19.4% of respondents daily choose appropriate portions from products recommended by food guide pyramid. Stress management habits: 76.1 % of students daily allocate time for resting and recovering from stress, but 9.2 % of students regularly perform exercises designed to reduce the stress-related tension. When assessing the students' emotional, intellectual, physical and mental wellness, the overall score is as follows: for 2.5 % of students the wellness level is low, for 16.9 % – marginal wellness level, for 52.8 % – good wellness level, but for 27.6 % of students the wellness level is high.

Keywords: students, healthy lifestyle, habits, wellness

Introduction

In Latvia most people do not engage sufficiently in physical activities due to the lack of motivation, lack of understanding about the importance of physical activity for maintaining health, lack of skills and resources for the implementation of physical activity, as well as lack of sufficiently developed and accessible physical activity-enhancing environments (for example, bicycle path, sport halls or sport fields) (LNAP, 2012).

In Latvian National Development Plan for 2014 - 2020 (LNDP) a course of action "A healthy and fit for work person" is included, which states that the main health risks in European region, which also cause significant health-care and social costs, are smoking, risky alcohol consumption, lack of physical activities and a poor diet. Thus, for strengthening healthy and active lifestyle habits in the society as a whole, one of the priorities is to support different health promotion networks: (a) promotion of a healthy diet, active lifestyle and mental health, (b) promotion of children, youth and nation's sports activities, (c) inclusion of health education in school programmes, (d) prevention of addictive substances and processes (LNAP, 2012, 46–48). Therefore, nowadays one of the topicalities in the health sphere is healthy lifestyle, with a particular emphasis on sufficient physical activity and healthy eating habits. The global research studies (Green, Smith & Roberts, 2005; Haerens, Kirk, Cardon & Bourdeaudhuij, 2010) show, that physical activity tend to decrease starting from the teenage years, and this tendency continues until the end of life, thus only worsening the health problems. The study of the health-influencing habits of the population (15-64 y/o) of Latvia (2014) confirms that 38 % of 15-24 y/o respondents engage in physical activities 2-3 times a week for at least 30 minutes, but in the group of 25-34 y/o respondents there is a significant drop to 19.2%. The physical activity is decreasing also in the midst of Latvia's students. In the study conducted by Porozovs, Porozova & Valdemiers (2012) the level of physical activity was compared between pupils and students, and they found that the pupils engage in sports more than the students, and that 42% of students lack physical activity.

According to the research of Latvian University Sport Federation (LASS, 2012, 11) students give the following reasons of why physical activities are not implemented: 1) lack of time; 2) lack of suitable sport fields nearby; 3) sports premises are not available at convenient times; 4) lack of company (partners, friends) for doing sports; 5) lack of motivation to do sports; 6) it is too expensive; 7) the health condition does not permit; 8) lack of competent coaches, instructors; 9) insufficient level of knowledge and skills.



In the academic year 2016/2017, there are 82.914 students studying in Latvian higher education establishments (IZM, 2017, 31), from them 21.669 are the first-year students (IZM, 2017, 21), but in Liepaja University, in academic year 2016/2017, there are 1342 students, from them 428 are the first-year students (IZM, 2017, 16).

Students form the part of society, and their knowledge, skills and attitudes obtained at the University will contribute to Latvia's growth, therefore during the study process it is particularly important that all students, not only students from health and sports related fields, obtain the health and physical activity competence. It is important also for future teachers. A healthy and developed society is the basis for each country's development. Broks (2000) suggests that the development of Latvian education system is closely related to the changes in all other areas of human activity, as well-organized life is in a very close interaction with well-organized life experiences – education and mentally and physically organized people. Latvia's socio-economic situation, reforms in education and the transition to a competence-based approach in education actualize the health and physical activity competence, which implies healthy lifestyle and taking responsibility for one's own health.

Health is the basis for a human life. The health concept is complicated; it is related to interaction between the individual and the surrounding environment, which is determined by the individual's conditions of existence, world views and motivation. The health is understood not only as an abstract state, but also as a tool for achieving goals, and as an instrument and a resource that allow the individual to manifest itself in all aspects of human life in various ways. The understanding of health is closely related to person's social, personal and physical capabilities. Holistic understanding of health is expressed in the definition elaborated by WHO in 1947: "Health is a complete physical, mental and social wellness and not just a condition without illness or physical deficiencies". Along with the development of the society and the growth of its welfare, the explanation of the essence of health is clarified: "Health is the degree to which an individual or a group is capable to implement their efforts and meet their needs both by making health-friendly decisions and by changing the environmental impact" (WHO, 1998, p.1).

Traditionally the healthy lifestyle is linked to the concept of health promotion. The WHO Ottawa Charter, in its 1986 resolution, has adapted the following clarification of the health promotion concept: health promotion is a process that enables every person to increase the control over one's own health and improve it. In order to achieve full physical, mental and social wellbeing, a person or group of individuals must be able to identify and implement their desires with the aim of meeting needs as well as changing or overcoming the environmental impact. Therefore health has to be considered as the means for everyday life, but not as a goal of life. Health is a positive concept; it emphasizes the importance of social and personal resources, including human physical capacity. Therefore, health promotion is not only a responsibility of the healthcare sector – healthy lifestyle is a key for achieving well-being (WHO, 2014).

The key prerequisites for health promotion, stated by WHO (2014), are peace, shelter, education, nutrition, income, a stable ecosystem, sustainability of resources, and social justice. Good health is a major resource for social, economic and personal development and an important aspect of quality of life. According to Kuklica, Straume & Klavina (2011), health promotion implies reduction of the use of addictive and health-influencing substances, increase of physical activity, development of the healthy nutrition idea, reduction of traumatism and violence, and other healthy lifestyle-promoting measures. Thus, the goal of health promotion is to prevent the negative impact of environmental, economic and social factors on the human health.

According to the paradigm described by Cockerham (2005), the practice of the healthy lifestyle depends on the individual's disposition to action, which in turn is influenced by person's choice of activity and the possibilities of a socially defined structure; through this interaction a disposition to action is formed, which is followed by a health-promoting or adverse behaviour. Each healthy lifestyle is given an assessment and can be judged from the positive to the negative point of view, creating a common model for healthy lifestyle practices. Such healthy lifestyle principle implies not only the involvement of health professionals but also the daily routine that is not related to health-care activities but still affects the health, such as diet, physical exercise, personal hygiene, alcohol use, smoking, compliance with safety precautions, etc., because it is the daily practice of healthy lifestyle that has a major impact on a person's well-being and longevity.

As health promotion is not only the responsibility of the state policy (mezo-) and the health sector (macro-), but also the choice of each person's lifestyle (micro-), it is essential to comprehend, which areas of life affect health in the most direct way. Corbin et al. (2008) and Robbins et al. (2011) points to the following health-influencing life spheres or healthy lifestyle components, which reduce health risks and improve health: 1) regular physical activity, 2) healthy eating habits, 3) stress management, 4) avoidance of harmful habits, 5) safe sex life, 6) compliance with



safety regulations, 7) first-aid knowledge, 8) observance of personal health (hygiene) habits, 9) finding and accepting appropriate medical advice, 10) consumer awareness, 11) environmental protection. Corbin et al. (2008) and Robbins et al. (2011) consider regular physical activity, healthy eating habits and stress management as priority components of a healthy lifestyle.

Health is closely related to wellness. Miller (2005) characterizes wellness as integration of various components (social, emotional, intellectual, mental and physical); it reflects the person's potential to live, work effectively and make an important contribution to society. Wellness reflects how a person feels (well-being) while living as well as person's ability to act effectively. Wellness is also described as a positive health component, opposite to illness; it is individual to each person and depends on the personality traits; it is determined by a person's self-assessment scale – from positive self-esteem to negative. Robbins et al. (2011) describes wellness as an integrated and dynamic functioning level of an individual, which focuses on the person's responsibility to reach his/her maximum potential and includes not only preventive health behaviour but also the change in thinking and attitudes.

Like health, wellness is a multidimensional concept and a positive component of optimal health. The wellness dimensions overlap with the health dimensions. There are five dimensions of health and wellness that are highlighted: (1) emotional/ mental, (2) intellectual, (3) physical, (4) social and (5) spiritual (Corbin et al., 2008). In the process of development, the wellness concept is expanded adding several other dimensions of human life, reaching eight wellness dimensions: (1) physical, (2) intellectual, (3) emotional, (4) social, (5) spiritual, (6) environmental, (7) work and (8) financial dimension (Swarbric, 2010; Swarbrick and Yudof, 2014).

Method

The questionnaire for this research is adapted and approbated after Corbin et al. (2008) survey on healthy lifestyle. The survey consists of 4 blocks of statements (Reliability Statistics Cronbach's Alpha 0,692). In this study only 2 blocks are analysed. The first block determines the healthy lifestyle habits (The Healthy Lifestyle Questionnaire) and looks at healthy lifestyle components that reduce health risks and improve health: 1) regular physical activity – 4 statements, 2) healthy eating habits – 5 statements, 3) stress management – 4 statements, 4) avoiding harmful habits – 3 statements, 5) safe sex life – 2 statements, 6) compliance with safety regulations – 2 statements, 7) knowledge about first aid – 2 statements, 8) observance of personal health (hygiene) habits – 2 statements, 9) finding and accepting appropriate medical advice – 3 statements, 10) consumer awareness – 2 statements 11) environmental protection – 2 statements. Altogether – 31 statements; and the respondent can choose between two answers – yes and no. The second part of the survey determines students' self-perception on wellness. The survey distinguishes five wellness dimensions: emotional wellness; intellectual wellness; physical wellness; social wellness and spiritual wellness (3 statements for characterizing each dimension, altogether 15 statements, and four Likert-type scale responses (1-4): strongly agree (4), agree (3), disagree (2), strongly disagree (1), summing three questions for each wellness dimension to get student's wellness dimension totals. Strongly agree response characterizes high level wellness; agree – good wellness; disagree – marginal wellness; but strongly disagree – low wellness.

Research participants: n=121 first year full time and part time students of study programme 'Teacher', age 18-57, average age 29; 89,2 % of them female and 10,8 % - male students. The research is conducted during academic year 2016/2017. Due to the fact that WHO (n.d.) includes the age range of 18-64 years when providing recommendations for physical activity and nutrition, as well as general recommendations for maintaining and promoting health, in this study specific age groups are not analysed.

Findings

The first part of the questionnaire describes the healthy lifestyle habits of students. As physical activity, eating habits and stress management habits are the priority components of a healthy lifestyle, they are highlighted in separate tables. The results of the physical activity habits' survey show that 71.9 % of students almost daily engage in moderate physical activity, 34.8% of students exercise vigorously, but 19.0 % of respondents perform strength-building exercises (See Table 1)



Table 1. Physical activity habits of students

Criteria for determining physical activity	Response Yes (%)
I accumulate 30 minutes of moderate physical activity most days of the week (the heart rate rises by 60-75 % of the maximal heart rate)	71.9
I do vigorous activity that elevates my heart rate for 20 minutes at least three days a week (the heart rate rises by 75-85 % of the maximal heart rate)	34.8
I do exercises for flexibility at least three days a week	43.7
I do exercises for muscle fitness at least two days a week (at least a complex of 10-12 strength-building exercises, repeating each exercise for at least 15 times)	19.0

From the survey “Eating habits of students” the following results were obtained: 69.3 % of students have three regular meals per day, 19.4% of respondents daily choose appropriate portions from the products recommended by the food guide pyramid, 69.7% of students restrict the amount of fat in their diet, 49.7% of students limit the consumption of salt, but 62.9% of students limit the consumption of sugar in their diet (see Table 2).

Table 2. Eating Habits of students

Criteria for determining the eating habits	Response Yes (%)
I eat three regular meals each day.	69.3
I select appropriate servings from the food guide pyramid each day.	19.4
I restrict the amount of fat in my diet.	69.7
I limit the consumption of salt in my diet (according to the healthy diet recommendations – no more than 5 g per day).	49.7
I limit the consumption of sugar in my diet (according to the healthy diet recommendations – no more than 50 g per day).	62.9

From the survey on Stress management habits of students, the following results were obtained: 90.7 % of students are able to identify the situations that cause stress, 76.1 % of students daily allocate time for resting and recovering from stress, 94.1 % of students find time for family and friends, but only 9.2 % of students regularly perform exercises designed for reducing the stress-related tension (see Table 3).

Table 3. Stress management habits of students

Criteria for managing stress	Response Yes (%)
I am able to identify situations in daily life that cause stress.	90.7
I take time out during the day to relax and recover from daily stress.	76.1
I find time for family, friends and things I especially enjoy doing.	94.1
I regularly perform exercises designed to relieve stress-related tension.	9.2

Assessing the other health-influencing habits of students, the following results were obtained. Avoiding destructive health-influencing habits: 86.4 % of students do not smoke or use tobacco products, 82.0 % of students do not abuse alcohol, 88.5 % do not use drugs or drug-containing substances. 94.95 % of students practice safe sex life by choosing a long-term, safe partner, but 93.4 % practice safe sex avoiding STD. Safety habits: 91.6 % of students follow the traffic regulation rules, adhere to the speed limit and use a seatbelt, but only 5.9 % of students have smoke detectors at their homes, which can protect them from domestic accidents. 84.5 % of students have knowledge about providing the first aid, but 53.7 % of students are able to help in such domestic accident cases as choking. Personal hygiene habits: 63.8 % of students brush their teeth and use the dental floss at least twice a day, but only 43.3 % of students allocate sufficient time for sleeping. 61.8 % of students have regular medical check-ups, 85.1 % listen to the doctor’s advice during the process of healing, but 71.5 % of students use medication only in the case of need following the instruction. Being an informed customer: 51.0 % of students read the labels and investigate effectiveness before buying the product, but 50.8 % use only products that have been proven by research to be effective. Environmental protection: 35.7 % recycle paper, glass and plastic waste, but 81.4 % of students save natural resources such as electricity, natural gas, etc. (see Table 4).



Table 4. Other healthy lifestyle-determining habits of students

Healthy lifestyle components	Criteria	Response Yes (%)
Avoiding Destructive Habits	I do not smoke or use other tobacco products.	86.4
	I do not abuse alcohol.	82.0
	I do not abuse drugs (prescription or illegal).	88,5
Practicing Safe Sex	I abstain from sex or limit sexual activity to a safe partner.	94.95
	I practice safe procedures for avoiding STDs.	93.4
Adopting Safety Habits	I use seat belt and adhere to the speed limit when I drive.	91.6
	I have a smoke detector in my home and check it regularly to see if it is working.	5.9
Knowing First Aid	I have had training to perform CPR if called on in an emergency.	84.5
	I can perform the Heimlich manoeuvre effectively if called on in an emergency.	53.7
Personal Health Habits	I brush my teeth at least two times a day and floss at least once a day.	63.8
	I get an adequate amount of sleep each night.	43.3
Using Medical Advice	I self-examine myself regularly, have regular medical check-ups, and seek medical advice when symptoms are present.	61.8
	When I receive advice and/or medication from a physician, I follow the advice and take the medication as prescribed.	85.1
	I take over-the-counter drugs sparingly and use them only according to directions.	71.5
Being an Informed Consumer	I read product labels and investigate their effectiveness before I buy them.	51.0
	I avoid using products that have not been shown by research to be effective.	50.8
Protecting the Environment	I recycle paper, glass or aluminium.	35.7
	I practice environmental protection such as carpooling and conserving energy.	81.4

The second part of the questionnaire determines student's self-evaluation on their wellness level. In this survey five wellness dimensions were identified. (1) Emotional wellness: 26% of students say that they feel happy (agree), strongly agree - 60.2% of students, but 13.8% for students disagree with this statement. 50.4% of students have good self-esteem (agree), 6.5% of students strongly agree, 38.2% of students disagree, but 4.9% of students strongly disagree with this statement. I do not generally feel stressed: 2.4% of students strongly agreed, 25.4% agreed, 60.2% disagreed, 12.2% strongly disagreed with the statement. Summarizing the responses to all three statements the following results were obtained: the emotional wellness level is low for 6.2% of students, marginal for 36.9% of students, good for 33.9% of students, but 22.03% of students have a high emotional wellness level (see Table 5).

Table 5. Self-perception of wellness

Wellness dimensions	Criteria	1-Strongly disagree(%)	2-Disagree (%)	3-Agree (%)	4-Strongly agree (%)
Emotional wellness	I am happy most of the time.	1.6	12.2	26	60.2
	I have positive self-esteem.	4.9	38.2	50.4	6.5
	I do not generally feel stressed.	12.2	60.2	25.2	2.4
Total Emotional wellness level		6.2	36.9	33.9	23.03
Intellectual wellness	I am well informed about current events.	0	15.6	74.6	9,8
	I feel comfortable expressing my views and opinions.	1.6	20.3	66.7	11.4
	I am interested in my career development.	0.8	0.8	38.2	60.2
Total Intellectual wellness level		0.8	12.2	59.8	27.1
Physical wellness	I am physically fit.	1.6	13.0	50.4	35.0
	I am able to perform the physical tasks of my work.	0	3.3	51.2	45.5
	I am physically able to perform leisure	0.8	4.9	44.7	49.6



	activities.				
Total Physical wellness level		0.8	7.1	48.8	43.7
Social wellness	I have many friends and am involved socially.	0.8	27.6	56.9	14.6
	I have close ties with my family.	1.6	4.9	37.7	55.7
	I am confident in social situations.	2.4	17.1	69.1	11.4
Total Social wellness level		1.6	15.5	54.6	27.2
Spiritual wellness	I am fulfilled spiritually.	3.3	10.7	73.8	12.3
	I feel connected to the world around me.	2.4	20.3	68.3	8.9
	I have a sense of purpose in my life.	3.3	7.4	59.0	30.3
Total Spiritual wellness level		3.0	12.8	67.03	17.2
Total Wellness level		2.5	16.9	52.8	27.6

Intellectual Wellness (2): I am well informed about current events: 9.8% of students – strongly agree, 74.6% agree, but 15.6% of students disagree with this statement. I feel comfortable expressing my views and opinions: 1.6% of the students strongly disagree, 20.3% disagree, 66.7% agree, but 11.4% of students strongly agree with this statement. 60.2 % of students are very interested in their career development, 38.2% are interested, but 0.8 % are not interested, or completely not interested (0.8%) in their career. Summarizing the data from all three questions the following results were obtained: the intellectual wellness level is low for 0.8 % of students, marginal for 12.2 % of students, good for 59.8 % of students, but 27.1 % of students have a high intellectual wellness level.

Physical wellness (3): 35 % of students feel physically very well, 50.4 % - well, 13.0 % disagree, but 1.6 % students strongly disagree with this statement. 45.5 % of students strongly agree with the statement that they are able to do necessary physical work, 51.2 % agree, but 3.3 % disagree with this statement. 49.6 % of students strongly agree that they are physically able to perform leisure activities, 49.6 % - agree, 4.9 % disagree, but 0.8 % strongly disagree with this statement. In summary, the physical wellness level is low for 0.8 % of students, marginal for 7.1 % of students, good for 48.8 % of students, but 43.7 % of students have a high physical wellness level.

Social wellness (4): 14.6 % of students strongly agree that they have lots of friends and various social connections 56.9 % – agree, 27.6 % – disagree, but 0.8 % of students strongly disagree with this statement. 55.7 % of students strongly agree with the statement “I have close ties with my family”, 37.7 % agree, 4.9 % disagree, 1.6 % strongly disagree with the statement. 11.4 % strongly agree, 69.1 % agree, 17.1 % disagree, 2.4 % strongly disagree with the statement “I am confident in social situations”. Summarizing the responses to all three statements, the social wellness level is low for 1.6 % of students, marginal for 15.5 % of students, good for 54.6 % of students, but 27.2 % of students have a high social wellness level.

Spiritual wellness (5): “I feel spiritually fulfilled” – 3.3 % strongly disagree, 10.7 % disagree, 73.8 % agree, 12.3% strongly agree; “I feel connected to the world around me” – 2.4 % strongly disagree, 20.3 % disagree, 68.3 % agree, 8.9 % strongly agree; “I have a sense of purpose in my life” – 3.3 % strongly disagree, 7.4 % disagree, 59 % agree, 30.3% strongly agree. Summarizing the responses to all three statements, the following results were obtained: the spiritual wellness level is low for 3.0 % of students, marginal for 12.8 % of students, good for 67.03 % of students, but 17.2 % of students have a high spiritual wellness level. Assessing the levels of all 5 wellness dimensions it can be concluded that the total wellness level is low for 2.5 % of students, marginal for 16.9 % of students, good for 52.8 % of students, but 27.6 % of students have a high wellness level (see Table 5).

Results and Discussion

According to the survey results and the WHO Global strategy for diet, physical activity and health recommendations (n.d.), the first-year students of Liepaja University need improvements in almost all spheres that affect healthy lifestyle. When assessing the healthy lifestyle habits, it should be taken into account that all healthy lifestyle activities do not imply similar health risks. For example, the use of tobacco and the abuse of alcohol or drugs affect health immediately, while the consequences of insufficient physical activity and unbalanced diet appear in the long run. We daily face tensions created by stress, but our first aid knowledge gets applied only in particular life situations (Corbin et al., 2008). Thus, the average arithmetic data collected from this research on healthy lifestyle habits show that majority of students avoid tobacco, alcohol and drug-containing substances, and in total 83.6 % of surveyed students avoid harmful habits. However, the habits of physical activity can be considered as satisfactory only for 42.4 % of respondents, 54.6 % of students have good eating habits, but 67.7% of students manage their stress well. 94.3 % of students practice safe sex life, but 48.4% follow the safety regulations, although here is a big dissonance between these two indicators: if 91.6 % of students follow the traffic rules, then safety at home is in danger – only 5.9 % of students have smoke detectors at home, which can protect them from casual domestic fires.



On average 68.7 % of students have sufficient knowledge about first aid, 57.6% of students adhere to adequate personal hygiene, although in personal hygiene practices are also differences: 63.8% of students pay sufficient attention to dental hygiene, but only 43.3% of students spend enough time sleeping. In general, 73.4% of students use appropriate medical services and follow doctor's recommendations. 50.4% of students can be considered as informed customers, 58.4% of students act environmentally friendly, although also here are big differences: 81.4% of students save electricity and other natural resources, while only 35.7% of students recycle.

When assessing the students' wellness level by interpreting the ratings, the level of physical wellness comes first – good and very good physical ability for performing the work duties and participating in leisure time physical activities is shown by 92.5% of students. The level of intellectual wellness is rated as good and very good by 86.9% of students, mental wellness – by 84.23%, social wellness – by 81.8%, but emotional wellness by 56.93% of students (see Figure 1).

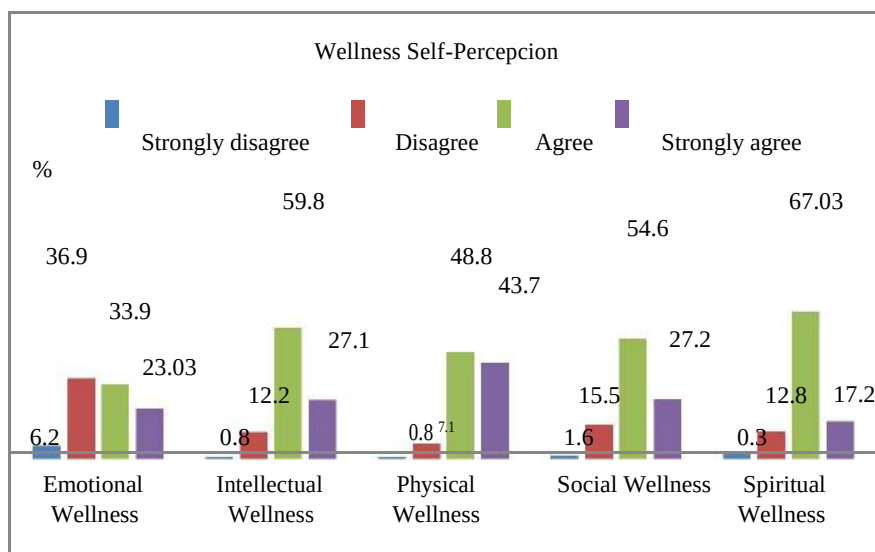


Figure 1. Indicators of overall wellness self-perception of students

Conclusions and Recommendations

Students' healthy lifestyle habits generally require significant improvements, especially in everyday habits: physical activity, eating habits, and adequate sleep. Assessing the overall wellness level of students it can be concluded that 2.5% of students have low wellness, 16.9% – marginal, 52.8% – good, but for 27.6% of students the wellness level is high.

The students' self-perception rates on wellness are relatively high, while students' healthy lifestyle habits need substantial improvements. This may indicate that students feel good at the moment and do not feel discomfort in terms of their lifestyle and lifestyle-related health risks in the near future.

In conclusion, it is recommended to promote the healthy lifestyle habits also in the universities, making health-promoting programs available for all students. It is particularly essential for future teachers – educators of the next generation, promoting the development of a healthy and educated society.

References

- Broks, A. (2000). *Izglītības sistemoloģija*. Rīga: RaKa
- Cockerham, C. W. (2005). Health Lifestyle Theory and the Convergence of Agency and Structure. *Journal of Health and Social Behavior*, 46:51; doi:10.1177/002214650504600105-0
- Corbin, C., Welk, G., Corbin, W., Welk, K. (2008). *Concepts of Fitness and Wellness: A Comprehensive Lifestyle Approach*. 7/e Published by McGraw-Hill, Boston, MA.
- Green, K., Smith, A., Roberts, K. (2005). Young people and lifelong participation in sport and physical activity: a sociological perspective on contemporary physical education programmes in England and Wales. *Leisure Studies*, 24: 1, P 27 — 43. DOI: 10.1080/0261436042000231637
- Haerens, L., Kirk, D., Cardon, G. Bourdeaudhuij, I., (2010). *The development of a pedagogical model for Health-Based Physical Education*. Research Foundation, Brussels, Belgium. Retrieved 21 June 2017 from: http://www.beraconference.co.uk/2010/downloads/abstracts/pdf/BERA2010_0602.pdf
- Kukliča, S., Straume I., Kļaviņa S. (2011). *Vadlīnijas pašvaldībām veselības veicināšanā*. Latvijas Republikas Veselības ministrija
- Latvijas Augstskolu sporta savienība (LASS). (2012). *Studentu un jauniešu sportošanas paradumi*. Analītiskais noslēguma ziņojums. Izglītības un zinātnes ministrijas 06.16.00. programmas „Izglītības sistēmas vadības nodrošināšana”. Retrieved 30 June 2017 from: <http://www.izm.gov.lv/images/statistika/petijumi/20.pdf>
- Latvijas Nacionālais attīstības plāns 2014. – 2020.gadam. (2012). LR saeima. Retrieved 14 April 2017 from:



- http://nap.lv/images/20121220_NAP2020_Saeim%C4%81_apstiprin%C4%81ts.pdf
- Latvijas iedzīvotāju (15-64 gadu vecumā) veselību ietekmējošo paradumu pētījums. (2014). Slimību kontroles un profilakses centrs. Retrieved 30 June 2017 from: <http://www.spkc.gov.lv/veselibu-ietekmejos-paradumu-petijumi/>
- Miller, J. (2005). Wellness: The History and Development of a Concept. *Spektrum Freizeit* 2005/1. P. 84-102. Retrieved 23 June 2017 from: https://duepublico.uni-duisburg-essen.de/servlets/DerivateServlet/Derivate-35061/11_miller_1_05.pdf
- Porozovs, J., Porozova, Dz., Valdemiers, A. (2012). Jauniešu fiziskās aktivitātes un veselības problēmas. *Scientific Journal of Riga Technical University. The Humanities and Social Science. History of Science and Higher Education*. Vol.20., 94.-100. lpp.
- Robbins, G., Powers, D., Burgess, S. (2011). A wellness way of life (9th ed.). USA: McGraw Hill.
- Swarbric, P. (2010). Defining wellness. *Words of Wellness Vol.3, Nr.7*. Retrieved 5 June 2017 from: <http://www.scattergoodfoundation.org/sites/default/files/innovation-submissions/Words%20of%20Wellness-Handout.pdf>
- Swarbrick, P., Yudof, J. (2014). *Wellness in Eight Dimensions*. Retrieved 3December 2017 from: http://www.state.nj.us/humanservices/dmhas/resources/mental/CSP_Wellness_8_Dimensions.pdf
- World Health Organization. (1998). *Health Promotion Glossary*. Retrieved 18 July 2017 from: <http://www.who.int/healthpromotion/about/HPR%20Glossary%201998.pdf>.
- World Health Organization. (2014). *The Ottawa Charter for Health Promotion*. Retrieved 23 May 2017 from: <http://www.who.int/healthpromotion/conferences/previous/ottawa/en/>
- IZM. (2017). *Pārskats par Latvijas augstāko izglītību 2016.gadā*. Augstākās izglītības, zinātnes un inovāciju departaments. Retrieved 30 June 2017 from: http://www.izm.gov.lv/images/izglitiba_augst/Parskats_augstaka_izglitiba_2016.pdf
- World Health Organization. (n.d.). *Global Strategy on Diet, Physical Activity and Health*. Retrieved 14 July 2017 from: http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/



An Investigation Of the Ergonomic Approach to Sportsmen and Musculoskeletal System Related Complaint

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Abstract

Ergonomics is the realization of a work arrangement in the direction of protecting human health. The main aim of this approach is to increase worker productivity by increasing employee compliance with the environment, minimizing possible health problems and increasing optimal harmony with the person's environment. People are in a functional interaction with the environment, work, and the product being discovered throughout their work life and life. In this context, we aimed to evaluate the statistical relationship between the ergonomic approach and musculoskeletal disorders of athletes. A total of 74 athletes participated in our work. Standardized ergonomic muscle and skeletal system disorders questionnaires were applied to participants. Correlational tests were performed and statistically evaluated by comparing the parameters such as gender, age range, height, weight, and sporting time period. When the data obtained from the sportsmen are examined; Age, height, weight, and age of sport showed significant correlations with pain complaints seen in some body regions as topographically ($P < 0.05$). The topographic area in which the pain complaint was highest in 47.3% ($n: 35$) was lumbar region and negative correlation with sport age was found ($P < 0.05$). As a result, the questionnaires of participating athletes; % 87,8 ($n: 65$) had complaints of pain related to musculoskeletal system during the last week. Incorrect static posture and ergonomic conditions in the formation of musculoskeletal system diseases can be influential factors. We think that the athletes with complaints of pain can be redesigned ergonomically to reduce the related discomfort by adapting sports methods and working environments.

Keywords: Ergonomics, Sportsman health, Musculoskeletal system.

Introduction

Ergonomics is the realization of a work arrangement in the direction of protecting human health. The main goal of this approach is to increase employee productivity by increasing employee compliance, reducing potential health problems to the minimum, and optimizing adaptation to the environment in which the person is present (Armstrong, T.J., 1979; Dennerlein, J.T., 2011).

Ergonomic approaches that can be applied in the working environment can contribute to the determination and reduction of possible health related risk factors (Tynes T., 2017). People are in a functional interaction with the environment, work, and the product being discovered throughout their work environment and life. Ergonomics is the science of studying the approach that makes the most appropriate arrangement in terms of work and health by increasing harmony of planned environmental factors (Van der Beek, A.J., 1998). Scientific training programs often applied in sports studies are very important in terms of increasing sportive efficiency. It is also a fact that it is important for the athlete to organize the work environment to be the most suitable for himself / herself and the sports branch, in terms of athlete performance and health. In this context, we aimed to evaluate the statistical relationship between the ergonomic approach of athletes and musculoskeletal disorders in this study.

Muscular and skeletal system disorders are frequently encountered in athletes due to excessive use of limbs. Such discomforts may cause a reduction in health and sport productivity by giving the athlete pain and limitation (Fett, D., 2017; Petraglia, F., 2017). Numerous scientific approaches and methodological studies are being conducted to increase athlete productivity (Abade, E., 2017). The goal of the ergonomic approach in sport, which is very important in terms of sport and health sciences, is to ensure that the athlete's working environment, the materials used and the training programs applied are optimized for the purpose and health of the person.



Method

In our study, a total of 74 students from Kocaeli University Sports Sciences Faculty participated. The standardized Ergonomic Musculoskeletal System Disorders Questionnaire (SEKISB) (Ekberg, K., 1994, Colak, S. 2017) was applied to the confirmed athletes who were not in the disability period. In the questionnaire form there are questionnaires indicating body figure and anatomical localization. Basically, pain formation and pain localization and grade are questioned in the last one week out of disability. SEKISB questionnaires obtained from the sportsmen were evaluated using the SPSS20 package program. The data obtained include athlete parameters such as age range, height, weight and sport age, and topographical anatomical pain descriptions on the questionnaire. Statistical comparisons and correlation tests were conducted and evaluated.

Findings

The average age of the athletes participating in the ergonomic evaluation questionnaire was 21.3 years, average height was 178cm, weight average was 72.2 kg and average age was 8.6 years. The numerical distributions of the athletic characteristics mentioned are shown in Table-1.

Table 1. Distribution of the average age, height, weight and sport age of the athletes

	Age (years)	Length (cm)	Weight (kg)	Sports age (years)
Average values	21,3 ±1,97	178 ±0,04	72,2 ±7,23	8,6 ±3,24

When the data obtained from the ergonomic approach questionnaire related to muscular and joint disorders of the athletes were evaluated by statistical comparison and correlation methods, significant differences were observed in terms of anatomical regions where the athletes had pain and discomfort. The assessment of these differences may contribute to the development of new ergonomic approaches to assess anthropometric data of athletes and to more extensive work to be done. In our study, a questionnaire study was conducted and the athletes were informed about the pain zone and the frequency they had prescribed for them in the last week. When the data obtained from the athletes are examined; Age, height, weight, and age of the sport showed significant correlations with pain complaints seen in some body regions ($P < 0.05$) (Table 2). The relationship between the anthropometric measurements of the athletes and the pain regions of the athletes again depends on the correct and effective use of joints and muscles by the athletes in terms of kinesiology. Many types of injuries to sportsmen can vary according to the sport they are doing. Pain and complaints are known to be deformed due to excessive strain and excessive use of anatomical regions.

Table 2. Athlete parameters and statistics values correlated with each other

	Age	Length	Weight	Sports Age
Neck pain	CC: -0,136	CC: 0,117	CC: 0,110	CC: -0,226
	p: 0,247	p: 0,320	p: 0,349	p: 0,052
Right Shoulder Pain	CC: -0,168	CC: -0,082	CC: -0,104	CC: -0,035
	p: 0,153	p: 0,487	p: 0,376	p: 0,768
Left Shoulder Pain	CC: -0,238*	CC: 0,193	CC: -0,025	CC: -0,143
	p: 0,041*	p: 0,099	p: 0,835	p: 0,225
Upper Back Pain	CC: -0,029	CC: 0,243*	CC: 0,071	CC: 0,040



	p: 0,804	p: 0,037*	p: 0,549	p: 0,737
Right Arm Pain	CC: -0,056	CC: 0,042	CC: 0,032	CC: 0,037
	p: 0,635	p: 0,719	p: 0,787	p: 0,757
	CC: -0,062	CC: 0,112	CC: 0,032	CC: -0,001
Left Arm Pain	p: 0,601	p: 0,341	p: 0,786	p: 0,995
	CC: -0,073	CC: -0,074	CC: -0,106	CC: -0,301*
Backache	p: 0,534	p: 0,529	p: 0,367	p: 0,009*
	CC: 0,014	CC: 0,159	CC: -0,087	CC: 0,114
Right Forearm Pain	p: 0,906	p: 0,175	p: 0,461	p: 0,332
	CC: 0,119	CC: -0,016	CC: -0,164	CC: 0,241
Left Forearm Pain	p: 0,314	p: 0,889	p: 0,162	p: 0,038
	CC: -0,123	CC: -0,090	CC: -0,082	CC: -0,217
Wrist pain	p: 0,298	p: 0,448	p: 0,488	p: 0,063
	CC: -0,050	CC: 0,185	CC: 0,068	CC: 0,128
Hip Pain	p: 0,675	p: 0,114	p: 0,565	p: 0,276
	CC: -0,034	CC: -0,007	CC: -0,170	CC: -0,120
Thigh Pain	p: 0,773	p: 0,952	p: 0,148	p: 0,309
	CC: 0,115	CC: 0,142	CC: 0,001	CC: 0,111
Right Knee Pain	p: 0,331	p: 0,229	p: 0,993	p: 0,345
	CC: 0,050	CC: 0,063	CC: 0,016	CC: 0,120
Left Knee Pain	p: 0,673	p: 0,594	p: 0,896	p: 0,307
	CC: -0,088	CC: -0,133	CC: -0,313*	CC: -0,184
Right Lower Leg Pain	p: 0,457	p: 0,260	p: 0,007*	p: 0,117



	CC: -0,159	CC: 0,065	CC: -0,031	CC: -0,057
Left Lower Leg Pain	p: 0,177	p: 0,581	p: 0,791	p: 0,628
	CC: 0,128	CC: -0,079	CC: -0,101	CC: 0,094
Right Foot Pain	p: 0,278	p: 0,504	p: 0,392	p: 0,427
	CC: 0,214	CC: -0,001	CC: 0,035	CC: 0,253*
Left Foot Pain	p: 0,067	p: 0,996	p: 0,767	p: 0,029*
CC: Correlation test, p value: Chi square test, P <0.05 significant correlation				

When the data of SEKISB questionnaires belonging to sportsmen are evaluated statistically, parameters with meaningful relation are seen. Statistical analyzes of the data were performed using SPSS package program and the results are shown in Table-2. There was a negative correlation between left shoulder pain and age, positive correlation between upper back pain and height, negative correlation between back pain and sport age, positive correlation between left forearm pain and sport age, right lower leg pain- There is a positive correlation between left foot pain and sport age. A statistically significant correlation was found for the pain described in the anatomical regions ($p < 0.05$). When the athletes who complained pain in any region of the body in the last week were evaluated among themselves, it was seen that the pain complaint was in the lumbar region with 47,3% (n:35) at the highest level.

The evaluation of these determinations, which may be important in terms of athlete's health, may contribute to the investigation and resolution of pain sources. The topographic area with the most pain complaints in the assessed athletes was identified as the lumbar area. A negative correlation with the age of participants' lumbar region was also found. When participants' lumbar pain complaints were statistically evaluated as sport age, there was a negative correlation ($P < 0.05$).

Discussion

More traumas can be seen in different anatomical regions depending on the branches of the athletes. It is important that the environmental factors are properly regulated in terms of athlete productivity and health as well as protective precautions to be taken by the athletes. As in other professions, we think that such ergonomic regulations can affect the rate of disabling and discomfort. The ergonomic approaches that can be achieved in sports studies will positively affect the athlete's productivity and health. Ergonomic approaches include environmental regulations to increase the efficiency of a person (Junior, S.A., 2015; Tirloni A.S., 2016). For this purpose, we also wanted to investigate the frequency and anatomical regions of the pain that occurred during the last week.

Because these aches are probably caused by the ergonomic uses of the body and are caused by excessive load on the musculoskeletal system. Of course, this will affect the performance as well as the continuity of the pain and disruption of the athlete's psychology. According to our results 87,8% (n:65) of the athletes participating in the study reported that they had musculoskeletal pain in the last week. The high rate of pain reporting lowers both the quality of life of athletes and their performance.

Differences in the frequency of injuries associated with sports branch and athlete's anatomy have important values for sports and kinesiology sciences. Sport, health, and ergonomics have been studied by several branches of science with different disciplines. The causes of pain may constitute the causes of certain disturbances in terms of athlete's health. More comprehensive correlation studies of the sports field and the pain areas may facilitate the athlete to take sports-specific measures (Cheng, K., 2016).



According to the statistical results obtained in our study; Negative correlation between left shoulder pain and age, positive correlation between upper back pain and height, negative correlation between back pain and sport age, positive correlation between left forearm pain and sport age, negative correlation between right lower leg pain and weight, There was a positive correlation between pain and sport age. Statistically significant correlations were found between the anatomical regions of the athletes ($p < 0.05$). When the results from these correlations are evaluated, a positive correlation between upper back pain-height is necessary to show a more careful ergonomic approach to the spine in training and study of tall athletes. The assessment of such athletic differences with more extensive work to be done with anthropometric data may contribute to the development of new ergonomic approaches. Some minor precautions can be taken to make the sport more ergonomic. It is believed that the development of ergonomic approaches in terms of athletes' health and productivity is important.

Pain in the muscular and joint disorders is a common complaint (Pirvu C., 2014; Korpinen, L., 2016). Pain is a very restrictive factor in terms of athletes' health and productivity. In terms of this importance relation, the treatment of the athletes is carried out in the clinics which are equipped according to the medical pain evaluations. From the point of view of sport sciences or other fields of work, pain studies to be performed in employees and pain areas can be determined and their frequency can be evaluated according to sports branch (Ardahan M., Simsek H., 2016). Such approaches and determinations may facilitate the establishment of a solution proposal for pain and discomfort related to sports. For example, we found another correlation in our study correlated negatively between back pain and sport age ($p < 0.05$). As the sport age grows or the athletes are treated, they have learned to protect their waist regions, which are the anatomical regions of the body that are most burdened and injured. When the data of participating athletes are evaluated, they report their waist regions as the topographic area with the most pain.

Statistically significant differences were obtained when evaluating the data obtained from sports pain and discomfort questionnaire ($P < 0.05$). When considering the importance of ergonomic approaches in terms of athlete health and sport productivity, pain complaints are one of the important factors affecting sport productivity. We think that the link between the pain-discomfort statement and the statistical analysis methods between the athletic factors such as age, height, weight, sport age will bring meaningful results.

Ergonomics knowledge aims to increase the harmony and interaction of the person with the environment. The ergonomic approaches to be formed in sports studies will also have an effect on the productivity of persons (Shiromani J., 2017). We think that rearranging the places where athletes perform their training activities, will be important in terms of health and efficiency.

Conclusion

As a result, 87,8% (n:65) of the participating athletes complained of pain related to musculoskeletal system other than disability in the last week. When many different environmental factors are considered, it is important to establish and regulate ergonomic approaches to occupational pain-discomfort situations.

Factors such as improper static posture and ergonomic conditions in the formation of muscle and skeletal system diseases can be influential in many professions. We believe that the incidence of such discomforts can be reduced by providing ergonomic environmental conditions in accordance with the athletes' working style, training techniques and characteristics. Apart from the risks arising from the instruments and equipment used during the training, different measures can be taken, such as the arrangement of the athletes' training and body movements. We think that such adjustable approaches will reduce the pain-injury and associated productivity losses.



References

- A. J. van der Beek, M. H. Frings-Dresen. (1998). Assessment of mechanical exposure in ergonomic epidemiology” *Occup Environ Med.*, 55(5): 291–299.
- Adriana Seára Tirloni, Diogo Cunha dos Reis, Antonio Cezar Bornia, Dalton Francisco de Andrade, Adriano Ferreti Borgatto, Antônio Renato Pereira Moro. (2016). Development and validation of instrument for ergonomic evaluation of tablet arm chairs” *EXCLI J.* 15: 671–686.
- Armstrong TJ, Chaffin DB, Foulke JA. (1979). A methodology for documenting hand positions and forces during manual work. *J Biomech.* 12(2):131–3.
- C Pirvu, I Pătrașcu, D Pirvu, C Ionescu. (2014). The dentist’s operating posture – ergonomic aspects. *J Med Life.* 7(2): 177–182.
- Çolak S., Güzelordu D., Çolak T., Bamaç B., Sivri İ., Çolak E., Örs A. (2017). Büro çalışanlarında ergonomik yaklaşım ve buna bağlı oluşan kas-iskelet sistemi rahatsızlıklarının araştırılması. *2nd World Congress on Lifelong Education*, Antalya, Türkiye.
- Daniela Fett, Katharina Trompeter, Petra Platen. (2017). Back pain in elite sports: A cross-sectional study on 1114 athletes. *PLoS One.* 12(6): e0180130.
- Eduardo Abade, Jaime Sampaio, Bruno Gonçalves, Jorge Baptista, Alberto Alves, João Viana (2017). Effects of different re-warm up activities in football players' performance. *PLoS One.* 12(6): e0180152.
- Ekberg K, Björkqvist B, Malm P, Bjerre-Kiely B, Karlsson M, Axelson O. (1994). Case-Control Study Of Risk Factors For Disease In The Neck And Shoulder Area. *Occupational And Environmental Medicine* 51:262-266.
- Federica Petraglia, Ileana Ramazzina, Cosimo Costantino (2017) Plantar fasciitis in athletes: diagnostic and treatment strategies. A systematic review. *Muscles Ligaments Tendons J.* 7(1): 107–118.
- Hsin-Yi Kathy Cheng, Man-Ting Wong, Yu-Chung Yu, Yan-Ying Ju. (2016). Work-related musculoskeletal disorders and ergonomic risk factors in special education teachers and teacher’s aides. *BMC Public Health.* 16: 137.
- JA Souza Junior, J Silva, M Cosme, L Ayako, C Ayres, K Zarco, L Candido, C Nascimento, FFP Rodrigues, CL Batista, EL Brasil, L Souza, D Carnieli-Cazati, RC Eid, KT Timenetsky. (2015). Ergonomic risk profile of critically ill patients. *Intensive Care Med Exp.* 3(Suppl 1).
- Jack T. Dennerlein, Karen Hopcia, Grace Sembajwe, Christopher Kenwood, Anne M. Stoddard, T. Helene Tveito, Dean M. Hashimoto, Glorian Sorensen. (2011). Ergonomic practices within patient care units are associated with musculoskeletal pain and limitations. *Am J Ind Med.*, 55(2): 107–116.
- Leena Korpinen, Rauno Pääkkönen, Fabriziomaria Gobba. (2016). Self-Reported Ache, Pain, or Numbness in Feet and Use of Computers amongst Working-Age Finns” *Healthcare (Basel)* 4(4): 82.
- Melek Ardahan, Hatice Simsek. (2016). Analyzing musculoskeletal system discomforts and risk factors in computer-using office workers. *Pak J Med Sci.* 32(6): 1425–1429.
- Shiromani Janki, Evalyn E. A. P. Mulder, Jan N. M. IJzermans, T. C. Khe. (2017). Ergonomics in the operating room. *Tran Surg Endosc.*, 31:2457–2466.
- Tore Tynes, Cecilie Aagestad, Sannie Vester Thorsen, Lars Louis Andersen, Merja Perkio-Makela, Francisco Javier Pinilla García, Luz Galiana Blanco, Greet Vermeylen, Agnes Parent-Thirion, Wendela Hooftman, Irene Houtman, Falk Liebers, Hermann Burr, Maren Formazin. (2017). Physical working conditions as covered in European monitoring questionnaires. *BMC Public Health.* 17: 544.



A competence development model for Complementary and Alternative Medicine professionals: aspects of life-long learning

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Abstract

The problems existing in Latvia's healthcare system have caused a profound crisis: formal medical specialists leave the country; remaining specialists refuse to work overtime; young professionals refuse to go to work to remote regions of the country. Public health education is neglected, and people lack self-care knowledge and skills when faced by medical issues. Institutions report that people burden health professionals with problems, which could be dealt on their own. After facing a poor treatment and negative attitude, more and more people use services provided by non-conventional medical practitioners. Education of such practitioners at national level is not encouraged in accordance with the legally defined content of the professional activities of Complementary and Alternative Medicine (CAM) specialists. The aim of this research is to promote the development of high quality CAM services. This article will provide a theoretical framework of the conceptual competence development model for CAM specialists. From 2010 to 2017, in the Institute of Conflictology, the legal and actual problems of Latvia's health care system were examined, seeking and modelling possible solutions. Employing the scientific findings and good practice ideas accumulated in the Institute, a theoretical and systematic basis was elaborated for a possible alternative: development of a national professional CAM system. The synthesis of CAM educational problem solutions was recognized as of paramount importance. But in order to understand the legal basis of professional activities of CAM specialists, the content analysis of international and national laws and regulations was performed. Also the legal and factual content of life-long education was clarified in the context of Latvia. A comparative analysis of legislation, good practices and expert advices was used to identify problems and search for solutions. The research revealed that Latvian legislation does not directly regulate professional activities of CAM specialists; only indirectly CAM specialists are mentioned in the Latvian Classification of Occupations, explaining the required qualifications, responsibilities and the level of education required. In the formal education of Latvia, including the higher education system, CAM study programmes have not been developed, although it is recommended by the World Health Organization (WHO). The research data analysis characterizes the legal and factual environment in which the CAM specialists' competence building solutions are possible in Latvia. It allows formulating a scientifically and legally sound recommendation: if CAM educational activities are not possible in the space of formal education, they must be organized through non-formal lifelong education processes. But in order to do it in an authoritative, scientifically and legally sound way, it is recommended to use the competence development model for CAM specialists, developed and approved by the authors.

Keywords. Complementary and alternative medicine, specialists, competence, life-long education, conceptual model.

Introduction

Comparably recently, in 2014, Latvian government elaborated Public Health Policy Guidelines for 2014-2020. The overriding goal stated in the guidelines is to increase the number of the healthy-lived years of life and to prevent premature death for people of Latvia. This is to be achieved by promoting equal health care opportunities for all inhabitants and reducing the risk factors of non-communicable diseases, improving the health of pregnant women and children, reducing the impact of traumas and environmental risks on public health, ensuring the prevention of communicable diseases, and developing a quality health care system and equal availability of health care services to all people in the country.

Assessing the quantitative and qualitative health care indicators from 2017, it can be concluded that health care in Latvia is still very problematic. The official data centre of Latvia – the Central Statistical Bureau has compiled the facts



about the circumstances that, in opinion of Latvia's inhabitants, have prevented them from medical examinations or treatment (Central Statistical Bureau, 2017). The facts are presented in Table 1.

Table 1. Circumstances that have prevented people from medical examinations or treatment

Indicators		Breakdown of results by age group									
		16-24	25-34	25-49	35-44	45-54	50-64	55-64	65-74	65+	75+
Medical examination or treatment at health care provider - Total		100	100	100	100	100	100	100	100	100	100
..there was at least one occasion		29,9	30,9	38,1	40,8	47,5	50,5	49,6	49,0	47,2	45,1
..there was no occasion		23,9	19,5	22,1	19,3	23,9	18,7	18,3	24,2	21,7	18,9
Reasons for unmet need for medical care - Total		20,3	16,5	11,8	12,4	8,0	8,6	7,9	0,5	0,4	0,3
..could not afford to (too expensive)		11,5	0,0	2,0	2,4	2,5	2,2	2,5	3,3	7,1	11,4
..waiting list		1,2	2,8	1,9	1,4	1,0	0,6	0,7	2,4	3,2	4,0
..could not take time because of work, care of children or for others		13,3	29,0	21,8	20,6	14,6	15,3	16,1	17,1	17,3	17,5
..too far to travel/ no means of transportation		13,3	29,0	21,8	20,6	14,6	15,3	16,1	17,1	17,3	17,5
..fear of doctors/ hospitals/ examination/ treatment		...	...	1,7	2,5	2,2	3,7	4,4	1,3	1,7	2,1
..wanted to wait and see if problem got better on its own		...	1,2	0,8	0,6	0,3	0,4	0,5	2,1	1,5	0,8

The data collected by the Central Statistical Bureau and its interpretation provide an understanding of the subjective-objective aspects of the health care situation in Latvia. Most often it is the financial situation that prevents people from health examination or treatment. For example, the data suggests that the older people get, the less they can afford health examinations or health care institutions. If in the age group of 16-24 almost 30% percent of people say that they cannot afford health care, then in the age group over 75, national healthcare is not accessible for almost half of Latvia's population. As the result, a large part of Latvian people participate neither in preventive nor active health care system.

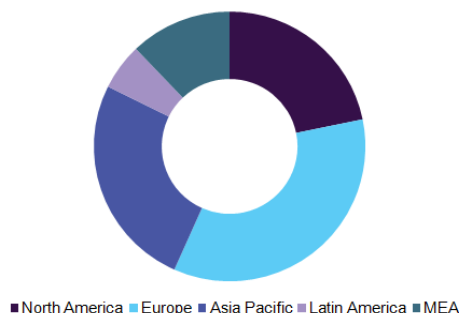
The prolonged problems in Latvia's healthcare system have caused a profound crisis. Formal medical specialists leave the country. Remaining specialists refuse to work overtime. Young professionals refuse to go to the remote regions of the country. Public health education is neglected; people acutely lack the health self-care knowledge and skills. Institutions report that citizens are burdening healthcare professionals with issues, which they could solve on their own. After facing poor quality care and negative attitude, more and more people are using services of traditional medical practitioners.

The research proves that CAM is not just a rescuing tool for problematic health care systems. Even experienced economic sector researchers consider CAM as a growing healthcare industry. Grand View Research, which employs researchers with more than 20 years of experience and conducts research studies worldwide, using scientifically recognized data analysis and interpretation techniques, has found that in 2015 the global alternative and complementary medicine market was valued at USD 40.32 billion. It predicts increased usage of traditional therapeutic methods in the coming decade as in 2015, more than 60% of the global population use some or the other form of traditional medicine. According to this research, alternative medicine involves the application of traditional medicine methods such as use of herbs and other mind and body healing techniques mostly based on faith and belief. However, most of these techniques have no regulatory approval or clinical evidential backing. Many governments and regulatory bodies are trying to find clinical support for the incorporation of alternative treatments in order to help to improve the market and treatment methods (Grand View Research, 2017).

Figure 1 visually explains CAM popularity in Europe already in 2015. The research reveals that Europe is the source of most revenue generation in the market owing to the extensive use of botanicals in the regions. Botanicals such as dietary supplements witness considerable demand in countries like Germany and France (Grand View Research, 2017).



Figure 1. Complementary & alternative medicine market share, by region, 2015 (%)



Also the World Health Organization (WHO) states that it is possible to solve health related problems both in economically lower and higher developed societies by integrating the possibilities offered by traditional and complementary medicine (TCM) into the systems of conventional medicine. According to WHO traditional medicine strategy: 2014-2023, TCM is an important and often underestimated part of health care. It is found in almost every country in the world and the demand for its services is increasing. Qualitative, safe and efficient TM contributes to the goal of ensuring that all people have access to care. Many countries now recognize the need for developing a cohesive and integrative approach to health care that allows governments, health care practitioners and, most importantly, those who use health care services, to access TCM in a safe, respectful, cost-efficient and effective manner. A global strategy to foster its appropriate integration, regulation and supervision will be useful to countries wishing to develop a proactive policy towards this important - and often vibrant and expanding - part of health care (World Health Organization, 2014).

At the same time, in the WHO Traditional Medicine Strategy 2014-2023 it is stressed that nowadays the levels of education, accreditation and regulation of TCM practices and practitioners vary considerably as individuals move freely from country to country in order to live and work. Given this trend, a better understanding of TCM practitioners is needed to ensure professional consistency and safety. In order to balance the popularity of CAM services with the quality, the following aspects need to be stressed:

- development and enforcement of policy and regulations; integration, in particular identifying and evaluating strategies and criteria for integrating TM into national and primary health care;
- safety and quality, notably assessment of products and services, qualification of practitioners, methodology and criteria for evaluating efficacy;
- ability to control and regulate TM and CM (TCM) advertising and claims; research and development; and education and training of TCM practitioners;
- information and communication, such as sharing information about policies, regulations, service profiles and research data, or obtaining reliable objective information resources for consumers (WHO, 2014).

The analysis of documents reveals, and it is also noted by WHO, that in various societies the terms ‘Traditional medicine’ (TM) and Complementary medicine (CM) (TCM) are used differently. We find terms ‘Complementary and alternative medicine’ (CAM), ‘Alternative and Complementary medicine’ (ACM), also Integrative medicine (IM). In order to equate the understanding of the terminology that is relevant to the research subject of this study, in this article all the aforementioned and similar terms are marked with the abbreviation CAM.

The goal of this research is to promote the development of high quality CAM services. This article presents a theoretical description of the conceptual CAM specialists’ competence development model, elaborated through scientific research and modelling processes.



Methods

In 2010-2017, at the Institute of Conflictology the legal and factual problems of Latvian health care system were studied, searching and modelling the possible solutions. Using the scientific and good practice experience accumulated in the Institute, the theoretical and systemic basis for an alternative solution was elaborated: the development of a national professional CAM system. In order to present the CAM system model to the public, the synthesis of CAM educational problem solutions was recognized as of paramount importance. For understanding the legal basis of the professional activities of CAM specialists, the content analysis of international and national laws and regulations was carried out. The analysis was also needed for clarifying the legal and factual content of life-long learning in Latvia. A comparative analysis of laws, good practice and experts' advice was used to identify the problems and search for solutions. In 2017, synthesis and approbation of conclusions and proposals were carried out based on a work of six experts in a focus-group discussion. The experts were selected according to the following criteria: doctoral degree in social sciences, education, management, law or health care and at least 7 years of work experience.

This study employs not only well-known and recognized quantitative research methods, but also the belief expressed by internationally recognized scholars, that the data analysis in a qualitative research design is usually a repetitive, spiral or cyclic process moving from more general to more specific observations (Cresswell, 1998; Silverman, 2000, Paterson et al, 2001; Paly, Achison, 2007)

Findings

1. Clarification of terminology

In order to understand professional qualification development principles of CAM, the term *qualification* must be clarified. The Law of Education states that a professional qualification is a documented evaluation of education and professional mastery of a certain profession. Thus, professional qualification certifies that a person has:

- obtained appropriate level of education for the profession concerned;
- professional and general skills and abilities appropriate for the profession;
- an educational document that certifies the acquisition of professional qualification (Saeima, 1998).

The other important term is *competence*. The Terminology Commission of Latvian Academy of Sciences, discussing the terms that should be used describing the learning outcomes in the Law of Higher Education, has concluded that in Latvian the term *competence* must be used in a singular form, and its conceptual content is reflected in "Dictionary of pedagogic terms" (2000) giving two meanings: 1) the necessary knowledge, professional experience, understanding of a particular field or issue, and ability to use the knowledge and experience in a particular activity; the person's (employee's) competence is assessed by the surrounding people, the cooperation partners, the society; 2) jurisdiction, lawfulness, the scope of responsibility, taking into account the person's education, abilities, knowledge and experience in the field. When describing the learning outcomes of the education process, the English phrase "knowledge, skills and competences" is reproduced in Latvian as "knowledge, skills and abilities (Latvijas Zinatnuu akadēmija, 2010).

2. The basic tasks and essential qualification requirements for the CAM professionals defined by the Latvian Classification of Occupations (LCO)

In order to understand the content of CAM professional qualification, the basic tasks and essential qualification requirements for the CAM profession groups were clarified, based on International Standard Classification of Occupations (ISCO 08) and the Latvian Classification of Occupations (LCO). LCO is a systematic list of occupations (trades, positions, specialties) that is designed to ensure the accounting and comparison of a labour force in compliance with international practice. It is created by applying the International Standard Classification of Occupations (ISCO-08).

LCO professions, according to the codes given by International Labour Organization, are classified in 10 groups. In LCO, the basic qualification requirements and core tasks for the professionals are defined, as well as the knowledge and skills everyone must have when starting work in the profession. The user of LCO must select the name of profession (trade, position, speciality) according to the basic tasks of professional activity defined by the Classifier.



2.1. CAM Professionals

ISCO 08 and LCO determine that all CAM professionals belong to Unit Group 223 “CAM Professionals”. According to ISCO 08 and LCO, CAM professionals examine patients, prevent and treat illness, disease, injury and other physical and mental impairments and maintain general health in humans by applying knowledge, skills and practices acquired through extensive study of the theories, beliefs and experiences, originating in specific cultures. Their tasks include:

- (a) conducting physical examinations of patients and interviewing them and their families to determine their health status;
- (b) developing and implementing treatment plans for physical, mental and psychosocial ailments using applications such as acupuncture, ayurvedic, homeopathic and herbal medicine;
- (c) evaluating and documenting patients’ progress through treatment plans;
- (d) providing health, nutrition and lifestyle advice to individuals, families and communities;
- (e) prescribing and preparing traditional medicines, such as herbal, plant, mineral and animal extracts, to stimulate the body’s capacity for self-healing;
- (f) exchanging information about patients with other health care workers as needed to ensure continuing and comprehensive health care;
- (g) conducting research into traditional and complementary medicines and treatments and disseminating findings such as through scientific papers and reports (International Labour Organization, 2012).

2.2. CAM Associate Professionals

ISCO 08 determines that Unit Group 323 representatives or CAM Associate Professionals prevent, care for and treat human physical and mental illnesses, disorders and injuries using herbal and other therapies based on theories, beliefs and experiences originating in specific cultures. They administer treatments using traditional techniques and medicaments, either acting independently or according to therapeutic care plans established by a traditional medicine or other health professional. (International Labour Organization, 2012). According to LCO, their tasks include:

- (a) examining patients and interviewing them and their families to determine their health status and the nature of physical or mental disorders or illnesses or other ailments;
- (b) recommending and providing care and treatment for illnesses and other ailments using traditional techniques and medicaments, such as physical manipulation and exercises, blood-letting using natural vessels, and preparations using herbs, plants, insects and animal extracts;
- (c) administering treatments such as acupuncture, ayurvedic, homeopathic and herbal medicine according to therapeutic care plans and procedures usually developed by a traditional medicine or other health professional;
- (d) providing care and treatment for physical injuries such as setting and healing fractured and dislocated bones using traditional methods of physical manipulation and herbal therapies;
- (e) advising individuals, families and the community on health, nutrition, hygiene, lifestyle and other issues to maintain or improve health and well-being;
- (f) referring patients to, and exchanging information with, other health care providers to ensure comprehensive and continuing care (International Labour Organization, 2012).

At the same time LPC and ISCO 08 also explain the differences what distinguishes CAM professionals from associate professionals. Occupations in traditional and complementary medicine for which a competent performance requires an extensive understanding of the benefits and applications of traditional and complementary therapies, developed as the result of extended formal study of these techniques as well as human anatomy and elements of modern medicine, are classified in the Unit Group 2230 – CAM Professionals. Those occupations, whose practice requires a less extensive understanding based on relatively short periods of formal or informal education and training, or informally through the traditions and practices of the communities where they originated, are included in Unit Group 3230 – CAM Associate Professionals. Practitioners working in the singular application of approaches to herbal medicines, spiritual therapies or manual therapeutic techniques are excluded from Unit Group 2230 (International Labour Organization, 2012).



Different from LCO, ISCO 08 gives a further explanation raising awareness about CAM related professions, which are not included in the CAM profession group:

- practitioners working in the singular application of approaches to herbal medicines, spiritual therapies or manual therapeutic techniques are excluded from Unit Group 2230;
- faith healers who treat human ailments through spiritual therapies, without using herbal therapies or other medicaments or physical treatments (Unit Group 3413: Religious Associate Professionals);
- occupations that provide therapy using traditional forms of massage and the application of pressure, such as acupressure and shiatsu therapists (Unit Group 3255: Physiotherapy Technicians and Assistants);
- traditional and lay midwives, who provide basic pregnancy and birthing care and advice based primarily on experience and knowledge acquired informally through the traditions and practices of the communities where they originated (Unit Group 3222: Midwifery Associate Professionals) (International Labour Organization, 2012).

3. Opportunities for acquiring required education for the qualification of CAM professionals in the lifelong education system

3.1. CAM in the context of lifelong learning

Lifelong learning is a process that lasts through a person's life-span, and it is based on changing needs for acquisition of knowledge, skills and experience in order to increase or change one's qualification in accordance with the current interests and needs and the demands of the labour market. Our research clarified that for persons interested in obtaining a CAM qualification, without violating the requirements set by LCO, it is possible to acquire it in three systems of lifelong learning: formal, non-formal and informal. In Latvian legislation it is explained that:

- formal education is a system that includes the levels of primary, secondary and higher education stages, and the acquisition of which is certified by a state-recognized educational or professional qualification document;
- non-formal education is an educational activity that is organized outside of formal education in accordance with the interests and demands;
- informal education or self-education is education obtained outside the educational establishment (International Labour Organization, 2012).

ISCO 08 and LCO do not give a clear picture about the education level required for CAM professionals and associate professionals. ISCO 08 and LCO also do not specify the type of educational document that should certify the qualification of CAM professionals and associate professionals.

3.2. Theoretical opportunities for acquiring the appropriate education for CAM professionals in the formal education system of Latvia

In the education system of Latvia there are five levels of vocational qualifications (VQF), as it is specified in the Vocational Education Law (Section 5). Qualification issues necessary for professional activity are also regulated by the Law on Education. According to the Law of Education, Article 8, the Latvian education system is formally divided into eight levels, thus forming a system known as the Latvian Qualification Framework (LQF). This system covers all educational stages (primary, secondary and higher education) and all types of education (general education, vocational education, academic education), as well as professional qualifications obtained outside the formal education system if it is formally recognized. LQF is linked to European Qualification Framework (EQF) (Saeima, 2015.2; The European Parliament and the Council of the European Union, 2008).

The Latvian legislation has defined the following relations between VQF and LQF/EQF levels

- VQF level 1 corresponds to LQF/EQF level 2;
- VQF level 2 corresponds to LQF/EQF level 3;
- VQF level 3 corresponds to LQF/EQF level 4;
- VQF level 4 corresponds to LQF/EQF level 5;
- VQF level 5 corresponds to LQF/EQF levels 6 and 7 (Saeima, 2015.1).

The LQF/EQF levels 1 and 8 are not connected with the professional education sphere and formation of professional qualification (Saeima, 2015.1, Saeima, 2015.2). Table 2, elaborated by the authors of this article, reflects the principles that are stated in legislative documents revealing the content of VQF and LQF/EQF, corresponding educational stages,



programmes and related types of documents (only the levels of secondary and higher vocational education levels are reflected).

Table 2. VQF and LQF/EQF comparative characteristics

VQF level	Description of abilities according to the level	LQF/EQF level	Description of abilities according to the level	Corresponding level of education	Corresponding Vocational education programme	Document certifying the acquisition of education
1	Theoretical and practical training, which gives an opportunity to perform simple tasks in a specific sphere of practical operation	2	Ability to demonstrate basic knowledge and use it for simple practical tasks in a specific field, partly independently under the supervision of a specialist	Basic education	Vocational basic education	Certificate of vocational initial education
2	Theoretical and practical training, which gives an opportunity to perform independently qualified artisan work	3	Ability to demonstrate general knowledge and use it for performing different tasks in an unchanging a stable environment, taking responsibility about the outcome of the work	Basic education	Vocational education	Certificate of vocational basic education
2.1.					Vocational education after basic education and after age of 18	Vocational qualification certificate
3	Advanced theoretical and professional preparedness that gives an opportunity to perform specific artisan duties, which also include planning and organising of the work to be implemented	4	Ability to show comprehensive knowledge and independently plan and organize work in the field, taking responsibility, working individually or in a team or managing the work of others	Secondary education	Vocational secondary education	Diploma of vocational secondary education
3.1.					Vocational education after general secondary education	Vocational qualification certificate
1,2,3					Vocational further-education	Vocational qualification certificate
4	Theoretical and professional preparedness that gives an opportunity to perform complicated artisan work, as well as to organise and manage the work of other specialists	5	Ability to show comprehensive and specialized knowledge relevant to the field; ability to use analytical approach to solving practical problems within profession in the changing environment; ability to understand one's field of activity in the wider social context, participate in the development of the relevant industry, evaluate one's own activities and activities of other people	First level higher education	College programme (2-3 years)	Diploma of first level higher vocational education
5.1	Higher qualification that gives an opportunity to plan	6	Ability to present basic and specialized knowledge in the industry and use it for	Higher education	Basic studies/ 2 nd level vocational higher	Diploma of higher vocational



	and also perform scientific research work in the relevant sector.	professional, artistic, innovative or research activity; ability to use a scientific approach to problem solving, to take responsibility and initiative; ability to make decisions and find creative solutions in changing circumstances		education	education and Diploma of higher vocational qualification
				Basic studies/ Professional Bachelor's study programme (3-4 years)	Professional Bachelor's Diploma and Diploma of higher vocational qualification
5.2.	7	Ability to demonstrate in-depth and extensive knowledge in the relevant field of science or professionally; ability to independently apply the theory, methods and problem-solving skills to research, artistic or highly qualified professional activities in changing circumstances; ability to independently formulate and critically analyse complex scientific and professional problems, integrate knowledge of different fields, contribute to the creation of new knowledge	Higher education	Higher level studies/ Professional Master's study programme (4-5 years)	Professional Master's Diploma and Diploma of higher vocational qualification
5.2.1.				Short professional Master's programmes (1 -2 years)	Diploma of higher vocational qualification

For formation of professional qualifications it is important to follow the Regulations of the Cabinet of Ministers of the Republic of Latvia on higher professional qualifications issued in accordance with Section 59 of the Law on Higher Education. These regulations stipulate that only the documents that certify the completion of higher education can certify the following professional qualifications of healthcare: a doctor; ergo-therapist; pharmacist; physiotherapist; veterinarian; dentist. The aforementioned professions the legislator has included in separate profession groups that are not related to CAM specialists. The regulations state that the representatives of the above-mentioned professions belong to the group of persons who must obtain higher professional education and higher professional qualification by completing a state-accredited study program of at least four years in higher education institution. Upon graduation from a state-recognized higher education institution, a higher professional qualification document – a diploma certifying the relevant higher professional qualification – is issued, indicating the professional qualification. In addition to the relevant qualification, a specialization may be indicated in accordance with the state-accredited higher education study programme and the LCO (Ministru Kabinets,1997).

4. Description of a competence development model for CAM professionals

4.1. The theoretical possibilities for obtaining appropriate education for CAM Associated Professionals in the formal education system of Latvia

According to LCO, CAM Associated Professionals, who represent the third group of professions, should develop their qualification by obtaining secondary or higher education. Summarizing the qualification requirements of ISCO 08 and LCO, it can be concluded that for CAM Associated Professionals the VQF Level 3 and LQF/EQF Level 4 education programmes are suitable in the formal education system. Of course, the higher is the qualification, the more skilled is the specialist. However, examining the requirements and recommendations of international and Latvian legislators, it becomes clear that there is no need for CAM associated professionals to obtain education from VQF Level 4 and LQF/EQF Level 5 education programmes, even if they manage the work of others.



LCO and ISCO 08 undoubtedly show that CAM Associated Professionals occupations require a less extensive understanding based on relatively short periods of formal or informal education and training, or informally through the traditions and practices of the communities where they originated. Thus, in the situations, when formal education does not offer programmes for CAM professionals, keeping in mind LCO professional education requirements, it is possible to legally apply the following qualification development approach for CAM specialists:

- educational programmes for acquiring CAM competence are developed in the non-formal education sector;
- the ability to obtain CAM associated professional's qualification while learning in non-formal education programme is awarded to persons who have obtained VQF Level 3 and/or Level 4 qualifications in other areas of formal education.

4.2. The theoretical possibilities for obtaining appropriate education for CAM Professionals in the formal education system of Latvia

LCO states that CAM Professionals, who represent the second group or professions, have formed their qualifications at the level of higher education. At the same time, for a competent performance of CAM Professionals, LCO and ISCO 08 requires an extensive understanding of the benefits and applications of traditional and complementary therapies, developed as the result of extended formal study of these techniques as well as human anatomy and elements of modern medicine (International Labour Organization, 2012).

Table 2 shows the levels of higher education, defined by legislation. Taking into account the fact that LCO and ISCO 08 has set the task for CAM Professionals to conduct research into traditional and complementary medicine and treatments and disseminate the findings such as through scientific papers and reports, the education programmes of VQF Level 5 and LQF/EQF Level 7 can be seen as the most appropriate. However, this hypothesis is contradictory because of the above mentioned fact that in Latvia the legislator requires a 4-year higher education only from doctors, ergo-therapists, pharmacists, physiotherapists, veterinarians and dentists, and these professions are included in separate profession groups that are not related to CAM specialists. CAM specialists are not included in the groups of professions which are in need for the higher qualification. CAM specialists also do not belong to the group for which the education and vocational qualification requirements are specified as for professions in the field of healthcare (Saeima, 2001). At the same time, according to ISCO 08 and LCO, the CAM specialists are health care specialists.

Summarizing the qualification requirements of ISCO 08 and LCO, it can be concluded that in the formal education system, VQF Level 4 and LQF/EQF Level 5 education programs can be effectively and lawfully applied to CAM Professionals. Although these programs do not imply elaboration of a scientific paper, at the end of the courses students prepare a qualification paper employing the principles and methods of the scientific work.

In situations when formal education does not offer CAM programmes, in order to comply with the formal requirements of LCO, it is possible to use the following qualification development approach for CAM professionals:

- Educational programmes for acquiring CAM competence are developed in the non-formal education sector;
- The opportunity to acquire CAM Professional's qualification while studying in a non-formal education programme is granted to persons who have at least VQF Level 4 and/or Level 5 qualification from any other formal education programme.

5. Focus group results

The experts involved in the study unanimously (100%) acknowledge that it is not possible to develop CAM qualifications, i.e. obtain education in any formal higher and secondary vocational education systems in Latvia. There are no higher education programmes available in Latvia for obtaining CAM Professional qualification. CAM Associate Professional qualification development programmes are also not implemented on secondary vocational education level. The Latvia University Centre of Complementary Medicine offers a non-formal education programme for Ayurveda practitioners (Latvijas universitāte, 2017). However, according to the experts, this course is intended only for qualified conventional medicine specialists, and the course has taken place only twice since the foundation of this Institute in 2015. Experts also conclude that the programmes and courses offered by non-governmental and private organizations do not meet the legitimate qualification content of either CAM Professionals or CAM Associate Professionals. The programs and courses offered by non-governmental and private organizations, considered to be CAM-related, are most



often associated with already in the article mentioned ISCO 08 statement about qualifications that are not part of the CAM sector.

Experts also point out that not only among the general public, but also among highly educated scholars, educators and practitioners, the understanding of CAM is inaccurate. CAM is considered to be a pseudoscience, denied, and its representatives despised. Even persons who legally have obtained the expert status in science often do not understand the terminological differences between conventional medicine and CAM medicine, in presentations and publications calling it as traditional medicine, etc.

Experts have acknowledge the model, developed as the result of this study, as scientifically sound (systemic and logical), which, on the one hand, allows integration of CAM programmes into the formal education system, on the other hand provides the possibility for integrating the qualification content in non-formal education programs in accordance with EQF and VQF's basic requirements. Experts note that the well-known principle of private law, recognized in Latvian jurisprudence, is present: all that is not forbidden is allowed. Only in the public legal relationship the principle of public law is applicable: allowed is only that what is permitted by law. The professional and business activities of CAM Professionals and CAM Associated Professionals are based in private relationships. In the sphere of CAM, patients' rights are protected by the Consumer Rights Protection Act, except when CAM professionals act as medical professionals by combining CAM services with conventional medical services.

Given the fact that CAM is a scientifically, academically and practically recognized healthcare provider in the world, and that CAM Professionals and CAM Associate Professionals are not only legally recognized professions but even represent the profession groups, which are included in LCO, at the same time recognizing that in the formal education sector these professionals do not have the opportunity to develop their qualifications, experts recommend to use the world's examples of good practice, and to organize educational programs for CAM Professionals and CAM Associate Professionals in the non-formal education sector as it is in some other countries, such as the United States, the United Kingdom, Australia, Canada, etc.

Taking into account the fact that healthcare and medicine in Latvia is a highly sensitive field of professional activity, experts recommend that before developing programs, it is necessary to explore the content and formalities of the formal education sector by revealing the general content of knowledge, skills and competences that would be needed for CAM Professionals and CAM Associate Professionals if they obtained education in the formal education sector. By clarifying the content of the knowledge, skills and competences formally established by the national legislator, it can be integrated into programmes and courses organized and offered to CAM Professionals and CAM Associate Professionals by non-formal education sector.

Conclusions and Suggestions

In the world, including in the European Union, CAM is a well-developed and potentially perspective sector of national economy. Thus, many higher education institutions worldwide, also in EU, have devoted different research and educational programmes to CAM. In Latvia CAM is not developed as a sector of national economy. Research and education programs dedicated to CAM are not being developed and implemented in Latvian higher education establishments. Good practice of the world demonstrates the potential of developing a CAM qualification as part of lifelong learning, including non-formal education programs and courses.

The CAM analysis and the model developed and presented by the authors of this article can help not only Latvia, but also other countries to create a scientifically-based qualification system for the competence development of CAM professionals.

The authors recommend:

1. To establish an association called "Latvian Professional CAM Association" for the purpose of promoting the development of CAM in Latvia;
2. As part of Association, involving experts who are highly competent in formation of CAM qualification and CAM content issues, to develop educational programs for CAM Professionals and CAM Associated Professionals for their qualification and competence development.



References

- Central Statistical Bureau. (2017). Population and Social Processes. Self-perceived health status. Retrieved from http://data.csb.gov.lv/pxweb/en/Sociala/Sociala__ikgad__vesel_pasnovert/?tablelist=true&rxid=cdbc978c-22b0-416a-aacc-aa650d3e2ce0.
- Cresswell, T.W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Thousand Oaks: Sage Publications. 297.
- Grand View Research, Inc. (2017). Market Research Report ID: GVR-1-68038-725-4. Alternative And Complementary Medicine Market Analysis By Intervention (Botanicals, Acupuncture, Mind, Body, and Yoga, Magnetic Intervention), By Distribution Method, And Segment Forecasts, 2013 – 2025. USA: Grand View Research, Inc. 120.
- International Labour Organization (2012). International Standard Classification Of Occupations. Volume 1. Structure, group definitions and correspondence tables. . Geneva: International Labour Organization. 420.
- Latvijas universitāte. (2017). Komplementārās medicīnas centrs (Centre of complimentary medicine). Available: <https://www.lu.lv/par/strukt/studiju-centri/kmc/>.
- Latvijas Zinātņu akadēmija. (2010). Terminoloģijas komisija. Lēmums Nr.84. Par termina *kompetence* izpratni un lietošanu latviešu valodā (Commission of terminology. Decision Nr.84. About understanding and use of term *competence* in Latvian language). Rīga: *Latvijas Vēstnesis*, 9 (4201).
- Ministru kabinets. (1997) Noteikumi Nr.74. Noteikumi par augstāko profesionālo kvalifikāciju (Regulation Nr 74. Regulations on higher professional qualification). Rīga: *Latvijas Vēstnesis*, 54/55 (769/770).
- Ministru kabinets. (2016) Noteikumi Nr. 633. Profesijas standarta, profesionālās kvalifikācijas prasību (ja profesijai neapstiprina profesijas standartu) un nozares kvalifikāciju struktūras izstrādes kārtība (Regulation Nr 633. The procedure for the development of a professional standard, professional qualification requirements (if the profession is not approved by the professional standard), and qualification structure in the field. Rīga: *Latvijas Vēstnesis*, 189 (5761).
- Palys, T., Achison, C. (2007). *Research Decisions: Quantitative and Qualitative Perspectives*. Nelson College Indigenous; 4 edition. 465
- Paterson, B.L., Thorne, S.E., Canam, C., Jillings, C. (2000.). *Meta-study of qualitative health research: A practical guide to meta-analysis and meta-synthesis*. Thousand Oaks, California: Sage. 2001. 162.
- Saeima. (1998). Likums. Izglītības likums (Law. Law of Education). Rīga: *Latvijas Vēstnesis*, 127 (5445).
- Saeima. (2001). Likums. Par reglamentētajām profesijām un profesionālās kvalifikācijas atzīšanu (Law. Regarding regulated professions and recognition of professional qualifications). Rīga: *Latvijas Vēstnesis*, 105 (2492), 06.07.2001.
- Saeima. (2015.1). Likums. Grozījumi Profesionālās izglītības likumā (Law. Amendments to the Law of Vocational education). Rīga: *Latvijas Vēstnesis*, 91 (5409).
- Saeima. (2015.2). Likums. Grozījumi Izglītības likumā (Law. Amendments to the Law of Education). Rīga: *Latvijas Vēstnesis*, 127 (5445).
- Silverman, D. (2000). *Doing Qualitative Research: A Practical Handbook*. Thousand Oaks: Sage Publications. 331.
- The European Parliament and the Council of the European Union. (2008). Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (Text with EEA relevance). Retrieved from <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32008H0506%2801%29>.
- World Health Organization. (2014). WHO traditional medicine strategy: 2014-2023. WHO Library Cataloguing-in-Publication Data. Hong Kong SAR, China. Geneva: WHO. 76.



Digital competence and blended learning

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Abstract

Development of competences nowadays is very important issue. There are discussions about development of competencies using different methods, competencies-based curriculum and so on. Digital competence is one of the 8 key competencies for lifelong learning. It is described by using five areas – information and data literacy, communication and collaboration, digital content creation, safety and problem solving (Vuorikari, Punie, Carretero Gomez, Van den Brande, 2016). The article shows literature based research of possibility to develop digital competence by using blended learning per se, because blended learning is described as learning process where integration of face-to-face learning and e-learning happens. The article's main focus is on development of digital competence.

Many authors talk about “net-generation” who spends their days with technology but does it mean that they are digitally competent people.

Keywords: Digital competence, Blended-learning, Higher education, E-learning

Introduction

Development of competencies becomes more and more popular topic in nowadays. This topic is interesting in all range of educational levels – from primary school to higher education. Development of different competencies is significant issue for life-long learning.

European Commission has defined eight key competencies – communicating in a mother tongue, communicating in a foreign language, mathematical, scientific and technological competence, digital competence, learning to learn, social and civic competences, sense of initiative and entrepreneurship, cultural awareness and expression. Main issue of this article is digital competence, what defined as confident and critical usage of information and communications technology for work, leisure and communication.

Another significant issue is how to manage development of digital competence. One of the possibilities is blended learning. Blended learning is defined as planned, pedagogically meaningful integration of face-to-face and e-learning (Picciano, 2009). Blended learning not only enriches learning process but it gives possibilities for students for more active participation in learning process (Garrison and Vaughan, 2007). Blended learning gives new learning experience for students as well as new teaching experience for teachers (Powell, Watson, Staley, et al 2015). Meaningful integration of e-learning tools gives opportunity for students for personal development, as well as to develop such cognitive skills as critical thinking and conversation leading (Garrison and Vaughan, 2008; Somekh, 2007). Blended learning experience enriches learners' learning as well as teachers' teaching praxis.

One of the reasons to research only digital competence is because of the technological side of blended learning. The poor digital competence can lead to unsuccessful blended learning experience as well as impact outcomes of the learning. To use technological tools effectively learners have to know them and have to know how they work (Hubackova & Semradova, 2016; Dohn, 2009). It depends on users' skills and historical body (Scollon, 2004) - it means that users use technological tools as they used to use. So, as more advanced user learner is as easier it is to use it for learning (in this case, for blended learning), because learners can pay they attention more on the content not on the technology itself (Ozsariyildiz, & Beheshti, 2007).



Eurostat data (Eurostat, 2017) shows that average percent of EU (28 countries) individuals aged 16 to 74, who thinks that they have high level of computer skills, are 29 % in 2014 (compare to 23% in 2007). That can mean that one third of individuals in EU can fully participate in blended learning's e-learning part, if we talk about digital competence. However, only 15 % thinks that they have very low computer skills (1 to 2 out of 6 computer related activities). Computer related activities offered to respondent were the following - copied/moved a file/folder, copy/cut/paste to move information on the screen, used basic arithmetic formulae, compressed/zipped a file, connecting and installing new devices or written a computer program. There is also statistics on individuals internet related skills - use a search engine to find information; send an e-mail with attached files; post messages to chatrooms, newsgroups or any online discussion forum; use the internet to make telephone calls; use peer-to-peer file sharing for exchanging movies, music etc.; create a web page. Eurostat data (Eurostat, 2017) shows that in the year 2013 30% of individuals aged from 16 – 74 evaluate themselves as low skilled (1 to 2 out of 6 internet related activities) and only 12% evaluate themselves as high skilled.

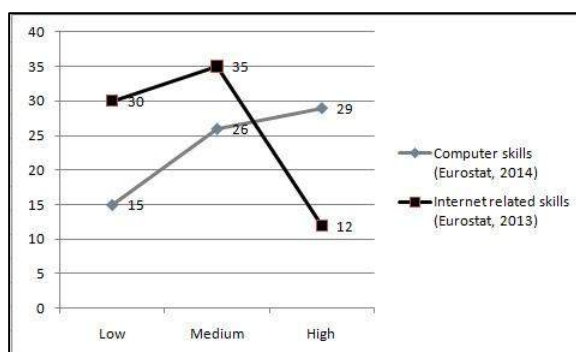


Diagram 1. Eurostat data on computer and internet related skills.

So there is possibility for 71 % to develop their computer skills and 88% of individuals can have possibility to increase their internet related skills.

The European Digital Competence Framework for Citizens (Vuorikari, Punie, Carretero Gomez, Van den Brande, 2016) sets five digital competence areas – information and data literacy, communication and collaboration, digital content creation, safety and problem solving. All these areas can be used and developed in blended learning.

The aim of the article is to find out do the scientific literature speaks about development of digital competence by using blended learning and does blended learning can help develop it.

Method

This is literature based research. Articles are read by using The European Digital Competence Framework set by Vuorikari, R., Punie, Y., Carretero Gomez S., Van den Brande, G. (2016). Articles are not categorized based on educational level or subject. Main issue is blended learning and development of skills.

Findings

The European Digital Competence Framework gives five digital competence areas with several dimensions for each of it. Literature on blended learning speaks about support of digital competence (Toia, 2016; Hubackova, & Semradova,



2016; Bates, Bates, Sangra, 2011; Díez, 2008), development of computer skills (Pratt, 2014), increase of information searching competence and identification of main ideas (Ozdamli & Tavukcu, 2016).

Information and data literacy has three dimensions – (1) browsing, searching and filtering data, information and digital content; (2) evaluating data, information and digital content and (3) managing data, information and digital content. All these dimensions are very important in the blended learning because students have to search for information and digital content to be successful. Blended learning can support development of this kind of skills (Soler, Soler, & Araya, 2017; Ozdamli & Tavukcu, 2016; Buran & Evseeva, 2015; Pratt, 2014). From one side – learners do not have to browse, search and filter data, information and digital content because learning material in blended learning's e-learning part is made to be ready to explore. From other side – there can be assignments that force learners to find information by themselves and there is clear need for previously mention skills. There are not much scientific researches on this issue in blended learning context.

Eurostat data shows that in year 2013 94% of youth aged from 16 – 29 (EU 28) have used search engine to find information. Of course there is different situation in some countries, for example, Turkey had 72 % but Iceland 100%. But average youth in European Union is very skilled in searching. From other side, there is situation that students make searching not effectively – it is hard for them to use keywords or think in bigger picture.

The second area is communication and collaboration with six dimensions – (1) interacting through digital technologies; (2) sharing through digital technologies; (3) engaging in citizenship through digital technologies; (4) collaborating through digital technologies; (5) netiquette; (6) managing digital identity. Interaction, collaboration and sharing are very important skills for successful blended learning experience. These skills also can be developed by blended learning (Soler, Soler, & Araya, 2017; Nazarenko, 2015; Okaz, 2015). Interaction and collaboration through digital technology are very important skills for blended learning. Many students have these skills (Soler, Soler, & Araya, 2017; Okaz, 2015) because of wide usage of web 2.0 tools in their everyday life (discussion forums, wikis, blogs, social networking). But there can be problems to use these skills in learning situations. Some researchers talk about development of online communication but as social competence (Prohorets & Plekhanova, 2015). Eurostat data shows that youth aged from 16 – 29 in European Union (28 countries) have posted messages to chat rooms, newsgroups or an online discussion forum in 72 %. Also there situation differs between countries from 37% in Turkey to 94% in Lithuania. It means that collaboration and interaction through digital technologies in blended learning can differ because of different digital technology usage cultures. 32% of youth (aged 16 – 29) used peer-to-peer file sharing for exchanging movies, music ect. (Eurostat, 2013) So sharing through digital technologies need to be developed. In the same time percentage differs for countries from 13% in Ireland to 74% in Lithuania.

The third area is digital content creation – (1) developing digital content; (2) integrating and re-elaborating digital content; (3) copyright and licenses; (4) programming. Digital content development and integration are very important issue in blended learning. Some researchers admit that there is problem of content creation in blended learning (Powell, et al, 2015; Clement, Vandeput, & Osaer, 2016). Teachers often use the same learning content as they used to for face-to-face learning. Content is not prepared specifically for blended learning. This may cause the issue that learners are not satisfied. Eurostat data shows that in 2013 only 18% of EU 28 youth have created a Web page (from 1% in Cyprus to 48% in Iceland). There is much work to develop digital content creation skills.

There are always discussion from teachers on copyright and licenses. Teachers want to be sure that their work is secured with copyrights; however, teachers and students take into consideration other author's rights (Soler, Soler, & Araya, 2017).



19% of youth aged from 16 – 29 in 2014 (EU 28 countries), according to Eurostat data, have written a computer program using a specialized programming language. This is very little number. From other side blended learning as per se probably cannot develop this kind of dimension (except blended learning course on programming) because learners do not need programming skills to participate in learning situations.

The fourth area is safety with dimensions like (1) protecting devices; (2) protecting personal data and privacy; (3) protecting health and well-being; (4) protecting the environment. All these dimensions can be developed in blended learning settings. Institutions, who offer blended learning, give advice to students about safety issues. Eurostat data in 2011 shows that 68% of youth judge their skills as sufficient to protect their private computer from virus or other computer infection. Safety issue is very important not only for blended learning but for student management systems as well so institutions put big effort on this issue. Sometimes students with lower digital skills need some safety advice when using public computers. Time by time students not log out of learning management system but just close tab. This can lead for problem that next user can get some information or even log in in other account. Eurostat data in 2011 shows that 69% of youth aged 16 – 29 in EU 28 countries judge their ability to be sufficient to protect their personal data. Unfortunately, Eurostat does not have data for later years. But this information on 2011 shows that young learners are able to protect their personal data and privacy.

About health protection in blended learning settings there is very little information in literature. A. Buran and A. Evseeva (2015) in their article mention problems of eyesight as a barrier for online learning as well as time spent on learning (Soler, Soler, & Araya, 2017; Buran & Evseeva, 2015) what impacts learners' and teachers' well being.

The last one area is problem solving. It has such dimensions as (1) solving technical problems; (2) identifying needs and technological responses; (3) creatively using digital technologies; (4) identifying digital competence gaps. Institution who offers blended learning most of the time has support system for students' and teachers' technical problems. Creative use of digital technologies is very important for teachers but as mention previously, teachers need training on technologies. There is no possibility to use technology creatively if you do not know how it works, it functions. Also students and teachers identify their digital gaps because some research mentioned in this article before shows that students and teachers admit that they need training.

Conclusion

There are two kinds of articles – one who pay attention on teachers/ staff and one who pay attention on learners. There is very little research made related to digital competency.

Some research shows that teachers, who work in blended learning, need training on use of technological tools (Kofar, 2016; Clement, Vandeput, L & Osaer, 2016; Georgsen & Løvstad, 2014). There are researches that illustrate teachers' or learners' technological skills before blended learning experience (Özel, Arıkan, 2015). But there are not articles what exactly speaks about development of digital competences. It is often just mentioned only in one sentence.

Many researches evaluate students' and teachers' technology proficiency but it seems that there is no research on do blended learning as per se develop digital competency, if learners and teachers uses it time after time. We can think that it is so because, for example, if learner uses discussion forum for learning purposes, then he/she learns netiquette, collaboration, data managing and so on. As well as teachers do so. Their skills develop as more as they use technology.

Research speaks about teachers' and learners' skills on collaboration, communication through digital technologies but there is hard to find research made on health issues because of blended learning or e-learning. As well as there is no research on do blended learning impacts learners' or teachers' skills on technical problem solving or protecting devices and environment.



There is need in future to make a research on these issues to be sure that blended learning has impact not only on teachers' and learners' social skills, language competencies ect., but also on their digital competency.

References

- Bates, A. W., Bates, T., & Sangra, A. (2011). Managing technology in higher education: Strategies for transforming teaching and learning. John Wiley & Sons.
- Buran, A., & Evseeva, A. (2015). Prospects of blended learning implementation at technical university. *Procedia-Social and Behavioral Sciences*, 206, 177-182.
- Carretero, S.; Vuorikari, R. and Punie, Y. (2017). DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use, EUR 28558 EN, doi:10.2760/38842
- Clement, M., Vandeput, L., & Osaer, T. (2016). Blended learning design: a shared experience. *Procedia-Social and Behavioral Sciences*, 228, 582-586.
- Diez, O. (2008). Training teachers for e-learning, beyond ICT skills towards lifelong learning requirements: A case study. Garç a-Pe alvo, F. *Advances in E-Learning: Experiences and Methodologies*.
- Dohn, N. B. (2009). Web 2.0: Inherent tensions and evident challenges for education. *International journal of computer-supported collaborative learning*, 4(3), 343-363.
- Eurostat <http://ec.europa.eu/eurostat/>
- Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. John Wiley & Sons.
- Hubackova, S., & Semradova, I. (2016). Evaluation of Blended Learning. *Procedia-Social and Behavioral Sciences*, 217, 551-557.
- Nazarenko, A. L. (2015). Blended learning vs traditional learning: What works?(a case study research). *Procedia-Social and Behavioral Sciences*, 200, 77-82.
- Okaz, A. A. (2015). Integrating blended learning in higher education. *Procedia-Social and Behavioral Sciences*, 186, 600-603.
- Ozdamli, F., & Tavukcu, T. (2016). The Effect of Digital Scenario Supported Learning on the Success of Scientific Ethic and Research and Strategies of Information Inquiry (EDISSUSERESII). *Anthropologist*, 25(3), 278-287.
-  zel, A. G., & Arikan, A. (2015). The use of the internet and web 2.0 tools among EFL instructors. *Mediterranean Journal of Humanities*, 1, 313-325.
- Ozsariyildiz, S., & Beheshti, R. (2007). Effects of teaching environments and digital media: the case of a parametric design systems course. *Bringing ITC Knowledge to Work*, 763-768.
- Picciano, A. (2009). Blending with purpose: The multimodal model. *Journal of the Research Center for Educational Technology*, 5(1), 4-14.
- Pratt, D. D. (2014). *Comm. Skills Online three years down the line: reflecting on design principles in blended learning*.
- Prohorets, E., & Plekhanova, M. (2015). Interaction Intensity Levels in Blended Learning Environment. *Procedia-Social and Behavioral Sciences*, 174, 3818-3823.
- Scollon, S. W. (2004). *Nexus analysis: Discourse and the emerging internet*. Routledge.
- Soler, R., Soler, J. R., & Araya, I. (2017). Diagnosis of Educational Needs for the Implementation of Blended Courses Based on the Blended Learning Model. The Case of the Social Sciences Faculty of the National University of Costa Rica. *Procedia-Social and Behavioral Sciences*, 237, 1316-1322.
- Somekh, B. (2007). *Pedagogy and learning with ICT: Researching the art of innovation*. Routledge.
- Toia, M. (2016). An in-depth analysis of the pebble learning approach and contents. *Innovative Learning Models for Prisoners*, 4, 77.



Vuorikari, R., Punie, Y., Carretero Gomez S., Van den Brande, G. (2016). DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: The Conceptual Reference Model. Luxembourg Publication Office of the European Union. EUR 27948 EN doi:10.2791/11517



Recommended formatting parameters for e-study materials

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Abstract

Technology is all around us. The use of modern technology is increasing in the process of acquiring knowledge as it provides greater opportunities and e-study is becoming as important as traditional education or even more significant.

During literature research, it has been found that there is no unambiguity about all formatting parameters. A survey was made to research users' habits and preferences concerning different text formatting parameters for e-study materials. Application and browser research about developers' imposed default formatting settings of font type, size and colours in the most popular applications and browsers was done.

There are recommendations presented for a user-oriented e-study material design - style, size, spacing, position, colour - to reach the user information must be presented in a comprehensible and easy to remember way. These recommendations have been developed for e-studying materials for one target group - young adults (16-38 y.o.) - without reading difficulties and any significant vision problems.

Keywords: e-study, e-study materials, formatting parameters, technologies, visual perception

Introduction

Nobody is surprised at the use of technologies and their rapid development and growth nowadays. There are a variety of purposes – work, education, entertainment, personal use, etc. – of different technology screen use for all - even young and elderly people. And such usability is only rising. It is not surprising that many of them serve us in delivering visual and textual information. Increasingly, screens are used for learning - in extra-curricular education and self-education and in the integration of technology in everyday standardized full-time education and there is a widespread use of e-learning and e-study.

Research of screen reading has been going for a long time. [1] Differences in reading from the screen and paper have been identified. Reading digital texts and materials from a computer screen is much more difficult than reading a printed text. [2] On the computer screen the text is read 25% slower than from paper. [3] Therefore text formatting parameters which improve reading on the screen are essential. Studies indicate that the text presentation of the parameters to be used are those that are easy and comfortable to be received and natural for people's eyes and human mental development level. [2] But still there are lots of incomprehensible things.

There have been viewed and analysed more than 100 different literature sources: the recommendations of web development and statistics on the most important parameters which are used in the e-environment, and recommendations and guidelines for e-study courses and e-learning materials, as well as various studies in which researchers have tried to find out the best solution. [4]

Analysis of suggested formatting parameters: font, font size for body text and heading, line spacing, and colour were made. During literature research, it has been revealed that many recommendations of the screen texts



continue to rely on the printed material developed parameters. It was found that there is no unambiguity about all formatting parameters.

Sans-serif fonts are mostly mentioned in references as recommended for use. Most mentioned sans-serif fonts are Arial, Verdana, Helvetica, Trebuchet MS, and Calibri. The most commonly referred serif fonts are Georgia and Times New Roman. For body text in different sources it is advised to use a font size of 8 pt and 28pt. However, the most common - from 12pt to 19pt. For Headlines, of course, it is recommended to use larger font size, but about this there is much less information. [5] In the literature, letter size from 12pt to 32pt can be found. In the literature line spacing is displayed in units and px, and mm, and the percentage of the font size. In units, it varies from 1.15 to 2, and most commonly it is recommended to use from 1.5 to 1.6. As the percentage varies from 90 to 160%, the most commonly recommended to use is at least 120% line spacing. [4]

Colour choice is more complicated as there are in need to consider more aspects: not only best solution for easy perception and visual processes, but also for helping the learning process and facilitating memorization as well as psychological colour perception aspects and situations of use.

Most often it is recommended to use a dark text on a light background. [6] A black text on a white background is always a good solution, [7] it is visible and legible, [8] A green text on a white background is being considered for use because the human eye has a natural tendency to green colour, as well as the rays are converged on the retina of the eye without the lens adjustment and adaptation that might induce eye fatigue. [9] A grey background increases the saturation of any colour in its foreground. [10] A black text on a grey background is also advisable. [11] Also, it is recommended to use other colours for text and background: there is found a wide range of suggestions, but not all is good to use.

To choose a good colour combination for tables and different chart types is even harder. There are in need to consider different aspects of colour perception [12] but also colour characteristics and possibility to combine from artistic basic principles of colour [13] and both psychological [12] and artistic point of view. On-screen colour perception also is affected by screen technical parameters.

Mostly, there are found suggestions from only one aspect or point of view. For good e-materials there are need to find best solutions based on all aspects that can affect formatting parameters and colour perception.

Method

Survey. Research on users' habits and choices preferences was done by a survey. For this purpose, two e-surveys were made. They are closed-ended questions surveys. For this research, there was selected an e-questionnaire because it was appropriate not only because it can be quickly carried out, but also because the third part of the questionnaire could be viewed and accurate choices could be made. It had to be done directly on the computer screen. E-survey in this case had a positive effect on the results, as the respondents could act whenever they wanted and in familiar surroundings – at their own screen without additional conditions.

Survey No.1 consisted of several parts. During the first part, there was obtained general information about the respondents - gender, age, education level and occupation. The second part consisted of questions about respondents' technology usage habits and knowledge of e-materials. Third, the main part consisted of questions about formatting options of e-materials where respondents had to provide answers of their own choice. The fourth and the final part was to obtain additional information about respondents' eye health and reading



difficulties, if they had any, to be accurately interpreted the responses received. It was a closed-ended questions survey.

Survey No.2 consisted of two parts. During the first part, there was obtained general information about the respondents - gender, age, education level and occupation. The second part consisted of questions about tablets and graphs colour formatting options of e-materials where respondents had to provide answers of their own choice.

Respondents. Survey No.1 involved 50 respondents aged 16 to 38 (Mean = 24.8, SD = 4.6) years old. From those 6 were men and 44 - women. 24 participants had vision correction. Survey No.2 involved 50 respondents aged 16 to 38 (Mean = 25.4, SD = 1.5) years old. From those 4 were men and 16 - women. 12 participants had vision correction.

In both surveys respondents were young people with different levels of education and different current occupation. Respondents were without significant visual defects and without reading difficulties. They joined the survey on a voluntary basis.

Findings

Samples for survey questions were made based on information from previous literature research. Text samples can be seen on web-page <http://www.phd-km.lv/fonti.php> and colour combination samples - <http://phd-km.lv/aptauja2/>.

Survey No.1. Font. There was presented a text sample by 14pt size. Respondents were shown a text in 5 different fonts - Times New Roman (TNR), Arial, Verdana, Georgie, Calibri. They had to take a look at all 5 examples from which respondents had to choose 3 fonts that seemed the most acceptable to use for on-screen text.

In general, Top3 fonts are Verdana (n = 35) Arial (n = 34), Georgia (n = 33). There is near also the TNR (n = 28) that had the greatest number of choices as the first choice, and it coincided with the Arial (n = 15). (Fig. 1)

Font size. Each participant had to see the text where each of the previously used 5 fonts were displayed in 4 sizes - 10pt, 12pt, 14pt un 16pt. Respondents had to choose one size for each font that seemed the most acceptable to use for on-screen text.

In general, most respondents chose 14pt size (n = 87) and 12pt size (n = 81), but it was different for each of the fonts. TNR - 14pt (n = 20) and Arial - 12pt (n = 19), Georgia - 14pt (n = 18), Verdana - 12pt (n = 20) and Calibri - 14pt (n = 20) (Fig. 2)

Line spacing. Each participant had to see the text where each of the previously used 5 fonts were displayed in 14pt size, but line spacing was changed - 1.0, 1.15, 1.5 and 2.0. Respondents had to choose one line spacing size for each font that seemed the most acceptable to use for on-screen text.

In general, most preferred were 1.15 (n = 126) and 1.5 (n = 103) The size of the space between the lines, but the choice was different for each of the fonts. TNR - 1.15 (n = 31) Arial - 1.15 (n = 26), Georgia - 1.5 (n = 28), Verdana - 1.5 (n = 20) and Calibri - 1.15 (n = 29). (Fig. 3)



Colour. Each participant had to see the text written with TNR 14pt font size, each of the options changed text font colour and background colour combination. It was created in 7 different versions: black text on a white background, white - on black, grey - on white, blue on white, green - on white, green – on blue and yellow - on a red background. Respondents had to choose 3 colour combination that seemed the most acceptable to use for on-screen text.

In general, Top3 colour combination is black and white (n = 40) grey to white and green (n = 32) and white (n = 21). 9 respondents decided that there are only two options, which should be applied when displaying text on the screen. (Fig. 4)

There were too few male respondents to compare data and to draw statistically significant conclusions by sex impact on parameter choice but it is possible to raise some hypotheses:

1. The least popular font for males were Times New Roman, whereas for females it was the 3rd preferred font.
2. The second preferred font size after 14pt for males is 12pt but for females – 16pt.
3. As the third-choice males prefer blue letters on white background, whereas females prefer green letters on white background.

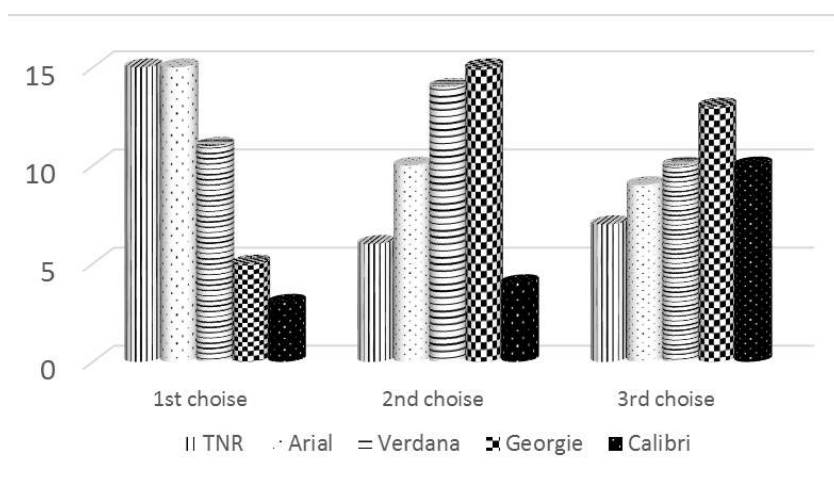


Fig.1 Respondents' font choice

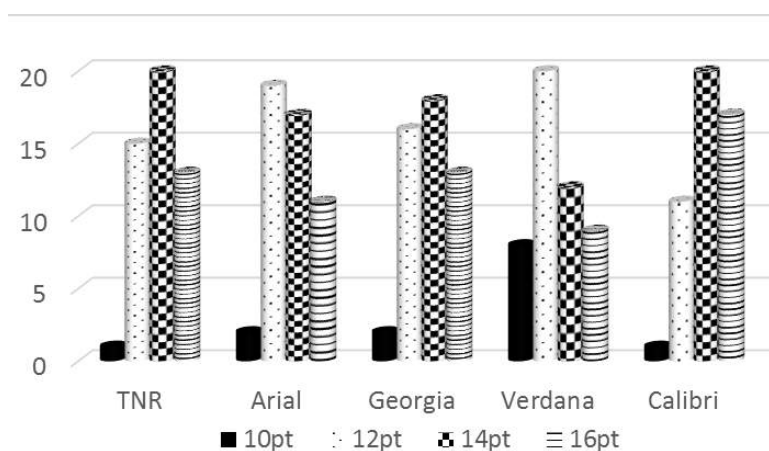


Fig. 2 Respondents' font size choice

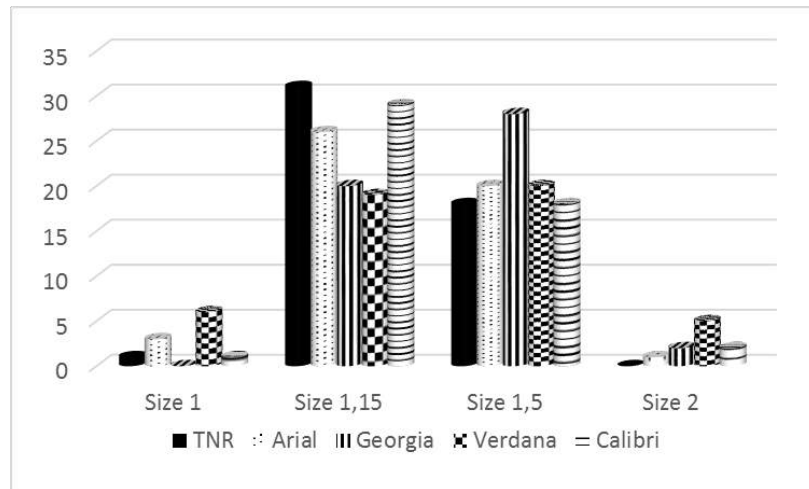


Fig. 3 Respondents' line spacing choice

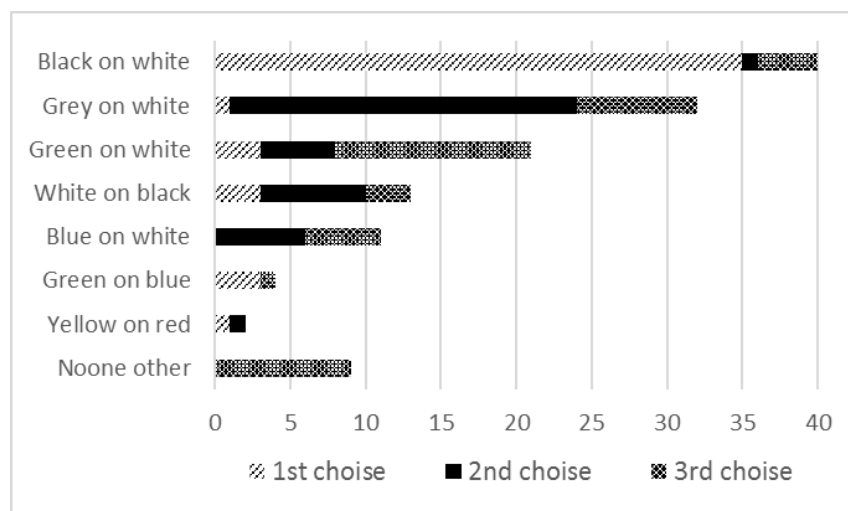


Fig. 4 Respondents' colour choice

Applications' and browsers' research. The research was made about developers' imposed default formatting settings of font type and size in the most popular applications and browsers. The most popular applications were found: Microsoft Office, OpenOffice.org and LibreOffice products, and open access web editors available online: Google, Zoho, Quip products. The most interesting products were word processors, spreadsheets, and presentation programs. After that analysis based on the elaborated recommendations was made. A similar analysis was performed in the most popular browsers - Google Chrome, Mozilla, Microsoft Edge, Opera, and also Safari.

There is no single standard to be applied by developers. There can be observed a use of different fonts and sizes for both body text and headings in applications and browsers. It is shown in table 1 un table 2.



Table 1 Applications default formatting settings

WORD PROCESSOR					PRESENTATIONS				
APPLICATIONS	Body Text		Heading		APPLICATIONS	Body Text		Heading	
Microsoft Office	Calibri 11pt		TNR 24pt		Microsoft Office	Calibri 28pt		Calibri 60pt	Light
LibreOffice	Liberation 12pt	Serif	Liberation 18,2pt	Sans	LibreOffice	Liberation 32pt	Sans	Liberation 44pt	Sans
OpenOffice.org	Calibri 12pt		Arial 16,1pt		OpenOffice.org	Arial 32		Arial 44pt	
Web editors					Web editors				
Google	Arial 11pt		Arial 20pt		Google	Arial 18pt		Arial 52pt	
Zoho	Arial 11pt		Arial Black 18pt		Zoho	Roboto 18pt	Normal	Roboto 51pt	Thin
Quip	Calibri 12pt		Calibri 24pt						
SPREADSHEETS									
Applications	Body Text								
Microsoft Office	Calibri 11pt								
LibreOffice	Liberation 10pt	Sans							
OpenOffice.org	Arial 10pt								
Web editors									
Google	Arial 10pt								
Zoho	Arial 10								

Table 2 Browsers default formatting settings

DEFAULT FORMATTING SETTINGS			
BROWSERS	Standard font	Serif font	Sans-serif font
Google Chrome	TNR 12pt	TNR 12pt	Arial 12pt
Mozilla	TNR 16pt	TNR 16pt	Arial 16pt
Microsoft Edge	Segoe UI 12pt		
Opera	TNR 12pt	TNR 12pt	Arial 12pt
Safari	TNR 16pt		

Survey No.2. Colour combinations. There were presented 10 different samples of colour combinations that are in PowerPoint default formatting suggestions: 1) Office, 2) Organic, 3) Gallery, 4) Integral, 5) ION, 6) ION Boardroom, 7) Retrospect, 8) Slice, 9) Wisp un 10) Facet – original, without colour changes. Respondents need to look on them and ranked they preference choice from 1 to 10 (1 – colour combination like the most and 10 – colour combination likes the least).

Tables. There were presented 10 different samples of table colour combinations. Respondents rank highest 1st, 2nd and 4th sample. (Fig.5.1)

Column charts. There were presented 10 different samples of column charts colour combinations. Respondents rank highest 1st, 2nd and 7th sample. (Fig.5.2)



Circle diagrams. There were presented 10 different samples of circle diagrams colour combinations. Respondents rank highest 1st, 2nd and 9th sample. (Fig.5.3)

Fig.5 (5.1., 5.2., 5.3.) Respondents choice rank of tables colour combination

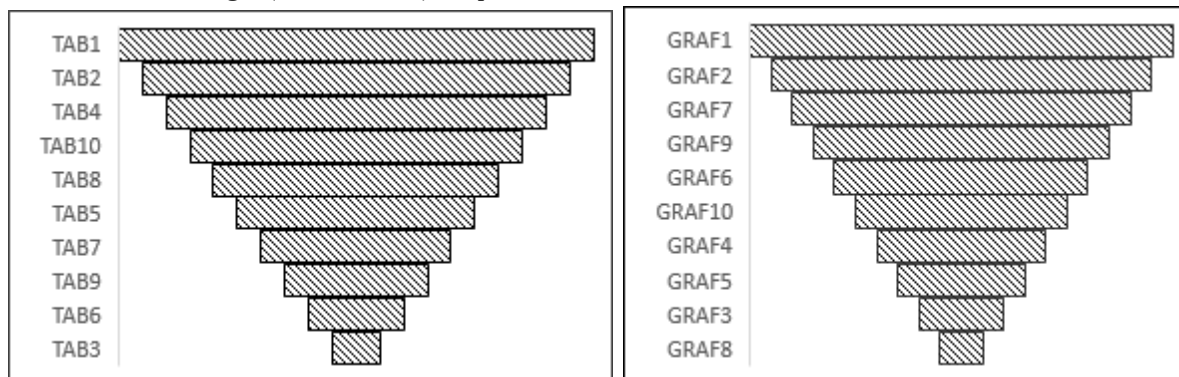


Fig. 5.1 tables

Fig. 5.2 column chart

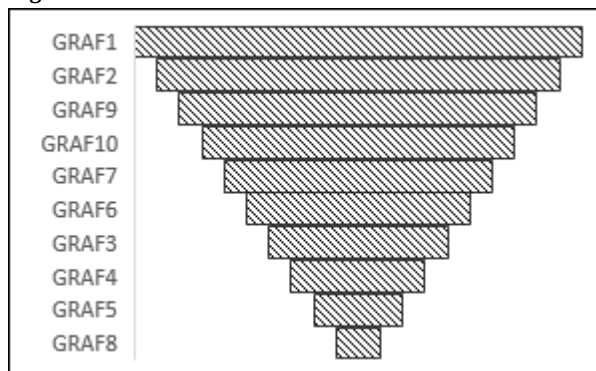


Fig. 5.3 circle diagrams

It is found what more preferred combinations are 1) Office and 2) Organic. Respondents found them good for use in all three tested positions: tables and two diagram types. The least preferred are 3) Gallery and 8) Slice.

These are not the only possible combinations but they are suggested for use in one of the most popular application which are in use for e-materials. It is important to know which of them are more preferred and good for use. Also, based on this finding, we can start work on possible changes of colour combinations to find the best solution on screen.

Results, Conclusions, and Recommendations

The most popular choices for different formatting parameters have been found: font, font size, line spacing, text and background colour, and table, charts colour combinations for screen use.

It has been found that respondents' choice does not match with the most popular recommendations from literature. Also, most respondents chose a larger font size, even young people, by survey No.1. This shows that for e-materials there cannot be used standard printed material recommendations directly.

There were recommendations for guidelines prototype developed based on literature study of the recommended parameters of different sources and on survey data collected, and on results of previous studies and vision



science-based research. These recommendations have been developed for e-learning materials and studying for one target group - young people - without reading difficulties and without any significant vision problems. Recommendations are shown in table 3.

Table 3. Formatting recommendations

FORMATTING PARAMETERS	RECOMMENDATIONS	FORMATTING PARAMETERS	RECOMMENDATIONS
Font	Body text: Arial, Verdana, Georgia un TNR Heading: Can use also other fonts	Line spacing	1,15 or 1,5
Size	Body text – min. 14pt Headings – min. 18pt	Colour	Black text on white background Grey text on white background Green text on white background

There are found users preferred existing combinations in Powerpoint by survey No.2. Recommendation for three best solutions in each situation – for tables, column chart and circle diagrams - are found. Recommendations are shown in table 4.

Table 4. Colour combination recommendations

USE FOR	RECOMMENDATIONS TO USE IN POWERPOINT		
	1 ST	2 ND	3 RD
Tables	1) Office	2) Organic	4) Integral
Column chart	1) Office	2) Organic	7) Retrospect
Circle diagrams	1) Office	2) Organic	9) Wisp

The study will be continued as there are lots to do. The data will be updated with a larger number of respondents in different target groups. The results will be tested and supplemented.

These recommendations must be checked experimentally in the target group by combined complexes in the context of e-material to confirm their effectiveness. Recommendations are supplemented by additional parameters. Also, there is a need to develop complementary recommendations, depending on the individual in addition to human factors, which may significantly affect reading and text perception - depending on their age, visual status, reading difficulties, and so on - because each person has different needs and opportunities.

References

- Rayner, K. Eye movements in reading and information processing: 20 years of research. Psychological Bulletin. 1998. Vol.124 p.372–422
- Muzammil Khan, Khushdil; Comprehensive Study on the Basis of Eye Blink, Suggesting Length of Text Line, Considering Typographical Variables the Way How to Improve Reading from Computer Screen; Advances in Internet of Things Vol.3 No.1(2013)
- Nielsen, J. “Designing Web Usability: The Practice of Simplicity,” New Riders Publishing, Indianapolis, 2000, p. 420.



- Mackare, K., Jansone, A. Research of guidelines for designing e-study materials - Environment. Technology. Resources. Proceedings of the 11th International Scientific and Practical Conference June 15-17, 2017. Volume 2
- Mackare, K., Jansone A. Rekomendācijas vadlīnijām e-studiju materiālu noformēšanai Sabiedrība un kultūra konferences rakstu krājums 2017
- Nix, T., Skyrocketing Your Web Content's Readability, <http://nectafy.com/readability-guidelines/> (Piekluve: 12.03.2017.)
- Pappas, C., Typography In eLearning: 5 Key Tips For eLearning Professionals, 2015 <https://elearningindustry.com/typography-in-elearning-5-key-tips-for-elearning-professionals> (Piekluve: 12.03.2017.)
- Hall, R.H., Hanna, P. The impact of web page text-background colour combinations on readability, retention, aesthetics and behavioural intention, Behaviour & Information technology, May-June 2004, Vol.23, No3, 183-195
- Rasheed, H., Eye Specialist, Saidu Medical College, Saidu.
- Richardson, R.T., Drexler, L.T., Delparte, M.D., Color and Contrast in E-Learning Design: A Review of the Literature and Recommendations for Instructional Designers and Web Developers, MERLOT Journal of Online Learning and Teaching, Vol. 10, No. 4, December 2014
- Hill, A., Scharff, L. V. Readability of screen displays with various foreground/ background color combinations, font styles, and font types," Proceedings of the Eleventh National Conference on Undergraduate Research, II, 1997, 742-746
- Optimise, Grafiskais dizains un krāsu psiholoģija <http://optimise.lv/grafiskais-dizains-un-krasu-psihologija/> (Piekluve: 20.07.2017.)
- Ravi Mehta and Rui (Juliet) Zhu. Blue or Red? Exploring the Effect of Color on Cognitive Task Performances. Sauder School of Business, University of British Columbia, 2053 Main Mall, Vancouver, BC V6T 1Z2, Canada. www.sciencexpress.org / 5 February 2009 / Page 1 / 10.1126/science.1169144



How Novice Teachers of Different Education Backgrounds Perceive Their Professional Identity

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Abstract

The article deals with one aspect of a larger scale and long-term phenomenological research to explore the teachers' perception of their professional identity. This article answers the research question – how the perception of professional identity is connected with novice teachers' educational background. The research sample was novice teachers – master students of the professional master study programme „Teacher” and stratified purposive sampling was used to choose nine extreme cases – the most representative three novice teachers having obtained teacher's qualification via concurrent model, consecutive model and alternative pathway “Mission Possible” each year. Reflection-on-action was used to collect in-depth data. The data of 45 reflection samples applying the reflection tool MAX (Motivation – Acquisition – Extension) and narrative essays were analysed in the context of professional identity and educational background in the period of three years. Novice teachers with diverse educational backgrounds demonstrated different features of how professional identity was perceived and reflected upon. Three most characteristic features for each group were identified and one feature was common for all groups – self-analysis.

Key words: Reflection tools, Professional identity, Educational background, Novice teacher.

Introduction

Global scale changes, increasing demand to advance education level, the need to acquire new teacher roles, the need to keep the track of the diversity of society, and the increasing amount of knowledge make it more difficult for novice teachers to understand their professional identity. Nowadays, schools fulfil socialization functions that were once the responsibility of families, religious organizations or workplaces (Thomas & Beauchamp, 2011). The new social situation is forcing teachers to experiment with their roles, constantly reviewing their professional identity in relation to the changing social context. This raises the question: “Can I be what I am in the classroom?” (Timoštčuk, Ugaste, 2010). To answer this question, it is important for teachers to know what they are, where they are and where they stand. Therefore, teacher education should focus on both novice teachers themselves and their expectations, what they want or do not want to achieve in teacher education and how teacher education influences what novice teachers will be, who they will be able to teach and how they will respond to the changing context of learning (Bullough, Gitlin, 2001). “From the Vygotskian perspective, the overall aim of a teacher-education programme is best conceived as the development of a professional identity” (Van Huizen, Van Oers, Wubbels, 2005: 275).



Professional identity in the context of teacher education

The concept of identity has been discussed from different points of view (philosophy, psychology, sociology, etc.), and the explanation of the concept of professional identity in the context of teacher education is diverse. Beijaard, Meijer and Verloop (2004) have divided all published research on the teacher's professional identity into three categories:

- 1) studies focusing on the development of teachers' professional identities;
- 2) studies focusing on the characteristics of teachers' professional identities as perceived by the teachers themselves or what researchers have identified from the data collected;
- 3) studies in which the professional identity was reflected in the teachers' stories that were told and written.

In general, the meaning of identity is explained differently, but all definitions support the idea that "identity is not a fixed attribute of a person, but a relational phenomenon" (Beijaard, Meijer and Verloop 2004: 108). The development of identity is the accumulation process of practical knowledge, characterized by independent integration, which manifests itself as a continuous learning process for each person, when based on mutual interaction of emotions and knowledge, professional experience is reflected upon. As the experience can be deeply individual or acquired in a group or pair, then the teacher's professional identity can be understood as a continuous learning process, focusing not only on behaviour, but also searching for meaning (Rodgers & Scott, 2008; Ropo, 2009) as well as for a wide perspective of social contexts (Bullough & Gitlin, 2001). Taking into account the close link of the teacher's profession with socio-cultural processes and current changing circumstances, teacher education is seen as a complex process with the deepest impact on the professional identity of novice teachers. According to Gee (2001), the development of identity occurs in an intersubjective field and can best be characterized as an ongoing process, a process of interpreting oneself as a certain kind of person and being recognized as such in a given context. In this context, the identity can be seen as an answer to the periodically asked question: "What am I now?"

Teachers may have different perceptions of themselves – what they are and what they might be in the future, how they perceive themselves as a part of society, how they reflect on what they are expected to do, what roles they are to perform in accordance with the common social views.

Not only is the concept "what am I?" important for teacher, but also "what am I as a teacher?" The perception of oneself must be understood in close connection with the personal and professional "I" (Lipka & Brinthaup, 1999). However, these different concepts of "self" for novice teachers may conflict and affect their teaching and learning environment (Flores & Day, 2006).

Research on professional identity reveals several aspects of identity:

- 1) the **relationship** of identity with the context of **career and role change** (Hall, 1971; Nicholson, 1984; Ibarra, 1999). Identity can change under organizational conditions promoted by career development, its advancement and the acquisition of new roles;
- 2) the **variability** of identity in the process of socialization **affected by (involved) groups and organizations** (Van Maanen & Schein, 1979; Greil & Rudy, 1984; Snow & Machalek, 1984; Pratt, Rockmann & Kaufmann, 2006) shaping the content of the identity in accordance with both the values of the organization and the individual's understanding of the professional culture;
- 3) the **development** of an individual's identity **in a social context** understanding it as an interactive process more than simply adopting roles (Ibarra, 1999; Pratt, Rockmann & Kaufmann, 2006). The **"testing" of role models** takes place to make sure they fit and meet expectations (Ibarra, 1999);



- 4) **the connection** of the development of professional identity **with the professional “I-concept”** and self-image (Schein, 1993; Garleja, 2006; Пряжников, 1996; Пряжников, Пряжникова, 2001; Callanan, 2003; Sveningsson & Alvesson, 2003; Зеер, 2006). The professional “I concept” determines the search for and discovery of personal meaning (Толочек, 2005; Могилёвкин, 2007) allowing one to answer the questions of professional identity: “what I am”, “what I am not”, and “what I would like to be”. „Self-image” determines the way in which teachers teach and the way they are developing as teachers, and how their attitude forms towards changes in education. It also reveals the existence of a link between learning about identity and learning about the job they want to do;
- 5) the development of teacher’s professional identity in the study process (Timoštšuk & Ugaste, 2010; Mikelsone & Odina, 2016^a, 2016^b). The link between learning reflection and the formation of a teacher’s identity is recognized as a goal for better educating students to perform a teacher’s job. The key objective is how teacher educators can educate teachers who can support students’ academic progress and reflect on their own professional activities. Britzman (2003: 31) states “Learning to teach is not a mere matter of applying decontextualized skills or of mirroring predetermined images; it is a time when one’s past, present, and future are set in dynamic tension. Learning to teach – like teaching itself – is always the process of becoming: a time of formation and transformation, of scrutiny into what one is doing, and who one can become”.

Timoštšuk & Ugaste (2010) have defined the teacher’s professional identity as a self-esteem of a person revealed in learning situations and relationships, manifested in practical professional activities, affiliation and learning experience. Studying student teachers’ professional development, Korthagen and Vasalos (2005) indicate that they most often reflect on 6 levels: (1) the level of environment; (2) behaviour; (3) changes in competences, (4) beliefs; (5) professional identity, and (6) mission. These levels are mutually influential, but exactly the changes happening on higher levels – professional identity and mission – characterize the core of the novice teacher’s personality (Korthagen and Vasalos, 2005).

Flores & Day (2006) define professional identity as a continuous and dynamic process, which means visualizing and reinterpreting one’s values and experiences that can be influenced by personal, social and cognitive factors.

Rodgers and Scott (2008: 733) have summed up four basic concepts for understanding the concept of *identity* today:

- 1) identity depends on and is shaped by the perception of social, cultural, political and historical contexts;
- 2) identity is formed in relation to others and includes emotions;
- 3) identity is variable, unstable and multiple;
- 4) identity is created and reconstructed over time through stories.

Reflection as a tool for understanding professional identity

The understanding of one’s professional identity can be ensured by the reflection that makes a person more aware and informed of what has been mastered and creates understanding in the sense that a person is able to change one’s attitude, behaviour and performance in individual and professional contexts during one’s life time (Mikelsone & Odina, 2016^b; Cottrell, 2013). Dewey (2012: 35) has indicated „We do not learn from experience ... we learn from the reflection on experience”. Reflection and its manifestations have been studied in the works of many authors (Schon, 1983; Van Peet & Kroese, 2013; Callanan, 2003; de Bono, 2012; Cottrell, 2013; McMillan & Weyers, 2006; Mikelsone & Odina, 2016^a) and they all point to the specific activities of reflection:

- 1) description of the event / activity and its evaluation from different points of view;



- 2) description and evaluation of specific skills and activities, identifying what is good and what needs to be improved;
- 3) evaluation of the results obtained, ascertaining how / in what way the result has been achieved;
- 4) analysis and identification of what steps should be taken to repeat this result;
- 5) putting in words lived experience and informing others about one's understanding and vision.

Thus, it can be said that reflection is an essential strategic tool for progress and development. The studies of Dewey (2012) and Schon (1983) provide evidence that reflective actions can take place in two ways:

- 1) within the process – at a specific time / moment when the action itself occurs, referring to reflection-in-action. This reflection happens spontaneously, turns out unintentionally as a quick response to what is happening and provides an opportunity to respond flexibly to the particular situation and prevent one from falling out or falling back. Beard and Wilson (2006: 246) refer to it as “concurrent learning”;
- 2) after action has happened and it has triggered senses and caused feelings that can be called reflection-on-action. This is systemic reflection that creates the meaning of learning and understanding and allows one to change behaviour and attitude. It is planned, supported, involves contemplation. Beard and Wilson (2006: 246-247) term it as “retrospective learning and coached reflection”.

Both Dewey (2012) and Schon (1983) support the idea that the most important value of reflection is to make clear what has been learnt and understood. Beard and Wilson (2006: 35) believe in deep learning – experiential learning: undertaking the “analysis of experience retrospectively, concurrently or prospectively, i.e., with reference to the past, the present or the future”.

But in every case, in order to reflect, it is important to know the purpose and focus of reflection, such as whether reflection is connected with personal development or if it is related to a specific learning activity, or research on understanding one's professional identity. The purpose of this study was to find out how the perception of professional identity was connected with novice teachers' educational background.

In order for novice teachers to reflect on their professional identity, it is essential to contemplate on the following questions:

- 1) “what changes the novice teachers' experience, meaning of life and professional „I concept”?”
- 2) what brings maximum benefit when professional identity is in harmony (merging) with personal identity?
- 3) how to use one's experience for further successful self-determination and creative professional activity (Mikelsone, Odina and Grigule, 2014) and how reflection strategies have been applied?” (Mikelsone and Odina, 2016^a: 240).

Research design, sample and data collection methods

Phenomenological research has been lasting for four years to explore the teachers' perception of their professional identity. Since 2013, 106 master students of the study module “Education for Well-being and Cohesion” of the professional master study programme „Teacher” have completed the course „Educator's Professional Identity and Pedagogic Mastery”. The aim of the course is to improve the understanding of the educator's professional identity and skills to evaluate pedagogic mastery. Among other objectives during the course, students are supposed to enlarge the knowledge and critical understanding of theories and good practice examples of the educator's professional identity in the national, European and global context; examine the contribution of the educator's professional identity to solving problems of well-being and harmonised



development. The learning outcomes of the previously mentioned objectives have been measured by reflection-on-action in the format of four independent assignments in the format of MAX and take-home exam paper: “The evaluation of my professional identity: My professional teacher’s story”. The reflection-on action has been chosen due to its retrospective nature as the intervention has been planned for specific times to involve students in contemplation about their “previous personal experiences, analysing them and then developing personal theories of action” Beard and Wilson (2006: 246).

The reflection tool MAX (Motivation – Acquisition – Extension) has been used to complete unfinished sentences usually after learning activities:

3 things I learnt/ heard/ understood

2 things I want to try/ I will use

1 thing I would like to examine in more detail/ I did not understand (Mikelsone and Odina 2016^a).

Three things show learners’ motivation, two things give the evidence of the acquisition and one thing demonstrates learners’ readiness to extend the acquired, to apply in practice.

Take-home exam papers “The evaluation of my professional identity: My professional teacher’s story” were written as narrative essays.

Pre-service teacher education represents the entry point into the profession, and the way it is organised plays a key role in determining both the quality and the quantity of teachers, as well as hypothetically the novice teachers’ perception of their professional identity. According to the gained experience during the pre-service teacher education process, the group of 106 students of the professional master study programme „Teacher” represented three models of the entry point into the teacher’s profession: novice teachers who have obtained the teacher’s qualification via a concurrent model, consecutive model and alternative model “Mission Possible”.

If pre-service teacher education is organized according to the concurrent model, academic subjects are studied alongside educational and professional studies throughout the duration of the course (Musset 2010). Students get integrated learning experience since education, psychology and content knowledge of one or two subjects take place at the same time. Students are supposed to take the decision whether they want to become teachers at a very early stage in their university studies. Thus, in Latvia they obtain the qualification of two subject teachers in four years, and there is a regular connection with schools.

“In the consecutive model, the specialized courses in pedagogy and in teaching are accessible after having completed another degree in a discipline taught in school (students are educated first in a specific discipline and then they receive pedagogical training)” (Musset 2010: 19). Such teachers have a strong subject expertise, but they can have a weaker knowledge in learning techniques and in pedagogy in general. According to Musset (2010: 19-20) “since they have studies in two different cycles, where they learn two different aspects of the teaching profession, their learning process is fragmented, rather than integrated. In the majority of the OECD countries, initial teacher education for secondary schools is consecutive, which means that their professional identity, as opposed to primary school teacher, is not constructed around teaching but around the subject which they specialize in”. If pre-service teacher education in Latvia is organized according to the consecutive model, students obtain the qualification of one-subject teacher in five years, where the last two years are connected to school teaching.

One of the most recent and important trends in teacher education is the development of alternative pathways into the teaching profession, like Teach for America created in 1990. This programme has inspired similar programmes: “DC teaching Fellows, Phoenix Teaching Fellows, New York Teaching, Teach First (in the UK), Teach First Germany, and Teach for Australia” (Musset 2010: 24) and “Mission Possible” in Latvia. The programme recruits university graduates with other backgrounds and professionals with no particular knowledge in teacher education for a two-year teaching position in a school. The programme offers a six-week summer



course and mainly provides teaching practice at school, “low priority is given to educational theory and research and to scientific knowledge. They rely on the candidates’ previous education to provide adequate grounding in subject matter. The curriculum itself emphasizes learning by doing” (Musset 2010: 22).

Stratified purposive sampling was used to choose extreme cases – the most representative three novice teachers having obtained teacher’s qualification via concurrent model (CC), consecutive model (CS) and alternative pathway “Mission Possible” (MP) each year.

To find out how the perception of professional identity was connected with the novice teachers’ educational background, the data of nine novice teachers’ 45 reflection samples applying the reflection tool MAX (36 samples) and 9 narrative essays were analysed in the context of professional identity and educational background over the period of three years.

Data and Discussion

Reflection-in-action was used during the seminars to get instant feedback on the activities, but the data were not specifically recorded for this research. Reflection-on-action was used to collect in-depth data. Novice teachers with diverse education backgrounds demonstrated different ways of how professional identity was perceived and reflected upon. By exploring the evaluations of novice teachers’ professional identities: “My professional teacher’s story” and independent assignments MAX, a number of specific characteristic features of the perception of identity were outlined in each target group. By analysing and comparing these features, it was concluded that not all were equally distinct and characteristic to each group (Table1.).

Table 1. Features revealing novice teachers’ perception of professional identity

Alternative model “Mission Possible” (MP)	Consecutive model (CS)	Concurrent model (CC)
self-analysis/ introspection	self-analysis/ introspection	self-analysis/ introspection
values of organization culture	intentionality	intentionality
affiliation	finding personal meaning in career	self-image

Common features to all novice teachers: self-analysis

Identifying three most pronounced, dominant features, self-analysis/ introspection was found as a common feature for all groups. Based on the definition of Latvian Dictionary of Educational Concepts where *identity* is explained as self-awareness, self-acceptance, self-reliance, self-esteem in behaviour and ability to make decisions (Skujina et al 2000: 62), self-analysis also reveals different aspects of personality.

“With interest, I caught ideas and studied the ways to learn more about myself” (MP 1), “I have started to explore myself as a person only in the last year. So far, I have not tried to analyse and understand the principles of decision taking” (CS 2); “I have learned so much in the last year, maybe not so much academic knowledge, but I have discovered myself and the nature of teachers. I really liked this approach that we looked at everything through the prism of our personality” (CC 2).

As identity is variable and depends on the situation in which a person is present (Mikelsone and Odina, 2016^b), it also reflects the person’s vision and point of view. *“... I wrote a diary that helped me to identify the situations I succeeded in and was good at if I tackled things with ease and naturalness without artificially darkening*



colours. It's hard to explain this feeling, but I remember it as a very clear revelation after a period of longer depression, when I promised myself that I did not want to end up like this anymore" (MP 2).

"... it is extremely important to give time and space to people's free work, contemplation, reflection on their actions, while giving them the foundation on which to build this freedom – by giving justification, basic rules, formulating expectations and hopes" (MP 2).

It confirms that the essential element of professional identity is the **professional "I-concept"** that is "based on regular self-assessment and exploration of the further goals" (Mikelsone, Odina, Grigule 2014: 241). "I have learned this skill [to analyse myself, my emotions and activities] very well for 2 years while I was a member of the programme – writing weekly career advancement notes, reflecting on my thoughts and benefits at the end of each lesson, analysing my lessons together with the mentor, writing the semester and annual evaluations" (MP 3).

"The most important thing that I have learned from all this is that I am too demanding to myself, too much in orderliness. Everyone is proud of me, but I just put up new and new challenges for myself, why? Because I want to improve, sometimes I am too demanding to myself. I have no idea at the moment what I will do after I finish my master's degree programme" (CC 2).

"From selfishness I passed to self-analysis. In the past, I was accused of saying that I always talked about myself, but then I realized that, in fact when listening to someone, I was reflecting through myself and trying to imagine myself in their place. I was looking for similar situations in my experience" (CC 1).

Another aspect of self-analysis unfolding in identity stories and MAX evaluations involves the ability of future teachers to reflect on their own feelings. This allows one to succeed in everyday life, since the ability of future teachers to reflect honestly and openly on their personal and professional progress also reveals the understanding of their professional identity (Mikelsone and Odina, 2016^a). "Analysing myself at the moment, it seems to me very important that I have learned much better to recognize my emotions and express them aloud, how I feel and why" (MP 3). Developing an emotional competence, novice teachers develop their self-belief and self-confidence, which gives an inner vision for **the value of reflection**. "Two things help me in the analysis – the structures that I use, thinking, reflecting on experiences and talking with people. Structures and forms can be different, but it is important that they are – in the format of questions, schemes or processes" (MP 2).

One more aspect of self-analysis present in the novice teachers' reflections, is **the relationship with other people**, which manifests itself both in the need to know what and how others value and perceive them and the need to understand others. "In the teacher's profession I myself learn to accept the opinions of other people and start taking the advice given by them not so personally" (CC 1).

"... I want to start with the quotations that students write about me as a teacher in the open questions of the annual opinion poll ..." (MP 3).

„... I seized all the opportunities to learn more about myself. For example, in the blind spot I learned a lot about myself because I did the Johari window activity with my students, friends and acquaintances" (MP 1).

„It must be said that good relations with people, peace and harmony are what I consider to be extremely important" (CC 3).



„Here’s another ego cookie for me when I recently learned from my friend, who also completed the programme of physics and mathematics teachers that Mencis [professor] has given snippets from my graduate paper to future teachers as an example” (CC 2).

Data also reveal that novice teachers are looking for a lot of similarities in their activities, feelings, and thoughts with **meaningful people** who are close, such as grandma, or publicly known people – writers, professors, mentors, etc.

„ I am pleased to associate myself with people whose strength is logical thinking, including my grandmother who also graduated from the same programme...” (MP 1)

„Thanks to Mencis [professor], if it was not he and we had not had a friendly relationship, then I would not be where I am at the moment. He is one of my inspirational sources ... and there is no such other person with his personality and a view on mathematics, he fascinates and captures people around” (CC 2).

In some cases, it could even be called identification with people who are important to them “... *in the scenes where in childhood Ziedonis [writer and poet] was stubborn, I had the feeling that I was literally looking in the mirror*” (MP 1) or “*I came across similar feelings when I visited the exhibition dedicated to the centenary of Professor Janis Mencis (Senior) and his work. The more I read the memories of the professor’s family members and contemporaries, the more I thought I was constantly comparing and drawing parallels with myself*” (MP 1).

A specific self-analysis feature is revealed for the novice teachers of the alternative model “Mission Possible” background – they are very critical of those people whose vision, beliefs, values are different from theirs – they do not recognize them or are looking for the excuse of their own actions that they are others, not the same as “myself”. “*As I wrote in MAX, I’m intolerant to selfish, self-centred people. Since in my everyday life, thankfully, I do not meet people like that, I have not had a situation in which this aspect of identity could pop up*” (MP 1).

“I have understood that I feel discomfort if the validity of my decisions is questioned” (MP 2). “Also, in this course, I appreciate the significant episodes where we were deliberately encountered with the diversity of people in behaviour and attitudes, such as ... workshop which made it very vivid to reflect on what I would never do as a tutor of the group and how I would never want my students to feel” (MP 2).

“I feel growing anti-reaction – either to the way the teacher treats the students or the idea – money determines the value of the idea” (MP 2).

As identity changes in any new situation, it is possible to notice its new aspects and look at oneself from aside. The data allow us to conclude that understanding the manifestations of one’s identity also happens in comparison with others “*as the knowledge of the unknown part of Johari windows suddenly pops up, and you become aware of such a ‘forgotten’ thing about yourself. This year I remember very clearly two such moments. In both cases, sudden self-knowledge came about when I was watching and hypothetically comparing myself – how I would have acted if I were in a situation like this?*” (MP 1).

Identity always talks about the relationship between the individual/s and the other one/ people. It either connects people or divides them revealing both the personal and professional aspects of self-development – which makes people the way they are “*always first asking questions and finding out situations, rather than assuming that I already know why a person has acted in one way or another. Asking questions to myself is also a tool for self-development ...*” (MP 2).



Thus, it can be concluded that the self-analysis feature of professional identity reveals the awareness and integrity of one's personality and professional "I-concept" that is based on regular self-assessment and exploration of the further goals; a subjective vision / view of the situation and the ability to reflect on one's feelings that allows one to succeed in everyday life; relationships with other meaningful people, meaning to know on what and how others value and perceive them and understand others.

Common features to teachers of consecutive and concurrent models: intentionality

A common essential feature – intentionality in the choice of the profession has been identified in the reflections of novice teachers representing consecutive and concurrent education models. With a mix of support and uncertainty and doubts about the chosen professional path, the representatives of consecutive and concurrent education models express their firm beliefs and certainty about their choice.

"I am proud of my profession in the sense that I like it, and what I do, and I tell this to my friends and colleagues. I have felt badly disdained contempt about my choice of teacher's profession from some of the acquaintances ("What? You will study to be a teacher?!" pronounced in a tone, as if I had done something indecent). I'm proud to say "yes, what is wrong about it?!" I love teaching students, developing their personalities to enable each of my students to be a capable and competitive citizen" (CS 1).

"Some colleagues are asking me why I am so young and bury myself at school. My answer is that I do not consider my life buried, but raised up to a new – higher level because at school it is always necessary to study and perfect myself throughout my life; it does not allow us to sink and stop in development" (CS 1).

„From then on when adults asked me what I was thinking of doing once I graduated from school, I would answer "something to do with English or history." I didn't want to admit it yet since the field of education has a bit of a negative stigma ..., but I was already almost certain that "something" meant "teaching" (CC 2).

By agreeing that identity always tells about the relationship between the individual/s and the other one/ people, the professional identity is also personal because it reveals the "what makes me". It can unite people or divide them (Mikelsone and Odina, 2014).

Thus, it can be concluded that both the consecutive and concurrent model representatives understand their professional identity through relationships and their views, where the main emphasis is to strengthen their self-esteem and self-image. A person's own view of their activities and the development of professional identity become evident through relationships and emotional feelings of an individual.

Individual features of alternative model "Mission Possible" novice teachers: the values of organization culture and affiliation

The participants in the study, whose pedagogical experience is related to the "Possible Mission" organization, specifically accept the culture and values of this organization in developing their own understanding of the identity of the teacher's professional culture of work. *"Of course, the most important role in shaping my teacher's professional identity and mastery has been to the experience that I have received as part of the*



“Mission Possible” programme” (MP 3). As participants recognize the culture and values of the particular organization essential, they expect the same cultural environment and values to be present in the schools they work at. If this does not happen, which is true in most cases, young teachers feel disappointed. *“At the end of the fifth year, I began to get tired of it. Not because I would not be able to adapt to such sudden changes, but because there were still ideas and plans that I wanted to implement with students for all 100%, not just when I was happy to intercept them from music and choir rehearsals”* (MP 1). In this case, this novice teacher changed his working place, but not job.

It is important to note that the culture and values of the MP organization have affected the personal and professional identity of these novice teachers. *“Exactly the experience in the programme helped me to see myself from aside, where I criticized and blamed myself too much, got unproductive, instead of putting energy into productive work”* (MP 2).

“By applying for Mission Possible, in the spring of 2009, I had to pass a four-round selection, one of which was the management competency test. I still look at this test report with interest and find new insights that are relevant to me now, five years later” (MP 1).

This is what makes the difference between that particular organizational culture and other educational environments because MP teachers recognize reflection and its acquisition as one of the competences that teachers need. Once reflection is mastered, it allows one to independently analyse, understand the content of the activity, the context, and be prepared and open to changes, which in other cases is not so clearly expressed due to the lack of teachers’ reflection. This allows the conclusion that the experience gained directly by MP members, entering the educational environment, allows us to associate them with the words “change” and “innovation”. *“Experience in Mission Possible showed me that in order for a person to develop, she/he must be outside her/his comfort zone, the goal must be higher than it seems to be achievable at the moment”* (MP 3). The ability to conduct reflection-on-action regularly generates a sense of learning and understanding of action. Getting out of one’s comfort zone creates new understanding and reveals the interactions between certain activities, which then have generated the result. Such new understanding provides the basis for new changes.

Reflecting on their individual skills and knowledge, MP teachers associate them with the organization’s common goals and disclose their understanding of their professional identity in relation to the “learning organization” (Senge, 1990). Thus, it can be assumed that it is essential to implement student reflection in the study process to make the school “an organization that learns” and MP teachers can greatly contribute to this with their own experience.

Another characteristic feature of the identity directly attributable to the MP group is the affiliation – sense of belonging to different social groups – the family, organization. *“The sense of belonging is essential for me as a professional to feel well – belonging to the community, team, ideas and values in a specific community. Recently I have come to the conclusion that I am working very inefficiently in an environment in which I do not feel affiliated, in which relationships are formal or artificial”* (MP 2).

Reflecting on their professional identity, all members of this group feel strongly affiliated to the organization, even after several years. The next group that forms the feeling of belonging is the family. *“Belonging as a state and as a value is in the centre of my identity – my personality has been very strongly influenced by family and childhood experiences – my parents are teachers, and I’ve been growing up in the environment where education is highly valued and has been put forward as a priority over many other things. I think that my family, home and family affiliation have put essential fundamental values in me as personality and professional – independence in making decisions, responsibility for work, humanity and tolerance”* (MP 2).



“I come from a large family I feel well when everything is in order with them (sisters and brothers), when they are happy and I feel depressed if it is not so” (MP 1).

Agreeing with Ropo (2009) that identity forms in both individual experiences and group/ peer relationships, it can be said that the teacher’s professional identity is an ongoing learning process, where the behaviour, the sense of action and the social context play a role. Professional boundaries are closely related to the boundaries of personality and reveal how an individual interprets oneself as a certain person and recognizes oneself as such in a particular context. *“Symbolically our internal reserves come from our places of origin” (MP 2).*

Thus, it can be concluded that the MP teachers’ perception of professional identity maintains the influence of the organization, since novice teachers recognize culture and values as important for themselves and retain a strong sense of belonging to it. The acquired organizational culture and values are also expected in other institutions/ organizations where they work. If these values do not match, it causes dissatisfaction and professional disappointment. The competence to reflect on their professional activities is a significant benefit acquired in MP, which creates a sense of learning and understanding of activities and provides a basis for new changes.

Individual features of novice teachers of consecutive model: finding personal meaning in a career

By analysing the reflections of the participants of a consecutive model, one distinctly predominant feature in the perception of professional identity for this target group can be identified: finding personal sense in a career.

Career is the subjective judgments of a person about their professional future, the expected possibilities of self-expression, it is individually conscious behaviour and position based on professional and life experience in general (Mikelsone, Odina, Grigule 2014). *“Career development has so far not been smooth, so my professional skills have not yet evolved sufficiently, and I believe that knowledge I have got is still not enough. On the other hand – I belong to those lucky people who have worked all the time in the works that they like very much. Consequently, as the main aspect that characterizes my teacher’s identity, is the subject I teach – I am (or at least certainly was) a historian and only then a teacher” (CS 3).*

“My professional identity has begun to develop in my childhood, but I have to say that I only recently have become aware of myself as a teacher” (CS 1). It can be said that career management is subjective and can be viewed from the person’s perspective on one’s own activities. *“I have started to explore myself as a person only in the last year. Before I did not try to analyse and understand the principles of decision-making” (CS 1).*

“Working at school, from a historian’s point of view, I arrived at the conclusion that this work is degrading – a teacher has to orient well in all the periods of history, so it is difficult to go deep into a particular field professionally” (CS 3).

The individual’s success of subjective career has a much greater impact on his or her career development (Hall, 1996; Mikelsone, Odina, Grigule, 2014) because from a subjective point of view, an individual creates one’s own vision of a successful career and creates one’s own professional identity. According to (Hall, 1996), a teacher, who does not feel personal satisfaction about his/her life in general, who does not feel the impact of professional growth as part of his/her life perfection, also loses optimism and zest in professional activities. Therefore, subjective achievements of one’s career are very significant as they make a person a lot more responsible for one’s career development.



Besides, this also means that the person is responsible for their own career and its development, *“I wanted to spend more time planning myself and realized that computer work was definitely not for me. At one point I gave up and resigned. I had not found or even seriously considered another job, but I could not stay there anymore”* (CS 2). *“Anyway, I was ready for changes, and then came a job offer to work in a private company, to make proposals for chemical equipment and supplies. Well-paid, stable work with promotion opportunities. But every day more and more I felt unhappy about it. I hated going to work every day at a certain time and at a certain time going home and spending the whole day at the computer”* (CS 2).

Thus, based on Schein’s (1993) research on the goals of professional development, it can be said that the development of a professional identity takes place gradually, through the development of one’s own awareness (professional, life, personality), independent planning, adjustment, readiness to analyse oneself and independently finding personally significant meaning in a particular professional activity.

Individual features of novice teachers of concurrent model: self-image

The novice teachers of the concurrent model have explained their understanding of professional identity by such a feature as self-image. Self-image reveals the individual’s subjective vision of themselves and their situation, how they see their world and how it is understood. By integrating the cognitive sphere with self-image and beliefs about oneself, a person makes choices in the favour of one or another profession. *“Since the 1st form, I have been independent, I have never been a book worm – everything was always done without special effort, except for chemistry. However, with my school mate we had our own business or agreement, I helped her with languages, and she helped me in the subjects of natural sciences”* (CC 2).

“I think that the beginning of the profession of a teacher is to be found in my childhood when I unconsciously seated the dolls around desks and enthusiastically taught them something and corrected their assignments. However, during school time, I did not deliberately aim at a teacher’s profession. I was interested in psychology. When in the final form of high school, I was invited to the competition: “I will be a teacher!”, I resisted it for a long time” (CC 1).

Often in early childhood, people “see a vision” of their potential career. For some it is connected with parents’ place of work, where they have often stayed; some want to resemble a pleasant and admirable personality. *“I had an idea that I want to become a teacher early in my childhood, especially when I was in Form 1. This urge manifested itself in the never-ending games with the brothers and sisters playing school”* (CC 3).

“Actually, I had the idea that I could become a teacher only in primary school when everything was still new and unknown. Later there were many other ideas not connected with teaching and then I returned to the thought of a teacher’s profession when I was in high school in Form 12. I also realized that most of all I was interested in pre-school idyll. Perhaps because I had grown up in a large family and got used to children around, but probably because I have always had wonderful contact with nieces and nephews ...” (CC 1).

It can be concluded that the interest of the novice teachers of this model in the profession of teacher has already emerged in childhood, during school time. Developing their self-image, novice teachers have gradually mastered the nature and role of this particular profession as creating a self-image means knowing what I am and what I want. Relatively, it is a lasting image of thought that a person develops in terms of their abilities, skills, knowledge, competence and individuality. Thus, the representatives of this model are clearly aware of when they



have become interested in the teacher's profession, which in their professional identity is reflected as the acceptance of the teacher's role.

Conclusions

1. The tool of the development of the teacher's professional identity is reflection that promotes both personal and professional development and is considered a compulsory teacher's competence. It allows the implementation of changes and ensures that the school is "an organization that learns".
2. The process of the reflection reveals emotions, therefore identity is created and reconstructed over time through stories.
3. The evaluations of the novice teachers of three different education backgrounds reveal that their identities have been formed in relation to others, therefore they are variable, multiple and changing; they have been shaped by their perception of various contexts, especially social and cultural.
4. It is possible to notice and understand others only through self-perception, self-analysis. It is important for teachers to master the skills to analyse themselves and use these skills as an important tool for further planning of their activity, behaviour and performance.
5. In order to enrich their professional identity, it is important for novice teachers to gain new experience in different social groups and communities, strengthening and developing a sense of belonging.
6. Affiliation to the organization is very evident for the alternative model novice teachers and is almost never mentioned in the reflections of the consecutive and concurrent model novice teachers, probably it is easier to belong to a smaller and closed organization than formal higher education institution, but it could also be the issue of the service provided and attention received. Consecutive model teachers tend to associate themselves more with the subject they teach, concurrent model novice teachers are more oriented to the relationships, social groups.
7. Consecutive and concurrent model novice teachers' decisions about the choice of the career are more self-determined and based on their childhood intentions, as well as also influenced by mutual relations. The reflections of the alternative model novice teachers do not reveal they have entered the teacher's profession by taking a purposeful and well-considerate decision a long time ago, but rather as being chosen by the board of experts. They associate themselves more with being leaders, which is also the vision of the programme.
8. Finding personal meaning in the teacher's profession and belief in the teacher's career from one's future perspective are based on the feeling of satisfaction with the choice of the teacher's profession. It is also reinforced by professional self-confidence, which is based on the conviction and determination that the personality is compatible with the teacher's profession.
9. Based on the novice teachers' reflections in the course of the accumulating teaching experience, they have become increasingly aware that to be a good teacher one does not need to be a top scientist in one's field. Being adequately competent in the subject and keeping abreast with world scientific achievements in the



field are sufficient. Indeed, since teachers cannot know everything, they need to acquire alternative methods in order to transmit the existing knowledge more qualitatively.

10. When supporting the development of professional identity, it is important to offer a possibility of reflection on ideals of both one's past and present to all in the higher education teaching process.

References:

- Beard, C. M., Wilson, J. P. (2006). *Experiential Learning: A Best Practice Handbook for Educators and Trainers*. Kogan Page Publishers
- Beijaard, D., Meijer, P. C., Verloop, N. (2004). Reconsidering Research on Teachers' Professional Identity. // In: *Teaching and Teacher Education* 20, ICLON—Graduate School of Education, Leiden University, P.O. Box 9555, 2300 RB Leiden, The Netherlands, pp. 107–128.
- Bullough, R., & Gitlin, A. (2001). *Becoming a Student of Teaching*. Linking knowledge production and practice (2nd ed.). New York: Routledge Falmer.
- Britzman, D. (2003). Practice Makes Practice. *A Critical Study of Learning to Teach*. SUNY Series, Teacher Empowerment and School Reform
- Callanan, G. A. (2003). What Price Career Success? *Career Development International*, Vol.8, No.3, p.126–133.
- Cottrell, S. (2013). *The Study Skills Handbook*. 4th ed. Palgrave Macmillan.
- de Bono, E. (2012). *Domā! Kamēr nav par vēlu*. Rīga: Zvaigzne ABC.
- Dewey, J. (2012). *How We Think*. Copyrighted Material. Renaissance Classics.
- Flores, M. A., & Day, C. (2006). Contexts Which Shape and Reshape New Teachers' Identities: A Multi-Perspective Study. *Teaching and Teacher Education*, 22, 219–232.
- Hall, D.T. (1971). A Theoretical Model of Career Subidentity Development in Organizational Settings. *Organizational Behavior and Human Performance*, 6, 50–76.
- Hall, D. T. (1996). *Protean Careers of the 21st Century*. The Academy of Management Executive, 10 (4), pp. 8–16.
- Garleja, R. (2006). *Cilvēkpotenciāls sociālā vidē*. Rīga: Izdevniecība RaKa.
- Gee, J. P. (2001). Identity as an Analytic Lens for Research in Education. *Review of Research in Education*, Vol 25. Washington, DC: American Educational Research Association, 99–125.
- Ibarra, H. (1999). Provisional Selves: Experimenting with Image and Identity in Professional Adaptation. *Administrative Science Quarterly*, 44: 764–791.
- Greil, A. L., & Rudy, D. R. (1984). Social Cocoons: Encapsulation and Identity Transformation in Organizations. *Sociological Inquiry*, 54: 260–278.
- Korthagen, F. & Vasalos, A. (2005). Levels in Reflection: Core Reflection as a Means to Enhance Professional Growth. *Teachers and Teaching: Theory and Practice*, 11 (1), 47–71.
- Lipka, R., Brinthaupt, T. (1999). Introduction: Balancing a Personal and Professional Development of Teachers. // In: Lipka, R. & Brinthaupt, T. (Eds.) *The Role of Self in Teacher Development*. Albany, NY: State University of New York Press. pp 1–8.
- McMillan, K., Weyers, J. (2006). *The Smarter Student*. Skills and Strategies for Success at University. Pearson & Prentice Hall.
- Mikelsone, I., Odina, I. (2016)^a. Future Teachers' Reflection to Understand Their Professional Identity. // In: *Proceedings of 1st International Conference on Lifelong Learning and Leadership for All*. Vol.1. ICLEL conference, Olomouc, 2015. Published in 2016 by Sakarya University, Faculty of Education. - pp. 239–244. Available: http://media.wix.com/ugd/d546b1_a7b3edd54a2e41718bb5a79c754b7dc0.pdf
- Mikelsone, I., Odina, I. (2016)^b. Male Teachers' Well-Being in the Context of Professional Identity. *Proceedings of 2nd International Conference on Lifelong Learning and Leadership for All*. ICLEL conference,



- Liepaja, 2016. Published in 2016 by Sakarya University, Faculty of Education. Sakarya, 54300, Turkey - pp. 19-27, ISBN: 978-605-66495-1-6
- Mikelsone, I., Odina, I., & Grigule, L. (2014). Conceptualizing the Understanding of Professional Identity in Teacher's Career. // In: *European Scientific Journal*, 10(10). pp. 238. – 249. ISSN: 1857 – 7881(Print) ISSN: 1857 - 7431 (Online) <http://ejournal.org/index.php/esj/article/view/4775>
- Musset, P. (2010). Initial Teacher Education and Continuing Training Policies in a Comparative Perspective: Current Practices in OECD Countries and a Literature Review on Potential Effects. *OECD Education Working Papers*, No. 48, OECD Publishing. <http://dx.doi.org/10.1787/5kmbp7s47h-en>
- Nicholson, N. (1984.). A theory of Work Role Transitions. *Administrative Science Quarterly*, 29, 172–191.
- Skujiņa, V., Beļickis, I., Blūma, D., Koķe, T., Markus, D., Šalme, A., Blinkena A. (2000). *Pedagoģijas terminu skaidrojošā vārdnīca*. Zvaigzne ABC.
- Pratt, M., Rockmann, K. & Kaufmann, J. (2006). Constructing Professional Identity: The Role of Work and Identity Learning Cycles in the Customization of Identity Among Medical Residents. *Academy of Management Journal*. Vol.49 (2), 235 -262.
- Rodgers, C. R., & Scott, K. H. (2008). The Development of the Personal Self and Professional Identity in Learning to Teach. // In: Cochran-Smith, M. & Nemser-Freiman, S. (Eds.). *Handbook of Research on Teacher Education*. Enduring Questions in Changing Contexts (3rd ed.). (pp. 732e755) New York & London: Routledge.
- Ropo, E. (2009). Identity Development as a Basis for Curriculum Development. //In: *Identity and Values in Education*. Edited by Rabensteiner, P.-M. & Ropo, E. European Dimension in Education and Teaching. Vol.2. – 20 – 34 pp. Schneider Verlag Hohengehren GmbH
- Schein, E.H. (1993). *Career Anchors: Discovering Your Real Values*. San Francisco: Pfeiffer.
- Schon, D.A. (1983). *Reflective Practitioner: How Professionals Think in Action*. New York, Basic Books.
- Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organisation*. New York, Doubleday.
- Snow, D. A., & Machalek, R. (1984). The Sociology of Conversion. // In: Turner, R. H. & Short, J. F. (Eds.), *Annual Review of Sociology*, vol. 10: 167–190. Palo Alto, CA: Annual Reviews.
- Sveningsson, S., & Alvesson, M. (2003). Managing Managerial Identities: Organizational Fragmentation, Discourse and Identity Struggle. *Human Relations*, 56: 1163–1193.
- Thomas, L., Beauchamp, C. (2011). Understanding New Teachers' Professional Identities Through Metaphor. *Teaching and Teacher Education*, 27, 762-769.
- Timoštšuk, I., Ugaste, A. (2010). Student Teachers' Professional Identity. *Teaching and Teacher Education*, 26, 1563 -1570.
- Van Huizen, P., Van Oers, B., & Wubbels, T. (2005). A Vygotskian Perspective on Teacher Education. *Journal of Curriculum Studies*, 37 (3), 269 – 290.
- Van Maanen, J., & Schein, E. (1979). Towards a Theory of Organizational Socialization. //In: Staw, B. M. (Ed.), *Research in Organizational Behavior*, vol. 1: 209–264. Greenwich, CT: JAI Press.
- Van Peet, H.P., Kroese, M.M. (2013). *Academic Skills for Business Students*. Pearson Custom Publishing.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge, UK: Cambridge University Press.
- Зеер, Э.Ф. (2006). *Психология профессий*. Москва: Фонд Мир.
- Могилёвкин, Е.А. (2007). *Карьерный рост. Диагностика, технологии, тренинг*. Санкт- Петербург: Речь.
- Пряжников, Н. (1996). *Профессиональное и личностное самоопределение*. Москва: Воронеж.
- Пряжников, Н. С., Пряжникова, Е. Ю. (2001). *Психология труда и человеческого достоинства*. Москва: Академия.
- Толочек, В.А. (2005). *Современная психология труда*. Москва: Питер



In-Service Teacher Training in a Professional Development Perspective: Logics of Participation

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Abstract

The main purpose of this study is to understand the reasons why teachers undertake in-service teachers training as a factor of professional development (PD). It is an interpretative study belonging to the category of educational case studies and ethnographic studies. The study was made in five schools which are associated to the Marco de Canaveses and Cinfães In-service Teachers Training Centre (ISTTC). The data in this study was collected in two different ways: by applying an enquiry to 450 teachers (N=450) in the five schools selected and by analysing the data previously collected within the process of asking teachers to evaluate teachers training courses organized by the ISTTC (218 enquiries analysed) (n=218). The main conclusion drawn from the study is that professional development is designated by almost all teachers enquired as the main motivating factor for joining teachers training courses.

Keywords: Professional development, teachers' in-service training, teachers working conditions

Introduction

In recent years, the issue teachers' professional development (PD) has been gaining a growing importance both at an international and at a national level for various reasons. These reasons are both social and sociological, economic and professional, pedagogical and didactic, legal and academic.

Rodrigues (2007) lists four reasons for the recent focus on this subject. The first one, arising from the field of psychology, is rooted on the developmental theories of Piaget (1983), who rejected unidirectional influences on the individual and emphasized the importance of the interaction between his internal dynamics, his self-regulating and adaptive processes and the environment that surrounds him. These theories, which were initially applied to the childhood development stages, expanded rapidly to the adult life stages and to his professional life, thus becoming a framework for the concept of "life span development" (Lerner & Hultsch, 1983).

Together with this concept, one can find the globalization, the technological advances, the constant changes in the means of production, in the entertainment industry, in personal relationships (Lerner & Hultsch, quoted by Rodrigues, 2007, p. 25). All these changes, which can be more obvious for some people than others, forces teaching, just as any other professional activity, to a need of permanent self-questioning and updating, in order to be able to correspond to the demands of consumers.

The third reason that Rodrigues points out is the need to break myths which associate bad teaching practices either to very early career stages or to more advanced ones. There are studies which include teachers' professional development models, referring to the vision those teachers have of the whole school system, the kind of relationship they establish with its rules, the priorities they set for their action, among other factors. Some examples are the "Berliner expertise model (1988)", the "Dreyfus skills acquisition model (quoted by Éraut, 1994, p. 124) and the "Huberman model (1992, quoted by Flores, 2012, p. 75).

The fourth and last reason given by Rodrigues for this growing interest on the subject of teachers' PD is the existence of a tendency to believe that it is only through practice that a teacher achieves his or her real training, which would bring the academic component of the training to a second plan. This position is based on principles



such as the teachers' implicit professional knowledge (Doyle, 1979, quoted by Rodrigues, 2007, p. 27), the possibility of describing the teachers' professional knowledge through the explanation of their tacit knowledge (Elbaz, 1983, quoted by Rodrigues, 2007, p. 26) and the use of that knowledge as a guide for the listing of the principles of a good practice (Carter et al, 1998, quoted by Rodrigues, 2007, p. 26).

As far as teachers' professional development is concerned, this is a concept that together with "teachers' identity" is not yet clearly defined in most teachers' conceptual framework and it is frequently mistaken for in-service training. Similarly, "teachers' identity" runs the risk of being mistaken for teachers' rights and duties. Day considers that PD involves all the spontaneous learning experiences and all the consciously planned activities, which are carried out aiming at the direct or indirect benefit of the individual, the group or the school and contribute through them for the quality of the education in the classroom (Day, quoted by Flores et al., 2009, p.75).

This very direct involvement of teachers in their task, this attitude of commitment, a word Day uses very often (2007; 2014), can also be found in Fullan, although in a less emphasized way. The latter defines PD as follows: any activity or process which seeks to improve skills, attitudes, understanding or performance in current or future roles (Fullan, 1995, quoted by Flores et al., 2011).

In fact, the speed at which social changes and the changes in the educational system take place lead to a situation where teachers are constantly assigned new roles and new functions. Many of these roles and functions go far beyond the field of their subject areas and of Education Sciences (Rodrigues, 2011, p.136).

In this context, teachers' training has to be looked at from the point of view of a set of competencies that teachers have to reveal while performing their professional activity. In this case, "competency" should be understood as the effective mobilization in specific situations of previously acquired knowledge, capacities and values (Rodrigues, 2011, p.137).

In the "Communication from the Commission to the European Council and Parliament - Improve the quality of teachers' academic and professional training" from 2006 (quoted by Rodrigues, 2011), the European Union issued a set of general competencies for the European teachers, among which three can be selected:

- To work in multicultural contexts (in order to understand the value of diversity and respect for what is different);
- To work in close collaboration with colleagues, parents and with the community in general;
- And (...) it would also be a big advantage if teachers had the opportunity of acquiring, developing and using leadership competencies.

If this set of skills are aimed at in the in-service teachers training in Portugal they will meet one of the areas that has been more questioned at least since the implementation of the In-Service Teachers Training Centres (ISTTC) in Portugal, which has already conquered an iconic value in the field of change induced by training and can be conveyed through the following question: to what extent can in-service training promote the transformation and improvement of teachers' practice?

In the opinion of Formosinho, Machado e Mesquita (2014) the Portuguese teachers' in-service training model is open to "training focused on school as a social and organizational unit" that ensures "the political-administrative and territorial feed-back of training". It has to be remarked, however, that from 2003 onwards, with the arising of some restraints on teachers training financing, the ISTTC became a kind of central management "agencies", putting into practice training plans designed at a central level.



Formosinho *et al.* points out that the effectiveness and efficiency of the ISTTC action continues to legitimize itself within the field of in-service training, focusing currently on the satisfaction of teachers and schools' demands for the constant requirements arising from the educational policies of the various governments (2014, p. 126).

The National Council for Education (NCE) issued a "Recommendation on In-Service Training for kindergarten, primary and secondary level teachers" in 2013. The opinion contained in this document suggests a balance between the training that teachers should get at school and the one that results from national training plans, based on the good results achieved through that experience on previous occasions.

The component of the training plan which is more focused on school should be adequate to the specific circumstances in which it is held and it is not necessarily effective in all contexts. This component should be designed with a broad participation of teachers in order to prevent, among other things, a unilateral conditioning of contents by the school director, who is the main leadership of Portuguese schools currently, or by the middle leaderships.

Vieira believes that the educational practices and training can be frequently labelled either as reproductive or as transformative. It is important at each moment to understand where we are and to learn how to work in the space between what is real and is ideal, building re(ide)alistic practices. It is in the middle space, one with a hybrid nature and undefined borders, that we can find the possibility of exploiting more humanistic and democratic practices, assuming that the lack of humanism and democracy is the main reason for that effort (2015, p. 218).

The issue of participation of teachers in in-service training plans is one of great importance since it allows not only the measurement of the PD process itself but also of the identity issues that have an impact on teachers' work. We believe that the logics of participation of teachers is a crucial sign of teachers' current professionalism, between "reproduction" and "transformation".

Method

This article gives an account of the results obtained in research whose main purpose was to understand the logics of participation of Portuguese teachers in in-service training as a factor of DP.

The research questions were stated following the literature review and the empirical data collected as follows: Hypothesis 1 –

The majority of teachers recognize that in-service training plays a positive role in the transformation of their practice, but they don't associate it with their PD.

Hypothesis 2 – The majority of teachers take part in in-service training, but are rarely available to play an active role in its planning and implementation.

Hypothesis 3 – The majority of teachers take part in in-service training regardless of adverse work conditions.

Hypothesis 4 – The majority of teachers and educators believe that the in-service training courses they take are not valued by the leadership of their schools.

The research which was made may be included in the large category of educational case studies for its empirical nature, for its object, which may be considered important material for the educational system, for its purpose, which is to allow an intervention on that same system and for the data collection methodology, which, by ensuring the reliability of the data, makes that intervention possible.

Simultaneously, it has characteristics of an ethnographic study: the researchers stayed at the research site for a long period of time, thus gaining the status of participant observers, which gave them the possibility of making an in-depth analysis of the problem to be studied and an overview of the factors that constituted influence on the behaviour of all the participants.



As data collection techniques are concerned, two surveys by questionnaire were used: in the first case the questionnaire was applied to a sample of teachers selected among those working in the schools which are associated to the MarcoCinfães IISTTC (Table 1); in the second case, the questionnaire was applied to teachers who attended in-service training courses at MarcoCinfães ISTTC between 2012 and 2015 (Table 2).

Table 1. Characteristics of the schools associated to MarcoCinfães ISTTC in which the questionnaire was applied

Schools and Schools Units	Number of questionnaires distributed	Number of questionnaires returned	Response Rate
Marco de Canaveses Schools Unit	175	123	70.26%
Alpendorada Schools Unit	125	56	44.8%
Cinfães Schools Unit	50	50	100%
Secondary School of Cinfães	50	24	48%
Vocational School of Agriculture and Rural Development of Marco de Canaveses	50	25	50%
TOTAL	450	278	61.78%

Table 2. In-service training courses in MarcoCinfães ISTTC between 2012 and 2015 whose evaluation by teachers was analysed

Typology of action	Number of hours	Year of assessment	Area of Training	Number of trainees who attended the action
A1	25H	2014	Early	29
A2	25H	2014	Intervention Sex Education in Schools	32
A3	25H	2013	Pedagogical	28
A4	25H + 25h)	2013	Practice Specific	10
A5	15H + 15h)	2013	Didactics Interactive White Boards	18
A6	25H + 25h)	2012	Special Needs Education	22
A7	25H + 50h)	2013	School Self-assessment	19
A8	25H + 50h)	2014	Teaching Performance Evaluation	21
A9	25H + 50h)	2013	Pedagogical Supervision	49
			Total	218



In what concerns data analysis, the software programs used were the SPSS (Statistical Package for Social Sciences), version 18, and MS Excel 2016 Preview. The analysis of the answers to the open-form item was made using the content analysis technique.

Findings

Findings from the survey by questionnaire (table 1)

The participants in this research who answered the questionnaire are mostly women, aged between 40 and 50, permanent teachers, with a time in service between 9 and 12 years or above 20. There is also a significant participation of contract teachers, who, if we take into account the characteristics of the schools, may be skilled technicians.

Although there is a participation of teachers of all levels of education, the percentage of primary school respondents stands out.

As regards the attendance of in-service training, it is noted that the vast majority of the participants (91.4%) have attended credited training, particularly long-term one, over the last three years, in spite of the fact that their careers are “frozen”. Most among them choose training courses and attend them at the MarcoCinfães ISTTC (64.6%). A significant number of participants (36.6%) are willing to pay in order to attend in-service training even when that implies travelling to other places.

In what concerns participating in the school training planning it is noted that 45.7% of the participants agree with the statement that they actively do it; 27% neither agree nor disagree; 15% agree completely and 6.5% disagree totally.

Regarding the participation on the needs analysis stage, data show that the percentage of more than a half of the participants (54.3%) agree with the statement presented to them (“I participate actively in the needs analysis stage of the in-service training plan of my school”) and 18.3% agree totally. The teachers who neither agree nor disagree account for 20.9% of the whole of the participants and only 6.5% of the participants disagree completely.

Concerning the role of the ISTTC, the highest percentage of participants disagree partly with the statement that it should be the full responsibility of Centre to organize and implement all the in-service training, while 28.4% disagree totally. The percentage of those who agree partially or totally is 19%.

As regards the importance of in-service training for the quality of professional practice, 88.1% of the participants agree totally with the statement that that importance is very high. Only 6.8% neither agree or disagree and 5.1% disagree partly.

Finally, 81.6% of the respondents agree or agree totally that their main motivation to attend in-service training actions is their professional development.

Findings from the survey by questionnaire applied at the end of the training courses (table 2)

In what concerns the open-term item in the questionnaire which was applied at the end of the last session of all actions that took place at the MarcoCinfães ISTTC in 2012 and 2015, the data obtained lead us to the conclusion that, generally, the teachers that attended the three types of training actions consider that the objectives of those actions had been achieved almost totally. The score of their answers ranged between 4.2 and 4.9. Moreover, the medium score of 4.64 is the highest among the four items which were analysed. It is worth noting, however, that the highest scores (4.8 and 4.9) can be found in training actions of more practical nature.



Regarding the satisfaction of training needs, the average score obtained in this item is also high (4.48) and the training action that stands out this time is A4 – “Mathematics Curricular Targets” (4.8).

The second highest score in this set of items that were selected among all in the opinion survey belongs to the item referring to the impact that the competencies acquired during the training actions will have on the teachers’ professional activity: 4.57. It is noteworthy that the action A8 – The Internal Component of Teachers’ Evaluation, which registers the highest score in this item (4.9) was the one with the lowest score in the item concerning training needs.

The item “After this in-service training action I feel more prepared to work in this specific area” presents the lowest average score among the four items (4.38) and, within it, all the scores are lower than the ones in the items considered previously.

On the other hand, the analysis and interpretation of the data contained in the replies to the open-term items allow us to infer the following conclusions:

- A) Teachers/trainees articulate the training actions they attend with their training needs;
- B) Teachers/trainees prepare structured proposals of new training actions, particularly following others they have just attended;
- C) Teachers/trainees establish a cause effect relationship between the training actions they attend and a better professional performance in the classroom and in school in general;
- D) Teachers/trainees recognize the in-service training as a means of knowledge acquisition and promotion of a reflexive posture;
- E) Teachers/trainees recognize the training as an emancipatory activity;
- F) Teachers/trainees assign a central role to the trainer in the success of the training action, emphasizing relational skills, availability, knowledge, domain of adequate strategies and methodologies and the ability to promote a good atmosphere in the group as essential abilities in the profile of that trainer.
- G) Teachers/trainees do not often use the term “professional development” but recognize practices that promote it, such as self-training, consolidation and acquisition of knowledge and the promotion of a reflexive posture.

Results, Conclusions and Recommendations

The main purpose of this study was to understand the logics of teachers’ participation in in-service training from the point of view of Professional Development.

As emergent purposes there were the one of assessing (1) the impact of current teachers’ working conditions on their adhesion to in-service training and (2) the role that the school leaders play on that same adhesion procession.

The collected data allowed us to obtain valid information to be compared with the working hypothesis stated at the research, which were the following:

Hypothesis 1 – The majority of teachers recognize that in-service training plays a positive role in the transformation of their practice, but they don’t associate it with their PD.

Hypothesis 2 – The majority of teachers take part in in-service training, but are rarely available to play an active role in its planning and implementation.

Hypothesis 3 – The majority of teachers take part in in-service training regardless of adverse work conditions.

Hypothesis 4 – The majority of teachers and educators believe that the in-service training courses they take are not valued by the leadership of their schools.



The in-service training and the professional development

Regarding the first research hypothesis, “The majority of teachers recognize that in-service training plays a positive role in the transformation of their practice, but they don’t associate it with their PD”, we came to the conclusion that the term “professional development” is not frequently used by teachers in occasions when they are asked to express their opinion on in-service training, nor is it much valued when they have to place it on a scale that includes commonly used concepts, such as “teaching practice”.

However, they recognize the value of teachers’ practices which are involved in training and promote PD, such as the consolidation and acquisition of theoretical knowledge, self-training and innovation.

We also came to the conclusion that the majority of teachers establishes a cause-effect relationship between the training courses attended and a better professional performance in the classroom and in school in general, particularly when that training is done in the specific subject areas they teach or in comprehensive areas of the education system, such as “assessment”.

Interestingly, a large majority of teachers considers their PD their main motivation to attend in-service training actions.

The in-service training and the participation of teachers in its structuring and implementation

In what concerns the second research hypothesis, “The majority of teachers take part in in-service training, but are rarely available to play an active role in its planning and implementation”, we draw the conclusion that more than a half of the inquired teachers consider that they participate actively in the process of needs analysis and structuring of the in-service training in their schools.

However, the data obtained show that teachers develop reasonably structured proposals for new training actions, particularly just following the attendance of others.

Moreover, this initiative comes together with another data, which shows that teachers recognize in the training a space of knowledge and promotion of a reflexive posture. These two sets of data together, i.e., the knowledge and the reflexive posture and the initiative to propose new in-service training actions constitute very important conditions to allow teachers to get themselves effectively involved in the structuring of the in-service training plans of their schools since the needs analysis stage.

Another data that should be noted is that teachers sometimes don’t identify certain subject areas as training needs but, after attending courses in those areas, consider them important for their professional performance.

The in-service training and the teachers’ working conditions

Regarding the research hypothesis number three, “The majority of teachers take part in in-service training regardless of adverse work conditions”, the collected data allow us to conclude that a very high percentage of teachers still attends in-service training in spite of adverse working conditions and the current situation of “frozen careers”.

A significant number of teachers is also available to spend money, time and energy to obtain that training. A significant number of teachers attend the training actions at the ISTTC to which their school is associated, which may imply travelling to a different school from their own after classes or from home on Saturdays. A similarly high number of teachers attend training actions at other ISTTC and other institutions, paying for the courses in some of them.



In parallel with this situation, one where the working conditions include work overload, excessive stress, loss of confidence, feelings of incompetence, resistance to change, economic and social crisis, austerity measures, teachers' impoverishment, the majority of teachers who participate in the research characterize a good training action as the one which has a good training atmosphere, a good connection with teaching practice and other activities in the school, which constitutes an opportunity to exchange experiences among teachers and institutions and has an appropriate length of time taking into account the contents to be discussed.

Simultaneously, they consider a good teachers' trainer the one who articulates the contents with the best strategies and methodologies, who can interact well with the teacher, who promotes their autonomy, who is always available and creates a good atmosphere in the training space and group.

Taking into account the data which were collected, the in-service training becomes therefore, not only a space and time for reflexion, for knowledge structuring and a means of support for teachers' work, but also a stronghold of pleasant and proficuous social intercourse among peers, which can potentially generate the necessary energy that may, in some way, help to overcome some of the exhaustion caused by the daily routine.

The in-service training and the school leaderships

In what concerns the research question number four, "The majority of teachers and educators believe that the in-service training courses they take are not valued by the leadership of their schools", the collected data allow us to conclude that the vast majority of teachers are of the opinion that the leaders of their schools recognize the training actions they attend, which contradicts the initially stated hypothesis.

The authors consider that the methodology which was used to test this hypothesis (questionnaire containing only closed items) was not the most appropriate for the clarification of the concept "recognition", which would be important in a perspective of professional development.

References

- Day, C. (2007). A reforma da escola: profissionalismo e identidade dos professores em transição. In Flores, M. A. & Viana, I. C. (eds.), *Profissionalismo docente em transição: as identidades dos professores em tempos de mudança*. Braga: Instituto de Educação e Psicologia, Universidade de Minho.
- Day, C. (2014). A resiliência, os professores e a qualidade da educação. In Flores, M. A. & Coutinho, C. (eds.) *Formação e trabalho docente: diversidade e convergências*. Santo Tirso: De Facto Editores.
- Éraut, M. (1994). *Developing professional knowledge and competence*. Oxford: Pergamon Press.
- Flores, M. A. & Veiga Simão, A. M. (2009). (orgs.) *Aprendizagem e desenvolvimento profissional de professores: contextos e perspectivas*. Mangualde: Edições Pedagogo
- Flores, M. A. (2011). Curriculum of initial teacher education in Portugal: new contexts, old problems. *Journal of Education for Teaching* (special issue), 37 (4), 461-470).
- Flores, M. A. (2012). A formação de professores e a construção da identidade profissional. *Pesquisa (Auto) biográfica - Educação*, 10, EDUFPR, EDUEM, EDUEB, Natal, Porto Alegre, Salvador.
- Formosinho, J., Machado, J., Mesquita, E. (2014). *Luzes e sombras da formação contínua*. Mangualde: Edições Pedagogo.
- Lerner, R. M. & Hultsch, D. F. (1983). *Human development: a life-span perspective*. USA: Mc Graw-Hill. National Council for Education (2013). *Recomendação sobre Formação Contínua de Educadores de Infância e Professores dos Ensinos Básico e Secundário* – Diário da República, 2.ª Série, n.º 95 – 17 de maio de 2013. Lisboa: Conselho Nacional da Educação.
- Piaget, J. (1983). *Problemas de psicologia genética*. São Paulo: Abril Cultural.
- Rodrigues, A. (2011). Formar professores para a escola de que precisamos- Educar para a cidadania. *Revista Elo* 18: *A Cidadania e a Democracia nas Escolas*. Braga: CFFH.
- Rodrigues, C. (2007). *Escola reflexiva e desenvolvimento profissional de professores - A concepção do Projeto Educativo como estratégia de desenvolvimento profissional* (Dissertação de Mestrado). Aveiro: Universidade de Aveiro.
- Vieira, F. (2015). Entre a reprodução e a transformação – a investigação como prática pedagógica na formação de professores in Flores, M. A., Moreira, M. A. & Oliveira, L. (org.) *Desafios curriculares e pedagógicos na formação de professores*. Mangualde: Edições Pedagogo.



Banking Model of Education in EFL Classes

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Abstract

This article aims at exploring major conflicts and the inadequacies in EFL classes consistent with ‘*banking education*’ which was described by Paulo Freire as one of the remarkable thinkers of education. The article criticizes the traditional method of foreign language teaching that is based on teacher domination as it is described in banking education and reveals the limits of banking model of education for FLL. The pedagogy and the method derived from the pedagogy should be applied for a fruitful FLL is far away from traditional banking education. Learners’ attendance and involved in learning English can be increased by means of a different alternative approach – critical pedagogy- in EFL classes. Critical Pedagogy that stresses empowering learners to think and act critically and use their life experiences as tools to foster their learning should be proposed as a suggestion for application of critical thinking in ELT classrooms. Problem posing education was proposed by Freire (1970) as an alternative to the banking model and it leads the development of knowledge by the students themselves. Problem posing education in Critical Pedagogy is more relevant for language learning as because language learning is an active process and cannot be achieved by passivized students of banking education. In the article, basic principles of problem posing education, teacher and student roles, praxis, and dialogue that are major themes of CP in language teaching are analyzed. To clarify the constraints of the present system of teaching of foreign languages, and as a suggestion; CP that should be put into practice in EFL classes is discussed here. For the discussion, available books and articles written on the subject were scrutinized.

Key words: banking education, ELT, CP

1. Introduction

Firstly I ‘d like to express the failure in FLL in Turkey and try to find out the reasonable solutions by shedding light to some reasons of unsuccessful students to access the second language. I’ve been teaching English for a long time in universities in Turkey and I’ve experienced that the need to speak an FL is irrelevant with the system, method, and techniques used in FLL. The pedagogy should be reconsidered to realize the barriers to be able to speak FL. Although some contemporary teaching methods are involved in ELT materials, both instructors of English and the learners do not avoid applying traditional teaching methods as described in banking model of education by Freire.

2. Method

In this study as the purpose is to extract the implications of the pedagogy for the design of ELT classes it was essential to indicate the general understanding of contemporary language teaching approaches. In addition, it was also needed to have a clear definition of major factors involved in designing ELT curriculum. It was first required to express the current situation in EFL classes as a whole in Turkey. To understand banking model of education versus language learning principals, the key concepts are expressed and discussed here such as; banking education and as an alternative model problem-posing education, critical pedagogy, and communicative language teaching.

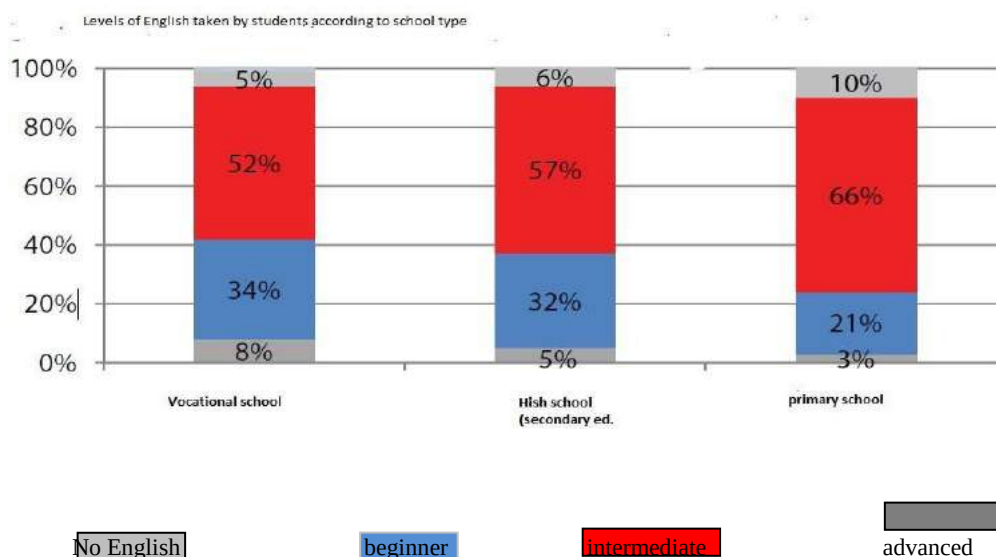
Firstly I want to point out the limits and unsatisfactory results in ELT in Turkey in general.



As Prof. Paker states, in Turkey, there are 700 hours English Lesson in primary school and in high school (secondary school) there are 700 hours English lesson. Approximately after 1400 hours English lesson % 90 per cent of students are at elementary level. (Paker, 2012). He also explains that in 2010-2011 academic year % 90,20 of 1450 students and in 2011-2012 academic year % 83,29 of 1634 students who enrolled in School of Foreign Languages in Pamukkale University were at an elementary level even they were at the beginning level.

In the report of TEPAV(Turkish Economic Policy Research Foundation) the findings show that level of the learners are dramatically low.

Table 1: Levels of English taken by students according to school type in Turkey



Source: TEPAV & British Council joint report on 'At State Schools in Turkey Teaching English Language Needs Analysis' (2013:40)

I also confirm this situation as one of the instructors of SOFL (School of Foreign Languages) in Selcuk University. The case in universities is the same like in the table above. After a one year of training, it is hard to say that the students can communicate well in English. During two terms the students have to take two or three hour's English lessons and despite we use some English materials which are designed on the basis of communicative language learning approach that is very popular nowadays, the students can do at the elementary level. English File by Oxford University, Headway by Oxford University or English for Life by Oxford University are some of the books which have been studied in SOFL both in Prep Classes and in Faculties' compulsory English lessons. The instructors in classes can confess that Grammar lesson are welcomed by all the students and other teaching practices are ignored and understood by the students that they are supplementary exercises to learn grammatical patterns.

Bayraktaroğlu claims that; *From the Preparatory School qualification Exam, 50 students who started the Undergraduate program with an expected score between 60 and 90, when they take the IELTS exam, they have been rated 2,5-4,5 which is much lower than the 6.0 required for studying a foreign language. (Bayraktaroğlu, 2014:4)*

Actually, the case is the same among academics in Turkey. They can read English and comprehend a text adequately but it not easy for them to write and speak in English. They are improved on reciprocal skills but they are lack of capacity of productive skills in English.

What are the reasons involved in this case in Turkey? It can apparently be said that one of the main reasons of



this case is the banking model of language teaching in the education system in language classes.



3. Findings

“Language is not simply communication; rather, it is a practice that constructs the ways language learners understand themselves and their social surroundings.”(Norton & Toohey; 2005).

In the review of Mendez as it is stated, Norton and Toohey suggest language learning with aspects of social change. In their book, they do not only express the need to provide new approaches to better language pedagogy but also indicate the importance of reflection and praxis. This means, they are not very interested in telling the relevant people of language education how to speak, write, read, listen or engage in critical practice but implied the power of praxis in FLL.

Language educators must open new productive possibilities for FLL. Critical pedagogy explores the social visions and promotes the understanding the relationships between teachers and students, material developers and test makers. They are all the elements of a unit and cannot be taken apart from the others in a language learning assumption.

I think we must define some terms and expressions about FLL before criticizing the limits of the current system. In analysing banking model of education in class we must refer to Freire as he stated this *banking education* as;

“Education thus becomes an act of depositing, in which the students are depositories and the teacher is the depositor. Instead of communicating, the teacher issues communicate and make deposits which the students patiently receive, memorize, and repeat. This is the “banking concept of education, in which the scope of action allowed to the students extends only as far as receiving, filling and storing deposits. (Freire, 1970).

As an alternative to the *banking model*, Freire (1970) proposed *problem posing education* which is identified in the context of Critical Pedagogy. Freire expressed the problem posing education as:

“They must abandon the educational goal of deposit making and replace it with the posing of the problems of human beings in their relations with the world. “Problem-posing” education, responding to the essence of consciousness – intentionally – rejects communicate and embodies communication.” (Freire, 1970).

Problem posing education is an opposition to banking education in many ways. The roles of teacher and student is changed and through dialogue here no one teaches another, nor is anyone self-taught. As Freire describes people teach each other. Problem posing education leads a way to liberation of person to society whereas banking education mirror oppressive society as a whole.

The following attitudes and practices maintain teacher student contradiction in banking education:

- (a) the teacher teaches and the students are taught;
 - (b) the teacher knows everything and the students know nothing;
 - (c) the teacher thinks and the students are thought about;
 - (d) the teacher talks and the students listen – meekly;
 - (e) the teacher disciplines and the students are disciplined;
 - (f) the teacher chooses and enforces his choice, and the students comply;
 - (g) the teacher acts and the students have the illusion of acting through the action of the teacher;
 - (h) the teacher chooses the program content, and the students (who were not consulted) adapt to it
 - (i) the teacher confuses the authority of knowledge with his/her own professional authority, which she and he sets in opposition to the freedom of the students;
 - (j) the teacher is the Subject of the learning process, while the pupils are mere objects.
- (Freire, 1970)

The basic principles of traditional class education and cannot be abandoned by teachers today. As a result of this system, the students cannot be adopted to modern learner-centered education in class despite its many advantages that are proposed by modern authorities of education.



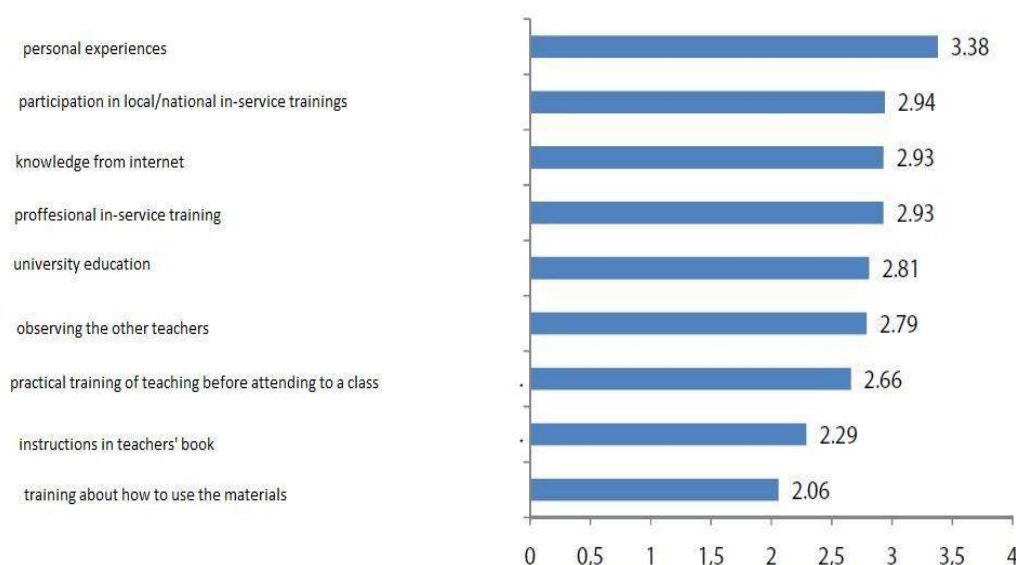
Problem posing education should be taken place transforming the traditional teaching systems.

In general, when we compare two models it is seen that each of them reject the other.

As Schugurensky says: “I learned that teachers can proclaim—and sometimes believe—to be implementing an emancipatory pedagogical model, yet in practice impose a traditional banking education.” (Schugurensky Twenty lessons I learned from Freire p: 4).

We can also see the case when we look into the Needs Analysis Report of ELT at state schools in Turkey.

Graph 1: How effective were the following factors on your teaching method? "(1 = zero effect, 4= most significant effect)



Source: TEPAV & British Council joint report on ‘At State Schools in Turkey Teaching English Language Needs Analysis’ (2013:46)

This data above show us that experiences are useful and necessary as it is proposed in problem – posing the model of education.

Critical Pedagogy /CP

Critical pedagogy has been developed with the work of Freire in the 1970s. Critical Pedagogy is an approach to language teaching and learning and it is associated with Brazilian educator Paulo Freire. Freire expressed it in these words; *The special contribution of the educator to the birth of the new society would have to be a critical education which could help to form critical education..* (Freire, 1974:29).

In fact, in Turkey, the trend of learner-centred approach in English Language Teaching is followed as a contemporary English language teaching pedagogy and so the lesson plan is designed focusing on developing learners’ communicative competence and promoting learner’s self-autonomy in language classrooms. Learner-centeredness came forward during 1970s-1980s and communicative language teaching was developed. Therefore language learning-teaching processes changed from language form to language function and the need of the learners is considered important. However it is not the case in English classrooms, the learner and teacher are in the habit of teachers’ domination and autonomy. This rigid habit cannot be transformed to learner-centeredness. Actually, as an experienced instructor of English, I can claim that both sides are pleased with the traditional training system. Teacher talks and wise listener learners listen. Activate the students in class is a big issue.

All these set of tenets about nature of language and of language learning and teaching describe CLT. As Brown



states; “ From earlier seminal works in CLT (Widdowson 1978, Breen & Candlin 1980), Savignon 1983) up to



more recent teacher education textbooks (Brown 2000, Richard-Amato 1996, Lee & VanPatten 1995, Nuna 1991a) we have definitions enough to send us reeling.”

As CLT is involved in CP is related to some principles like cooperative learning, interactive teaching, learner-centered classes, and content centered education etc. When we compare the banking model and communicative language teaching it is seen that traditional model of education and as an alternative model communicative language teaching is opposite in many details:

In Communicative Language Teaching

- ✓ Meaning is paramount
 - ✓ Dialogues center around communicative functions and aren't memorized
 - ✓ Contextualization is a basic premise
 - ✓ Language Learning is learning to communicate
 - ✓ Communicative competence is the desired goal
 - ✓ Teachers help learners in any way that motivates them to work with the language
 - ✓ Students are expected to interact with other people
 - ✓ The teacher cannot know exactly what language the students will use
- (Brown, 2001: 45).

All these tenets cannot be practiced in a banking model of language education. In the banking model of education as mentioned above, the teacher is the subject of the learning process, while the pupils are mere objects. So it is not possible to teach a language in this traditional way of teaching as it is understood that when the learner is involved in learning he/she can learn effectively, as a reason of the nature of language learning requires involving.

However, the limit of the situation is that the instructors of English are not confident. The Tütüniş state this case;

A teacher who is unsure of his/her own communicative knowledge is not adapted to communicative method. For this reason, the theoretical flux is warmer for her/him and gives priority to rule teaching as a method. The end result of this method is that the student goes into the conversation effort and often gives up using the target language. (Tütüniş, 2014).

Another aspect of the issue is that ELT is a very distinctive subject matter that cannot be practiced and achieved under the conditions of banking model of education. Language Learning may be affected by some factors and these are named as effective filter and state of relaxation. It is known today that when a person has lower stress he/she can learn better a language. It supports the idea of freedom in class in ELT. When the learners' confidence is low they are in fear of making mistakes and it causes them not to produce a language and not to communicate in the target language. This is the effective filter and in this situation, it is not very possible to get enough input in the target language. (Krashen & Terrell, 1983).

Rogers' learning principles also support the claims about language learning atmosphere;

-When productive learning is concerned with the goals and desires that it wishes to achieve, and when the person considers the material presented to him as a means of achieving these goals, he/she progresses at a rapid pace

-When the threat to self is low, experience is perceived in a different design and learning progress

-Learning becomes easier when students take part in taking responsibility for the learning activity. (Rogers, 1969: p.164).

Carl Roger's views about education are that learners have their own interests and desires and the teacher's job is to free the student's sense of self-helping his students to live their interests and desires. (Rogers, 1969).



“I learned that education is communion: “I cannot think authentically unless others think. I cannot think for others, or without others.” (Schugurensky Twenty lessons I learned from Freire p: 5).

When language is used simply for the repetition of lessons, it is not surprising that one of the chief difficulties of school work has come to be instruction in the mother-tongue. Since the language taught is unnatural, not growing out of the real desire to communicate vital impressions and convictions, the freedom of children in its use gradually disappears” (pp 289) (Dewey, 1900: pp 55-56 – The School and Society).

The students must express their own feelings and emotions on a topic they are very interested in or have some boundaries with it. They must have some desire to express themselves and motivation to do something on a topic such as students’ financial problems when they are university students or shortcomings of education in universities. They may wish to talk about their legal rights in university education system or their role or place, whether they are subjects or objects. For example; an old woman named ‘Carol Baines from Australia lived in the Australian outback and had an unusual life’ is not in point of interest. (English for Life- Elementary, 2007, Tom Hutchinson, Oxford University, page: 96) No student cares the story. Instead of doing this you can choose a student that he/she wants to be a model and make the students talk about her/his life and every detail in it. Lifestyle, culture, money, sadness, happiness, problems etc. can become in view. Such a situation will empower all the students to be involved in the life of this student as because all the students will be talking about their lives unawares. Semantic point of view is essential in FLL as Littlewood states:

“One of the most characteristic features of communicative language teaching is that it pays systematic attention to functional as well as structural aspects of language.” (Richards & Rodgers, 1986:66).

According to the Communicative approach, contextualization is a basic premise. Richards and Rodgers explain the paramount of CLT.

“Firth also stressed that language needed to be studied in the broader sociocultural context of its use, which included participants, their behavior and beliefs, the objects of linguistic discussion, and word choice.” (Richards & Rodgers, 1986:69).

The learners in ELT classes as they are ruled under in banking model of education cannot ask questions and do not comment or discuss and analyze. As wise listener, they are waiting to be told and memorize. The dramatic fact is that second language acquisition cannot be acquired if the learner isn’t involved in the target language. Speaking a language is ability such as to be able to write or swim. You learn how to write with a pencil practically, you see and you are told how to write but eventually, you achieve it by practicing. Swimming is not described you can swim when you swim.

Krashen (2003) states that cognitive development, including the acquisition of concepts and facts, is more likely to occur through problem-solving than through deliberate study.

4. Results, Conclusions, and Recommendations

Thus, this study raises concerns that all stakeholders need to take into account when education policy is being implemented in the dissemination stage. Policy cannot be successfully implemented without listening to the teachers’ voices as they are the key agents of the change. If the policy of learning reform is to be successful, intensive and consistent teacher development must be organized and sufficient resources must be allocated so that all schools, especially those in rural areas, can meet policy objectives.

As it is understood, learning a foreign language is a big process and only the method is not the key element to be designed. There are many components of language learning and the aim of learning plays an important role. You can name it as motivation and motivation are linked to some approaches and techniques can be used in ELT. Teacher and learner roles should be adjusted and the learner must be taken as a subject that can determine his/her own needs to learn a language. Language learning is an active process and it cannot be limited to class education.



I personally think that the functionality of a language increases the motivation and it must be paid more attention rather than structural aspects of a language.

Hymes (1972) defined communicative competence not only as an inherent grammatical competence but also as the ability to use grammatical competence a variety of communicative situations. As Richards and Rodgers explains; *“Wilkins’s contribution was an analysis of the communicative meanings that a language learner needs to understand and express. Rather than describe the core of language through traditional concepts of grammar and vocabulary, Wilkins attempted to demonstrate the systems of meanings that lay behind the communicative uses of language.”* (Richards & Rodgers, 1990:65).

Unfortunately, it is seen that regular instructors of English are tempted to use traditional techniques and methods in teaching English. It is easier and faster but useless. We must put habit formation aside and try to communicate in English. As Tutüniş states; the teachers that are not confident in English interaction repudiate the communicative method and lean towards theoretical approaches and give priority to teaching grammar rules as a method. As a result of this, learners try to speak accurately and give up speaking. (Tutüniş, 2012).

So, as a result, the followings should be put into practice to help learners learn English:

Language teachers must realize the communicative language teaching and leave the structural traditional methods. Widdowson states; The structural approach is based on the belief that language learning comes about by teaching learners to know the forms of the language as a medium and the meaning they incorporate; that they will learn how to do things with this knowledge on their own. The communicative approach is based on the contrary belief that language learning comes about when the teachers get learners to use the language pragmatically to mediate meaning for a purpose... (Widdowson, 1990).

Banking education cannot provide what the need is in ELT classroom. Language learning nature is versus traditional banking education.

Consequently,

-innovation and social change in teacher education must be on the agenda of effective language education, especially in such countries where failure in teaching English is recorded.

- A comprehensive curriculum of CP must be realized and regarding this curriculum, ELT material must be designed. These materials must give chance to the learners to choose their own topic and field of interest.

-Vocationally oriented Language teaching can help to solve some motivation problems and give chance to learners to use his/her life and job experiences as a resource in learning which is proposed in problem-solving education.

References

- Bonny Norton and Kelleen Toohey. (2003). Review of Critical Pedagogies and Language Learning, Eva Núñez-Méndez Portland State University, enunez@pdx.edu DOI:10+10170S0272263105320286 (Eds.)+ New York:Cambridge University Press, Pp: 362+.
- Brown Douglas H. (2001) Teaching by Principles/ An Interactive Approach to Language Pedagogy. NY: Longman.
- Dewey, John. (1915). The School and Society. Chicago, Ill., The University of Chicago Press.
- Freire, Paulo.(1970,1993) Pedagogy of the Oppressed. (by Donaldo Macedo) . (2000). USA, Bloomsbury Publishing.
- Freire, Paulo. (1974). Education for Critical Consciousness. London: Continuum.
- Harmer, Jeremy. (2001). The Practice of English Language Teaching. Longman, Pearson Education Limited.
- Hymes, Dell (1974). Foundations in Sociolinguistics. An Ethnographic Approach. Philadelphia: Pennsylvania University Press, pp11-17.



- Hymes, D. H. (1972). On Communicative Competence. In Pride, J. B., & Holmes, J.(Eds.), Sociolinguistics, 269-293. Baltimore, USA: Penguin Education, Penguin Books Ltd.
- Krashen, S. (2003). Explorations in Language Acquisition and Use. Portsmouth, NH: Heinemann.
- Paker, Turan. (2012) T nrikiye’de Neden Yabancı Dil (İngilizce) Öğretmiyoruz ve Neden Öğrencilerimiz İletişim Kurabilecek D zeyde İngilizce Öğrenemiyor? Pamukkale University Journal of Education, Number 32 (July 2012/II).
- Richards, Jack C. & Rodgers Theodore S. (1990). Approaches and Methods in Language Teaching. Cambridge University Press.
- Rogers, C. & Freiberg, H. J. (1969). Freedom to Learn. USA: Merill.
- Schugurensky, Daniel. (2011). Continuum Library of Educational Thought Paulo Freire. Series Editor: Richard Bailey Vol. 16. London: Continuum International Publishing Group.
- Richards, Jack C. & Rodgers Theodore S. (1986). Approaches and Methods in Language Teaching. Cambridge: Cambridge University Press.
- Prof. Dr. Sinan Bayraktaroğlu (2014). (Yıldırım Beyazıt Üniversitesi Yabancı Diller Yüksekokulu) Türkiye’de Yabancı Dil Eğitiminde Eğilim Ne Olmalı? Hacettepe Üniversitesi Eğitim Fak ltesi İngiliz Dili Eğitimi Anabilim Dalı 1. Yabancı Dil Eğitimi Çalıştayı Bildirileri 12 – 13 Kasım 2012 Edit rler Arif SARI OBAN H seyin  Z HACETTEPE  NİVERSİTESİ YAY I N L A R I Copyright , 2014 by Hacettepe University ISBN: 978-975-491-371-2 Ankara.
- T t n ş, Birsen. Prof. Dr. (2014) İstanbul Aydın Üniversitesi Eğitim Fak ltesi İngilizceT rkiye’de Yabancı Dil Eğitiminde Eğilim Ne Olmalı? Hacettepe Üniversitesi Eğitim Fak ltesi İngiliz Dili Eğitimi Anabilim Dalı 1. Yabancı Dil Eğitimi Çalıştayı Bildirileri 12 – 13 Kasım 2012 Edit rler Arif SARI OBAN H seyin  Z HACETTEPE  NİVERSİTESİ YAY I N L A R I Copyright , 2014 by Hacettepe University ISBN: 978-975-491-371-2 Ankara
- T rkiye’deki Devlet Okullarında İngilizce Dilinin Öğretimine İlişkin Ulusal İhtiya  Analizi (2013).TEPAV Proje Ekibi E şan Nas  zen (Proje Y neticisi), İdil Bilgi  Alpaslan, Aysen  a lı, İdil  zdo an, Merve Sancak, Ali Osman Dizman, Ali S kmen Danışman David Vale, British Council Danışmanı KASIM 2013
- Widdowson, H.G. (1990). Aspects of Language Teaching. Oxford University Press.

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Digital competence and blended learning

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Abstract

Development of competences nowadays is very important issue. There are discussions about development of competencies using different methods, competencies-based curriculum and so on. Digital competence is one of the 8 key competencies for lifelong learning. It is described by using five areas – information and data literacy, communication and collaboration, digital content creation, safety and problem solving (Vuorikari, Punie, Carretero Gomez, Van den Brande, 2016). The article shows literature based research of possibility to develop digital competence by using blended learning per se, because blended learning is described as learning process where integration of face-to-face learning and e-learning happens. The article's main focus is on development of digital competence.

Many authors talk about “net-generation” who spends their days with technology but does it mean that they are digitally competent people.

Keywords: Digital competence, Blended-learning, Higher education, E-learning

Introduction

Development of competencies becomes more and more popular topic in nowadays. This topic is interesting in all range of educational levels – from primary school to higher education. Development of different competencies is significant issue for life-long learning.

European Commission has defined eight key competencies – communicating in a mother tongue, communicating in a foreign language, mathematical, scientific and technological competence, digital competence, learning to learn, social and civic competences, sense of initiative and entrepreneurship, cultural awareness and expression. Main issue of this article is digital competence, what defined as confident and critical usage of information and communications technology for work, leisure and communication.

Another significant issue is how to manage development of digital competence. One of the possibilities is blended learning. Blended learning is defined as planned, pedagogically meaningful integration of face-to-face and e-learning (Picciano, 2009). Blended learning not only enriches learning process but it gives possibilities for students for more active participation in learning process (Garrison and Vaughan, 2007). Blended learning gives new learning experience for students as well as new teaching experience for teachers (Powell, Watson, Staley, et al 2015). Meaningful integration of e-learning tools gives opportunity for students for personal development, as well as to develop such cognitive skills as critical thinking and conversation leading (Garrison and Vaughan, 2008; Somekh, 2007). Blended learning experience enriches learners' learning as well as teachers' teaching praxis.

One of the reasons to research only digital competence is because of the technological side of blended learning. The poor digital competence can lead to unsuccessful blended learning experience as well as impact outcomes of the learning. To use technological tools effectively learners have to know them and have to know how they work (Hubackova & Semradova, 2016; Dohn, 2009). It depends on users' skills and historical body (Scollon, 2004) - it means that users use technological tools as they used to use. So, as more advanced user learner is as easier it is to use it for learning (in this case, for blended learning), because learners can pay they attention more on the content not on the technology itself (Ozsariyildiz, & Beheshti, 2007).



Eurostat data (Eurostat, 2017) shows that average percent of EU (28 countries) individuals aged 16 to 74, who thinks that they have high level of computer skills, are 29 % in 2014 (compare to 23% in 2007). That can mean that one third of individuals in EU can fully participate in blended learning's e-learning part, if we talk about digital competence. However, only 15 % thinks that they have very low computer skills (1 to 2 out of 6 computer related activities). Computer related activities offered to respondent were the following - copied/moved a file/folder, copy/cut/paste to move information on the screen, used basic arithmetic formulae, compressed/zipped a file, connecting and installing new devices or written a computer program. There is also statistics on individuals internet related skills - use a search engine to find information; send an e-mail with attached files; post messages to chatrooms, newsgroups or any online discussion forum; use the internet to make telephone calls; use peer-to-peer file sharing for exchanging movies, music etc.; create a web page. Eurostat data (Eupstat, 2017) shows that in the year 2013 30% of individuals aged from 16 – 74 evaluate themselves as low skilled (1 to 2 out of 6 internet related activities) and only 12% evaluate themselves as high skilled.

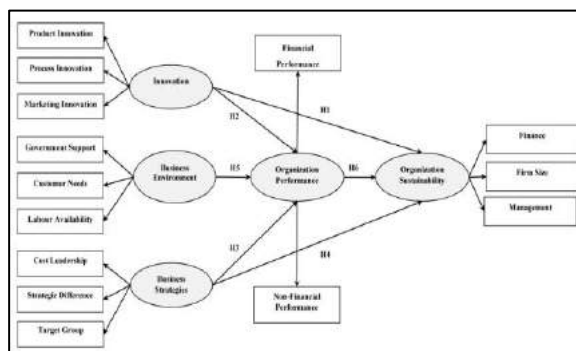


Diagram 1. Eurostat data on computer and internet related skills.

So there is possibility for 71 % to develop their computer skills and 88% of individuals can have possibility to increase their internet related skills.

The European Digital Competence Framework for Citizens (Vuorikari, Punie, Carretero Gomez, Van den Brande, 2016) sets five digital competence areas – information and data literacy, communication and collaboration, digital content creation, safety and problem solving. All these areas can be used and developed in blended learning.

The aim of the article is to find out do the scientific literature speaks about development of digital competence by using blended learning and does blended learning can help develop it.

Method

This is literature based research. Articles are read by using The European Digital Competence Framework set by Vuorikari, R., Punie, Y., Carretero Gomez S., Van den Brande, G. (2016). Articles are not categorized based on educational level or subject. Main issue is blended learning and development of skills.

Findings

The European Digital Competence Framework gives five digital competence areas with several dimensions for each of it. Literature on blended learning speaks about support of digital competence (Toia, 2016; Hubackova, & Semradova, 2016; Bates, Bates, Sangra, 2011; Díez, 2008), development of computer skills (Pratt, 2014), increase of information searching competence and identification of main ideas (Ozdamli & Tavukcu, 2016).



Information and data literacy has three dimensions – (1) browsing, searching and filtering data, information and digital content; (2) evaluating data, information and digital content and (3) managing data, information and digital content. All these dimensions are very important in the blended learning because students have to search for information and digital content to be successful. Blended learning can support development of this kind of skills (Soler, Soler, & Araya, 2017; Ozdamli & Tavukcu, 2016; Buran & Evseeva, 2015; Pratt, 2014). From one side – learners do not have to browse, search and filter data, information and digital content because learning material in blended learning's e-learning part is made to be ready to explore. From other side – there can be assignments that force learners to find information by themselves and there is clear need for previously mention skills. There are not much scientific researches on this issue in blended learning context.

Eurostat data shows that in year 2013 94% of youth aged from 16 – 29 (EU 28) have used search engine to find information. Of course there is different situation in some countries, for example, Turkey had 72 % but Iceland 100%. But average youth in European Union is very skilled in searching. From other side, there is situation that students make searching not effectively – it is hard for them to use keywords or think in bigger picture.

The second area is communication and collaboration with six dimensions – (1) interacting through digital technologies; (2) sharing through digital technologies; (3) engaging in citizenship through digital technologies; (4) collaborating through digital technologies; (5) netiquette; (6) managing digital identity. Interaction, collaboration and sharing are very important skills for successful blended learning experience. These skills also can be developed by blended learning (Soler, Soler, & Araya, 2017; Nazarenko, 2015; Okaz, 2015). Interaction and collaboration through digital technology are very important skills for blended learning. Many students have these skills (Soler, Soler, & Araya, 2017; Okaz, 2015) because of wide usage of web 2.0 tools in their everyday life (discussion forums, wikis, blogs, social networking). But there can be problems to use these skills in learning situations. Some researchers talk about development of online communication but as social competence (Prohorets & Plekhanova, 2015). Eurostat data shows that youth aged from 16 – 29 in European Union (28 countries) have posted messages to chat rooms, newsgroups or an online discussion forum in 72 %. Also there situation differs between countries from 37% in Turkey to 94% in Lithuania. It means that collaboration and interaction through digital technologies in blended learning can differ because of different digital technology usage cultures. 32% of youth (aged 16 – 29) used peer-to-peer file sharing for exchanging movies, music ect. (Eurostat, 2013) So sharing through digital technologies need to be developed. In the same time percentage differs for countries from 13% in Ireland to 74% in Lithuania.

The third area is digital content creation – (1) developing digital content; (2) integrating and re-elaborating digital content; (3) copyright and licenses; (4) programming. Digital content development and integration are very important issue in blended learning. Some researchers admit that there is problem of content creation in blended learning (Powell, et al, 2015; Clement, Vandeput, & Osaer, 2016). Teachers often use the same learning content as they used to for face-to-face learning. Content is not prepared specifically for blended learning. This may cause the issue that learners are not satisfied. Eurostat data shows that in 2013 only 18% of EU 28 youth have created a Web page (from 1% in Cyprus to 48% in Iceland). There is much work to develop digital content creation skills.

There are always discussion from teachers on copyright and licenses. Teachers want to be sure that their work is secured with copyrights; however, teachers and students take into consideration other author's rights (Soler, Soler, & Araya, 2017).

19% of youth aged from 16 – 29 in 2014 (EU 28 countries), according to Eurostat data, have written a computer program using a specialized programming language. This is very little number. From other side blended learning as per se probably cannot develop this kind of dimension (except blended learning course on programming) because learners do not need programming skills to participate in learning situations.



The fourth area is safety with dimensions like (1) protecting devices; (2) protecting personal data and privacy; (3) protecting health and well-being; (4) protecting the environment. All these dimensions can be developed in blended learning settings. Institutions, who offer blended learning, give advice to students about safety issues. Eurostat data in 2011 shows that 68% of youth judge their skills as sufficient to protect their private computer from virus or other computer infection. Safety issue is very important not only for blended learning but for student management systems as well so institutions put big effort on this issue. Sometimes students with lower digital skills need some safety advice when using public computers. Time by time students not log out of learning management system but just close tab. This can lead for problem that next user can get some information or even log in in other account. Eurostat data in 2011 shows that 69% of youth aged 16 – 29 in EU 28 countries judge their ability to be sufficient to protect their personal data. Unfortunately, Eurostat does not have data for later years. But this information on 2011 shows that young learners are able to protect their personal data and privacy.

About health protection in blended learning settings there is very little information in literature. A. Buran and A. Evseeva (2015) in their article mention problems of eyesight as a barrier for online learning as well as time spent on learning (Soler, Soler, & Araya, 2017; Buran & Evseeva, 2015) what impacts learners' and teachers' well being.

The last one area is problem solving. It has such dimensions as (1) solving technical problems; (2) identifying needs and technological responses; (3) creatively using digital technologies; (4) identifying digital competence gaps. Institution who offers blended learning most of the time has support system for students' and teachers' technical problems. Creative use of digital technologies is very important for teachers but as mention previously, teachers need training on technologies. There is no possibility to use technology creatively if you do not know how it works, it functions. Also students and teachers identify their digital gaps because some research mentioned in this article before shows that students and teachers admit that they need training.

Conclusion

There are two kinds of articles – one who pay attention on teachers/ staff and one who pay attention on learners. There is very little research made related to digital competency.

Some research shows that teachers, who work in blended learning, need training on use of technological tools (Kofar, 2016; Clement, Vandeput, L & Osaer, 2016; Georgsen & Løvstad, 2014). There are researches that illustrate teachers' or learners' technological skills before blended learning experience (Özel, Arikan, 2015). But there are not articles what exactly speaks about development of digital competences. It is often just mentioned only in one sentence.

Many researches evaluate students' and teachers' technology proficiency but it seems that there is no research on do blended learning as per se develop digital competency, if learners and teachers uses it time after time. We can think that it is so because, for example, if learner uses discussion forum for learning purposes, then he/she learns netiquette, collaboration, data managing and so on. As well as teachers do so. Their skills develop as more as they use technology.

Research speaks about teachers' and learners' skills on collaboration, communication through digital technologies but there is hard to find research made on health issues because of blended learning or e-learning. As well as there is no research on do blended learning impacts learners' or teachers' skills on technical problem solving or protecting devices and environment.

There is need in future to make a research on these issues to be sure that blended learning has impact not only on teachers' and learners' social skills, language competencies ect., but also on their digital competency.



References

- Bates, A. W., Bates, T., & Sangra, A. (2011). Managing technology in higher education: Strategies for transforming teaching and learning. John Wiley & Sons.
- Buran, A., & Evseeva, A. (2015). Prospects of blended learning implementation at technical university. *Procedia-Social and Behavioral Sciences*, 206, 177-182.
- Carretero, S.; Vuorikari, R. and Punie, Y. (2017). DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use, EUR 28558 EN, doi:10.2760/38842
- Clement, M., Vandeput, L., & Osaer, T. (2016). Blended learning design: a shared experience. *Procedia-Social and Behavioral Sciences*, 228, 582-586.
- Diez, O. (2008). Training teachers for e-learning, beyond ICT skills towards lifelong learning requirements: A case study. Garç a-Pe alvo, F. *Advances in E-Learning: Experiences and Methodologies*.
- Dohn, N. B. (2009). Web 2.0: Inherent tensions and evident challenges for education. *International journal of computer-supported collaborative learning*, 4(3), 343-363.
- Eurostat <http://ec.europa.eu/eurostat/>
- Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. John Wiley & Sons.
- Hubackova, S., & Semradova, I. (2016). Evaluation of Blended Learning. *Procedia-Social and Behavioral Sciences*, 217, 551-557.
- Nazarenko, A. L. (2015). Blended learning vs traditional learning: What works?(a case study research). *Procedia-Social and Behavioral Sciences*, 200, 77-82.
- Okaz, A. A. (2015). Integrating blended learning in higher education. *Procedia-Social and Behavioral Sciences*, 186, 600-603.
- Ozdamli, F., & Tavukcu, T. (2016). The Effect of Digital Scenario Supported Learning on the Success of Scientific Ethic and Research and Strategies of Information Inquiry (EDISSUSERESII). *Anthropologist*, 25(3), 278-287.
-  zel, A. G., & Arikan, A. (2015). The use of the internet and web 2.0 tools among EFL instructors. *Mediterranean Journal of Humanities*, 1, 313-325.
- Ozsariyildiz, S., & Beheshti, R. (2007). Effects of teaching environments and digital media: the case of a parametric design systems course. *Bringing ITC Knowledge to Work*, 763-768.
- Picciano, A. (2009). Blending with purpose: The multimodal model. *Journal of the Research Center for Educational Technology*, 5(1), 4-14.
- Pratt, D. D. (2014). Comm. Skills Online three years down the line: reflecting on design principles in blended learning.
- Prohorets, E., & Plekhanova, M. (2015). Interaction Intensity Levels in Blended Learning Environment. *Procedia-Social and Behavioral Sciences*, 174, 3818-3823.
- Scollon, S. W. (2004). *Nexus analysis: Discourse and the emerging internet*. Routledge.
- Soler, R., Soler, J. R., & Araya, I. (2017). Diagnosis of Educational Needs for the Implementation of Blended Courses Based on the Blended Learning Model. The Case of the Social Sciences Faculty of the National University of Costa Rica. *Procedia-Social and Behavioral Sciences*, 237, 1316-1322.
- Somekh, B. (2007). *Pedagogy and learning with ICT: Researching the art of innovation*. Routledge.
- Toia, M. (2016). An in-depth analysis of the pebble learning approach and contents. *Innovative Learning Models for Prisoners*, 4, 77.
- Vuorikari, R., Punie, Y., Carretero Gomez S., Van den Brande, G. (2016). DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: The Conceptual Reference Model. Luxembourg Publication Office of the European Union. EUR 27948 EN doi:10.2791/11517



The Investigation of the Level of Satisfaction for the Different Categories of the Sports Centre

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Abstract

Today, the service sector's development is one of the factors that determine the levels of development of the countries. The increasing competitive environment and urbanization, people helped to people to establish a new service sector to address the requirements of the sport industry. We have aimed to find out the evaluation of quality of service, from customers who go to sports centers that offers this service. 328 randomly selected people, from Istanbul, participated to our study (%43,3 (142) women, %56,7 (186) men). We applied "Quality Perception and a Satisfaction Survey in Sports Center" to participants . The survey questions, contain these following categories; the state of the physical comfort of the gym, the quality of exercise equipment and exercise methods which are used in the gym, qualification and sentence of trainers of sports , the satisfaction levels of the participants to the gym, questions about traffic and car-park issues, which is one of the biggest problems of the city life. The results were statistically compared according to gender of participants. There was a statistically significant difference between males and females about the comparison of the responses to questions about traffic and parking problems($p<0,05$). We find that, women participants have more trouble about traffic and car-parking. These results of our study shows that the service should take place in a reachable way, not crowded and adequate parking spaces.

Key Words: sports centers, traffic, gender, satisfaction

Introduction

One of the factors determining the level of development of countries is the development related to the service sector. The relevance of service sector within international and national economies has been experiencing an increase for the past 25 years. When we take a look at the development rate of the service sector in countries around the world from 70s until today, it can be seen that the number of employers within this sector increased by 60% in USA and 40% in Japan (Bergman and Klesjö, 1994). Over time, it became necessary for the service sector to adhere to the quality practices that were already in place for the production sector so that it can contribute to the national economy of its country (Devebakan N and Aksaraylı M, 2003). There are various definitions for the word "service". In one definition, it is described as a product that is made so that it can provide for the consumers' needs and does not have the characteristics of a tangible material (Kurilof, 1993). Whereas in another definition, service is defined as economic activities that give rise to psychological, temporal, positional or structural benefits (Gözlü 1995). Another definition describes service as the execution of work for someone else (Goetsch and Davis 1998). An increasingly competitive environment and rapid technological developments force businesses to adapt and change. In order for the businesses to get ahead of their competitors during this time, their goods and services have to differ and stand out from those of other businesses. The importance of the concept of quality that appeared as a result of these differences increased with time and its application became mandatory. The difference in quality between businesses plays a significant role regarding their preference by the customers(Cimen, 2007).

One of the most basic methods that could be used to make a service company stand out from its competitors is to continuously provide a higher quality service compared to the competing businesses. Service businesses nowadays have a customer-oriented view of quality similar to production businesses. Big companies operating within the service sector are aware that a high quality of service would provide them with a high sales and profit potential which would then create a competitive advantage(Cimen, 2007). Higher quality of service also results in an increase in costs. However, high-quality service coupled with high customer satisfaction and fidelity can make up for the costs brought along by the increase in quality (Yıldız, 2013).

Most of the time, it is hard for customers to evaluate the service quality after they have purchased and used the service. While in these kinds of services, it might be hard to do quality control, it is possible to increase and standardize service quality by finding qualified personnel, a good location and providing adequate staff training (Parasurmann 1985, Kuns and Lenmink 1996, Tek 1999, Uyguç 1998).



Being establishments that provide customer-oriented service, sports centers also have to pay close attention to customer satisfaction. Since consumers that are satisfied with the sports center would be more inclined to revisit the establishment, it is important for the services and products to be well-presented to the customers, in a way similar to other service businesses. Establishments not responding to this need will end up losing their customers.

When we take into account the fact that sports centers are currently regarded as being service businesses, increasing service quality for them also is important so that their business can get ahead of other sports centers. This study was based on a conceptual frame concerning the customers' perception of service quality within the sports sector and in this study, feedbacks of the customers that resided in the central areas at the Maltepe District of the Istanbul Province were evaluated.

Among the marketplace of sports centers which is competitive and cost-oriented when it comes to providing services, it is of utmost importance for these businesses to identify, measure and evaluate their service quality so that they can gain the upper hand in the competition and maintain their presence. For this purpose, we asked the customers of these businesses to evaluate the service they are being offered and tried to determine the factors that play a role on the service quality.

Method

Research Group

Participants are made out of 328 individuals who voluntarily agreed on taking the survey and were chosen randomly at the Maltepe District of the Istanbul Province. 43.3% (142) of the participants were women whereas 56.7% of them were men.

Data Collection Tool

"Survey for Quality Perception and Satisfaction in Sports Centers" (Yaşar Y. 2013) was used as a research data collection tool. In order to provide a more up-to-date approach and a broader perspective, new questions were added and some modifications were made by us to the survey. This survey has questions that consist of personal features such as age, sex, sports age and for how long they have been going to their sports center as well as a total of 35 statements regarding the determination of service quality and satisfaction in sports centers prepared according to the 5-point Likert Scale. The study was conducted by evaluating the information about the participants based on the data collected via the aforementioned survey form.

Data Collection

The survey was conducted with face-to-face encounters by the researcher on random individuals who voluntarily agreed on taking it, at the Maltepe District of the Istanbul Province. The surveys took 22 days to conduct. 4 of the questions were demographic, 6 concerned changing rooms, 4 were about the area where sports-related activity takes place, 6 about tools and equipment, 5 about trainers, 5 about other staff, 5 related to personal information and 3 about the location of the center, with a total of 40 questions.

Data Analysis

The collected data was analyzed under the IBM SPSS Statistical Package for Social Sciences) for Windows 22.0 software, frequency (f) and percentage (%) values were calculated and tabularized.

All the average values concerning the participants and the answers they provided were statistically calculated. Survey questions were investigated one by one and sex-related differences were sought after.



Findings

Table-1: Frequency and percentage distribution of the participants based on sex

		18-24	25-29	30-34	35-39	40+
Age	SEX	N(%)	N(%)	N(%)	N(%)	N(%)
	FEMALE	57(40,1)	39(27,5)	17(12)	13(9,2)	16(11,3)
	MALE	20(10,8)	66(35,5)	47(25,3)	24(12,9)	29(15,6)

A two-parameter distribution of ages of the men and women who participated in the survey was established (Table-1).

Table-2: Frequency and percentage distributions of the participants according to their duration of sporting activity

		0-6 months	7-12 months	13-24 months	25-36 months	36+ months	P
For how long have you been doing sports?	SEX	N(%)	N(%)	N(%)	N(%)	N(%)	
	FEMALE	39(27,5)	56(39,4)	29(19,7)	9(6,3)	10(7)	0,562
	MALE	58(31,2)	68(36,6)	34(18,3)	19(10,2)	7(3,8)	

There is no statistically significant difference between men and women when it comes to their duration of sporting activity ($p > 0,05$) (Table-2).



Table-3: Frequency and percentage distributions of the participants according to their membership duration

		0-6 months	7-12 months	13-24 months	25-36 months	36+ months	P
SEX		N(%)	N(%)	N(%)	N(%)	N(%)	
For how long have you been a member of this gym?	FEMALE	59(41,8)	43(30,5)	25(17,7)	8(5,7)	6(4,3)	0,448
	MALE	84(45,2)	59(31,7)	24(12,9)	14(7,5)	5(2,7)	

There is no statistically significant difference between men and women when it comes to their membership duration ($p > 0,05$) (Table-3).

Table-4: Frequency and percentage distributions and p-values of the participants according to the answers they provided on the categories of traffic and parking-related issues.

		Highly Disagree	Disagree	Indecisive	Agree	Highly Agree	P
SEX		N(%)	N(%)	N(%)	N(%)	N(%)	
I think that accessing this center is easy and suitable	FEMALE	19(13,5)	24(17)	37(26,2)	40(28,4)	21(14,9)	0,049
	MALE	12(6,6)	26(14,2)	55(30,1)	56(30,6)	34(18,6)	
I think that it is easy to park your car when you come to this center	FEMALE	23(16,3)	16(11,3)	43(30,5)	41(29,1)	18(12,8)	0,038
	MALE	14(7,7)	26(14,2)	52(28,4)	57(31,1)	34(18,6)	

The questions of Quality Perception in Fitness Centers Survey that we used in our study were divided under 5 categories. These are: questions describing the physical comfort state of the fitness center, questions that demonstrate the quality of the used equipment and practice methods, questions that demonstrate the level of competence and awareness of the gym trainers, questions that show the level of satisfaction of the participants going to the sports center and questions that delve upon traffic and park-related issues which are in fact the biggest problems of today's city life.

In our results, a statistically significant difference was found between men and women concerning the answers given to the question "I think that accessing this center is easy and suitable." which belongs to the category of questions that delve upon traffic and park-related issues ($p < 0.05$) (Table-4). It was deduced that women had more accessibility-related issues than men.



A statistically significant difference was found between men and women concerning the question "I think that it is easy to park your car when you come to this center." which belongs to the same category as the one above ($p < 0.05$) (Table-4). In light of the answers provided to this question, it was concluded that women faced more parking-related issues than men.

There was no statistically significant difference between men and women in other categories that Quality Perception in Fitness Centers Survey that we used in our study. These categories were: questions describing the physical comfort state of the fitness center, questions that demonstrate the quality of the used equipment and practice methods, questions that demonstrate the level of competence and awareness of the gym trainers, questions that show the level of satisfaction of the participants going to the sports center ($p > 0.05$).

CONCLUSION AND RECOMMENDATIONS

Service is defined as the work-related interaction between the institution serving to provide customer satisfaction and the customer themselves (Ramaswamy, 1996, Çeto, 2016).

Service quality is the best way to understand how satisfied customers are with the business' services (Çeto, 2016). Moreover, [high] service quality means that the customer would be more willing to come back for the service and continue their membership (Rosender, 1989).

In establishments that work on a membership based system and require continuity, there are various factors that affect the service quality. Among these factors are: the physical condition and location of the business; staff performance; specifications of tools that are being used and the business' attitude. In our study, we conducted the survey for the customers' perception of quality in sports centers, which focused on these factors and examined customer satisfaction based on these categories. In our survey, we also asked the customers to provide an answer and commentary on questions related to the environmental condition of the business, accessibility of its location, sufficiency and organization of its parking space. The customers were also asked to provide answers and commentaries about the sufficiency and cleanliness of resting and changing rooms, sufficiency of showers and hot water and sufficiency of ventilation and lighting. Among other factors, information was gathered from customers on the sufficiency, diversity and adequacy of the used tools and equipment. Furthermore, they were asked to provide answers on the efficacy of the practiced exercise programs and their satisfaction from them. They were also asked to answer questions on their opinions about the competence of the working staff and the relationships of the latter with the customers. There was no statistically significant difference between males and females ($p > 0.05$) on their satisfaction about the physical condition of the business, sufficiency and diversity of the used equipment, efficacy of the applied exercise program and competence and customer relationships of the working staff. There were numerous studies conducted on satisfactions related to these categories in sports centers (Çeto, 2016, Çoban, 2002, Yerlisu, 2012). However, in our study, besides the abovementioned categories, customers were asked to respond to the questions "I think that accessing this center is easy and suitable." and "I think that it is easy to park your car when you come to this center." that we defined as the environmental factors of sports centers. We investigated the presence of a statistically significant difference between men and women related to the answers provided on this context.

When it comes to the sex-related statistics of the abovementioned questions of the survey used in our study, a statistically significant difference ($p < 0.05$) was found between men and women regarding the ease of access to the center and organization of parking spaces, both of which are environmental factors of the business. No statistically difference between sexes was found in other categories ($p > 0.05$). There are numerous studies conducted on sex-related differences in customer satisfaction (Yerlisu, 2012, Savaş, 2012, Greenwell, 2004, Theodorakis, 2004). Most of these studies also found that the percentage of men going to sports centers was higher than that of women. This means that men are more interested in sports-related activities and can access these centers more easily. In our study, it was found that even in developed and metropolitan cities, women are experiencing problems related to access, traffic and parking when they are going to sports centers. According to the results of our study, more women would be encouraged to go to sports centers if we ease their access to these locations at all times. Sports centers should be located at places that are safe, easy to access and don't have any parking-related issues.



References

- Bergman, Bo., Klefsjö, B. (1994). Quality, McGraw-Hill, Sweeden.
- Çeto E. (2016) KKTC genelinde faaliyet gösteren özel spor merkezleri üyelerinin hizmet kalitesine yönelik algıları, Yakın Doğu Üniversitesi, Sağlık Bilimleri Enstitüsü, Beden Eğitimi ve Spor Anabilim Dalı, Yüksek Lisans tezi.
- Çimen, Z., Gürbüz, B. (2007). Spor Hizmetlerinde Toplam Kalite Yönetimi. Ankara: Alp Yayınevi.
- Çoban, B. (2002). Spor Hizmetlerine İlişkin Halkın Belediyelerden Beklentileri (Elazığ Belediyesi Örneği), Ankara: Gazi Üniversitesi, Sağlık Bilimleri Enstitüsü, Yayınlanmamış Doktora Tezi.
- Devebakan, N., Aksaraylı, M. (2003). Sağlık İşletmelerinde Algılanan Hizmet Kalitesinin Ölçümünde Servqual Skorlarının Kullanımı ve Özel Altınordu Hastanesi Uygulaması. Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 5(1): 38–54
- Goetsch, DL., Stanley, BD. (1998). Understanding and Implementing ISO 9000 and ISO Standarts, Prentice-Hall, USA.
- Gözlü, S. (1995). Hizmet Kalitesinin Kontrolünde İstatistiksel Yöntemler, Verimlilik Dergisi, MPM Yayını, Sayı:1995/2, Ankara.
- Greenwell., F., Pastore, DL. (2004). Perceptions of the Service Experience: Using Demographic and Psychographic Variables to Identify Customer Segments. Sport Marketing Quarterly, 11(4): 233-241
- Kunsk, P., Lemmink, J. (1996) Managing Service Quality, Paul Chapman Publishing, London.
- Kuriloff, A., Hemphill, JM., Cloud, D. (1993). Starting and Managing the Small Business , Mc Graw-Hill Edition, Singapore.
- Parasuraman, A., Zeithaml, VA., Berry, LL. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research, Journal of Marketing, Vol.49, 41-50
- Ramaswamy, R. (1996). Design and Management of Service Process. Massachusetts: Addison Wesley Publishing Company Inc., s.12-15,345
- Rosander, AC. (1989). The Quest for Quality in Services, Quality Resources, Milwaukee: ASQC Quality Press,
- Savaş, N. (2012). Hizmet Kalitesi, Müşteri Tatmini ve Müşteri Sadakati: Fitness Merkezi Üyeleri Üzerine Bir İnceleme, Balıkesir Üniversitesi, Sosyal Bilimler Enstitüsü.
- Tek, ÖB. (1999). Pazarlama İlkeleri, Beta Yayınları, İstanbul.
- Theodorakis, N., Alexandris, K., Rodriguez, P., Sarmento, P J. (2004). Measuring “Customer Satisfaction in the Context of Health Clubs in Portugal.” International Sports Journal. Winter, 8(1).
- Uyguç, N. (1998). Hizmet Sektöründe Kalite Yönetimi; Stratejik Bir Yaklaşım, Dokuz Eylül Yayınları, 1.baskı, İzmir.
- Yaşar, Y. (2013). Fitness Sektöründe Hizmet Kalitesi Algısı, Maltepe Üniversitesi, Sosyal Bilimleri Enstitüsü, Pazarlama İletişimi ve Marka Yönetimi, Yüksek Lisans Tezi.
- Yerlisu Lapa T.,Baştaç E.(2012).Antalya’da Fitness Merkezlerine Devam Eden Bireylerin Yaş,Cinsiyet ve Eğitimlerine Göre Bu Merkezlere Yönelik Hizmet Kalitesi Değerlendirilmelerinin İncelenmesi,Pamukkale Journal of Sport Sciences ,Vol.3,No.1,Pg:42-52.
- Yıldız Y., Onağ A., Onağ Z. (2013), Spor ve rekreasyon hizmetlerinde algılanan hizmet kalitesinin incelenmesi: fitness merkezi örneği, Uluslararası Hakemli Beşeri ve Akademik Bilimler Dergisi Kış Dönemi Cilt: 2 Sayı: 3.



Globalization: In Terms Of Teachers' Opinion And Metaphorical Perceptions

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Abstract

The purpose of this paper is to investigate teachers' opinion and metaphorical perceptions about globalization. In this paper, phenomenology one of the qualitative research type was used. 61 teachers' metaphorical perceptions about globalization were collected and interviewed with 12 teachers about globalization in education. Teachers' metaphorical perceptions about globalization were determined by a space filled question (globalization is similar to...; because ...). A semi-structured interview form has been prepared by the researchers. The opinions of the teachers can be summarized as teachers associate globalization with technology, especially with the internet. In general teachers mentioned that the effects of globalization in education are positive. Further teachers' metaphorical perceptions about globalization summarized as follows; village, market, whirlpool, family, shopping, teapot, neighborhood, technology. Withal teachers' reasons for analogy of the metaphors about globalization are grouped as; globalization as a unifying of differences concept, globalization as a communication and interaction enhancer concept, globalization as a damaging concept and globalization as an indefinite concept.

Keywords: Globalization, Teachers' Opinion, Metaphorical Perceptions.

Introduction

Within the historical process, it is seen that different phenomena have left its mark on different periods. The globalization phenomenon (Öz-Kılınç, 2009), a key concept describing the increasing in interdependence of today's societies in which no life in any country is not separated entirely from the rest of the world anymore, indicates changes and transformations which are in various fields from information to economy, from culture to politics in a way of the interaction, dependence, merger and integration (Şener, 2014).

The rapid changes in the fields of communication, information and informatics depending upon scientific, technological and economic development, have brought out the concept of globalization by removing the importance of the boundaries between nations (Akdemir, 2004). Globalization which is a concept leaving its mark on 21st century (Yılmaz, 2004), is one of the most-debated concepts nowadays especially in the academic and economical circles (Yılmaz and Horzum, 2005, Kaya, 2009). Globalization, which is used to express the change almost in every field of the world from the economy to politics, social politics to culture (Bozkurt, 2000), can be considered as a characteristic feature of education as well (Kartal, 2007).

The concept, Globalization, from the USA was successfully introduced in the world literature and took part in its place today (Dağlı, 2007). Despite the fact that the concept of globalization (Kürkçü, 2013), whose originators are liberal thinkers such as Muray Rohtbard and David Friedman, is not a common idea, it is a concept symbolizing the change in every area on which it has affected, and whose profound effects are seen especially in information and economy as well as other social fields (Çavuşoğlu, 2007). While Şahin (2011) defines globalization as the spreading of some values and structures to the world scale by transcending over local and national boundaries in



terms of economic, political and cultural aspects, Kan (2009) defines globalization as structure which was formed resulting of further confrontations of different countries together with the development of communication and transportation possibilities. In furtherance of the other definitions of globalization, Power (2000) states that globalization causes the world to shrink even further.

The globalization that affects people, societies and states as a postmodern dimension of change (Doğan, 2002), in the whole world's single ground axis that it revealed with its different processes and actors, means that the concentration of economic relations, the flow of information easily transcending physical boundaries, the new reference point in the fields of identity and culture, the becoming of global problems into a common problems of all mankind (Ateş, 2007; Holton, 2000). As pointed out by Karaman (2010), while, the process of resemblance of societies to each other in the process of globalization reveals a global culture the differences on the other hand point out to the cultural diversity of societies.

It is possible to define the globalization widely as removing of national borders and integration of free markets by transcending these borders in consequence of movement of money and goods and development of trade and knowledge (Yorgun, 1998). But in essence, it seems that globalization is not a system in which the borders of the country are removed as it is asserted by many people. As a matter of fact, the borders of the country are necessary for the survival of cheap labor repository. However, globalization is far from the concept of nationalism that is defined by boundaries. When global companies go to other countries for cheap labor, jobs are created in these countries, but this leads to unemployment in rich countries. In this respect, it is also a fact that globalization is distorting the international and inland income distribution (Ertuna, 2006).

Globalization, which had not been widely used until the beginning of the 1960s, even though it has a history of over 400 years, were particularly influential in international trade in the 1950s and 1960s (Erdoğan, 1999). Another important process behind the phenomenon of globalization is that societies become information societies through developing technology (Guidelines, 2002). Oran (2000) who stated that the globalization process took place in three phases, stated that the first phase began with the discovery of the American continent in 1492, followed by the second phase taking from the 1870s to the 1890s in which the globalization institutionalized, and lastly he stated that it was proceeded to the third phase which began with revealing of the multinational corporations in the 1970s, went on with communication revolution in the 1980s, became popular in the 1990s by means of non-rival of West.

Approaches concerning to globalization in the literature are classified as "extreme globalization supporters", "skeptics" and "transformationalists" by following Held, McGrew, Goldbaltt and Perraton (Bozkurt, 2010; Elçin, 2012). All three groups defined the concept of globalization according to their own, but they did not radically rejected this period that were lived. Because the main difference between these three views stem from their worldviews that they represent rather than from phenomena (Elçin, 2012; Yalçınkaya, Çılbant and Yalçınkaya, 2012).

There have been positive and negative effects concerning to globalization as well as positive and negative effects of every change and transformation. The common values of man have begun to emerge, human and his works, culture and civilization have been re-interpreted over again. From this point of view, it was understood that educating only the people from select segment of each country is not the way to go, and there is a need for a quality population who was mass-grown by an education system reaching grassroots level for development. It was also an inevitable ending that common understanding and perception developed among the citizens of the country through the establishment of new and common lifestyles among people and common education policies (Bilhan, 1996, Balay, 2004).

Globalization has a close relationship with education (Çelik and Gömleksiz, 2000). Because raising creative and



innovative people is the main purpose of the information age education. In this respect, it is now necessary to teach the individual how and in what ways he will access to information needed rather than directly transferring information to the individual (Çalık and Sezgin, 2005). According to Kirkwood (2001), the world's shrinking and becoming a global village has also reflected to the educational process. Therefore, in the process of globalization, education is seen as a process that provides continuously learning, knowing knowledge, being knowledgeable, producing knowledge, living with knowledge, that is, a process that raises the individuals who fulfill the requirements of globalization (Dağlı, 2007, Titrek, Güneş, & Sezen). According to Pike (2000), this must be carried out by planting global values without giving up national education in this globalizing world.

On the other hand, student exchange programs are becoming widespread at almost every level of education nowadays. This situation leads students to think globally by giving them the opportunity to recognize different countries and cultures, to find jobs in different countries or to establish them (Tezcan, 2002). In addition, schools and universities are opening their branch offices in other countries through bilateral agreements, which require distance education. Thus, globalization is creating an international educational market (Çınar, 2009). Levitt (1984) states that one of the key benefits of globalization is that it is allowing low-income groups to be trained for adapting to modern life.

Raising students who can successfully adapt to the globalizing world is only possible with the teachers who were self-educated about globalization in the education sector. In this case, the education that teachers have from the teaching period to the in-service training needs to be regulated in the context of globalization. At the beginning of the topics to be considered in the regulation of the teachers' education are the opinions and thoughts of the teachers. From this point of view, it was tried to determine the global views and metaphorical perceptions of teachers in this research.

Problem statement

What are the teachers' opinion and metaphorical perceptions about globalization?

sub-problems (hypotheses)

1.What are the teachers' metaphorical perceptions about globalization?

2.What are the teachers' opinion about globalization?

Method

This section contains information on the design of the research, study group, data collection tools, collection and analysis of data.

Method of the research

The phenomenology design, one of the qualitative research types, was used in this study in which views of teachers on the concept of globalization and their metaphorical perceptions were investigated, in the study. The data of the research shows a triangulation method feature in terms of being obtained by interviews with teachers and by metaphors collected from teachers. Triangulation is based on careful examination of the data obtained by different methods in order that qualitative researches and their results produce more accurate and valid estimates for a specific structure (Oliver-Hoyo and Allen, 2006; Yeasmin, & Rahman, 2012).

Population-sampling

The data of the research were obtained from the teachers who were working in different branches in the province of Kırklareli in the academic year of 2016-2017. Teachers who participated in the research were selected by easy accessibility method. 61 (39 females, 22 males) teachers' metaphorical perceptions about globalization were collected and interviewed with 12 (8 females, 4 males) teachers about globalization in education.



Data collection tools

Teachers' metaphorical perceptions about globalization were determined by a space filled question (globalization is similar to...; because ...). Besides a semi-structured interview form has been prepared by the researchers to determine the opinions of teachers about globalization. The form have five questions; "How does globalization affect the class climate?", "What are the advantages of globalization over the educational process?", "What are the disadvantages of globalization on the educational process?", "What should be done for better education in the globalizing world?" and "How does globalization affect your career plans?"

Analysis techniques

The qualitative data of collected were analyzed through content analysis technique.

Reliability and validity of data

Two researchers analyzed the content of the data separately. The two results compare with each other in the light of the formula "Reliability = Consensus / Consensus + Disagreement x 100". Compliance rate between two outcomes was found as .76. It can be said that the analyzes are reliable based on this result (Miles and Huberman 1994).

Findings

In this section, the metaphors produced by the teachers for the concept of globalization and the frequencies of these metaphors are given. Later, the categories that were created from these metaphoric images were explained by supported by the quotations produced by the teachers.

Metaphor images and frequencies related to the concept of globalization

When the metaphorical images that teachers used in relation to the concept of globalization are examined, a total of 56 valid and 41 different metaphor images were obtained from 61 teachers. teachers' metaphorical perceptions about globalization summarized as follows; village (4), market (4), whirlpool (3), family (3), shopping (3), teapot (2), neighborhood (2), technology (2). metaphor images that Apart from these metaphor images Were once preferred.

Table 1. Metaphor images and frequencies related to the concept of globalization

Metaphor Images	f	Metaphor Images	f
Village	4	Human (Live)	1
Market	4	District	1
Whirlpool	3	Communication	1
Family	3	Kinship	1
Shopping	3	Butterfly Effect	1
Teapot	2	Matryoshka	1
Neighborhood	2	Metropol	1
Technology	2	Heterogeneous Fluid	1
Internet	2	Competition	1
Mall	1	Picture	1
Peer Bullying	1	Industry	1
Bee	1	Book With No Page Number	1
Military	1	Smoking	1
Fire	1	Fog Screen	1
Swamp	1	Supermarket	1
Knowledge Society	1	Process	1
Damaged Scales	1	Blaze	1
Wheel Gears	1	Degeneration	1
Desert	1	Time Travelling	1
Pit	1	Total	
Soccer Ball	1		



Reasons for metaphorical similarity to the concept of globalization

Teachers' reasons for analogy of the metaphors about globalization are grouped as; globalization as a unifying of differences concept (n = 21), globalization as a communication and interaction enhancer concept (n = 19), globalization as a damaging concept (n = 13) and globalization as an indefinite concept (n = 3). The results Presented in Table 2.

Table 2. Reasons for metaphorical similarity to the concept of globalization

Kategoriler	Metafor İmgesi	N
Globalization As A Unifying Concept Of Differences	Market (4), Family (3), Village (2), Teapot (2), Metropolis (1), Communication (1), District (1), Industry (1), Supermarket (1), Picture (1), Soccer Ball (1), Military (1), Neighborhood (1), Matryoshka (1)	21
Globalization As A Concept To Enhance Communication And Interaction	Shopping (3), Technology (2), Village (2), Internet (2), Time Travelling (1), Neighborhood (1), Kinship (1), Mall(1), Process (1), Wheel Gears (1), Whirlpool (1), Human (Live) (1), Knowledge Society (1), Butterfly Effect (1)	19
Globalization As A Harmful Concept	Whirlpool (2), Desert (1), Competition (1), Peer Bullying (1), Bee (1), Swamp (1), Pit (1), Smoking (1), Damaged Scales (1), Degeneration (1), Blaze (1), Fire (1)	13
Globalization As An Indeterminate Concept	Fog Screen (1), Book With No Page Number (1), Heterogeneous Fluid (1)	3
Total		56

Some of the participants' opinions regarding the categories shown in Table 2 are as follows:

a) Globalization as a concept to unify differences

21 metaphors were produced in this category. Teachers perceive globalization as a concept that brings together the differences, in doing so, that in fact, standardizes many things. The views of participant for this category given as follows:

“Globalization is like a market; because the different colors of the world coexist “(Teach 29).

“Globalization is like a family; because it requires integration”(Teacher 42).

“Globalization is like a supermarket; because it contains many different concepts” (Teacher 31).

“Globalization is like a military; because it will make people be monotype by destroying the differences” (Teach 51).

b) Globalization as a concept to enhance communication and interaction

19 metaphors were produced in this category. Teachers perceive globalization as an element that enhances communication and interaction among people. Some of the participants's views on this category given as follows:

“Globalization is like shopping; because different ideas are taken and given among people by means of globalization” (Teacher 9).



“Globalization is like village; because the prevalence of the means of communication transformed the world into a small village” (Teacher 12).

“Globalization is like kinship; because it increased interaction of people in the world between each other” (Teacher 26).

c) Globalization as a damaging concept

13 metaphors were produced in this category. Teachers think that globalization has corrupted the specific structures of societies, and degenerated local culture by creating a universal structure. Teachers, therefore, perceive globalization as a damaging concept. Some of the participants's views on this category given as follows:

“Globalization is like a desert; because, it will gradually dry up everything” (Teacher 1).

“Globalization is like a peer bullying; Because, Strong people always dominate on weak people, and exploit them” (Teacher 21).

“Globalization is like a swamp; because it draws everything into it” (Teacher 32).

d) Globalization as an indeterminate concept

3 metaphors were produced in this category. Teachers perceive globalization as an entirely unknown concept. Some of the participants's views on this category given as follows:

“Globalization is like a fog curtain; because it blurs the minds of the people” (Teacher 13).

“The globalization is like a book whose page numbers are unidentified; because as we examine and investigate the topic, globalization deepens. Even if it is made into a book, the topics grow and the book becomes thicker. It will have an infinite page number” (Teacher 39).

“Globalization is like a heterogeneous liquid; because it contains many complex structures” (Teacher 47).

Findings belonging to views of teachers on the concept of globalization

Views of teachers on the concept of globalization were examined and the findings were examined under two categories as "effects of globalization on educational process" and "recommendations for better education in a globalized society". Findings related to these categories are given below.

Effects of globalization on educational process

The views of teachers related to the effects of globalization on the educational process are given in table 3.

Table 3. Views of teachers related to effects of globalization on educational process.

Theme	Code	N
Effect of globalization on education	Easy access to information through technology	11
	Information pollution	8
	Weakness in human relations	6
	Pushing to laziness	5
	Equality in opportunity	3

As seen in Table 3, views of teachers related to the effects of globalization on the educational process are grouped in the way that easy access to information through technology, information pollution, weakness in human relations,



pushing to laziness and equality in opportunity.

a) Easy access to information through technology

The vast majority of teachers (11/12) stated that effect of globalization on education is to provide easy access to information through technology. Some of the participant's views on this code are as follows:

"... the desired information is more easily reached. This situation is positive for the self-development of teacher. However, while the ease of access to information provides a very large resource for teachers, students are more interested in social media, games and other things. In this sense, technology and technological tools are seen as a fashion. It is clear that our students need for guidance in this sense. "

"... at any moment, in the classroom, every piece of information can be reached in a short time. The use of resources such as encyclopedias disappeared. Unlimited resources increase the choices of students. "

"... globalization enables to use new information and access educational technologies every day in the educational process. I am convinced that young people and students who make useful programs in their school, around their home country will become a globalizing world person in the event that they closely follow the changes made in other countries. "

b) Information pollution

More than half of the teachers (8/12) seem to have stated that effect of globalization on education is information pollution, as well as providing easy access to information through technology. Some of the participants' views about this code was presented exactly in the same way as in follows:

"... the side that positively influences classroom environment of the globalization is that the students can reach to the topics that they need immediately, and the side that negatively influences is that they waste lots of their time for unnecessary information and they do not spend their time for the topics they have to learn "

"... the access of children to adverse web sites in the educational process is affecting them negatively. That every information which is published on the internet is not true, is a reality"

"... In order to be targeted to reach the right information as soon as possible, unauthenticated information is in demand. This makes negative examples be normalize"

c) Weakness in human relations

Half of the teachers (6/12) seem to have stated that effect of globalization on education is weakness in human relations. Some of the participants's views about this code was presented exactly in the same way as in follows:

"Besides technology has positively effects on our lives it has also negatively effects. People can not work and fulfill their responsibilities in the family environment, on the streets and in the workplace. Keeping up the sharing platforms and communication groups prevent people from making use of their time well "

"Rapid access to social network sites on the internet can turn them into young people who passivate themselves in their inner world.

"The use of tablets and smartphones makes students dependent on social media as well as reaching to information.

"Fast consumption, excessive increase in expectations, disappointment resulting from this and alienation affect negatively."



d) Pushing to laziness

Approximately half of the teachers (5/12) seem to have stated that the effect of globalization on education is that it pushes the students to be lazy. Some of the participants' views about this code was presented exactly in the same way as in follows:

"Easy access to information is pushing them to laziness. It causes them to waste their time with unnecessary information. "

"Easy access to information leads them to bring their homeworks directly as output without making analyze. This is reducing the study time of students. It may encourage easiness. "

"Since it facilitates to access to information rather than researching the topic it is pushing students to laziness. In addition, a wide variety of information is accesible for everyone. "

e) Equality in opportunity

Three of the teachers (3/12) seem to have stated that t effect of globalization on education is to providing equality in opportunity among students. Some of the participants' views about this code was presented exactly in the same way as in follows.

"It provides equality in opportunity by facilitating students to access to information easily."

"Educational opportunities are increasing. The borders in education are being removed. In addition, because of the fact that the students need to have basic skills they must have a standard level of education. "

"It provides to access to desired information in a short period of time. At the same time, it advantageous for society because it provides equal opportunities for people from all walks of life. "

Recommendations for better education in a globalized society

The views of teachers related to their recommendations for a better education in a globalized society are given in table 4.

Table 4 the views of teachers related to their recommendations for a better education in a globalized society

Theme	Code	N
Recommendations for better education in a globalized society	Becoming conscious about the right information	9
	Openness to developments	7
	Education on technology	4
	Protection of national culture	2

As seen in Table 4, the views of teachers related to their recommendations for a better education in a globalized society are grouped in the way that becoming conscious about the right information, education on technology, openness to development and protection of national culture.

a) Becoming conscious about the right information

It was seen that more than half of the teachers (9/12) were suggesting that students should be directed to the right information for better education in a globalized society. Some of the participants' views about this code was presented exactly in the same way as in follows.

"Education in which students use the technology correctly and identify the right information on the internet should be given"

"It should be ensured that students use the Internet consciously. Attention should be paid to media literacy. In doing so, it should be ensured that they should be able to do research with the computer. "



"Students should be encouraged to investigate. They should test the accuracy of the information and take precautions to prevent this information pollution. It means that comparing information obtained from various sources and reaching the right one. Books are indispensable sources providing us always to reach more reliable information. "

"It is needed to teach the students how to access the information. In the globalizing world, it is necessary to make them to notice that every information on the virtual world is not correct. They have to be selective in this regard. "

b) Education on technology

It was seen that more than half of the teachers (7/12) suggested that necessity of educating in technology for a better education in the globalizing society. Some of the participants' views about this code was presented exactly in the same way as in follows:

"We must be a teacher who adapts to technology and development. Practices such as distance education, e-seminars and e-books are helping people become more competent by paving the way of career plans. "

"I believe that it is necessary to teach the child how to use the means of informatics. The child may not know how to get the information. "

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"In order to gain the skills of the 21st century students should be educated in computer science education and communication skills. Technology should be brought into close with education by project and homework presentations."

c) Openness to developments

It was seen that 4 of the teachers (4/12) suggested to be open to development for a better education in the globalizing society. Some of the participants' views about this code was presented exactly in the same way as in follows:

"I think it is more important to be able to make the child aware of what he / she can do and make them have an open and progressive perspective to innovations, and then this child who has awareness can provide development by internet and use it beneficially."

"A student-centered education should be targeted, and it should be open to innovations. Innovations need to be followed continuously. Students are very good at this issue and they need to be guided well. "

"We must strive to be productive at all times by following innovations and developments in the field of new scientific and technological developments in order to move ahead ourselves further."

d) Protection of national culture

It was seen that 2 of the teachers (2/12) suggested the protection of national culture for better education in the globalizing society. Some of the participants' views about this code was presented exactly in the same way as in follows:

"Our education policy should not be confined to the school walls. We can use our national culture and values for conveying to new generations. What is happening in the world of science can be ensured to be followed by children. "



"The national culture should be protected against to erosion and assimilation over time. Because we are gaining momentum in becoming a disidentified society. "

Discussion

The aim of this research is to examine the views of teachers on the concept of globalization and their metaphorical perceptions about this concept. In accordance with this purpose, the metaphors that are related to the concept of globalization were collected from teachers in order to determine their metaphorical perceptions about the concept of globalization. In addition, face-to-face interviews were conducted with teachers through semi-structured interview form in order to determine the views of teachers on globalization and effects of globalization on education.

When the metaphorical perceptions of teachers on the concept of globalization are examined as result of analysis done, it is seen that a great majority of teachers perceive the globalization as a concept to unify differences. Indeed, metaphors such as the market, family and village that they produce can be given as an example. Teachers who use metaphors such as shopping and technology also perceive globalization as a concept that increase communication and interaction. However, some teachers preferred to explain the globalization with metaphors such as desert, swamp, pit and fog which define it as a damaging and indefinite concept. A large part of the teachers who participated in the research through these findings perceived globalization as a positive concept, but the number of teachers with negative perceptions is also undeniable. As a matter of fact, Doğan (2002) reports that the perception and adoption of globalization in education are among the current educational problems. Therefore, the positive and negative effects of the globalization process have become a subject of constant debate as much as what is the globalization process (Balay, 2004). The Kurul and Tural (2004) report that globalization is a concept that can be perceived in different dimensions, and that there are both positive and negative views on this issue. Pekiyi (2011), in his research on perceptions of school administrators about globalization, found that school administrators perceive globalization in a skeptical point of view, that 61.8% of school administrators participating in the survey perceive globalization as a process affecting many aspects of life negatively. In addition, 76.3% of the school administrators participating in the research consider that turning of the world into a small village as a result of globalization is an opportunity in many directions. Therefore, in this research as well, that the teachers explained the concept of globalization in different contexts using both positive and negative metaphorical imagery, shows similarity with the current information in literature.

The findings obtained as result of the content analysis of the interviews made with teachers about globalization and effects of globalization on education were examined under two categories as a name of effects of globalization on education and recommendations for education in a globalizing society. While views of teachers for effects of globalization on education are easy access to information through technology, information pollution, weakness in human relations, pushing to laziness and equality in opportunity, their views for education in globalizing societies are becoming conscious about the right information, openness to developments, education on technology and protection of national culture.

It is seen that teachers often associate their views on globalization with easy access to information through technology. The information pollution and the weakness in human relations depending on accessing information through the Internet, was associated with the concept of globalization by teachers. From this point of view, it can be concluded that teachers can not fully understand the concept of globalization. It was noticed that a large proportion of teachers associate the concept of globalization with technology. Whereas, technology is only one of the elements that taken part in globalization concept. It was assessed that the concept of globalization could not fully understood and the effects on education could not be interpreted by teachers. Moreover, it is understood that some of the teachers who associate globalization with technology perceive the use the technology as a negative condition that the student can refer wrong information or lead student to easiness.

As another result of the research, it can be considered that teachers perceive education as not learning to learn but as learning to knowledge, and that they perceive purpose of education as learning to exact knowledge. Although Turkey has been adopting a constructivist approach in education since 2005, it is seen that they still have a traditional knowledge-oriented understanding. This situation is of great importance to show that teachers are



resistant to changing their educational attitudes.

As a postmodern dimension of change, there is a close relationship between the globalization that affects people, societies and states (Doğan, 2002) and the education that has a significant role in shaping society (Çelik and Gömleksiz, 2000). Many people define globalization in the context of technology (Hyttén and Bettez, 2008). Education is seen as a process that provides continuously learning, knowing knowledge, being knowledgeable, producing knowledge, living with knowledge, in the process of globalization (Dağlı, 2007). With the influence of globalization, it is seen that the foreground of the concept of information society on the world and the information and developing knowledge and technologies have an important influence on education (Balay, 2004, Çalık and Sezgin, 2005, Gömleksiz and Kılınç, 2012). Hence, thanks to the developing information technologies, people can access information easily. As a matter of fact, Gürbüz (2015) reached to conclusion in his research that, 59% of the prospective teachers achieved a better education in a globalizing world. On the other hand, as Çalık and Sezgin (2005) point out, it has become important to teach the individuals how to get necessary information rather than relaying information directly to them.

Additionally, individuals need to be directed correctly about this issue in order to be able to access the exact information without drowning in information pollution. In addition to all this, even though, it increases the equality in opportunity between individuals at the point of being able to acquire information easy access to information can be regarded as a negative situation because, it may cause individuals to easiness, or make them get wrong and suspicious information without reaching real sources and doing research (Balkar and Özgan, 2010). Therefore, this situation which was clearly indicated by the teachers participating in the research shows that expectations from the elements of the education period changed together with the globalization process. It can be said that the ideas of teachers who were research participants associating globalization with the easy access to information overlaps with the studies in the literature associating globalization with information society. In addition to these, the idea that the teachers perceive globalization as a concept empowering communication and interaction metaphorically is compatible with the idea of easy access to information that they state in the interview process. The view of teachers regarding idea that globalization supports equality in opportunity in education overlaps with statement regarding idea of Levitt (1984) that individuals at every socio economic level catch the possibility of modern education with globalization.

On the other hand, globalization does not only mean the circulation of money and goods. Globalization means that the disappearance of the old meaning of time and space concepts, the borders are not as clear as used to be and the increase in mutual relations of the societies (Bozkurt, 2000). However, as mutual relations increase, this situation comes to a point of relationship based on self-interest, and from this point of view, it can be considered that globalization actually weakens human relations as indicated in the teachers participating in the research. Indeed, as İlhan (2009) points out; together with today's contemporary globalization perception, contrary to what is said, the sovereign values cause to deepening of problems, especially in underdeveloped countries rather than bringing more prosperity and happiness, and it has enlarged the gap between classes within each country. In this context, protection of national cultures in each community can be considered as an important issue in the globalization process stated by teachers. Because, indicating that cultural identity tends to be massification in globalization; Akdemir (2004) states that ideal emotions are replaced by actual phenomena and means in this tendency, and emphasizes that the individuals have gone from social values, political and cultural participation to alienation phenomenon and head to delight, consumption and entertainment prepared by various power centers.

Conclusions

Globalization's effects are big at significant all over the world. These are also manifest in the education sector. Therefore it can be said that teachers role important in this area.

The following conclusions have been reached in this study. The opinions of the teachers can be summarized as teachers associate globalization with technology, especially with the internet. In general teachers mentioned that the effects of globalization in education are positive. Further teachers' metaphorical perceptions about globalization summarized as follows; village (4), market (4), whirlpool (3), family (3), shopping (3), teapot (2), neighborhood (2), technology (2). Withal teachers' reasons for analogy of the metaphors about globalization are



grouped as; globalization as a unifying of differences concept (n = 21), globalization as a communication and interaction enhancer concept (n = 19), globalization as a damaging concept (n = 13) and globalization as an indefinite concept (n = 3).

Recommendations

Recommendations for practitioners

School books should be organized in the light of globalization.

Globalization should be taught to pre-service and in-service teachers

Recommendations for researchers

A scale to determine teachers' opinion about globalization should be developed.

Teachers' views on globalization Should be examined according to other variables

References

- Akçay, R. C. (2003). Küreselleşme, eğitimsel yoksunluk ve yetişkin eğitimi. *Milli eğitim dergisi*, 159, 33-49.
- Akdemir, A. M. (2004). Küreselleşme ve kültürel kimlik sorunu. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 3(1).
- Ateş, D. (2007). Ulus devletin siyasal meşruiyeti: küreselleşmenin yansımaları, *Ekonomik ve Sosyal Araştırmalar Dergisi*, 3(2), s.32-55.
- Balay, R. (2004). Küreselleşme, bilgi toplumu ve eğitim. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 37(2), 61-82.
- Balkar, B., & Özgan, H. (2010). Küreselleşmenin ilköğretim kademesindeki eğitim sürecine etkilerine ilişkin öğretmen görüşleri. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, (19), 01-22.
- Bozkurt, V. (2000). Küreselleşmenin insani yüzü. *İstanbul: Alfa Yayınları*.
- Craig, G. (2003). Globalization, migration and social development. *Journal of Social Development in Africa*, 18(2).
- Çalık, T., & Sezgin, F. (2005). Küreselleşme, bilgi toplumu ve eğitim. *Kastamonu Eğitim Dergisi*, 13(1), 55-66.
- Çavuşoğlu, D. (2007). *Küresel rekabet ortamında örgütlerde yaratıcılık kültürü ve yaratıcılık yönetimine ilişkin tutumların değerlendirilmesi (okullarda araştırma)*, Marmara Üniversitesi Eğitim Bilimleri Enstitüsü Eğitim Bilimleri Ana Bilim Dalı, Yüksek Lisans Tezi, İstanbul.
- Çelik, V., & Gömleksiz, M. N. (2000). A critical examination of globalization and its effects on education. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 10(2), 133-144.
- Çınar, İ. (2009). Küreselleşme, eğitim ve gelecek. *Kuramsal Eğitimbilim Dergisi*, 2(1), 14-30.
- Dağlı, A. (2007). "Küreselleşme karşısında türk eğitim sistemi". *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*. 9(1), 1-13.
- Doğan, E. (2002). Eğitimde küreselleşme. *Eğitim Araştırmaları*, 6, 87-98.
- Elçin, E. B. (2012). Küreselleşmenin tarihçesi. <http://docplayer.biz.tr/746102-Kuresellesmenin-tarihcesi-a-bora-elcin.html> (Erişim tarihi: 14.03.2017).
- Erdinç, Z. (1999). Küreselleşmenin istihdama etkileri. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 3, 111-120.
- Ertuna, Ö. (2006). Yeni dünya düzeni: Küreselleşme. *Muhasebe ve Finansman Dergisi*, (30).
- Ferguson, Y. H. & Mansbach, R. W. (2012). *Globalization The Return of Borders to a Borderless World*. New York: Routledge.
- Gömleksiz, M. N., & Kılınç, H. H. (2012). Küreselleşmenin Eğitim Programları Üzerindeki Etkisine İlişkin Akademisyen Görüşleri: Nitel Bir Çalışma. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 9(17).
- Gürbüz, Z. (2015). Sosyal Bilgiler öğretmen adaylarının küreselleşmeye yönelik görüşleri. Yayınlanmamış yüksek lisans tezi. İstanbul: Marmara Üniversitesi Eğitim Bilimleri Enstitüsü.

- Holton, Robert. (2000). Globalization's Cultural Consequences, Dimensions of Globalization. *Annals of the American Academy of Political and Social Science*, 570, 140-152.
- Hyttén, K., & Bettez, S. C. (2008). Teaching globalization issues to education students: what's the point?. *Equity & Excellence in Education*, 41(2), 168-181.
- İlhan, H.İ. (2009). Küreselleşmenin eğitime yansımaları. Yayınlanmamış yüksek lisans tezi. Gaziantep: Gaziantep Üniversitesi Eğitim Bilimleri Enstitüsü.
- Kan, Ç. (2009). Değişen değerler ve küresel vatandaşlık eğitimi. *Kastamonu Eğitim Dergisi*, 17(3), 895-904.
- Karaman, K. (2010). Küreselleşme ve eğitim. *Zeitschrift für die Welt der Türken/Journal of World of Turks*, 2(3), 131-144.
- Kartal, Z. (2007). Kavramsal ve tarihsel yönleri ile küreselleşme. *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi*, 8(2), 261-262.
- Kaya, M. (2009). Küreselleşme yaklaşımları. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, 13, 1-16.
- Kılavuz, U. M. (2002). Küreselleşen dünyada din. *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi*, 11(2).
- Kirkwood, T. F. (2001). Our global age requires global education: Clarifying definitional ambiguities. *Social Studies*, 92(1), 10-15.
- Kurul Tural, N. (2004). *Küreselleşme ve Üniversiteler*, Kök Yayıncılık, 1. Basım, Ankara.
- Kürkçü, D. D. (2013). Küreselleşme kavramı ve küreselleşmeye yönelik yaklaşımlar. *The Turkish Online Journal of Design Art and Communication*, 3(2).
- Levitt, T. (1984). The globalisation of markets. *The McKinsey Quarterly*, 1984 (3): 2-20.
- Miles MB, Huberman MA 1994. *An Expanded SourceBook Qualitative Data Analysis*. London: Sage.
- Oliver-Hoyo, M. ve Allen, D. (2006). The use of triangulation methods in qualitative educational research. *Journal of College Science Teaching*, 35(4), 42.
- Oran, B. (2000). *Küreselleşme ve Azınlıklar* (3. Baskı). Ankara: İmaj Yayınları.
- Öz-Kılınç, M. (2009). *Küreselleşme sürecinin eğitim üzerine etkileri ve öğretmen kimliği*. Doktora tezi. İzmir: Ege Üniversitesi, Sosyal Bilimler Enstitüsü.
- Pekişi, A. (2011). Okul yöneticilerinin küreselleşmeyi algılamalarının incelenmesi. Yayınlanmamış yüksek lisans tezi. İstanbul: Marmara Üniversitesi Eğitim Bilimleri Enstitüsü.
- Pike, G. (2000). Global education and national identity: In pursuit of meaning. *Theory into Practice*, 39(2), 64-73.
- Power, N. C. (2000), "Global Trends in Education". *International Education Journal*, 3, 1-6 .
- Şahin, İ. F. (2011). *Küreselleşme Avrupa Birliği ve Türkiye*. Ankara: Pegem Akademi.
- Şener, B. (2014). Küreselleşme sürecinde ulus-devlet ve egemenlik olguları. *Journal of History School (JOHS) Year 7, Issue XVIII*, 51-77.
- Titrek, O., Zafer Güneş, D., Sezen, G. (2013). Yükseköğretim ve Yaşam Boyu Öğrenme: Bir Model Önerisi. *ICQH 2013, 12-14 Aralık 2013, Sakarya Üniversitesi Kongre ve Kültür Merkezi*.
- Yalçınkaya, M. H., Çılbant, C., & Yalçınkaya, N. (2012). Küreselleşme ile yeniden şekillenen ulus-devlet anlayışı. *Uluslararası İktisadi ve İdari İncelemeler Dergisi*, (8).
- Yeasmin, S., & Rahman, K. F. (2012). Triangulation'research method as the tool of social science research. *Bup Journal*, 1(1), 154-163.
- Yıldırım, A. ve Şimşek H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık
- Yılmaz A. (2004). *İkinci küreselleşme dalgası kavram süreç ve sorunlar* (1. Basım) Vadi Yayınları Ankara
- Yılmaz, K. ve Horzum, B. (2005). *Küreselleşme, bilgi teknolojileri ve üniversite*, İnönü Üniversitesi, Eğitim Fakültesi Dergisi, Cilt: 6, Sayı: 10, s.103-121.
- Yorgun, S. (1998). Küreselleşme sürecinde sendikalar. *MESS Mercek*: İstanbul.



Education in the field of mobilization readiness as part of Military Art

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Abstract

Preparation for the defence any country can be defined as a continuous process. The main purpose of this process is to plan and prepare state armed forces for mobilization and force employment against enemy. In the event of jeopardy of national security there is compulsory military recruitment for military duty. Not only the political roles of government and state administration, but also the economic capabilities of the state and allied commitments play a decisive role in this process. The tasks and requirements in this area are based not only on the laws, but also on the guidelines of the government and the orders of the president, as the supreme commander of the armed forces. The article deals with current issues of education and training in the field of mobilization planning and war preparation of state territory. This field provides a system for transition of the armed forces of the Czech Republic from a peaceful to war military organizational structure. The issue of the deployment of the armed forces concerns cross-section of all members of the armed forces, both professional and civilian soldiers. For the deployment of the armed forces, it is necessary to have enough skilled professionals to handle these processes. The article describes theoretical foundations and approaches to education and training within the Training Headquarters at the Vyškov Military Academy and the University of Defense. In the article, the authors also introduce limited states of the personal security system at individual levels of command, in connection with ensuring the transition of the armed forces of the Czech Republic from the peace to the war organizational structure.

Keywords: Mobilization, Armed Forces, Education, War.

Introduction

The basic duty of every state is to ensure national defence and security and the protection of its own population. This role belongs not only to the most basic but also to the most expensive and most complex economic activities; because it requires the allocation of significant human, material and financial resources for this purpose (Ivančík, Nečas, 2011, 392). Ensuring the defence of each state can be defined as a permanent process. The crucial role in this process is the ability to mobilize and deploy its own armed forces. Within this capacity, political representation, state administration and the economic capabilities of the state play a key role. Tasks and requirements in this area are based on the laws, the government orders and the orders of the resident as the supreme commander of the armed forces, and the obligations of the state in relation to the NATO and the EU. According to Kozůbek (2012, p. 87) each NATO member armed forces are presently under extensive transformation process to meet declared initial and demanded capabilities. With defence being a significant ongoing investment for any nation, and with the typical perdurability of the capabilities involved, there are challenges in developing of robust and modular force which are able to meet its national interests. In an effort to point out these challenges, an analytical concept is necessary to be developed for experimentation that provides an obvious connecting link from government guidance through to the capability implications.

Due to the changing internal and external environment, the classical concept of the war, when individual states fought against each other and the conflict resolution has been in the hands of individual Nations, has become a thing of the past. The future operational environment will be characterized by the rising role of new actors. These new actors will include the irregular enemy using illegal warfare, criminal organizations, NGOs, mass media, international organizations and civilian actors as part of a civilian environment. For current and future crisis management, all parties have used the resources that involve non-military actors. (Kovanda, 2015, p. 63)



On the basis of these security challenges, changes also occur in the system of mobilization and deployment of the armed forces.

In the defence sector, the area of mobilization is represented by specific military expertise "Mobilization planning and operational preparation of state territory". The subject of this article is the reaction of the department to the current and possible future requirements and the needs of the sector in the field of professional training of its members.

Method

Scientific methods of analysis and synthesis of knowledge from the history of deployment of the Czech Armed Forces were used for research. Training approaches within vocational courses have been analysed and best practices and approaches to education have been developed through an inductive approach. The methods of induction and deduction were used to derive and generalize judgments and conclusions.

Findings (Potential ways and their realization)

a. Background

The basic tool for the process of deploying the armed forces of CR is mobilization planning. Planned measures are generally implemented within individual security states. In times of peace, calculation of human and material resources needs is conducted. Its updating is done regularly with regard to the relevancy of the data and the war organizational structure. In the event of a military threat, the levies will be made on the basis of military duty. Increase of material resources will also be carried out for the war organizational structure. Training and preparation of individual elements then follows. With further deterioration of the situation and the transition to a state of war, formation of other units and services may be established for the defence of the state territory.

Planning and securing mobilization is dependent on human potential. For this activity (control and planning activity) professionally prepared management must be at all levels of command and control. With the current deteriorating security situation, there is need not only for the ability and readiness of the management department of the Defence Department. An important aspect is also the ability and readiness of lower levels to carry out their own mobilization. To do this, we need to maintain basic know-how on defence and mobilization preparations at all levels of management. Meeting these requirements is the purpose and task of the training system for professionals in the area of defence and mobilization preparation. The education and training of these specialists is conducted by the defence department separately. This is due to the fact that this issue is absolutely unique and lacks a direct equivalent in the labour market in the civil sector. In order to meet the required capabilities, the Department of Defence creates specific training courses within its sectorial training and education facilities to provide training to the members of the Defence Department, so they acquire both theoretical knowledge and practical skills.

b. History

In 1995-2004, the education of mobilization expertise was under the responsibility of the Department of Military Strategy and Operational Arts, which was within the organizational structure of the then Military Academy. This department was focused on mobilization and deployment of the armed forces. It provided instruction for students, staff and conducted scientific and research activities. The most important activity of the department was a two-month vocational training course. This Department, however, ceased to exist as a result of the reorganization of the Military Academy at the University of Defence in 2004. There is no organizational element in the current organizational structure of the University of Defence, focusing on science and education in the



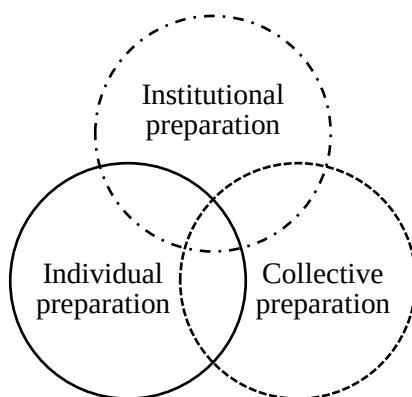
field of mobilization of the Czech Armed Forces. At present, the preparation of persons in the defence sector is implemented by one training facility¹, one military secondary school² and one university³

c. Present time

The current process of acquiring theoretical knowledge and practical skills in the deployment of armed forces consists of three components, namely schooling, education and training, as shown in Fig. 1. Within these three components, a soldier is professionalized during his military career. All educational facilities within the defence sector are included in the institutional preparation or added outside of the Defense Department. Collective preparation includes all the common preparations made in the units. Independent training is then an individual study of the military professional himself. According to Balaban (2015, p. 229), it is possible to utilize Sorensen's model describe the professionalism as: *"Forming an individual towards the best performance of his profession since the moment of his recruitment for military service as workforce suitable for the performance of a certain work in the armed forces, through preparation for such performance, through the performance, or the performance of other positions as a part of his career within the army."*

According to Spišák (2016, p. 180) *"The aim of the education and training of military personnel in the courses is the achievement of the basic qualifications required for the performance of duties in the relevant rank corps. Fulfilling these requirements is a prerequisite for the career development of professional soldiers and the possibility of their appointment to the higher ranks."* The professionalism of the members of the Czech armed forces is therefore an expression of the required ability to handle the given position in the best manner.

Figure 1: Particular elements of education. Source: Own



The above-mentioned institutional training of military professionals can be further divided into several phases. The first phase is a general introduction to the deployment of the armed forces, which is conducted at the training facility. The second phase, for military experts and civilian employees, is a professional course at the University of Defense, in competence of the General Staff of the Army of the Czech Republic (hereinafter referred to as GS). The frequency and the duration of the courses are tailored to the needs of the defence sector in a one-year period and duration of three weeks. Teaching is provided exclusively by GS members. The aim of this course is to enable graduates to be able to plan and implement the mobilization measures set up separately at the various levels of command and control. Nowadays, the need to complete the course is partially triggered by an increase in the number of military professionals and civilian staff dedicated to securing this area. In the previous period, the training of mobilization expertise was underestimated, and there was even a reduction in the

¹ Headquarters of Training - Military Academy Vyškov

² Military High School and Higher Technical School of the Ministry of Defense Moravská Třebová

³ University of Defence Brno



number of experts induced by the reorganization in the defence sector between 2003 and 2013. The third phase, from the point of view of career education, is the Senior Officer's Course (for captain-major) and the General Staff Course (for lieutenant colonel- colonel) in competence of University of Defence. With the changes in the development of the security situation, it is striking that the deployment of the armed forces of CR is currently not part of the teaching plan as it was in the past.

d. Legislative framework

The historical way of implementation is adapted to the current developments within the society itself. A completely new approach, way and concept of the deployment of the armed forces with the emergence of professional armed forces of CR have not yet been designed. If there is a need to modify or change the established system, there should be no over-thinking in terms of the deployment of the armed forces during World War I or World War II or the theories of military art consisting of strategy, operational art and tactics of the 1990s. General mobilization is history. The principle of defence against an ambiguous enemy was a way of seeking the defence of the territory with a maximum of forces and resources. Approaches to legislative adjustments in the field of mobilizing forces and state resources and to the deployment of the armed forces must respond not only to current, but above all, future threats. These future legislative adjustments are a challenge for the training of experts in the area of mobilization the armed forces.

e. Recommendations

For the deployment of armed forces of CR, it is necessary to have enough well-prepared officials in the resort to manage these processes. The solution of this problem can be found between following bordering states:

- In times of peace, develop organizational elements for the deployment of CR armed forces, which will implement the planning.
- Do nothing within the resort.

Arguments can be provided for both options:

- Argument for this option is the fulfilment of one of the key capabilities of armed forces, which is the availability of forces. Argument against this option is the development of organizational elements at particular levels of command and control at the expense of other capabilities. This counterargument is based on the necessity to use every available space for improving the management of combat tasks in the times of peace. It is not possible to weaken the peace structure of CR armed forces by selecting forces to manage measures, which are oriented toward the future.
- To not implement the option, because of necessity to fulfil the fundamental task of armed forces-prepare itself for the defence of CR and to ensure the fulfilment of other tasks associated with common defence against aggression within NATO and EU.

Intersection of these border options may provide for best solutions of the issue. This may take the form of following:

- To prepare and train selected professionals at all sections to provide the building block for the needs of planning in the area of the deployment of armed forces.
- To prepare main officials, who in the process of deployment of armed forces will provide command and control functions.
- To implement practical planning.

Conclusion

The aim of this article is to introduce approaches to education in the field of mobilization and deployment of the CR armed forces, as part of military art. The problems were solved on the basis of theoretical and practical experience of the authors gained at various levels of command and control of CR armed forces.



The issue of the deployment of the CR armed forces concerns the cross-section of all members of the armed forces. The state and the government, through the Defense Department, maintains the established method of deploying armed forces (mobilization), the principle of which was implemented in the history of Czechoslovakia.

In 2005, the proscription was abolished in the Czech Republic, thereby abolishing the general military duty. This also influenced the military readiness of soldiers in reserve. Nowadays, reaction to this state comes in the form of education and training of active reserves, which mostly consist of soldiers in reserve and voluntaries civilians. From the perspective of the institutional level, there is no long-term scientific project in the area of mobilization. Within the professional courses, the students are acquainted with the theory and practice of implementation of the current way of concept of the deployment of the armed forces of CR. In order to develop and maintain the know-how of the area, it will be necessary to identify and accept new challenges for the Armed Forces deployment system from the level of top management of the defence sector.

References

- BALABÁN, Miloš a Bohuslav PERNICA, 2015. Bezpečnostní systém ČR: problémy a výzvy. Praha: Univerzita Karlova v Praze, nakladatelství Karolinum. ISBN 9788024631509.
- CLAUSEWITZ, Carl von, 1996. O válce. Brno: Bonus A. ISBN 8085914271.
- GALATÍK, Vlastimil a Ivo PIKNER, 2008. Principy obrany České republiky "2030". Brno: Univerzita obrany. ISBN 9788072315130.
- GRASSEOVÁ, Monika, Radek DUBEC a David ŘEHÁK, 2010. Analýza v rukou manažera: 33 nejčastěji používaných metod strategického řízení. Brno: Computer Press. ISBN 9788025126219.
- IVANČÍK, R. – NEČAS, P. 2011. The Influence of Global Economic Depression on National and International Defence and Security. In The Knowledge Based Organization : Conference Proceedings from the 17th International Scientific Conference. Sibiu (Romania) : Nicolae Balcescu Land Force Academy. 2011. pp. 390 – 395. ISSN 1843 – 6722.
- KOVANDA, Petr, 2015. The Relation between Military and Civilian Actors in Military Operations. In: The 21th International Scientific Conference Knowledge-Based Organization. Management and Military Sciences. Sibiu, Romania: "Nicolae Balcescu" Land Force Academy Publishing House, 2015, p. 62-65. ISSN 1843-6722.
- KOZŮBEK, Jaroslav; FLASAR, Zdeněk. Possibilities of Verification the Required Capabilities According to NATO Network Enabled Capabilities Concept. Croatian Journal of Education Vol. 14, Spec. Ed. 1/2012, 2012, vol. Vol. 14, no. 1/2012, p. 87-98. ISSN 1848-5189.
- SPIŠÁK, Ján a Ivo PIKNER. Significance of operational art in the lifelong education of military professionals. In: The 2nd ICLEL Conference, Liepaja, Lotyšsko, 2016, p. 180-188. ISBN: 978-605-66495-1-6.



Utilization of simulation in support of educational process of state's security forces: Contemporary possibilities for leadership development

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Abstract

The paper deals with the possibilities of adult career education as one of the decisive tools for expanding and deepening knowledge, developing skills and improving the personal characteristics of students. It describes the possibilities of improving education in decision-making skills by using simulations of crisis situations by state's security forces, for examples the Police and the Armed Forces of the Czech Republic. The article clarifies the possibilities of increasing the quality of training of police and military officers at the middle level of management. In order to determine the status of the selected category of persons, standard scientific methods are used, which, in a wider conception of the given sample, help to recognize the level and individual quality of the examined persons. The final evaluation of the data for examining a given sample of probands becomes a classification, a sum of relevant information that is a basic element for interpretation and other possible uses. The combination chosen and the number of standardized scientific methods used in the research offer the possibility of mutual evaluation, confirmation or rejection of the obtained findings

Keywords: recruitment, training, scientific methods

Introduction

The issue of ensuring the security of the citizens of the Czech Republic in relation with the development of the security environment requires the constant consideration and improvement of the tools for ensuring the safety of the population. In particular, it may take the form of improving the selection of workers, by using different personnel and managerial tools, and their subsequent training. In 2014, the authors of the article developed and tested a tool for the selection and training of security staff. Prior to the development of this tool, an analysis of the current state of the issue under consideration was carried out.

If we want to achieve a higher quality of decision-making skills in responsible officers within the constantly changing security environment, it is necessary to look for the actual activities that can be lead to the accomplishment of this goal.

These activities can take the form of personnel selection, focusing on people with personality prerequisites for quality decision-making, or readiness to learn quality decision-making.

Method

The research used general scientific methods, which were applied in combination. The following methods were used: Method of analysis, synthesis, induction and deduction, method of comparison and statistical evaluation of data and paired-samples sign test.



Following techniques were used during the research:

Critical Incident Techniques - Critical Incident Techniques serve to analyze activity and identify major mistakes. We place this technique in the field of people selection. It is a behavioral, qualitative method by which job positions are analyzed. During the conversation, the worker deals with critical, key events (Flanagan, 1954). The advantage of this method is its focus on practical problems and its flexibility: data collection can be done through interviews, questionnaires or observations (Kemppainen, 2000) (Procházka et al., 2015).

Semi-standardized interviews with heads of operational unions of centers- one group of questions focused on the same problems, the other group asked in non-standardized manner.

Test of decision-making situations– Deliberate test for the evaluation of model situations, evaluation at the scale of 1-5.

Personality questionnaire SPIDO offering profiling of values for competencies, which are necessary for decision-making activities and for the solution of various events in the workplaces (Mikšik, 2007). The method of SPIDO was established with the purpose of examining the structure and the dynamics of psychological resistance and integration of personality.

Spearman's Rank Order Correlation – There was conducted the comparison of solving the given tasks, with the success of police in practice, with the utilization of correlational analysis as a statistical method. The core of the method consisted in the table of mutual correlations between evaluation by the seniors and results of the solving of case studies.

Correlation – it describes the impact of change in one variable on the change in other variable.

In order to compare the difficulties of particular situational variable, paired-samples sign test was utilized.

The validity of personnel selection describes the relationship between values of employed method (predictor) and some real criteria (number of car accidents in drivers, trade results for businessmen, and evaluation by senior at other occupations). Validity can be measured by coefficient of correlation between predictor and criteria.

Simulated situation, in the form of case study, is one of the most reliable tools of personnel selection. Following scheme is suitable for high-quality processing of simulated situations:

1. Collection of data
2. Selection of valid situations for the testing (situations, which differentiate between wrong and right acts, which are adequate in difficulty and which are open to rigid evaluation.
3. Presentation of situations of respondent's sample and aggregation of possible answers to particular questions.
4. Marking of answers by a group of experts.
5. Development of user guidance for the testers.



According to specific conditions, the case study has a written form, where the applicant solves the problem situation or a set of problem situations, or a role playing form, in which the candidates act as participants in a fictitious situation and their reactions are evaluated by their senior (Hroník, 2002, Hroník, 2007).

Plenty of research deals with the use of simulated situations to predict the future performance of police work and monitor their validity.

Another model for decision-making was developed by Gary A. Klein (1993). He developed it on the basis of his own experience in the area of decision-making. In his book he points out model of decision-making based on his experience, in order to avoid limited analytical strategies. The model, general known as RPD, explains how people make decisions without comparing alternative courses of action.

This model integrates two processes- evaluation of situation and mental simulation. The model assumes that people evaluate a situation, in order to generate possible course of action and they use mental simulation, in order to evaluate that course of action.

RPD model points out that experienced decision-makers are able to be first to identify reasonable courses of actions, because they avoid generating courses of actions by semi-random process (Klein, 1993).

Partial conclusion of the above mentioned review was conducted.

According to Hroník, the most suitable tool for personnel selection is simulated situation in the form of case studies. General approach of the author was used in the implementation and development of the tool in operational centers integrated rescue system.

Gary A. Klein (1993), who developed the RPD model, described how decision-makers use their experience to avoid careful consideration. In this work, in the process of developing the tool, author also builds upon real experience with decision-makers at the centers integrated rescue system.

Procedure and instrument development in decision-making situations

In 2015, the author of the article developed a tool to assess the effectiveness of the decision-making processes of operational center staff. Data was gathered in order to determine the frequency of work situation of operational center staff. Data was analyzed in order to determine the frequency of each critical situation and the main factors to which it is caused. A general procedure was developed for the operational centers of security forces, while one of them (the operational centers of the Czech Police) was carrying out its own research project (Mitacek, 2016).

Procedure of the research at operational center of Czech Police:



1. Monitoring of the work-shift will be conducted by the author on pre-determined period at the site of operational center of Czech Police. It will monitor solutions of the announcements and other events, work analysis, methods of critical incidents, time-scale of particular activities and their difficulty.
2. Author created situational questions to describe work-shift at operational center, in which he utilizes knowledge of previously mentioned monitoring.
3. Author set the criteria for evaluation of the case study. Criteria were developed based on experience with the operational center of Czech Police. They include areas such as protection of lives and health, protection of property, speed of the solution, risk of the solution etc.
4. Author conducted exploration of the case study to trial personnel; he then prepared the case study. The case study was given to 25 people. Those filled the case study and the author has written down possible answers to particular task of the case study. The assessment of quality of various types of answers by was conducted by 5 experts (experienced heads of shifts of Armed Forces). The experts evaluate the quality of various answers on the scale from 1 to 5.
5. Subjective evaluation of personal qualities by senior officers and identification of validity concurrency. This will be conducted according to the criteria of practical success in protection of population. Senior officers will evaluate the work of participants on the scale from 1-5 (1 standing for weakest performance).

Evaluation of performance of policeman:

- a. readiness,
- b. work effort,
- c. quality of decision-making in situations,
- d. reliability,
- e. communication with seniors and subordinates

Utilizing the calculation, correlation between the results of case study and evaluation of seniors will be sought. This will result in correlation coefficient describing the validity.

6. In the last part the case studies will be prepared for practical utility- by calculating the percentile norms via statistical calculation. Percentile stands for the position of participant in comparison with the rest of tested population (Mitáček, 2016).

Statistics was used in the following way:

With accordance to ordinal character of data, Spearman's coefficient of correlation will be used (r_s). We assume that we have dual values at N participants $(X_1, Y_1), (X_2, Y_2), \dots, (X_n, Y_n)$, where X_i stands for the quality of solution of individual participants according to the experts and Y_i stands for the results of evaluation of individual policemen by their seniors. Spearman's coefficient is then calculated by the following relationship:

$$r_s = 1 - \frac{6}{n(n^2 - 1)} \sum_{i=1}^n (R_i - Q_i)^2,$$



R_i stands for the order of random variable X_i and Q_i for the order of random variable Y_i . When testing the hypothesis about independence of variables X and Y , statistics test will be utilized.

$$T_o = r_s \sqrt{n-1} \approx N(0,1),$$

Statistics test is suitable for larger files ($n > 30$) (Budíková et al. 2010).

Findings

Based on the conducted research, the results of solutions to particular simulated situations were acquired. Situations were acquired based on the monitoring of particular shifts in common performance and from structured interview of leading officers of operational center of Czech Police. In the following examples three out of fifteen situations are introduced.

(Situational questions for officers of Armed Forces).

1. How will operational officer approach the examination of death, injury or arrest of foreign citizens?
2. How will operational officer approach the situation of doctor requiring the transportation of drunken patient to anti-alcoholic station by car?
3. Every day, the 158 link is dialed by the same person, who overwhelms the link by useless stories. What measures will you take?

Results, Conclusions and Recommendations

From the results of these situation follows statistically significant correlation between managing the decision-making situations and evaluation by seniors in situation n.10 in readiness $\alpha = 0,05$ in work effort $\alpha = 0,01$, in solving, reliability and communication- statistically insignificant correlation. In situations 11, 12, the items readiness, effort, solutions, reliability and communication are statistically insignificant.

Simulation of work shift was conducted- file of tasks, which are related to mistakes at the workplace in relation to acceptance of announcements and events. Criteria of evaluation were identified, which were then used in evaluation of particular case studies solved by policemen. Also, the exploration of simulated situation to trial personnel was conducted. Based on the evaluation of personal qualities of participants by their superiors, the concurrency validity was established, in relation to practical success in protection of population. A correlation was calculated between the results in solutions of the case studies and evaluation of practical success of policemen. The relationship was identified between the results of success of policeman in solving the test of case study and evaluation of his person by his superior.

There are situations, in which we are able to predict the ability of valid decision-making in policemen. Our method describes possibilities for increasing the quality of education in the area of decision-making skills with utilization of simulations of crisis situations in security forces of the state such as Police and Army of Czech Republic. Implementation of the reliable general procedures in decision-making processes in study programs of „Population protection“ into the education system will be contribution for whole our society. The support of



informal education as part of the process of acquiring the knowledge, skills, changing of positions, experience and contacts may be very effective form of professional preparation of soldiers (Kubínyi, 2014, s. 63). Author has chosen the topic based on his great amount of experience and attempts to look for a way to eliminate mistakes in decision-making processes, which are present in security sphere. The contribution of the results for the theory of population protection comes in the form of tool for increasing the efficiency of decision-making process at the Army and Police of Czech Republic. Practical output is the increase in efficiency in personnel selection. In terms of testing the proposed procedures and personnel selection, it is possible to test the reduction of mistakes-making by employers.

References

- HRONÍK, František. 2002. *Poznejte své zaměstnance: vše o Assessment Centre*. 1. vyd. Brno: ERA group. Kariéra. ISBN 80-865-1720-9.
- HRONÍK, František. 2007. *Jak se nespálit podruhé: strategie a praxe výběrového řízení*. Vyd. 1. V Brně: MotivPress. MBA study. ISBN 978-80-254-0698-4.
- KLEIN, Gary A. 1993. *A recognition-primed decision (RPD) model of rapid decision making*. Ablex Publishing Corporatio.
- KUBÍNYI, Lubomír. Další profesní příprava vojáků. *Andragogická revue*, 2014, sv. 5, č. 1/2013, s. 59-65. ISSN 1804-1698.
- MITÁČEK, Radek., 2016. *Hodnocení efektivnosti rozhodovacího procesu pracovníků složek Integrovaného záchranného systému*. Univerzita Obrany Brno 2016.



Environmental Awareness of Teacher Candidates

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Abstract

Today, environmental problems are gathered at four main points. 1) the destruction of the ecological balance, destruction of the natural order to completely disrupt the balances, 2) the waste of natural resources, 3) not struggling to eliminate natural disaster, 4) the insufficient use of renewable energy sources. Scientists have serious discoveries and worries that the world cannot solve environmental problems, especially global warming, and that the world will become a planet of disasters within this century. The only way to solve the problems that humans have is the most intelligent being on the planet is science. Informing and raising awareness happens through education. If we want to leave a livable world to future generations, we must educate everybody in this matter, especially children. It is in this point that the teachers who realize these trainings have environmental awareness. The study was carried out with a total of 532 students randomly selected from all departments of Trakya University Faculty of Education and Pedagogical Formation program students during the fall semester of 2016-2017. "Environmental Awareness Scale" prepared by the researcher was used as data collection tool. The scale consists of 71 items with a rating of 4. For each sub-scale, the internal consistency was determined by calculating the item-total correlation coefficient and the internal consistency was calculated by calculating the total correlation coefficient excluding item. In the same way, t-test between the upper quartile and the lower quartile was applied to detect the discrimination power of the items. For the scale and sub-scales, the reliability was determined by calculating the Cronbach and Rulon coefficients. It was determined that the scale consisting of 3 factors was valid, reliable and usable after statistical procedures. A questionnaire consisting of 19 questions prepared by the researcher was used to collect data about the independent variables of the research. The questionnaire contains questions about nature love as well as demographic characteristics such as gender and age. The statistical analysis of data featured t test, variance analysis and LSD methods for Post hoc analysis to determine the source of variation.

Keywords: environment, environmentalism, environmental awareness

Introduction

Natural assets are the conditions of our existence, having existed till today, allowing today and the future to be lived. The future will be preserved as long as they are protected. Also defined as the environment, these natural assets can also be defined as the habitat to which all living things maintain a relationship throughout their lifetime. The world is struggling to cope with environmental issues that have long existed, but become increasingly effective on one hand, and the emerging environmental issues on the other. Deforestation, loss of biodiversity, air pollution, nutritional issues, global climate change and similar issues that are directly or indirectly related to the environment are growing exponentially. While global climate change is the leading threat to the planet and life today, it is now evident that we are in the footsteps of irreversible destruction. Civilization is at the threshold of permanent crises which may significantly affect the life on the planet at a point where all living things, including mankind, are threatened. The leading causes of environmental crises, the energy industry is strategic, but also prominent in environmental discussions due to its role in global climate change.

Today, environmental problems are gathered at four main points. 1) the destruction of the ecological balance, destruction of the natural order to completely disrupt the balances, 2) the waste of natural resources, 3) not struggling to eliminate natural disaster, 4) the insufficient use of renewable energy sources. Scientists have serious discoveries and worries that the world cannot solve environmental problems, especially global warming, and that the world will become a planet of disasters within this century. The only way to solve the problems that humans have is the most intelligent being on the planet is science. Informing and raising awareness happens



through education. If we want to leave a livable world to future generations, we must educate everybody in this matter, especially children. It is in this point that the teachers who realize these trainings have environmental awareness.

Solving environmental issues is only possible by raising awareness on such issues and the environment. This is a process of education. It will be possible to succeed if the educational process through formal and informal channels is maintained. Environmental education to raise awareness on environment can be provided informally by the family, by mass communication, internet, social networks and similar methods of influence. But in addition to all of the above, the important thing is to provide formal education on environment. Educational activities with contents to raise the environmental awareness of students of all age should be carried out.

Environmental education is a new field of education that emerged when we realized that the distortion of environment, resulting from mankind's efforts to dominate the nature, can only be remedied by mankind's efforts again (Özdemir, 2016). By realizing that the distortion of the environment caused by mankind's interaction with the nature can be remedied again by mankind, environmental education is considered the primary method of creating the required change in people's cognitive, sensory and behavioral aspects. (Özdemir, 2007).

The foundation of environmental education is intended to protect the nature and natural resources. In addition to informing, environmental education also affects human behavior. Providing positive and permanent changes in behavior and ensuring active participation of individuals in solving problems are the fundamental objectives of environmental education (Şimşekli, 2004).

It is necessary that the candidate teachers, who will be providing environmental education in schools, should themselves gain awareness of the environment in Educational Faculties, then receive education on the methods to provide environmental education depending on their expertise and level. The initial point for raising awareness is teachers at all levels.

Method

The study was carried out with a total of 532 students randomly selected from all departments of Trakya University Faculty of Education and Pedagogical Formation program students during the fall semester of 2016-2017. "Environmental Awareness Scale" prepared by the researcher was used as data collection tool.

"Environmental Awareness Scale" consists of 71 items with a rating of 4. For each sub-scale, the internal consistency was determined by calculating the item-total correlation coefficient and the internal consistency was calculated by calculating the total correlation coefficient excluding item. In the same way, t-test between the upper quartile and the lower quartile was applied to detect the discrimination power of the items. For the scale and sub-scales, the reliability was determined by calculating the Cronbach and Rulon coefficients. It was determined that the scale consisting of 3 factors was valid, reliable and usable after statistical procedures. (Ergin, 2017)

A questionnaire consisting of 19 questions prepared by the researcher was used to collect data about the independent variables of the research. The questionnaire contains questions about nature love as well as demographic characteristics such as gender and age. The statistical analysis of data featured t test, variance analysis and LSD methods for Post hoc analysis to determine the source of variation.



Findings

It is evident, based on the totals and the sub-scales, that the candidate teachers have a very high level of environmental awareness, by 3,6/4 (max). In addition, the results of the skewness and kurtosis analyses demonstrated that the distribution is normal, thus the parametric statistics are eligible. (Table 1)

Table 1. Descriptive statistics

	N	Mean	Std. deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. error	Statistic	Std. error
To do	532	3.647	0.301	-2.774	0.106	14.133	0.211
Not to do	532	3.620	0.348	-2.487	0.106	10.390	0.211
Current Threats	532	3.661	0.485	-2.825	0.106	9.649	0.211
Total environmental awareness	532	3.642	0.295	-1.886	0.106	4.734	0.211

The candidate teachers' environmental awareness show no variation by gender in the three sub-scales and the total awareness. Female candidate teachers have more positive environmental awareness in the three sub-scales and the total score compared to men. (Table 2)

Table 2. Environmental awareness t test results by gender

		N	Mean	Std. deviation	t	df	Sig. (2-tailed)
To do	Female	427	3.666	0.275	2.972	530	0.003
	Male	105	3.569	0.380			
Not to do	Female	427	3.640	0.310	2.683	530	0.008
	Male	105	3.539	0.467			
Current threats	Female	427	3.693	0.455	3.138	530	0.002
	Male	105	3.529	0.574			
Total environmental awareness	Female	427	3.666	0.267	3.800	530	0.000
	Male	105	3.546	0.377			

Candidate teachers' environmental awareness in To do ($t=-2,392$ $df=530$ $p<.05$) and Current Threats ($t=-2,190$ $df=530$ $p<.05$) sub scales vary by marital status. Married candidate teachers have more positive environmental awareness in these two sub-scales compared to single ones. (Table 3)

Table 3. Environmental awareness t test results by marital status

		N	Mean	Std. deviation	t	df	Sig. (2-tailed)
To do	Single	495	3.638	0.305	-2.391	530	0.017
	Married	37	3.760	0.205			
Not to do	Single	495	3.621	0.332	0.219	530	0.827
	Married	37	3.608	0.526			
Current threats	Single	495	3.648	0.487	-2.190	530	0.029
	Married	37	3.828	0.419			
Total environmental awareness	Single	495	3.636	0.296	-1.921	530	0.055
	Married	37	3.732	0.272			

Candidate teachers' environmental awareness in To do ($t=2,530$ $df=530$ $p<.05$) and Current Threats ($t=2,396$ $df=530$ $p<.05$) sub scales and the total awareness ($t=2,878$ $df=530$ $p<.01$) varied by their favoring of flowers, trees and greens. Candidate teachers who indicate they like flowers, trees and greens have more positive environmental awareness in these two sub scales and the total score compared to candidate teachers who do not like such. (Table 4)



Table 4. Environmental awareness t test results by like of flowers, trees, greenery

		N	Mean	Std. deviation	t	df	Sig. (2-tailed)
To do	Yes	523	3.651	0.296	2.530	530	0.012
	No	9	3.397	0.454			
Not to do	Yes	523	3.624	0.348	1.782	530	0.075
	No	9	3.416	0.325			
Current threats	Yes	523	3.667	0.479	2.396	530	0.017
	No	9	3.278	0.676			
Total environmental awareness	Yes	523	3.647	0.290	2.878	530	0.004
	No	9	3.364	0.448			

Candidate teachers' environmental awareness in To do ($t=3,597$ $df=530$ $p<.01$) and Current Threats ($t=2,135$ $df=530$ $p<.05$) sub scales and the total score ($t=2,462$ $df=530$ $p<.05$) vary depending on whether they respect the rights of non-human living beings. Candidate teachers who indicate that they are respectful of the rights of non-human living beings have more positive environmental awareness in these two sub scales and the total score compared to candidate teachers who are not respectful of the rights of non-human living beings. (Table 5)

Table 5. Environmental awareness t test results by respectful of the rights of living beings outside of humans

		N	Mean	Std. deviation	t	df	Sig. (2-tailed)
To do	Yes	523	3.653	0.283	3.597	530	0.000
	No	9	3.294	0.796			
Not to do	Yes	523	3.621	0.349	0.203	530	0.839
	No	9	3.597	0.269			
Current threats	Yes	523	3.667	0.478	2.135	530	0.033
	No	9	3.320	0.763			
Total environmental awareness	Yes	523	3.647	0.289	2.462	530	0.014
	No	9	3.403	0.533			

Candidate teachers' environmental awareness in To do ($t=2,649$ $df=530$ $p<.01$) sub scales vary by whether they are informed about the future negative effects of damage to nature and animals. Candidate teachers who indicate they are informed about the future negative effects of damage to nature and animals have more positive environmental awareness in this sub scale compared to candidate teachers who indicated they are not informed. (Table 6)

Table 6. Environmental awareness t test results by knowing about the negative effects of damage to nature and animals in the future

		N	Mean	Std. deviation	t	df	Sig. (2-tailed)
To do	Yes	472	3.659	0.299	2.649	530	0.008
	No	60	3.551	0.298			
Not to do	Yes	472	3.624	0.344	0.709	530	0.479
	No	60	3.590	0.379			
Current threats	Yes	472	3.664	0.494	0.438	530	0.662
	No	60	3.635	0.403			
Total environmental awareness	Yes	472	3.649	0.297	1.413	530	0.158
	No	60	3.592	0.281			

Candidate teachers' environmental awareness in To do ($t=2,157$ $df=530$ $p<.05$) sub scales vary by accepting nature and animals as part of their life/family. Candidate teachers who indicate they see nature and animals as part of their life/family have more positive environmental awareness compared to candidate teachers who indicate otherwise. (Table 7)



Table 7. Environmental awareness t test results by accepting nature and animals as part of your life / family

		N	Mean	Std. deviation	t	df	Sig. (2-tailed)
To do	Yes	467	3.657	0.293	2.157	530	0.031
	No	65	3.572	0.344			
Not to do	Yes	467	3.627	0.353	1.145	530	0.253
	No	65	3.574	0.310			
Current Threats	Yes	467	3.666	0.489	0.732	530	0.465
	No	65	3.619	0.456			
Total Environmental Awareness	Yes	467	3.650	0.293	1.583	530	0.114
	No	65	3.588	0.311			

The results of the Test of Homogeneity of Variances have shown that the scale totals and the subscales are homogeneous and ANOVA is usable. (Table 8)

Table 8. Test of homogeneity of variances

	Levene statistic	df1	df2	Sig.
To do	2.269	2	529	,104
Not to do	,310	2	529	,734
Current threats	2.336	2	529	,098
Total environmental awareness	2.338	2	529	,098

Candidate teachers' environmental awareness in Total ($F=3,035$ $df=2-529$ $p<.05$) and To do ($F=3,860$ $df=2-529$ $p<.05$) sub scales show variation by their age. (Table 9)

Table 9. ANOVA results by age

		Sum of squares	df	Mean square	F	Sig.
To do	Between groups	0.690	2	0.345	3.860	0.022
	Within groups	47.270	529	0.089		
	Total	47.960	531			
Total environmental awareness	Between groups	0.525	2	0.263	3.035	0.049
	Within groups	45.773	529	0.087		
	Total	46.298	531			

Descriptive statistics on the environmental awareness of candidate teachers varied by their age are as follows. (Table 10)

Table 10. ANOVA descriptive statistics by age

		N	Mean	Std. deviation
To do	18-25	473	3.634	0.309
	26-35	49	3.751	0.203
	36 and over	10	3.736	0.162
	Total	532	3.647	0.301
Total environmental awareness	18-25	473	3.631	0.301
	26-35	49	3.728	0.243
	36 and over	10	3.748	0.147
	Total	532	3.642	0.295

According to the results of the LSD **Post Hoc** related to the candidate teachers' variable environmental awareness in Total and To do sub scales, candidate teachers aged 18-25 display a more negative environmental awareness compared to candidate teachers aged 26-35. (Table 11)

Table 11. ANOVA LSD post hoc results by age

Dependent variable			Mean difference (I-J)	Std. error	Sig.
To do	18-25	26-35	-0.117	0.045	0.009
		36 and over	-0.102	0.096	0.288
Total environmental awareness	18-25	26-35	-0.096	0.044	0.029
		36 and over	-0.116	0.094	0.217



Candidate teachers' environmental awareness in Current Threats ($F=3,108$ $df=3-528$ $p<.05$) sub scale vary by which class they study in. (Table 12)

Table 12. ANOVA results by class

		Sum of squares	df	Mean square	F	Sig.
Current threats	Between groups	2.166	3	0.722	3.108	0.026
	Within groups	122.640	528	0.232		
	Total	124.805	531			

Descriptive statistics on the environmental awareness of candidate teachers varied by which class they study in are as follows. (Table 13)

Table 13. ANOVA descriptive statistics by class

		N	Mean	Std. deviation
Current threats	1. year	85	3.795	0.230
	2.year-3.year	288	3.622	0.491
	4. year	67	3.700	0.404
	Formation	92	3.629	0.648
	Total	532	3.661	0.485

According to the results of the LSD **Post Hoc** related to the candidate teachers' variable environmental awareness in Current Threats sub scale candidate teachers studying the 1. Year have a more positive environmental awareness level compared to candidate teachers in the 2.year-3.year and formation classes. (Table 14)

Table 14. ANOVA LSD post hoc results by class

Dependent variable		Mean difference (I-J)	Std. error	Sig.
Current threats	1. year 2.year-3.year	0.173	0.059	0.004
	4. year	0.095	0.079	0.226
	Formation	0.166	0.073	0.023

Candidate teachers' Total Environmental Awareness ($F=3,182$ $df=4-396$ $p<.05$) vary by the most important reason in choosing where to live. (Table 15)

Table 15. ANOVA results by choosing a living place

		Sum of squares	df	Mean square	F	Sig.
Total environmental awareness	Between groups	1.079	4	0.270	3.182	0.014
	Within groups	33.569	396	0.085		
	Total	34.648	400			

Descriptive statistics on the environmental awareness of candidate teachers varied by the most important reason in choosing where they live are as follows. (Table 16)

Table 16. ANOVA descriptive statistics by choosing a living place

		N	Mean	Std. deviation
Total environmental awareness	Degradation of natural beauties	24	3.484	0.420
	Concrete	68	3.714	0.283
	Air / water pollution concern	18	3.707	0.212
	Relinquishment also demands to leave	8	3.719	0.173
	Other	283	3.636	0.287
	Total	401	3.645	0.294

According to the results of the LSD **Post Hoc** related to the candidate teachers' Total Environmental Awareness varied by the most important reason in choosing where to live, those who prioritize Degradation of natural



beauties as the most important reason have a more positive environmental awareness than those choosing by Concrete, Air / water pollution concern, Relinquishment also demands to leave and Other. (Table 17)

Table 17. ANOVA LSD post hoc results by choosing a living place

Dependent variable			Mean difference (I-J)	Std. error	Sig.
Total environmental awareness	Degradation of natural beauties	Concrete	-0.230	0.069	0.001
		Air / water pollution concern	-0.223	0.091	0.014
		Relinquishment also demands to leave	-0.235	0.119	0.049
		Other	-0.152	0.062	0.015
	Concrete	Degradation of natural beauties	0.230	0.069	0.001
		Other	0.078	0.039	0.049

Below are the variables which lead to no variation in total and sub scales of environmental awareness:

- Do you like nature?
- Do you like animals?
- Do you like sea, land, ponds?
- Do you think to leave the place you live?
- Do you take care of your responsibilities to create a smooth future for your child?
- Have you ever been involved in any social service-social activity?
- Have you ever been involved in any environmentalist social work-social activity?
- Are you reluctant to take responsibility?
- Are you warned against faults?
- Why do you choose where you live?

Discussion and Suggestions

While classes and content to raise environmental awareness are not widespread in all departments and course contents in the education faculties, a high environmental awareness level, maintained by the modern mentalities of academic staff and students, has been found. However, to remove this from personal interest and initiative and render it systematic, candidate students who will address future students of varying age and branches should receive environmental courses coherent with the course contents they'll teach.

Environmental issues should be taken into consideration as part of a systemic integrity. Each geographical region should be assessed in a systemic integrity along with their ecosystem, culture and natural assets, tourism and economy. Certainly, the economic and sociological needs of the region's population should also be on the foreground. Therefore, to serve the economic development of the region without interrupting its natural balance, it is intended to become a touristic region.

Flora and fauna must be preserved. Forests are home to many species. All flora housing endemic species, primarily forests and mountains, must be preserved. New industrial facilities, mining survey, destructive energy generation and transportation systems, which may threaten the natural life and disrupt the natural balance in the region should never be permitted, and in fact existing facilities should not be operated and unnecessary concrete formations should be prevented. Trees should not be cut down for any reason, especially mining surveys.

Pollution must be prevented. All forms of environmental pollution must be prevented. The air, water and earth, as the sources of life, should be preserved in "clean" condition for mankind, animals and plants. Any threat of pollution against such sources of life should be prevented before realization, or immediately remedied if realized. Any threat to the existence of forests should be eliminated Thermal/nuclear plants should never be considered an option, initiatives that may cause deforestation should not be permitted. Any initiative leading to the pollution or



threatening the existence of water sources should be prevented. Mining survey licenses should not be granted in the vicinity of water sources, and industrial facilities should be prevented from discharging/contaminating wastes into such water sources. Industrial facilities must be strictly supervised to ensure they establish treatment plants to avoid environmental pollution.

It has been established that the pollution of soil and water leads to cancer formation in humans through food. Such metallic pollution in the water affect all produce in irrigated farms, thus inevitably causes significant harm to human health. Treatment plants should be established to prevent sewage waste from polluting rivers and creeks.

In recent years, greater amounts of fertilizers, water and chemical pesticides have been used in agricultural land to increase output. In particular, the hybrid seeds are renewed each year, thus pesticides are applied to the soil against harmful organisms which will be forced to develop resistance for the seed, increasing soil toxicity. The soil and water, polluted over a quarter of a century, become unable to renew itself in thousands of years. Nitrogenous fertilizers lead to an increase in nitrate pollution in underground water sources. Soil fatigue and pollution should be prevented. Penal sanctions should be implemented. Thousands of facilities continue to pollute the environment, it will not be possible to prevent pollution without implementation of measures. No penal sanctions are implemented to organizations polluting the environment, no factory is prosecuted or penalized.

Green energy industry should be prioritized. One of the fundamental requirements of development is energy generation. Current energy generation and consumption systems lead to the pollution of air, water and earth at local, regional and global level. The most important instrument in reducing contaminants is energy systems established to contain new and renewable energy that are environment-sensitive and sustainable. Coal and thermal plants lead to serious concern in the scientific world, primarily due to negative health and environmental effects and climate change. Coal-fired thermal plants built within settlement areas increase the health issues for the inhabitants. In the recent years of where renewable energy resources were ignored in a tendency towards nuclear and coal-fired thermal plants, energy industry is one of the leading sources of environmental issues.

The global oil crisis of 1973 led to increased interest in alternative and renewable energy resources. The fossil fuels, which fulfill a significant portion of the global energy requirements, have limited time of use, lead to destruction of the environment during energy generation, which combined with the energy requirements of the future generations, better demonstrates the significance of renewable energy resources. Widespread and large-scale use of such resources is subject to technological developments and the establishment of national and international information networks to determine its potential. The first alternative energy resources to be considered are wind and solar energy.

References

- Aktepe S. & Girgin S. (2009). "Comparison of Eco-Schools and Other Primary Schools in Terms of Environmental Education". *İlköğretim Online*, 8(2), 401-414, 2009. [Online]: <http://ilkogretim-online.org.tr>
- Buhan, B. (2006). "Okul öncesinde görev yapan öğretmenlerin çevre bilinci ve bu okullardaki çevre eğitiminin araştırılması". *Yayımlanmamış Yüksek Lisans Tezi*. Marmara Üniversitesi, Eğitim Bilimleri Enstitüsü, İstanbul.
- Ergin, Demirali Yaşar (2017). "Çevre Bilinci Ölçeğinin Geliştirilmesi". **ICSER- 3.Uluslararası Sosyal Bilimler & Eğitim Araştırmaları Konferansı**. Roma / İtalya 27-29 Nisan 2017
- Gülay, H. ve Ekici, G., (2010). "MEB Okul Öncesi Eğitim Programının Çevre Eğitimi Açısından Analizi", *Türk Fen Eğitimi Dergisi*. 7(1), 74-84.



- Güler, T. (2009). “Ekoloji Temelli Bir Çevre Eğitiminin Öğretmenlerin Çevre Eğitimine Karşı Görüşlerine Etkileri”. *Eğitim ve Bilim*. 2009, Cilt 34, Sayı 151
- Külköylüoğlu, O. (2000). “Çevre Eğitiminde Yapısal Unsurlar ve Amaçlar, Üniversitelerin Eğitimde Önemi” İ. Kızıroğlu, N. İnanç ve L. Turan (Ed.), *V. Uluslararası Ekoloji ve Çevre Sorunlar Sempozyumu*. Ankara: Çevre Bakanlığı Yayını
- Oluk, S. (2008). “Okul Öncesi Dönemde Çevre Eğitimi”. *Ekoloji Magazin* (Ocak-Mart),17.
- Ozaner, F. S. (2004). “Türkiye’de okul dışı çevre eğitimi ne durumda ve neler yapılmalı?” *V.Ulusal Ekoloji ve Çevre Kongresi* 5-8 Ekim 2004 Abant İzzet Baysal Üniversitesi & Biyologlar Derneği, Abant- Bolu. Bildiri Kitabı (Doğa ve Çevre), 67-98, Biyologlar Derneği, İzmir.
- Özdemir O. (2007). “A New Environmental Education Perspective: Education For Sustainable Development”. *Education and Science* 2007, Vol. 32, No:145
- Özdemir O. (2016). *Ekolojik Okuryazarlık ve Çevre Eğitimi*. 1.Baskı. Ankara: Pegem Akademi
- Şimşekli Y. (2004). “Çevre Bilincinin Geliştirilmesine Yönelik Çevre Eğitimi Etkinliklerine İlköğretim Okullarının Duyarlılığı”. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi* XVII (1), 2004, 83-92
- Yoleri S. (2012). “Children And The Environment: Creating Environmental Awareness Among Preschool Children” *Buca Eğitim Fakültesi Dergisi* 34 (2012)



Correlation Between Elementary School Students' Success in Mathematics and Studying Strategies

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Abstract

Students' academic success is influenced by four fundamental factors, namely the students themselves, their social environment, physical conditions and education. The factors stemming from the students themselves comprise three sub-factors, namely mental competence, affective/emotional properties and study habits. Students' affective/emotional properties, variations in personality features also reflect on study habits, methods and techniques which interact with mental competences. Consequently, study strategies play a role as one of the defining factors students' success. The study strategies of students should also have a powerful influence on success in mathematics, which is the lowest scoring subject of student success in Turkey. The study has been conducted with randomly selected Elementary school students among Suleymanpasa and Cerkezoy districts in Tekirdag province during the 2016-2017 spring term. The data collection tool was the "Scale of Study Strategies" prepared by Ergin (2017). The scale comprises 30 items each with 4 grades. To determine sub-dimensions as scale development statistics, the varimax rotated exploratory factor analysis has been used. Internal consistency has been determined by calculating item-total correlation coefficient and item-remainder correlation coefficient individually for each sub-dimension. Similarly, the distinctive effect of items has been determined by applying the t-test in upper quarter and lower quarters. The Cronbach and Rulon coefficients have been calculated for the scale and its sub-dimensions to determine reliability. Through statistical processing, it has been established that the scale is applicable, reliable and usable. Furthermore, the survey prepared by the researchers, involving 13 questions has been used to gather data on certain demographic characteristics of students. According to the findings of this study, the students' success in mathematics is correlated with their study strategies.

Keywords: Study Strategies, mathematics, academic success

Introduction

Students' academic achievement can be categorized into 3 fundamental features: 1) student's personal features (mental capabilities, psychological features, attitudes and habits) 2) features of their social environment (family features, friendship relations, social-economic features) 3) Features related to education system (Course contents, teaching methods, teaching tools). The most important elements in the student's attitudes and habits category are study habits, learning styles, strategies to prepare for examinations and study strategies.

In today's world where information and technology rapidly advance, the needs of individuals and societies are changing. Individuals should receive quality education in order to conform with advanced technology and to accumulate knowledge. Educational institutions should support students to ensure effective studies. Providing education at the desired level of quality can be ensured by enabling students to learn how to learn (Avcı and Nazlı, 2006). At this point, students' study habits for accessing information and strategies used for studies are the most significant elements of permanent learning and therefore, success. (Demirezen & Akhan, 2013)

Information accumulates so rapidly that it is not possible to relay it to students with equal pace. It should be ensured that students are equipped with the ability to attain learning strategies on their own in order to keep track of information in the fastest way. Learning strategies, also defined as learning to learn, should be among the learning outcomes. Each student may develop learning and exam-taking strategies in line with their own type of



intelligence and learning style, in addition to generally applicable strategies. Students should combine these general and unique circumstances to develop strategies providing academic achievements, creating efficient study habits.

One of the most significant factors influencing achievement in the learning process is the study strategies attained. In general, strategy is the path followed in order to reach a preset objective or the implementation of a plan to achieve a goal (Açıkgöz, 1996).

In a world where information is constantly updated, educators should seek to answer the question of "How to teach information to students?" rather than "What information to teach students?". Students are strong, productive and persistent when they believe they can be successful in their academic studies, achieving greater use of study strategies (Bandura, 1986). To ensure greater use of study strategies that increase academic achievement, academic self-efficacy is required. The number and type of study strategies students use to increase success are influenced by the concept of academic identity. (Subaşı , 2000)

For students to learn how to learn, they should first know themselves in terms of learning features. In addition, students should recognize and be able to use various methods beneficial in learning. For instance, what methods are there to ensure learning? Which type of learning requires their use and how? By recognizing their own learning features and by recognizing and learning to use methods of learning, students can learn to learn and achieve effective learning (Özer, 1998: 150).

Study habits has prerequisites such as suitable study environment, self-direction, time and stress management, effective resting, reading adequacy, note-taking and writing skills. Studies show that self-direction, mood management and self-monitoring are successful strategies for study motivation (Thomas, 1993).

It is commonly expressed that the reason of failure is lack of adequate study and students are reminded to study frequently. In fact, effective learning is achieved by consciously utilizing processes and paths ensuring learning (Uluğ, 1995; Özer, 1993). Therefore, achievement in the teaching-learning process requires, in addition to specific study times, students being aware of how they study or recognizing the level of effective study habits students have. Today, attaining the longest-lasting information in the shortest time possible has become an objective of education as a requirement of our age. Considering that success can be achieved through studying effectively, rather than studying hard, the necessity for students to have efficient study strategies is apparent (Küçükahmet, 1987).

Studies show a positive and strong correlation between achievement and study strategies. Self-efficacy and use of study strategies, student's skill level and use of strategy are also positively correlated (Horn, Bruning, Schraw and Curry, 1993: 465).

Küçükahmet (1987), the first study in Turkey on study strategies, examined the study habits and attitudes of university students in various branches using the scale developed by Brown and Holzman (1967), which **demonstrated** that the use of effective study strategies and habits positively influence academic achievement. In general, we seek to teach classes such as Mathematics, Science and Turkish to students using various methods, but little or no information is given on how the student should learn these classes. Students being uninformed on which study habits to use for each class negatively influences the efficient studying of students (Yörük, 2007). Efficient study refers to the use of study time in a planned and efficient manner towards preset objectives and established priorities (Yeşilyaprak, 2003, p.129).



Method

The study has been conducted with randomly selected Elementary school students among Suleymanpasa and Cerkezoy districts in Tekirdag province during the 2016-2017 spring term. The data collection tool was the “Scale of Study Strategies” prepared by Ergin (2017). The scale comprises 30 items each with 4 grades. To determine sub-dimensions as scale development statistics, the varimax rotated exploratory factor analysis has been used. Internal consistency has been determined by calculating item-total correlation coefficient and item-remainder correlation coefficient individually for each sub-dimension. Similarly, the distinctive effect of items has been determined by applying the t-test in upper quarter and lower quarters. The Cronbach and Rulon coefficients have been calculated for the scale and its sub-dimensions to determine reliability. Through statistical processing, it has been established that the scale is applicable, reliable and usable. Furthermore, the survey prepared by the researchers, involving 13 questions has been used to gather data on certain demographic characteristics of students. According to the findings of this study, the students’ success in mathematics is correlated with their study strategies.

Findings

Study strategies and all subscales as well as other numerical variables used in the study all display normal distribution properties. Statistical results Show that the research data displays normal distribution. (Table 1) Parametric methods have been used in line with these results.

Table 1. Descriptive statistics

	N	Mean	Std. Deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Study regularly	89	2,267	0,622	0,453	0,255	-0,157	,506
Learn the course in the classroom	89	2,968	0,600	-0,640	0,255	0,142	,506
Ability to study alone	89	2,640	0,684	-0,180	0,255	-0,685	,506
Not focusing on memorization	89	2,404	0,757	0,172	0,255	-0,198	,506
Not idling with food-beverages	89	2,713	0,907	-0,265	0,255	-0,975	,506
Studying on the desk	89	2,502	0,548	-0,018	0,255	-0,284	,506
Studying in a quiet environment	89	2,815	0,896	-0,198	0,255	-0,971	,506
Studying without heeding distractions	89	3,079	0,783	-1,012	0,255	0,925	,506
Studying on time	88	1,682	0,989	1,046	0,257	0,227	,508
Study strategies	89	2,565	0,293	-0,044	0,255	0,193	,506
Your Age?	88	12,807	0,908	0,490	0,257	-0,516	,508
Your Grade?	87	6,759	0,731	0,411	0,258	-1,024	,511
What is your latest score in the mathematics course?	83	66,976	22,672	-0,322	0,264	-0,555	,523
What is your course score in your latest report card?	78	74,385	19,763	-0,613	0,272	-0,407	,538

There is no correlation between which class the students attend and their study strategies. There is a negative correlation between students’ age and the habit of studying at a desk, children stop studying at a desk as their age rises. There are positive correlations between the latest score in the mathematics examination and the mathematics class score in their latest report card and learning the course in the classroom, studying without heeding distractions subscales and the total study strategies. Students who are successful in mathematics learn the course in the classroom and study without heeding distractions, and generally have more positive study strategies. (Table 2).



Table 2. Relations between working strategies and some demographic characteristics

		Your Age?	Your Grade?	What is your latest score in the mathematics course?	What is your course score in your latest report card?
Study regularly	Pearson	-,134	-,108	,090	,079
	Correlation				
	Sig. (2-tailed)	,214	,320	,417	,494
Learn the course in the classroom	N	88	87	83	78
	Pearson	-,045	-,092	,356**	,354**
	Correlation				
Ability to study alone	Sig. (2-tailed)	,677	,399	,001	,001
	N	88	87	83	78
	Pearson	,136	,167	,193	,084
Not focusing on memorization	Correlation				
	Sig. (2-tailed)	,208	,123	,080	,466
	N	88	87	83	78
Not idling with food-beverages	Pearson	-,121	-,153	,033	,149
	Correlation				
	Sig. (2-tailed)	,262	,158	,769	,192
Studying on the desk	N	88	87	83	78
	Pearson	,062	-,016	,059	-,014
	Correlation				
Studying in a quiet environment	Sig. (2-tailed)	,564	,885	,599	,904
	N	88	87	83	78
	Pearson	-,237*	-,182	,194	,153
Studying without heeding distractions	Correlation				
	Sig. (2-tailed)	,026	,091	,079	,180
	N	88	87	83	78
Studying on time	Pearson	,151	,080	-,021	,062
	Correlation				
	Sig. (2-tailed)	,160	,464	,853	,593
Study strategies	N	88	87	83	78
	Pearson	,149	,139	,302**	,281*
	Correlation				
	Sig. (2-tailed)	,166	,201	,006	,013
	N	88	87	83	78
	Pearson	,055	,003	-,039	,045
	Correlation				
	Sig. (2-tailed)	,612	,978	,725	,696
	N	87	86	82	77
	Pearson	,042	-,025	,273*	,284*
	Correlation				
	Sig. (2-tailed)	,696	,819	,013	,012
	N	88	87	83	78

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

There is correlation between gender and studying at a university. 88,6% of female students want to study at university very much, while this rate is 62,2% for male students. (Table 3)



Table 3. Relations between gender and do you want to studying at a university?

		Gender		Total
		Girl	Boy	
Do you want to studying at a university?	I want it very much	f 39	28	67
		% 88,6%	62,2%	75,3%
	I want	f 4	15	19
		% 9,1%	33,3%	21,3%
	I don't want, but I will	f 0	2	2
		% 0,0%	4,4%	2,2%
	I don't want, and I won't	f 1	0	1
		% 2,3%	0,0%	1,1%
Total		f 44	45	89
		% 100,0%	100,0%	100,0%
Pearson Chi-Square		Value	df	p
		11,165 ^a	3	,011

There is a correlation between gender and daily time of studying at home. The rate of female students who answered none is 4,5%, while the same rate is 33,3% for male students. 61,4% of female students study 1-2 hours daily, whereas this rate is 20,0% for male students. (Table 4)

Table 4. Relations between gender and daily time of studying at home?

		Gender		Total
		Girl	Boy	
Daily time of studying at home	None	f 2	15	17
		% 4,5%	33,3%	19,1%
	Less than 1 hour	f 11	18	29
		% 25,0%	40,0%	32,6%
	1-2 hours	f 27	9	36
		% 61,4%	20,0%	40,4%
	3 hours and more	f 4	3	7
		% 9,1%	6,6%	7,8%
Total		f 44	45	89
		% 100,0%	100,0%	100,0%
Pearson Chi-Square		Value	df	p
		22,822 ^a	5	,000

There is no correlation between gender and students' self evaluation of general success in class. 80,9% of students perceive themselves as successful students. 13,5% of students consider themselves very successful, while only 5,6% consider themselves unsuccessful or very unsuccessful. (Table 5)

Table 5. Relations between gender and students' self evaluation of general success in class

		Gender		Total
		Girl	Boy	
Students' self evaluation of general success in class	Very successful	f 7	5	12
		% 15,9%	11,1%	13,5%
	Successful	f 35	37	72
		% 79,5%	82,2%	80,9%
	Unsuccessful	f 1	3	4
		% 2,3%	6,7%	4,5%
	Very unsuccessful	f 1	0	1
		% 2,3%	0,0%	1,1%
Total		f 44	45	89
		% 100,0%	100,0%	100,0%
Pearson Chi-Square		Value	df	p
		2,378 ^a	3	,498

There is no correlation between gender and students' self evaluation of success in mathematics class. 54,5% of students perceive themselves as successful in mathematics class. 12,5% consider themselves very successful, 26,1% as unsuccessful, while a mere 6,8% consider themselves very unsuccessful. (Table 6)



Table 6. Relations between gender and students' self evaluation of success in mathematics class

		Gender		Total
		Girl	Boy	
Students' self evaluation of success in mathematics class	Very successful	f	5	11
		%	11,4%	12,5%
	Successful	f	26	48
		%	59,1%	54,5%
	Unsuccessful	f	11	23
		%	25,0%	26,1%
	Very unsuccessful	f	2	6
		%	4,5%	6,8%
Total		f	44	88
		%	100,0%	100,0%
Pearson Chi-Square		Value	df	p
		1,134 ^a	3	,769

Gender and liking mathematics class are correlated. The rate of female students who responded "Yes, I like it" is 84,1%, while this rate is 46,7% for male students. More female students like mathematics class than male students. (Table 7)

Table 7. Relations between gender and liking mathematics class

		Gender		Total
		Girl	Boy	
Liking mathematics class	Yes	f	37	58
		%	84,1%	65,2%
	No	f	7	31
		%	15,9%	34,8%
Total		f	44	89
		%	100,0%	100,0%
Pearson Chi-Square		Value	df	p
		13,938 ^a	2	,001

There is no correlation between gender and being afraid of mathematics class. 33,7% of students indicate they are afraid of the mathematics class. (Table 8)

Table 8. Relations between gender and being afraid of mathematics class

		Gender		Total
		Girl	Boy	
Being afraid of mathematics class	Yes	f	13	30
		%	29,5%	33,7%
	No	f	31	59
		%	70,5%	66,3%
Total		f	44	89
		%	100,0%	100,0%
Pearson Chi-Square		Value	df	p
		1,798 ^a	2	,407

There is no correlation between gender and students' evaluation of how the mathematics teacher teaches the class. 88,5% of students consider the mathematics teaching of the teacher as successful. (Table 9)



Table 9. Relations between gender and students' evaluation of how the mathematics teacher teaches the class

		Gender		Total
		Girl	Boy	
Students' evaluation of how the mathematics teacher teaches the class	Successful	f	41	36
		%	95,3%	81,8%
	Unsuccessful	f	2	8
		%	4,7%	18,2%
Total		f	43	44
		%	100,0%	100,0%
Pearson Chi-Square			Value	df
			4,091 ^a	2
				p
				,129

There is no correlation between gender and the students' evaluation of mathematics teacher's communication with the students. 88,6% of students are of the opinion that the mathematics teacher successfully communicates with the students. (Table 10)

Table 10. Relations between gender and students' evaluation of mathematics teacher's communication with the students

		Gender		Total
		Girl	Boy	
Students' evaluation of mathematics teacher's communication with the students	Successful	f	39	39
		%	90,7%	86,7%
	Unsuccessful	f	4	7
		%	9,3%	13,3%
Total		f	43	45
		%	100,0%	100,0%
Pearson Chi-Square			Value	df
			1,066 ^a	2
				p
				,587

Results, Conclusions and Recommendations

Nearly all of the students indicate they want to study at university. However, it is evident in their responses to other questions in the survey that they are not aware of the effort required to achieve this objective.

It is observed that students do not dedicate time to study regularly on a Daily basis. 1/3 of male students indicate they don't study at all, which is concerning. The rate of students indicating that they study on average 1 hour or less daily is less than half.

It is significant that the majority of students consider themselves successful in mathematics class, similar to courses in general. Students are not aware of their failure, or more accurately, they evidently become overconfident with respect to their level of knowledge based on their scores.

1/3 of the students like mathematics class, while 2/3 are afraid of it, implying that a major cause underlying students' failure in this class is the affective field they created with respect to the mathematics class. On the other hand, it is interesting that female students favor mathematics class more than male students, contrary to popular belief.

The majority of students indicate that the mathematics teacher's teaching and their communication with students is successful, thus indirectly accepting that the failure does not stem from the teacher.



References

- Açıkgöz, K. Ü. (1996). *Etkili Öğrenme Ve Öğretme*. İzmir: Kanyılmaz Matbaası.
- Avcı, Y. ve Nazlı, S. (2006). Ders Çalışma Alışkanlıkları, Akademik Başarıları ve Sınav Kaygıları Üzerindeki Etkisi. *Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*. 15, 21-43.
- Bandura, A. (1986) *Social Foundations of Thought and Action*, Englewood Cliffs, NJ. Prentice-Hall.
- Demirezen S. & Akhan N.E. (2013). İlköğretim Öğrencilerinin Ders Çalışma Üzerine Algıları, *Karadeniz Sosyal Bilimler Dergisi*. 169-183.
- Horn, C.; Bruning, R. ; Schravv, G. & Curry, E. (1993). Paths to success in the College Classroom, *Contemporary Educational Psychology*, 18, 464-478
- Küçükahmet, L. (1987) *Öğrencilerin Çalışma Alışkanlıkları Ve Tutumları*. AÜ Eğitim Bilimleri Fakültesi Yay,
- Özer, B. (1993). Öğretmen Adaylarının Etkili Öğrenme ve Ders Çalışmadaki Yeterliliği. Eskişehir: *Anadolu Üniversitesi Eğitim Fakültesi*.
- Özer, B. (1998). Öğrenmeyi Öğretme. A. Hakan (Ed.). *Eğitim Bilimlerinde Yenilikler*. Eskişehir: Anadolu Üniversitesi Açıköğretim Fakültesi.
- Subaşı, Güzin. (2000). Verimli Ders Çalışma Alışkanlıkları Eğitiminin Akademik Başarı, Akademik Benlik Kavramı ve Çalışma Alışkanlıklarına Etkisi. *Eğitim Ve Bilim*, [S.l.], v. 25, n. 117, jul. 2000. ISSN 1300-1337
- Thomas, H.A. (1993) *Cognitive and Affective Learning Strategies*. Academic Press. New York
- Uluğ, F. (1995). *Okulda Başarı: Etkili Öğrenme ve Ders Çalışma Yöntemleri*. İstanbul: Remzi Kitabevi
- Yeşilyaprak, B. (2003). *Eğitimde Rehberlik Hizmetleri*. 6. Baskı. Ankara: Nobel Yayınları
- Yörük, D. (2007). *Lise Öğrencilerinin Akademik Başarıları, Başarı Korkuları ve Verimli Ders Çalışma Alışkanlıkları Arasındaki İlişkilerin İncelenmesi*. Yayınlanmış yüksek lisans tezi, Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.



Development of Material Use Scale in Mathematics Teaching

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Abstract

The academic achievement of the students is influenced by four basic factors, themselves, their social environment, physical conditions and education. The education factor consists of four basic subfactors: teacher, method, environment and material. As one of the basic principles which is valid for all educational factors, when more senses of the student is addressed, learning becomes easier. The training materials that contribute to the inclusion of multiple senses in the course of learning increase the success in learning. One of the reasons for the low student achievement in mathematics is the abstract formation and the lack of connection ability of the student between the abstract and the concrete. In this context, materials in mathematics education gain more importance. Much more attention should be paid in mathematics lesson to the use of educational materials that serve to improve mathematical thinking in the pupils. It is highly likely that teachers' attitudes and behaviors of using materials is effective in mathematics lesson, where student achievement is lowest in Turkey.

The study was conducted with mathematics teachers (n=275) who were working in the spring semester of 2016-2017 in Edirne, Tekirdağ, Kırklareli. The data collection tool was the "Scale of Material Use in Mathematics Teaching" prepared by the researchers. The scale consists of 41 items each with 4 grades. To determine sub-dimensions (8) as scale development statistics, the varimax rotated exploratory factor analysis has been used. Internal consistency has been determined by calculating item-total correlation coefficient and item-remainder correlation coefficient for each sub-dimension. Similarly, Discriminant Coefficients of the items has been determined by applying the t-test in the upper and lower quarters. The Cronbach and Rulon coefficients have been calculated for the scale and its sub-dimensions to determine reliability. It has been established by statistical processing that the scale comprising 8 factors is valid, reliable and usable.

Keywords: mathematics teaching, educational material use, reliability

Introduction

With the mathematics education program first implemented in 2005 in Turkey, the use of materials in the classroom gained significance. This requires teachers and candidate teachers be informed on material selection and usage through in-service and pre-service training. (Özdemir, 2008)

The rapid development of science and technology necessitates the use of technological tools in education. In this context, the reformed Mathematics Teaching Programs (MEB, 2006; MEB, 2013) emphasize that the advanced technology presents new opportunities for learning, requiring teachers to include technological tools and teaching materials in their classes. This aims to ensure meaningful learning in schools and boost the quality of education. (Ünlü, 2017)

Moving from solid information in the learning-teaching process and enabling students to practice is only possible through the use of teaching materials. The teaching materials used to achieve the outcomes specified in the teaching programs are indispensable tools to discover and restructure information (MEB, 2005).

Teaching materials may be clearly identified objects or objects presented in media requiring advanced technology to access the contents. The teaching materials that can be used in the classroom environment include real objects or models, written tools, visual and printed materials, various panels and boards, projectors and its



sheets, slides and movie strips, audio elements, television and video, computers, internet and software (Kaya, 2006).

Materials are objects designed to represent abstract mathematical concepts, engaging various senses of students, which are visual and movable. Materials can be everyday items such as beads, beans, money or measuring tools as well as objects designed and produced for mathematics teaching such as decimal blocks, geometrical board or pattern blocks. (Özdemir, 2008)

Mathematics is inarguably significant in the private and professional lives of everyone. Mathematics is one of the most challenging classes for students. This is primarily because mathematics is composed of abstract concepts and abstract relations between such concepts. Since it is difficult for students to turn abstract concepts and relations into tangible ones, special methods and techniques to facilitate this process are needed.

Piaget indicates that students in elementary level need materials and drawings to gain a lot of experience in order to comprehend mathematical concepts. Mathematical concepts, when simply explained by words or symbols to children without full mental maturity, will be incomprehensible abstract concepts. (Piaget, 1952).

Piaget states that logical-mathematical information is structured in people's minds through associations (similarity, comparison of less or more etc.). This type of information is different from physical information observed in the outside world (the color, weight etc. of an object). (Özdemir, 2008)

In a changing and advancing world, teachers' struggle to render the learning environment effective in mathematics teaching and to raise individuals for the 21st century, the role and significance of developing and implementing teaching technologies and materials is undeniable. Today, individuals aren't expected to access information from a single source or to memorize it, but to raise individual who know the methods of accessing information, are able to use them and solving problems by using such information; the use of teaching materials prepared in line with the principles of teaching technologies have a unique role in providing such qualities to individuals and allowing teachers to prepare effective and interactive learning environments. (İnan, 2006)

Children's mental development moves from tangible towards abstract. People always learn the tangible objects they observe easier than their abstract description. Therefore, students should be allowed to see the item or object in question during the class, if possible, and shown a model, photograph or other icon of the object or event otherwise. In particular, objects seen or held are more meaningful for elementary school students. Therefore, students should first be taught tangible items, to reach abstract concepts thereafter. Tangible topics should be utilized in teaching abstract topics. (Akbayır, 2016)

Use of materials in education facilitates perception and learning. It creates interests and vividness into the classroom. It shortens learning times, reinforces knowledge and helps with long-term retention. It ensures student engagement in the topic, invokes the desire to read and research. Events, concepts and entities that cannot be visited or brought into the classroom can be displayed in the classroom in their actual form. (Aslan and Doğdu, 1993).

In particular, students in elementary level are challenged by perceiving abstract concepts which negatively influences their success in mathematics class. Therefore, mathematics classes should feature multi-media, multiple tools and teaching-learning practices frequently. (Hızal, 1992). Use of teaching materials in learning environments places the students in the center, offers richer learning opportunities, makes mathematics fun, and allows mathematics to be written down and discussed. Use of materials in mathematics classes to associate mathematics with daily life and to render it tangible will positively influence student motivation, engagement and success, and offer positive contributions to the development of estimation, association, information transfer, mathematical conclusion and mathematical generalization skills.



Method

The study was conducted with mathematics teachers (n=275) who were working in the spring semester of 2016-2017 in Edirne, Tekirdağ, Kırklareli. The data collection tool was the "Scale of Material Use in Mathematics Teaching" prepared by the researchers. The scale consists of 41 items each with 4 grades. To determine sub-dimensions (8) as scale development statistics, the varimax rotated exploratory factor analysis has been used. Internal consistency has been determined by calculating item-total correlation coefficient and item-remainder correlation coefficient for each sub-dimension. Similarly, Discriminant Coefficients of the items has been determined by applying the t-test in the upper and lower quarters. The Cronbach and Rulon coefficients have been calculated for the scale and its sub-dimensions to determine reliability. It has been established by statistical processing that the scale comprising 8 factors is valid, reliable and usable.

Findings

The "rotated exploratory factor analysis" has been used to determine the structural validity of the scale. The adequacy of data for factor analysis has been evaluated using KMO and Bartlett tests and found that the statistical requirements are fulfilled. (Table 1)

Table 1. KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.931
Bartlett's Test of Sphericity	5.934.084	9.251.959
	820.000	528
	0.000	0.000

8 factors have been established for the analysis where components with an Eigen value of 1 or above are selected. Principal component analysis has been used as extraction method. 8 component (factor) explains,533% of total variance. (Table 2)

Table 2. Total variance explained

Component	Initial eigen values			Extraction sums of squared loadings			Rotation sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	15.219	37.118	37.118	15.219	37.118	37.118	9.045	22.062	22.062
2	2.823	6.885	44.004	2.823	6.885	44.004	3.468	8.459	30.521
3	1.832	4.467	48.471	1.832	4.467	48.471	3.083	7.520	38.040
4	1.724	4.206	52.677	1.724	4.206	52.677	3.072	7.494	45.534
5	1.425	3.476	56.153	1.425	3.476	56.153	2.473	6.031	51.565
6	1.278	3.116	59.270	1.278	3.116	59.270	2.304	5.621	57.185
7	1.106	2.697	61.966	1.106	2.697	61.966	1.641	4.004	61.189
8	1.052	2.567	64.533	1.052	2.567	64.533	1.371	3.344	64.533
9	,957	2.334	66.866						

According to the results of the "Varimax rotated" factor analysis, the factors and the components they include have been determined. Placement of components into the factor where the highest eigen value results in an 8-factor scale (APPENDIX A Table 3).

The factors determined by factor analysis, including positive and negative skills and their meanings are as follows; (Table 4)



Table 4. Factors

Factor	Value	Name	Definition
F1	Positive	Tactile material	Visual material that students may hold and touch in the school and the classroom.
F2	Positive	Online viewing/ examination resources	Materials based on viewing which are accessible online or shared with students.
F3	Positive	Classical, fundamental simple materials.	Compass, ruler and other oldest educational materials used in every age.
F4	Positive	Mind games	Real or online games that indirectly support through developing logic/thinking/strategy usage in problem solving.
F5	Positive	Shape games	Real or online games that indirectly support through using /developing spatial intelligence in problem solving.
F6	Positive	Software	Computer software programs
F7	Positive	Music	Improvised music pieces with mathematical lyrics
F8	Positive	Drawing	Using other items instead of a ruler

Item-total correlation and item remainder coefficients have been calculated to determine internal consistency between dimensions. Calculated to examine the relationship between the factor totals and the scale totals, the Rulon=0.602, and Cronbach α =0.686 have been established. According to these analyses, it has been observed that all factors are positively related to the totals of the scale and demonstrate internal consistency (Table 5).

Table 5. The analysis of internal consistency between dimensions

Factors	Item-total correlation coefficient			Item-remainder correlation coefficient		
	rit	df	p	rir	df	p
F1	0.956	273	p<.01	0.808	273	p<.01
F2	0.692	273	p<.01	0.611	273	p<.01
F3	0.821	273	p<.01	0.740	273	p<.01
F4	0.694	273	p<.01	0.640	273	p<.01
F5	0.707	273	p<.01	0.665	273	p<.01
F6	0.496	273	p<.01	0.388	273	p<.01
F7	0.416	273	p<.01	0.386	273	p<.01
F8	0.372	273	p<.01	0.332	273	p<.01
	rulon			cronbach		
	0.602			0.686		

For each factor internal consistency has been determined by item-total correlation coefficient and item-remainder correlation coefficient, Rulon (0.948, 0.786, 0.888, 0.454, 0.547, 0.720) Cronbach α (0.941, 0.758, 0.854, 0.730, 0.708, 0.696) coefficients. According to these analyses, that all items are related to the totals of the subscale and demonstrate internal consistency (Appendix Table 6-11).

t- Test has been used to analyze the difference between upper and lower quartiles to determine people with high level skills and low level skills. According to the results, it has been observed that all factors are suitable to distinguish low and high skills levels (Table 12).

Table 12. Discriminant coefficients for Subscales

Factor	Upper Quadrille			Lower Quadrille			t	Comparison		
	n	Mean	Std.dev.	n	Mean	Std.dev.		df	p	
F1	74	56.770	6.471	74	24.581	3.634	37.056	146	p<.01	0.000
F2	74	12.919	2.584	74	7.311	2.305	13.837	146	p<.01	0.000
F3	74	17.865	2.972	74	8.095	2.101	22.936	146	p<.01	0.000
F4	74	7.689	2.126	74	3.716	1.188	13.940	146	p<.01	0.000
F5	74	6.419	2.196	74	3.203	0.523	12.173	146	p<.01	0.000
F6	74	11.662	2.771	74	7.878	2.871	8.101	146	p<.01	0.000
F7	74	2.014	1.040	74	1.189	0.459	6.196	146	p<.01	0.000
F8	74	2.730	1.089	74	1.608	0.841	6.964	146	p<.01	0.000



The t test has been used to determine the discrimination power of each factor to discriminate individuals with high and low skill levels. According to the results of the t test calculated to examine the difference between the factor totals and the quadrille created by scale totals, all items within all factors have been determined to function in distinguishing individuals with high and low skill levels. (Appendix Table 13-18).

Results, Conclusions and Recommendations

As a result of the all statistical analyses it has been decided that the scale consisting 8 factors and 41 items is valid, reliable, and useable. All items should be valued straight (Never =1 Always=4). High scores in positive factors indicate positive skills.

References

- Akbayır, K. (2016). “Matematik Dersinde Materyal Kullanımına İlişkin İlkokul Öğretmenlerinin Görüşleri”. *Akademik Sosyal Araştırmalar Dergisi*, Yıl: 4, Sayı: 33, Kasım 2016, s. 169-182
- Aslan, Z ve Doğdu, S. (1993). *Eğitim Teknolojisi Uygulamaları ve Eğitim Araç-gereçleri*. Ankara: Tekışık Ofset.
- Bozkurt, A., Akalın, S. (2010). Matematik Öğretiminde Materyal Geliştirmenin ve Kullanımının Yeri, Önemi ve Bu Konuda Öğretmenin Rolü. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*. 27, 47-56.
- Demirel, Ö. (2012). *Öğretim İlke ve Yöntemleri: Öğretme Sanatı*. Pegem Akademi, Ankara
- Hızal, A.(1992), *Programlı Öğretim Yönteminin Etkililiği*, Ankara: Ankara Üniversitesi Eğitim Bilimleri Fakültesi Yayınları.
- İnan, C. (2006).”Matematik Öğretiminde Materyal Geliştirme Ve Kullanma”. D.Ü.Ziya Gökalp Eğitim Fakültesi Dergisi 7, 47-56
- Kaya, Z. (2006). *Öğretim Teknolojileri Ve Materyal Geliştirme*. Ankara: Pegem-A Yayıncılık 2. Baskı.
- MEB (2005). *İlköğretim matematik dersi öğretim programı ve kılavuzu*. Ankara: Devlet Kitapları Müdürlüğü Basımevi.
- Milli Eğitim Bakanlığı (2009), *İlköğretim Matematik Dersi (6–8 Sınıflar) Öğretim Programı*, Ankara: Milli Eğitim Bakanlığı
- Özdemir, İ. E. Y. (2008). “Sınıf Öğretmeni Adaylarının Matematik Öğretiminde Materyal Kullanımına İlişkin Bilişsel Becerileri” *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (H. U. Journal of Education)* 35: 362-373
- Piaget, J. (1952). *The Child’s Conception of Number*, Humanities press, New York.
- Ünlü, M. (2017). “Matematik Öğretmen Adaylarının Matematik Derslerinde Öğretim Materyali Kullanımına İlişkin Görüşleri”. *Eğitimde Kuram ve Uygulama / Journal of Theory and Practice in Education*. 2017, 13(1), 10-34

SCALE OF MATERIAL USE IN MATHEMATICS TEACHING

Below some expressions are given related to material use in mathematics teaching. Answer the expressions below sincerely by putting ✕ only one of the options according to the conformity degree of you. Do not answer if you are indecisive, or do not have any idea.

		Never	Rarely	Mostly	Always
1)	Abacus / counting stick / counting beans etc.	☐	☐	☐	☐
2)	Smart notebook etc. programs	☐	☐	☐	☐



3)	Smart board	☐	☐	☐	☐
4)	Antropi teach etc writing programs	☐	☐	☐	☐
5)	Unit cubes	☐	☐	☐	☐
6)	Algebra tiles	☐	☐	☐	☐
7)	Ruler	☐	☐	☐	☐
8)	Wheel	☐	☐	☐	☐
9)	Drawer (edge of a book, liner box etc. instead of ruler)	☐	☐	☐	☐
10)	Multi-tile items	☐	☐	☐	☐
11)	Multi-cube items	☐	☐	☐	☐
12)	Eba (Educational Information Network)	☐	☐	☐	☐
13)	Geometrical drawing programs	☐	☐	☐	☐
14)	Geometry strips	☐	☐	☐	☐
15)	Graphics	☐	☐	☐	☐
16)	Volume sets and developments	☐	☐	☐	☐
17)	Calculator	☐	☐	☐	☐
18)	String / ribbon	☐	☐	☐	☐
19)	Isometric or dotted paper	☐	☐	☐	☐
20)	Creating shapes/objects by cutting and pasting paper	☐	☐	☐	☐
21)	Square or round geometry board	☐	☐	☐	☐
22)	Origami	☐	☐	☐	☐
23)	Desktop games like monopoly or card games such as matching games adapted to mathematics	☐	☐	☐	☐
24)	Music (songs with mathematical lyrics etc.)	☐	☐	☐	☐
25)	Drawing shapes or writing on the school wall / floor / steps.	☐	☐	☐	☐
26)	Online tests	☐	☐	☐	☐
27)	Decimal ground blocks	☐	☐	☐	☐
28)	Origami	☐	☐	☐	☐
29)	Students themselves (lining up before the board, creating shapes etc.)	☐	☐	☐	☐
30)	Pattern blocks	☐	☐	☐	☐
31)	Panel / posters	☐	☐	☐	☐
32)	Compass / norma / bevel	☐	☐	☐	☐
33)	Chess / checker / domino / mangala / go	☐	☐	☐	☐
34)	Symmetry mirror	☐	☐	☐	☐
35)	Sudoku / kendoku and similar mind games	☐	☐	☐	☐
36)	Transparent fraction cards	☐	☐	☐	☐
37)	Tangram	☐	☐	☐	☐
38)	Video (documentary, lectures etc.)	☐	☐	☐	☐
39)	Vitamin / morpa and similar portals	☐	☐	☐	☐
40)	Percentage circle /decimal and percentage squares	☐	☐	☐	☐
41)	Percentage table	☐	☐	☐	☐

Appendix

Table 3. Rotated component matrix

Items	Factors	Component							
		1	2	3	4	5	6	7	8
i1	1	0.320	-0.055	0.146	0.079	0.053	0.167	0.623	0.075
i2	6	0.020	0.114	-0.016	0.046	-0.053	0.671	-0.028	0.144
i3	6	0.137	0.327	-0.045	0.039	0.098	0.712	0.055	-0.085
i4	6	0.122	0.031	0.032	0.109	0.031	0.771	0.270	-0.027
i5	1	0.660	0.067	0.413	0.024	0.097	0.043	0.072	0.202
i6	1	0.722	0.111	0.278	0.160	0.153	0.113	0.100	0.114
i7	3	0.509	0.211	0.662	0.065	0.048	-0.026	0.001	0.067
i8	5	0.482	0.234	0.129	-0.071	0.525	-0.011	0.269	-0.181



i9	8	0.216	0.095	0.187	0.052	-0.107	0.070	0.179	0.735
i10	1	0.705	0.036	0.076	0.096	0.119	0.029	0.035	0.153
i11	1	0.827	0.000	0.116	0.080	0.047	0.072	-0.042	0.133
i12	2	0.057	0.586	0.354	0.136	0.153	0.276	0.005	0.059
i13	6	0.111	0.184	0.113	0.264	0.445	0.498	-0.186	0.099
i14	1	0.544	0.165	-0.004	0.277	0.353	0.226	-0.112	0.287
i15	1	0.353	0.359	0.185	0.126	0.271	0.104	-0.353	0.343
i16	1	0.659	0.133	0.196	0.185	0.207	0.073	-0.267	0.046
i17	3	0.058	0.152	0.525	0.099	0.474	0.008	0.014	0.027
i18	3	0.374	0.016	0.561	0.115	0.358	-0.081	0.041	0.152
i19	3	0.538	0.092	0.605	0.111	0.048	0.093	0.097	0.079
i20	3	0.393	0.212	0.521	0.061	0.094	-0.053	0.116	0.211
i21	1	0.629	0.065	0.205	0.217	0.293	0.085	0.140	0.085
i22	5	0.290	0.036	0.114	0.236	0.697	0.099	0.120	-0.013
i23	4	0.175	0.089	0.204	0.618	0.159	0.083	0.372	0.094
i24	7	0.117	0.206	-0.035	0.342	0.217	0.075	0.581	0.216
i25	1	0.251	0.394	-0.017	0.372	0.280	-0.251	-0.009	0.031
i26	2	0.035	0.563	0.054	-0.063	0.252	0.131	0.211	0.314
i27	1	0.702	0.204	0.099	0.237	0.227	0.064	0.152	-0.007
i28	5	0.245	0.329	0.118	0.410	0.525	-0.027	0.092	-0.168
i29	1	0.382	0.523	0.144	0.224	-0.027	0.016	0.014	0.245
i30	1	0.722	0.285	0.093	0.190	0.213	0.040	-0.045	-0.052
i31	1	0.322	0.499	0.180	0.484	-0.086	0.057	-0.109	-0.152
i32	3	0.491	0.234	0.641	0.220	-0.069	0.045	-0.015	-0.067
i33	4	0.255	0.112	0.082	0.730	0.100	0.143	0.007	-0.043
i34	1	0.663	0.257	0.239	0.260	0.171	0.054	0.097	-0.140
i35	4	0.215	0.172	0.054	0.681	0.150	0.133	0.088	0.184
i36	1	0.737	0.215	0.186	0.229	0.081	0.011	0.109	-0.025
i37	1	0.553	0.101	0.239	0.456	0.188	0.053	0.073	-0.093
i38	2	0.208	0.702	0.027	0.228	0.091	0.244	-0.081	0.057
i39	2	0.251	0.720	0.216	0.106	0.066	0.219	0.094	-0.109
i40	1	0.749	0.148	0.094	0.074	-0.050	0.100	0.289	0.116
i41	1	0.744	0.240	0.224	0.105	-0.035	0.079	0.229	-0.008

Extraction method: principal component analysis. rotation method: varimax with kaiser normalization.

a. Rotation converged in 11 iterations

Table 6. Internal consistency analysis for factor 1

Item	Item-total correlation coefficient			Item-remainder correlation coefficient		
	rit	df	p	rir	df	p
i1	0.386	273	p<.01	0.350	273	p<.01
i5	0.734	273	p<.01	0.695	273	p<.01
i6	0.808	273	p<.01	0.778	273	p<.01
i10	0.659	273	p<.01	0.613	273	p<.01
i11	0.749	273	p<.01	0.713	273	p<.01
i14	0.700	273	p<.01	0.657	273	p<.01
i15	0.580	273	p<.01	0.527	273	p<.01
i16	0.737	273	p<.01	0.696	273	p<.01
i21	0.727	273	p<.01	0.690	273	p<.01
i25	0.495	273	p<.01	0.430	273	p<.01
i27	0.795	273	p<.01	0.766	273	p<.01
i29	0.603	273	p<.01	0.550	273	p<.01
i30	0.796	273	p<.01	0.764	273	p<.01
i31	0.596	273	p<.01	0.541	273	p<.01
i34	0.796	273	p<.01	0.765	273	p<.01
i36	0.806	273	p<.01	0.777	273	p<.01
i37	0.717	273	p<.01	0.679	273	p<.01
i40	0.727	273	p<.01	0.688	273	p<.01
i41	0.797	273	p<.01	0.765	273	p<.01
	ruon			croanbach		
	0.948			0.941		



Table 7. Internal consistency analysis for factor 2

Item	Item-total correlation coefficient			Item-remainder correlation coefficient		
	rit	df	p	rir	df	p
i12	0.779	273	p<.01	0.583	273	p<.01
i26	0.697	273	p<.01	0.454	273	p<.01
i38	0.740	273	p<.01	0.550	273	p<.01
i39	0.829	273	p<.01	0.648	273	p<.01
rulon				croanbach		
	0.786			0.758		

Table 8. Internal consistency analysis for factor 3

Item	Item-total correlation coefficient			Item-remainder correlation coefficient		
	rit	df	p	rir	df	p
i7	0.856	273	p<.01	0.766	273	p<.01
i17	0.526	273	p<.01	0.373	273	p<.01
i18	0.750	273	p<.01	0.637	273	p<.01
i19	0.801	273	p<.01	0.694	273	p<.01
i20	0.761	273	p<.01	0.644	273	p<.01
i32	0.831	273	p<.01	0.728	273	p<.01
rulon				croanbach		
	0.888			0.854		

Table 9. Internal consistency analysis for factor 4

Item	Item-total correlation coefficient			Item-remainder correlation coefficient		
	rit	df	p	rir	df	p
i23	0.769	273	p<.01	0.510	273	p<.01
i33	0.836	273	p<.01	0.582	273	p<.01
i35	0.812	273	p<.01	0.571	273	p<.01
rulon				croanbach		
	0.454			0.730		

Table 10. Internal consistency analysis for factor 5

Item	Item-total correlation coefficient			Item-remainder correlation coefficient		
	rit	df	p	rir	df	p
i8	0.792	273	p<.01	0.525	273	p<.01
i22	0.753	273	p<.01	0.561	273	p<.01
i28	0.861	273	p<.01	0.568	273	p<.01
rulon				croanbach		
	0.547			0.708		

Table 11. Internal consistency analysis for factor 6

Item	Item-total correlation coefficient			Item-remainder correlation coefficient		
	rit	df	p	rir	df	p
i2	0.657	273	p<.01	0.387	273	p<.01
i3	0.781	273	p<.01	0.561	273	p<.01
i4	0.784	273	p<.01	0.561	273	p<.01
i13	0.664	273	p<.01	0.418	273	p<.01
rulon				croanbach		
	0.720			0.696		

Table 13. Discriminant coefficients for factor 1

Item	Upper quadrille			Lower quadrille			Comparison			
	n	Mean	Std.dev.	n	Mean	Std.dev.	t	df	p	
i1	74	1.541	0.780	74	1.000	0.000	5.923	146	p<.01	0.000
i5	74	3.216	0.603	74	1.297	0.635	18.719	146	p<.01	0.000
i6	74	3.149	0.715	74	1.068	0.253	23.434	146	p<.01	0.000
i10	74	3.162	0.550	74	1.486	0.880	13.803	146	p<.01	0.000



i11	74	3.108	0.632	74	1.135	0.416	22.281	146	p<.01	0.000
i14	74	3.054	0.842	74	1.243	0.569	15.223	146	p<.01	0.000
i15	74	3.243	0.737	74	1.757	0.919	10.785	146	p<.01	0.000
i16	74	3.432	0.664	74	1.378	0.656	18.807	146	p<.01	0.000
i21	74	2.838	0.844	74	1.122	0.404	15.665	146	p<.01	0.000
i25	74	2.851	0.989	74	1.514	0.815	8.921	146	p<.01	0.000
i27	74	2.919	0.888	74	1.041	0.199	17.645	146	p<.01	0.000
i29	74	3.527	0.707	74	1.919	0.990	11.298	146	p<.01	0.000
i30	74	3.135	0.816	74	1.054	0.228	20.980	146	p<.01	0.000
i31	74	3.311	0.793	74	1.730	0.911	11.187	146	p<.01	0.000
i34	74	3.081	0.903	74	1.054	0.228	18.599	146	p<.01	0.000
i36	74	3.000	0.721	74	1.014	0.116	23.225	146	p<.01	0.000
i37	74	2.838	0.922	74	1.149	0.459	14.014	146	p<.01	0.000
i40	74	2.932	0.849	74	1.068	0.253	17.980	146	p<.01	0.000
i41	74	3.284	0.631	74	1.081	0.275	27.355	146	p<.01	0.000

Table 14. Discriminant coefficients for factor 2

Item	Upper quadrille			Lower quadrille			t	Comparison		
	n	Mean	Std.dev.	n	Mean	Std.dev.		df	p	
i12	74	3.730	0.580	74	1.703	0.772	17.937	146	p<.01	0.000
i26	74	3.324	0.778	74	1.446	0.705	15.283	146	p<.01	0.000
i38	74	3.541	0.578	74	1.770	0.750	15.971	146	p<.01	0.000
i39	74	3.595	0.639	74	1.162	0.371	28.114	146	p<.01	0.000

Table 15. Discriminant coefficients for factor 3

Item	Upper quadrille			Lower quadrille			t	Comparison		
	n	Mean	Std.dev.	n	Mean	Std.dev.		df	p	
i7	74	3.689	0.495	74	1.243	0.491	29.979	146	p<.01	0.000
i17	74	2.297	0.903	74	1.284	0.609	7.955	146	p<.01	0.000
i18	74	2.770	0.900	74	1.095	0.295	15.122	146	p<.01	0.000
i19	74	3.365	0.674	74	1.162	0.406	23.916	146	p<.01	0.000
i20	74	3.311	0.681	74	1.378	0.566	18.643	146	p<.01	0.000
i32	74	3.676	0.526	74	1.216	0.476	29.614	146	p<.01	0.000

Table 16. Discriminant coefficients for factor 4

Item	Upper quadrille			Lower quadrille			t	Comparison		
	n	Mean	Std.dev.	n	Mean	Std.dev.		df	p	
i23	74	2.662	0.848	74	1.000	0.000	16.738	146	p<.01	0.000
i33	74	3.054	0.858	74	1.000	0.000	20.446	146	p<.01	0.000
i35	74	2.838	0.861	74	1.000	0.000	18.248	146	p<.01	0.000

Table 17. Discriminant coefficients for factor 5

Item	Upper quadrille			Lower quadrille			t	Comparison		
	n	Mean	Std.dev.	n	Mean	Std.dev.		df	p	
i8	74	2.365	0.885	74	1.000	0.000	13.180	146	p<.01	0.000
i22	74	1.838	0.794	74	1.000	0.000	9.013	146	p<.01	0.000
i28	74	2.757	1.031	74	1.000	0.000	14.556	146	p<.01	0.000

Table 18. Discriminant coefficients for factor 6

Item	Upper quadrille			Lower quadrille			t	Comparison		
	n	Mean	Std.dev.	n	Mean	Std.dev.		df	p	
i2	74	3.432	0.664	74	1.770	0.930	12.432	146	p<.01	0.000
i3	74	3.878	0.329	74	1.676	0.908	19.482	146	p<.01	0.000
i4	74	3.365	0.804	74	1.068	0.253	23.299	146	p<.01	0.000
i13	74	3.000	0.860	74	1.324	0.471	14.598	146	p<.01	0.000



Atatürk's Conception Of Citizenship Education

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Abstract

Citizen can be defined as “person living together in a society”, and citizenship can be defined as “a legal and political connection between the state and person.” The concept of citizenship has been defined in all constitutions since the Ottoman basic law. The concept of “citizen” or “patriot” was born in Europe and spread to the world. The concept of citizen in modern sense emerged with American and French revolutions. The concept of citizenship also includes the ideas of “status” and “role”. Citizenship is based on the idea that people are equal and they are treated equally in legal and political sense. For this reason, it forms the basis of the conception of democracy.

The idea of raising “modern citizen” began with the second constitutional monarchy in Turkey. The science of history was utilized in the first years of the republic to raise the consciousness of “nation”, “Turkishness”, and “citizenship”. Atatürk defines the people living within the borders of the republic he founded as “Turkish” or “Turkish nation” even if they come from different ethnic identities. According to Atatürk, the Turkish society founding the Republic of Turkey is called “Turkish nation.” According to Atatürk, Turkishness will exist forever in Anatolia.

Turkish people are intelligent, hardworking, and strong nation founding many civilizations in world and Anatolia at the history books written for the citizenship education in Atatürk period. It was aimed to raise polite, educated, individual, who can reach the Western science, and hardworking citizens conscious of their duties and responsibilities in the Civil information course at this period. It was also aimed to raise republic citizens believing in the revolution. Atatürk was trying to adopt “Turkish identity” and “Turkish culture” by all citizens to compose nation-state and homogeneous nation. Everyone accepting the identity of “Turkish Republic Citizen” was taken under constitutional guarantee and accepted as equal citizens regardless of his ethnic origin and religion.

Key Words: Atatürk, Citizenship-Allegiance, Citizenship Education, Turkishness, Republic.

1. Introduction

While the words “rayah” and “subject” were at Dictionnaire Turc-Francais shortly known as Bianchi & Kiefer, the word of “citizen” wasn't. “Subject” and “homeland” words were seen at A Turkish-English Lexicon which made its first edition in 1890 but the word of “citizen” wasn't. In the meaning at famous “Vatan yahut Silistre” of Namık Kemal, Redhouse defined “homeland” as the place or country where a person is born, and “homeland effort” carried today's meaning of “citizenship”. “Subject” and “subjecthood” were used in the meaning of only “nation” and “nationality” at Kamus-u Türki of Şemsettin Sami in 1901. The word of “citizen” is explained as “citizenship”, “countryman”, “compatriot of the same country”. The fact that only “concitoyen” was mentioned in French reflects that “citoyen” which means “modern citizen understanding” was not present in Ottomans yet. We can say that “citizenship” concept was not born even though the concept of “country” was existent in the last years of the Ottoman Empire (Ünsal, 1998, p.13).

In the dictionary the word “homeland” is expressed as “country”, and “citizen” is the one whose country and country love is the same (TDK. Dictionary, 1992, p.1553-1554). According to the same source, the concept of “citizenship” means “being citizen, the situation of being born and living in a country”. In legal sense, citizen means real person who lives in a country and dependent on it legally and politically.



2. Method

Qualitative methods have been used in the topic of Atatürk's citizenship understanding in this study.

3. Findings

Many essays and thesis studies have been found about this topic as a result of Web survey. Found studies have been analyzed together with the Works of the researcher.

3.1. The definitions of citizen concept

Citizenship is related to various sciences in terms of definitions and topics. (Duman, 2001; cited by Sağırılı, 2005, cited by Atasoy). The most important study that nearly all of the studies about citizenship refer belongs to a sociologist Chantal Marshall (Gündüz, Gündüz, 2007, p. 18, see Marshall, Bottomore, 2000, p.13-74) Some of the definitions made about citizenship are as follows: **Citizenship;** People who have some political, social, and cultural rights. These rights are ruled and maintained by the practices of the authority. (Marshall, 1992) **Citizenship;** means political and legal bond that connects real persons to the state. (Aybay, 1982, p.3). **Citizenship;** is a legal bond that state determines its provisions and conditions with its one-sided will and realizes a legal status, establishes with the people. (Uluocak, 1984, p.6, Çiftçi, 2006, p.113). **Citizenship;** is a legal and political status given by the state to the individual, and it can be considered as a contract of loyalty that individual feels to the state. (Heater, 2004, p.194; Özdemir-Bingöl, 2009, cited by Er, Ünal, Özmen, 2013) **Citizenship;** has been defined by Active Citizenship European Commission (1998) as the way of developing different cultural views , value of the democracy, feeling partner of the society they live in, and raising their voice. (Kıncal, 2012). **Citizenship;** is the only factor that is shared by everyone in democratic country or nation-state equally regardless of his nation, religion, social class, or gender. (Patrick, 1999, p.2).

The concept of citizenship is generally defined in four different ways; a) citizenship defined with national identity and nationality in modern society, b) citizenship that expresses legal situations of people, c) citizenship that is seen as a status containing civil, political, and social rights, d) citizenship that is seen as duty and responsibility (Kadioğlu, 2008, p. 21-30). The concept of citizenship gained strength, citizenship concept list was created and modern citizenship understanding was adopted in 21th century. As result of this interest; new citizenship understandings such as “political citizenship”, “economic citizenship”, “social citizenship”, “liberal citizenship”, “republican citizenship”, “democratic citizenship” (Osler and Starkey, 2006); “multi-cultural citizenship”, “cosmopolitan citizenship”, “digital citizenship” (cited by Kılınç, 2013).

Were defined by the researchers. New undrstandings such as “Active citizenship”, and “Effective citizenship”, started to appear at the education systems of the European contries (Ersoy, 2013). It has been aimed at raising individuals adopting pluralistic democracy, using their rigths and responsibilities effectively, and being sensitive to their environment and society. In addition; concepts such as: “civil citizenship”, “global citizenship”, “cross-cultural citizenship”, “constitutional citizenship”, “active citizenship”, “universal citizenship”, “Europe citizenship”, Started to be used (Gündüz ve Gündüz, 2007; Turner, 2002, cited by Özden, 2011, p.23). Citizenship is a relatively complex and disputable term according to many authors (see Anderson, J., Askins, K., Cook, I., Desforages, L., Evans, J., Fannin, M., Helen, G. Skelton, T. 2008).

Other definitions about citizenship can be seen in (see Bouineau, 1998, p.109, Şenkal, 2007, Lehning, 1999, p. 3, Wiener, 1998, p. 4, Uluocak Akt. Çiftçi, 2006, p.113, Özden, 2011, p.25, Turner, 1993, p.2; Sağlam, 1998, p. 91; Erol, 1995, p. 90; Nomer, 2012; Kastoryano, 2007, p.54; Waltzer and Heilman, 2005, p.159; Yılmaz, 2002, p.92; Duman, Karakaya and Yavuz, 2001, p.7; Sunal and Hass, 2002, p.194-195; Arat, 1998, p. 67; Anderson et al. 2008; Battery, 2003, p.103; Üstel, 1999, p. 80; Schmitter and Karl, 1992, p. 13; Lawson, 2001, p.164-165;



Kepenekçi, 2008; İşcan and Demir, 2009; Heater, 2004: 194; Özdemir-Bingöl, 2009, cited by Er, Ünal, Özmen, 2013; Nomer, 2000, p.3; Torney-Purta and Vermeer, 2004).

3.2. The aim and importance of citizenship education

Citizenship education has appeared in parallel with the concept of citizenship, and has shaped with the changes in time (Ersoy, 2007, p.1). Some of the definitions made about the Citizenship education are as follows:

-citizenship education; is fictionalized on basic knowledge, skills, and values that citizens of a country must gain that are evaluated synonymous with being citizen to that country (Karip, 2006, p.321).

-citizenship education; if state guarantees the education right of the children, it has to do it as the nature of the citizenship institution (Marshall and Bottomore 2005, p.6).

-citizenship education; can be defined as the process of activities that are made to prepare young people to their responsibilities and roles as a citizen (Devies, 2000; cited by Özbek, 2006, p.5).

-citizenship and democracy education; students have to know what citizenship is, which rights and responsibilities do this concept bring them, and the connection of the state with its institutions (Patrick, 1999, p.3-4).

-the aim of the citizenship education; is to gain knowledge, skills, and understanding that young people need to play an effective role in regional, national, and international levels (Douglas, 2003, p.8).

-citizenship education; should be related to the life of the children, and should be designed to help children feel themselves in an environment, and a wider world (Menter and Walker, 2000, p.111). Other definitions about the aim of citizenship education can be seen in (Ersoy, 2007, p.25; EU, 1997, p. 84; McCowan, 2009, p.87; Koutselini, 2008, p.167; Davis, 1994, p.2; Heath, Rowe and Breslin, 2008, p. 7; Kymlicka, 2008, p.187; Osler and Starkey, 2003, p.246; Campbell and Craft, 2004, p.75, p.20; Hoge, 2002, p.104; Sadovnik, Cookson and Semel, 2001, p.19-20). Considering these information, the competences to be gained at citizenship education can be stated as **“knowledge, and understanding, skill, and tendency, values, and rules”**.

The aim of the citizenship education based on school is; to gain knowledge, skill, and behaviours necessary to participate actively and responsibly society life in a democracy. **Talented and responsible citizens are;** a) informed and thoughtful of the principles and ruling styles of democracy. b) contribute to their societies via volunteered civil society organizations. c) act politically to realize public purposes. d) have social virtues such as public benefit (Patrick, 1999, p.1). One of the most important necessities of global society is to raise effective citizens. **The features that an effective citizen must have are as follows:** Dealing with the problems with a global view, Working cooperatively, and taking responsibility, Accepting cultural varieties, Thinking critically, and systematically, Solving conflicts without using violence, Changing life style to protect environment (Hicks, 2001, p.230). **21st century citizens must have the following features:**

Working cooperatively with others, Developing social justice principles to guide their behaviours, Thinking critically, Accepting cultural varieties, and learning from them, Evaluating problems in a global context, Solving conflicts without using violence, Changing life style to protect environment, Defending human rights, Making an effort for a more just future, Participating democratic policy (Clough and Holden, 2002, p.10, cited by Kılınç, 2013).

3.3. Historical background of the citizenship education

The concept of Citizenship was born in Athens, and Rome, and it made its development with nation state. Citizenship education in modern sense initially began in 19th century in France related to the development of the nation-state concept (Tezgel, 2008, p.17). Abolishment of Jesuit Cult, confiscating its property, and stopping the studies of its members paved the way for giving a secular education to French children after 1762 (Heater, 2007, p 194). La Chalotais asserted in his work named “Essay on National Education” that the state must take control of the education to increase the feelings of virtue, loyalty to the country, and secularity in 1762. Philosopher-politician Condorcet emphasized that moral and politics be a part of the political education in his report titled “An Education for Democracy” in 1792. Condorcet’s opinion that “state has the mission of raising its citizens”



came into effect at III. Republic Period. French Education Minister Jules Ferry turned the school into a political tool that will serve to form French nation (Schnapper, 1995, p. 142). The essential aim of the courses of history, geography, and citizenship education that took place in curriculums since III. Republic Period has been building “acceptable citizen” and suggestion of patriotism (Üstel, 2005: 20). People were firstly raised to the “citizen” status with “French Human and Citizenship Rights Declaration” and had “equal rights” in French in 1789 (Ercan, 2010, p.11). Like many other enlightened of the countries, Ottoman enlightened have also been influenced by the developments about citizenship education in France. Especially Ottoman enlightened who escaped from II. Abdulhamid regime and moved to certain European cities contributed to the inclusion of the course of “Civil Information” that is directly related to the citizenship education to the curriculum after the declaration of II. Constitutional Monarchy (Üstel, 2005: p. 22). The courses in 1913 Primary Education Temporary Law that are Geography, especially “Ottoman Geography”, history, especially “Ottoman history” emphasis, and “Civil Information” have the mission of forming Ottoman citizenship. It was aimed to unite with a common Ottoman identity with “Ottoman Geography,” “Ottoman history” and “Civil Information” course that was included to the curriculum, and to send children generally aged 7-13, and with some special conditions aged 7-16 with 1913 Primary Education Temporary Law. Especially the aim of the “Civil Information” course was expressed in a 1913 dated history book as “duties that person has to do for his family, country, and government, and his rights” (Ahmet Ziya and Ali Haydar, 1913, Cited by Hülya Çelik, 2008, p. 359-369).

3.4. Citizenship understanding of ottoman empire

Citizenship understanding of the Ottoman Empire generally is based on the ideology of “Ottomanism”. People living in the Ottoman Empire and accepted as its nationality had different statuses whether they were Muslims or not. The rescript of Gülhane, edict of reform, and declaration of the Constitutional monarchy did not decrease the influences of the European countries on Ottoman political life (Aybay, 2008, p. 70). II. Mahmut told that “subjects with different religions have no differences, they are all equal for me” (Üçok, Mumcu, Bozkurt, 2010, p.350). There are many regulations about citizenship right in 1856 dated edict of reform (Gözler, 2004, p.147). **“Ottoman Citizenship Law”** was published in 1869. This law adopted jus sanguinis to gain Ottoman nationality. “Ottoman citizenship” was protected at constitutional level with **“the Ottoman Basic Law”** in 1876. It is said in the law that “regardless of their religions, **all Ottoman subjects are equal, and protected by the state.** II. Constitutional monarchy paved the way for a new political-social area understanding, and showing up of “citizen” (Üstel, 2004, p. 27). **“Equality”** came into existence as an important gain. Main duties of the citizens are, “obeying the laws, doing military service, and paying taxes” (Üstel, 2004, p. 59). Ottomans are no more “rayah” and “subject”, but became citizen.

Party of Union and Progress, aiming to create a “nation-state”, believed that its most basic principle is the institution of citizenship, and planned to form a structure whose members are equal and only responsible to the state (Akçam, 1997, p. 145-146). Party of Union and Progress tried to determine the rules of the legal, and political relations between the citizen and the state with the laws and regulations until 1913 (Üstel, 2004, p. 27). Party of Union and Progress started to defend the idea of “Turkism” after the defeat in Balkan Wars, and their official declaration of the failure of “Ottomanism” policy, and they accepted that a progress with all elements of the empire is just a dream. The process of elimination of the elements not Turkish was realized, and Anatolia started to become Turkish rapidly (Akçam, 1997, p. 147-155). The years of 1908-1919 are the years when “new citizenship” understanding was tried to be adopted and loved. Celebrations, and holidays were invented to mobilize “new society”, especially primary schools were given importance (Üstel, 2004, p. 28-29). “Citizenship Information” course was started to be taught as an independent course after the changes made after 1908 curriculum. “Ottoman History” and “Ottoman Geography” courses were also added to the curriculum (Polat, 2011).

3.5. Citizenship understanding in turkish constitutions



The concept of “citizenship” has been defined in all constitutions since 1876 Ottoman Basic Law. (Göztepe, 2003, p.229.) According to the Ottoman Basic Law; “ No matter which religion do they belong to, all subjects living in Ottoman Empire are accepted in Ottoman nationality” (m8).

In 1921 dated Constitution; there was no definition about citizenship. However; a national citizenship understanding on Turkish ethnic identity was dominant in 1924, 1961, and 1982 constitutions. (Fırat, Gül, 2014, p.340) .

According to 1924 Constitution; “Everyone is called “Turkish” in Turkey regardless of his race, and religion.” (m.88/1). (Kili, 1982, p.62.). As it is seen, the process of transition from empire to nation-state has affected the definitions of citizenship, as well. **First citizenship law** is 1928 dated 1312 numbered law. It is stated that this law created the desire to become Turkish citizen as many people as possible with the psychological effect of the low number of population. According to this law; “the children whose mothers and fathers are Turkish and who are born in Turkey or abroad are Turkish. The situation does not change whether the child is born in marriage or extramarital”. An interesting feature of this law is that: “a foreign woman marrying to a Turkish man becomes Turkish citizen automatically. In return, a Turkish woman marrying to a foreign man keeps her citizenship” This law was abolished with 1964 dated 403 numbered Turkish Citizenship Law (Aybay, 1998, p. 39-40, cited by Nalbant p.79-94, see, Korkut, 2014, p. 5-41).

In 1961 and 1982 Constitutions it is said that “Everyone who is tied to Turkish state with citizenship bond is called Turkish.” (Aybay, 2008, p.76; Gültaş, 2004, p. 902). With this law an anthropological and sociological definition was not made, in contrary, a pure legal definition was made. “The equality of citizens “ was accepted in the 10th numbered item of the constitution. (Ergin, 2012, p.48, Akt. Doğan). 43 times Turkish, 7 times Turkish nation, 3 times Turkish state, and 2 times Turkish society concepts were used in 1982 constitution where differences were integrated with equal Turkish citizenship. (Fırat, Gül, 2014, p. 341). 1982 constitution organized “Turkish citizenship” under the title of Political Rights and Duties. (Şehirli, 2010, p. 135)

3.6. Atatürk’s understanding of citizenship education

Ataturk has placed great importance to raising “national, modern, and democratic” citizens of the society (Akyüz, 2009). Important developments that contributed to the citizenship education at Ataturk’s period are; “Law on Unity of education”, “Changes at the Curriculums”, “the book of Civil Information for Citizen” (Çelik, 2008, p. 359-369).

a) Law on Unity of education (3 March 1924) All education institutions in the country were taken under state supervision and united with this March of third 1924 dated law. The courses of “Turkish, History of Turkey, Geography of Turkey, and Country Information “ became compulsory and were given vital importance. An important step has been taken to raise citizens republic regime needing with this law (Çelik, 2008, p. 359-369).

b) Changes at the Curriculums (1924, 1926, 1936, 1948) Primary education has an important place in citizenship education. Children develop rapidly cognitively, affectively, physically, and socially at this period. (Ersoy, 2007 p.16). Efforts made to increase schooling have increased, some regulations have been made in the content and pedagogical structure of the teaching since the first years of the republic. While the number of primary school was 4.984 in 1923-1924, it rose to 6.713 in 1931-1932; the number of the students rose from 341.941 to 523.611. While the number of secondary school was 64 in 1923-1924, it rose to 80; the number of the students rose from 10.052 to 30.316.

First regulations at curriculums were realized when Mr. Vasıf (Çınar) was Minister of Education. The curriculums of primary, secondary schools, and high schools. The courses of “psychology, manner, philosophy, information of law, information of economics, history of science,” were abolished, and the courses that prepare students to life such as “housekeeping, workshop, laboratory, and nursery for girls” were added to the curriculum (Başgöz ve Wilson, 1968, p.106, Akt. Çelik, p.359-369). It is understood that the aim of “giving national citizenship education” was carried. It is understood that importance was given to develop skills of culture, research, and analysis with geography courses. (İMMP 1926 p.75, cited Çelik, p. 359-369) The first regulation at



Ataturk's period was made in 1924, and primary, secondary schools, and high schools curriculums were changed. "the courses that prepare students to life" were added to the curriculum. The structure of the books based on Ottoman ideology was eliminated, and the content "**dependent on the basic principles of the Republic, and suitable for Kemalist ideology**" was added (Üstel, 2011). The name of the course "Civil Information" was changed as "**Country Information**" and it was aimed to raise citizens suitable for the new regime, and aware of their duties. (Üstel, 2011, Kayaalp, 2015). According to the first curriculum in 1924, there were 2 hours History, 2 hours Geography, and 1 hour country knowledge in Social sciences course at primary schools. (Keskin, 2004). The first big regulation about curriculums was made with first 1926 dated Primary Education curriculum. According to this curriculum, there were 2 hours History, 2 hours Geography, and 1 hour country information in Social sciences course at primary schools. General aim of this course, "is to raise good citizens". (Nalçacı, Özdemir ve Şahin, 2002). The aim of 1926 dated curriculum is to "**nationalize**" and "**modernize**" at the same time in the direction of new principles and reforms of the new state (Kafadar, 1997). The main aim of country knowledge course is **to raise citizen suitable for republic** staffs (Üstel, 2011). The writer of the country knowledge course Ali Kami (Akyüz) (Akyüz, 1930, p. 3). explained the aim of this course is "to children love their country with its widest meaning" (Üstel, 2011). The aim of the courses that were based on raising citizen was to raise every Turkish children grasping psychology, and ideology of the republic thoroughly, and beneficial to Turkish nation and country. 1936 dated curriculum emphasized the importance of school in raising, and new courses were added to realize this aim. The distribution of the social sciences course at primary school is the same. The aim of this project is "**nationalism**". Therefore, the content of 1936 curriculum and social sciences course became "national citizen production center". (Üstel, 2011). The politics project of Kemalist ideology, and national state is to form a "classless, unprivileged, and homogeneous society depending on the principle of "**populism**". This was reflected in at 1936 curriculum and Social Sciences course content. Social Sciences course books contributed a lot to "**Turkish identity**." "Loyal, self-sacrificing, and respectful citizen type" was tried to be raised (Üstel, 2011). 1936 curriculum also aimed at raising "**six-arrow citizen**" or "**regime citizen**" (Gülmez, 1999).

1948 primary school and 1949 secondary school curriculums of the one-party period remained in force during Democrat Party's reign, (1950-1960) (Cicioğlu, 1985 and was abolished with 1968 curriculum, Üstel, 2011). Courses such as Geography, History, and Country Information were united under Social Sciences Course (Kayaalp, 2015).

c) Civil Information Book for Citizen (1931)

"**Civil Information Book for Citizen**" which was written by Afet İnan with the incentive and contribution of Ataturk, and published by Ministry of Education with date 1931, and order number 2197 for schools is pretty important for the citizenship education given at schools. Afet İnan talks about the writing process of this work at her book of "Civil Information, and Mustafa Kemal Ataturk's Handwritings" (Afet İnan, 2010 p. 11-12). The studies of Afet İnan and Ataturk's notes contributed to the publication of various brochures and books. These works are; 1- **Country Information for Turkish Children**" as brochure. (Ankara 1929) 2- Separate book for each topic: "**Election**", 72 pages. "**Military service**", 77 pages, "**Companies and Banks**", 172 pages, "**Tax Information**", 98 pages, (These four books were published in İstanbul in 1930). 3-One book including all of these topics (141 pages) is called "**Civil Information for Citizen**" (İstanbul 1930). 4- Another book was published with this name for secondary schools by Ministry of Education in 1932 with the order number 1908 (191 pages). It is clearly seen at the official message sent dated 18th December of 1931 by Ataturk to Prime Minister İnönü that he is very sensitive to the book "Civil Information for Citizen". The first book of "Civil Information for Citizen" by İnan consists of 17 sections. **The names of the parts are:** "Nation, State, Republic, How did Turkey become Republic?, First Right, First Duty, and the relation between them, State's Duties to Citizens, Freedom, Loyalty, Work-Job, Citizen's Duties to State, Election, Military Service, General Information about Taxes, and Freedom". The second book on Civil Information for Citizen was written by the secretary of republican people's party **Recep Peker**. The names of the parts of the books consisting 29 sections are: "Basic Organization, Turkish Grand National Assembly, the process of the Turkish Grand National Assembly,



Aggregate, Law, budget, economics Council, Council of state, political parties, organization of the government, justice, chancery, tarde courts, lawyer, and law society, municipalities, villages, civil servants, Education, economics, Banks, Health, Family, and National defence (Çelik, 2008, p. 359-369).

3.7. Atatürk's studies about education and citizen education

When Republic was proclaimed in 1923, wars lasting 11 years had been undergone, the country had been burnt, devastated and lost three millions of its population. The destruction of the wars was so terrible that there was nearly no teacher, doctor, nurse, artist, lawyer, etc left. Even there was almost no carpenter, tailor, driver, etc. It was necessary to raise driver, blacksmith the army needed. There was no hospital, school, road, harbour, factory (İnan, 1981 p. 144). The population of Turkey was about 11-12 millions at 1923-1924 education year. Only 10% of this population, and just 3% of the women were literate. There were totally 5.062 teaching institutions including 4.984 primary schools, 72 secondary schools, 23 high schools, 64 vocational schools, 9 faculties, and academies. There were 10.102 primary school teachers in 1923: 1.08 of them were woman, 9.021 of them were men. The ones having vocational education were totally 2.734; 378 of them were woman, and 2.356 of them were men. (Şehirli, 2010, Ankara). Teachers played a great role at War of Independence to arise “national struggle spirit”. (Şehirli, 2012, p. 202-207). The great leader started a successful “**education war**” against all struggles and impossibilities since the first day of War of Independence. He gave Turkish education system a “**new**” and “**modern form**” with his “**macro education plan**”, and laid the foundations of today's Turkey social and economic structure (Özalp-Ataünel, 1977, p. 30).

The great leader Atatürk predicted big and radical changes for education. This change aimed at turning “**old fashioned, superstitious**” education system into “**modern, scientific, rationalist**” one. “**A cultured society**” and “**educated staffs**” were needed to maintain independence and modernize. Atatürk thought “education system should be settled to meet the needs of the society, and needs of the era, and become widespread”. National education policy targeted at three main aims in the first years of the Republic. These are; 1- Providing national culture unity. 2- Becoming widespread of the citizenship education, and primary education. 3- Raising the educated man power Turkey needed. (Budak, 2003, p.1).

3.8. Atatürk's studies about education philosophy and making education modern

Atatürk in essence was not a man of harsh doctrine, but a man of action. Atatürk who did not limit himself to any doctrine, was pragmatist, as well as idealist. Therefore; the best term expressing his philosophy is “**pluralism**” that is the basis of “**liberal democracy**”. (Giritli, 2001, p.59-72). According to Aytaç. (2001); Atatürk has a “**rationalist**” and “**nationalist**” world view, and he is reformist. He developed a “**National Progress Strategy**” based on his world view. He names this as “**Ideology of Country Problems**”. Big revolutions give education organizations a new aim and meaning. (Karal, 1981, p. 3). Atatürk also followed this way. Important developments and regulations at Atatürk's period laid the foundations of today's education system. “**Reformist**” and “**enterprising**” Atatürk has given a “**new**” and “**modern**” form to Turkish education in 15 years. The most important developments and regulations at Atatürk's period are: (Karagözoğlu, 1985, p. 197)

1-Law on unity of education (1924) 2- Bringing educators from abroad (1924-1926) 3- Reorganization of the National Education 4- Preparing New Curriculums 5- Free Secondary Schools 6- Vocational Guarantee for teachers 7- Coeducation 8- Alphabet Reform (1928) 9- Sending students abroad (1929) 10-University reform of Atatürk (1933) 11- Language Reform and Foundation of Turkish Language Society (1932), and Turkish Historical Society (1931) (Göksel, 1985, p.922, Karagözoğlu, 1985, p.197-199, Binbaşıoğlu, 2005, p. 66-67, Şehirli, 2011, p.173-175).

3.9. The principles Atatürk's new education policy based on

There are two main principles of the education Atatürk desires. These are: “**National Education**” and “**Education Unity**”. The principles of Atatürk about education are as follows: 1- Education should be national.



(MEB, 2001a:291, A.S.D.1959,C.2, p.178). 2- The development of national genius can be made with national culture. (MEB, 2001a:85). 3- Copying others does not bring progress. (Cumhur, 1981,p.73). 4- Unity should be provided at education. 5- Education should be widespread and ignorance should be eliminated. (Akyüz,1993: p. 290) 6- Vocational Skills should be gained as well as general knowledge (MEB 1993, p.11-12) 7- Educated man power our country needind should be raised. (MEB,2001:s.138). 8- Education should be scientific, and secular. 9- Rote-learning should be left. (Cumhur, 1981, p.72). 10- Boys and girls should be educated equally. (A.S.D.1971: c.2, p.84-85) 11- Success at education depends on disciplined study. (A.S.D.1971:c.1, p.328) 12- Education should be modern. 13- Curriculum should meet the needs of the modern social life. 14- Idea, and action should move together at education.15-Education should develop fine arts. 16- Education should be realistic.17- The most important factor affecting education is teacher. Therefore; it is essential to raise talented teachers. The principles to apply at National education are; “Republicanism, Nationalism, Populism, Statism, Secularism, and Reformism”. (Şehirli, 2009, p. 27, Şehirli, 2007, Köknel, 1981, p. 325-327).

3.10. Atatürk's giving importance to education of the citizens and community centers

Ataturk thought that the continuity of his modern state is possible with a “modern” education. For this reason, he addressed to teachers and people about education many times. He visited schools, and gave importance to teacher training. These positive developments became examples for other nations. When the war of Independence was over, he was asked “what would you like to do now?” He answered “I would like to increase national knowledge as a national education minister.” (MEB, 2001b: 104) He made 39 laws about education during his 15 years of presidency. (Fiden ve Erden, 1993, p.123). “**Nation schools**” were opened to increase literacy level, and teach new letters with his leadership. “**Teacher's training schools**” were opened to raise new teachers. Vocational skills were also taught at these schools (Baykara, 1999, p. 163).

“**Community centers**” were opened to gather people with “**Republic ideals**” on the 19th February of 1932. Turkish Hearths closed and People's Houses opened instead (Uluskan, 2010, p.34). The concept of Citizenship was born in Athens, and Rome, and it made its development with nation state. Centers where people can socialize have been established. It was aimed to instill into populism understanding to people. There were language, literature, fine arts, sports, history, museum, and publications at community centers. They got approval, and the number of them increased in a short time (Oğuzkan, 1973, p. 89). The number of them rose from 56 in 1933 to 167 in 1937. “**Community rooms**” were opened at small centers. (Kayıran, 1998, p. 814). When they were closed because of political conflicts in 1951, there were 478 community centers, and 4,327 community rooms (Oğuzkan, 1973, p. 89). While the rate of literacy was 10.6 % in 1927, it rose to 19.2 % in 1935 thanks to national education activities.

4. Results, Conclusions and Recommendations

The aim of Ataturk was to found a democratic regime in Turkey. National unity and togetherness understanding carried a great meaning to Ataturk (Bileydi Koç, 2012, p.36). Ataturk talked about this topic as “the most valuable entity of a country is unity between citizens, getting on well with each other, and industriousness.” (Kocatürk, 1999, p. 205). *In his work “Speech” Ataturk expressed that “the decision is to found a new independent state that is based on national sovereignty while starting national struggle* (Atatürk, Nutuk, Hz. Korkmaz, 1998, p. 9) Ataturk universalized because he was the first to give independence war against imperialism, and became independence leader for the developing countries of the third world. For these reasons, first universal dimension of “Ataturkist thought” is “anti-imperialism” and the second universal dimension is “carrying enlightenment movement of western civilization to his region, Islamic world, Asia, and the third world countries of Africa.” (Odyakmaz, 2003, p. 94-95, see İnan, 1983) Turkish reform Ataturk realized is based on “modernization”. The values such as “nationalism, national sovereignty, secularism, national education, total independence, peace at home, peace in the world, standing against exploitation, human love, respect to woman rights, are at the basis of the state he founded. These values are important topics that modern and western world



emphasize.

It is compulsory to give a **“national education”** to all citizens in Turkey according to the constitution, and related laws. An education based on **“ethnicity, cultural differences”** or **“multiculturalism”** cannot be presented. **“Integration”** model has been adopted while forming national identity in Turkey. The principles of **“socialization, education, law”** and **“equality before the law”** has been adopted as main element. Citizens can express and protect their **“cultural differences”** at this model. But they cannot politicize their **“cultural differences”**. The state cannot apply different education models for **“every ethnic base”, “different cultures”, “different mother tongues”, “regions”, and “districts”**. Our national law, and foundation bases of our state, and nation are not appropriate for this.

“Ethnicity, race, religion, and language” are out of question in the definition of national identity in Turkey. As Atatürk said; everyone who can say **“How happy is he who says I am a Turk,”** defines himself as **“Turk”**. It is the essence of the democracy and tolerance to accept cultural differences in terms of religion, and language, and protect them as cultural heritage. The identity of today’s Turkish nation and state was shaped with Lausanne Peace Treaty. **“Turkishness”** was defined clearly based on **“citizenship”** without expressing any ethnic meaning in the constitution. **66th item** of the constitution is very obvious. **“Everyone who is tied to Turkish state with citizen bond is Turkish”**. (see Kili ve Gözübüyük, 2000, p. 188, 283). The reason of this definition is that like many other examples in Europe and world, **“Turks are the foundation elements of the state (Önder, 2005, p. 52-57).**

Atatürk maintained **“the education war”** he started together with the Independence War until he died. (Karagözoğlu, 1985, p.195-196). Atatürk, the savior of Turkey, and founder of the state, has won victories at the education war, as well. The aims that Atatürk addressed at education are the main principles of a **“national, humanistic, and modern education”**. It is doubtless that if we ignore them, we will suffer a lot. When we apply them properly, the rise of our nation will realize. Atatürk is a great leader who enabled our nation to change era in the area of **“citizen education”** as well as being a great soldier, statesman and diplomat. We see that most of the opinions of Atatürk are valid today (Tezcan, 1996, C.2 p. 696-697). There are 4433 books at Atatürk’s personal library, most of which are about history, science, language, literature, and he read most of them. (Anameriç, 2005, p.1115-1140). The developments at our education system lived its golden era at Atatürk period. The biggest expectation of Republic regime from educators and education institutions with Atatürk’s expression; **“ is to raise generations whose ideas, consciences, and understanding are free.”** The citizen model aimed at to be raised is **“rational, free, local, based on positive science, loving fine arts, and virtuous personality.”** This national citizen model is **“universal citizen model”**, as well. Today, all modern countries aim at this type of citizen. It is possible to make the following evaluations about **“Turkish citizen”** and **“Turkish identity”** understanding desired to be formed at Atatürk period (1923-1938): **Turk**; is wise, generous, brave, freedom lover, hospitable, loyal, and hero. **Turk**; is an unique citizen example who has moral, human, national, universal, earthy, and spiritual components. **Turkish youth**; is an unique human model who adopts national, moral, and universal values. **Idealization of Turkishness**; is a meaningful process. **Country**; is a mutual home. **Citizen**; is the son of the country, and citizens are brothers and sisters. **Patriotism**; is the biggest virtue. **Citizenship**; is being a member of a family. **Working**; is one of the vital points of the ideal Turkish identity of the citizenship books of this period. Furthermore, **“working”** has also an important place in the economic model understanding of Turkish reform. **In Turkish society**; there is no **“class”**. Instead of this, there are **“occupation groups”** needing each other.

Hatred against tyranny and dominance; There is a reserved attitude towards the name **“Ottoman”** and its environment. **“Captivity”** and **“freedom”**, **“monarchy and democracy”**, **“tyranny and national sovereignty”** are emphasized as uncompromising contradictions. (Karakılıç, Müjdecı, 2014, p.173-198).



When we analyze Social Sciences course books between the years 1923-1950, “citizenship categories” that **“Kemalist/Ataturkist ideology” wants to form are stated as follows:**

1. Obedient, passive, knowing their rights, and duties citizen, 2. Citizen praying Turkishness, 3. Citizen knowing their enemies, 4. Citizen staying distant to Ottoman history, 5. Citizen giving importance to civil life, 6. Citizen adopting mutual benefit, 7. Citizen equipped with army-nation, 8. Healthy and strong citizen, 9. Citizen equipped with holy symbols (country/flag), 10- Self-sacrificing, and loyal citizen (Kayaalp, 2015).

Republic regime wanted his **“acceptable citizen”** to have features of “national values, and self-sacrificing for the sake of nation, and country.” It has been stressed that new Turkish generations should be “nationalist, populist, reformist, secular, praising of being Turk, self-confident, obedient, and faithful to the Republic.” It has been aimed at raising the citizens with these qualities via Social Sciences courses. The duty of being ready of the acceptable citizens for the inner threats against the aim of “modern civilization level” has been given to them (Tercan, 2014). Citizen model in accordance with global citizenship requires “having a universal identity respectful to his country, nation, laws, and humanity”. For this reason, today’s citizenship values are **“national”** and **“universal”**. The definition and awareness of citizenship of “Citizenship Information” course book requires having some values. These values that “a good citizen” should have are stated as follows;

1. Loyalty; a) Loyalty to nation, b) Loyalty to country, c) Loyalty to state, d) Loyalty to laws, e) Loyalty to spiritual values, and symbols, **2. Duty;** a) the duties of citizens to other people, b) the duties and responsibilities of the citizen to society, c) the duties and responsibilities of the citizen to state, **3. Respect;** a) Self-respect, b) Respect to people, c) Respect to nation, d) Respect to state, e) Respect to laws, **4. Service without thinking himself or his benefits, 5. Honour, 6. Righteousness, 7- Personal courage** (Kan, 2009, p.895-904).

Information, skills , and values necessary for responsible global citizenship are stated by Oxfam as follows: 1-social justice and equality, 2- Differences, 3- Globalization, and dependence, 4- A sustainable future, 5- Peace and struggle. Skills: 1- critical thinking, 2- effective discussion, 3- injustice and struggle for inequality, 4-respect to people and property, 5- cooperation and solving conflicts, Values and attitudes; 1- Identity and self-respect, 2- Empathy, 3- responsibility for social justice, and equality, 4- valuing, and respecting to differences, 5- taking responsibility for a sustainable development 6- believing in people for making differences (cited by Ersoy, 2013, p. 83.)

The qualities that 21st century citizens should have are explained as follows:

1. He should deal with the problems as a member of a global society. 2. He should work cooperatively, and take responsibility of his roles. 3. He should understand cultural differences, accept, admire, and tolerate them. 4. He should have the capacity of thinking critically, and systematically. 5. He should solve the problems without violence. 6. He should be willing to change his life style. 7. He should be sensitive to human rights, and protect them. 8. He should have the capacity of do politics in local, national, and international levels. Education systems should give priority to raise “universal citizen”, and their curriculums should be designed accordingly. (Cogan, J. J. (2000) cited by. Kan, 2009, p. 895-904) Hence, Ministers Council of European Council declared the year 2005 as “the year of European citizen via education. The importance of education at citizenship conscience, and increasing democratic participation was desired to be emphasized with this. (Tezgel, 2008, p. 20) The qualities of “good, global, 21st century citizens that were stated above are “national and universal citizen model that Ataturk desired and struggled to raise”

It is state’s duty to fix the failing parts of “the national education system”, which means “Citizen education system” with “modern principles” without diverging from “wisdom” and “science”. However, non-governmental organizations, educators, and scientists should do their parts in a changing and developing world. In our opinion, “basic principles “ and “Principles to apply” of our education system addressed by Ataturk are right. They should



be developed with “modern principles” and “rational methods”. They should not be stopped with government changes, and populist approaches should be refrained. (Şehirli, 2011).

5. References

- Akçam, T. (1997). *Hızla Türkleşiyoruz*. Cumhuriyet, Demokrasi ve Kimlik, Haz. Nuri Bilgin, İstanbul: Bağlam Yayıncılık.
- Akyüz, K. A. (1930). *Yurt Bilgisi 3. Sınıf*. İstanbul: Maarif Matbaası.
- Akyüz, Y. (2009). *Türk Eğitim Tarihi*, Ankara: Pegem Akademi.
- Akyüz, Y. (1993). *Türk Eğitim Tarihi Başlangıçtan 1993'e*, (4.Baskı) İstanbul: Kültür Koleji Yayınları.
- Anameriç H. (2005). Mustafa Kemal Atatürk'ün Afet İnân'da kalan kitapları, *AAM. Dergisi*, 21 (63).
- Anderson, J., Askins, K., Cook, I., Desforjes, L., Evans, J., Fannin, M., Helen, G.,... Skelton, T. (2008). *What is geography's contribution to making citizens?*. Geographical Association. 93 (1), 34-39.
- Arat, Y. (1998). Türkiye'de toplumsal cinsiyet ve vatandaşlık, *75. yılda tebaadan yurttışa doğru*. (Ed. Artun Ünsal). İstanbul: Tarih Vakfı Yurt Yayınları.
- Atasoy, T. Koç. H. (1998). Coğrafya Öğretiminin Aktif Vatandaşlık Eğitimindeki Rolü: Öğretim Üyesi Görüşleri, *Journal of World of Turks*, Vol.7, No.2 (2015).
- Atatürk, K. (1998). *Nutuk (1919-1927)*, Yayına Haz.: Zeynep Korkmaz, Ankara: AAM. Yayınları.
- Atatürk'ün Söylev ve Demeçleri (1959)*. Ankara: C.1, İkinci Baskı, Türk Tarih Kurumu Yayını.
- Atatürk'ün Söylev ve Demeçleri (1971)*. Ankara: C.1, Türk Tarih Kurumu Yayını.
- Aybay, R. (2008) *Yurttaşlık (Vatandaşlık) Hukuku Ders Kitabı ve Temel Yasa Metinleri*. İstanbul.
- Aybay, R. (1982) *Yurttaşlık (Vatandaşlık) Hukuku*, Ankara: AÜSBF Yayınları, No: 499.
- Aytaç, K. (2001). Atatürk'ün eğitim görüşleri, *Atatürkçülük II. Kitap*, Atatürk ve Atatürkçülüğe İlişkin Makaleler, İstanbul: Milli Eğitim Basımevi.
- Başgöz İ. , Wilson H. W. (1968). *Türkiye Cumhuriyetinde Milli Eğitim ve Atatürk*, Ankara: Dost Yayınları.
- Battery, M. (2003). *The End of Citizenship? The Nation State, Threats to Its Legimacy and Citizenship Education In The Twenty First Century*. Cambridge Journal of Education, 33 (1), 101-102.
- Baykara, T. (1999). *Türk İnkılâp Tarihi ve Atatürk İlkeleri*, İzmir: Akademi Kitabevi.
- Binbaşıoğlu, C. (2005). *Türk Eğitim Düşüncesi Tarihi*, Ankara: Anı Yayınevi.
- Bouineau, J. (1998). *Fransa'da Devrim Döneminde Yurttaşlar ve Yurttaşlık*, Dersimiz Yurttaşlık. (Çev. Y. Köy), İstanbul.
- Budak, Ş. (2003). Atatürk'ün eğitim felsefesi ve geliştirdiği eğitim sisteminin değiştirilmesi, *Milli Eğitim Dergisi*, Sayı:160. (http://dhgm.meb.gov.tr/yayimlar/dergiler/milli_egitim_dergisi/160/kargin.htm)
- Cicioğlu, H. (1985). *Türkiye Cumhuriyetinde İlk ve Orta Öğretim*. Ankara: Ankara Üniversitesi Yayınları.
- Cogan, J. J. (2000). *Citizenship Education For The 21. Century: Setting The Context*. John, J. C., Derricot R. (Edit). *Citizenship For The 21. Century An International Perspective On Education*. Uk-Kogan Page Limited & Usa-Stylus Publishing Inc.
- Cumhur, M. (1981). *Atatürk ve Milli Kültür*, Ankara: Başbakanlık Basımevi.
- Campbell J. ve Craft L. (2004). *Citizenship and PSHE- opportunities, responsibilities and experiences*, *Education Review*, 2004,17(2).
- Çelik, H. (2008). Cumhuriyet dönemi vatandaşlık eğitiminde önemli adımlar, *Sakarya Üni., Fen-Edebiyat Dergisi*, Cilt.10.1, pp. 359 -369, ISSN:1301-3769, DOI:
- Çiftçi A. (2006). *Vatandaşlık Bilgisi, Demokrasi ve İnsan Hakları*. Ankara: Gündüz Eğitim ve Yayıncılık.
- Doğan, V. Anayasal Vatandaşlık Kavramı Üzerine (<http://milliyetcidusunce.org/anayasal-vatandaslik-kavrami-uzerine/>) (Erişim Tarihi:25.08.2017).
- Douglas, L. (2003). *Citizenship Education and Human Rights Education. An overview of recent developments in the UK*. Manchester, British Council.
- Duman T., Karakaya N. ve Yavuz N. (2001). *Vatandaşlık Bilgisi*. Ankara: Gündüz Eğitim Yayıncılık.
- Davis I. (1994). The Nature of Education for Citizenship. *Social Science Teacher*, 24 (1), 2-4.
- Education For Global Citizenship: A Guide For Schools*. <http://www.Oxfam.Org.Uk/Coolplanet/Teachers/Globciti/Downloads/Gcguide06.Pdf> (Erişim Tarihi: 04.01.2007).
- Er, H. Ünal, F. Özmen, C. (2013) 8. Sınıf vatandaşlık ve Demokrasi Eğitimi Dersinin 4. Sınıfa Alınmasına İlişkin Görüşler Üzerine Bir Araştırma, *International Journal of Social Science* Doi number:<http://dx.doi.org/10.9761/JASSS1961>, Volume 6 Issue 8, p. 179-196.)
- Ercan, R. (2010). Temel kavramlar, *İnsan Hakları ve Demokrasi*, İstanbul: Lisans Yayınları.



- Erol, N. (1995). Yurttaşlık ve demokrasi: çoğulcu bir yurttaşlık kavramına doğru. (Haz: N. Bilgin). *Cumhuriyet, Demokrasi ve Kimlik*. İstanbul: Ayrıntı Yayınları.
- Ersoy, A. F. (2007). *Sosyal Bilgiler Dersinde Öğretmenlerin Etkili Vatandaşlık Eğitimine İlişkin Görüşleri*, Anadolu Üniversitesi Eğitim Bilimleri Enstitüsü, Yayınlanmamış Doktora Tezi, Eskişehir.
- Ersoy, A. F. (2013). *Vatandaşlık, (Yeni Yaklaşımlarla Vatandaşlık Eğitimi)*, İnsan Hakları Demokrasi ve Vatandaşlık Eğitimi, Ankara: Pegem Akademi Yayını.
- Fırat, İ. G, H. (2014). *1982 Anayasası ve Yeni Anayasa Çalışmaları Çerçevesinde Anayasal Vatandaşlık Üzerine Bir Tartışma*, İstanbul: İstanbul Bilgi Üni. Yayınları.
- Fiden, N. ve Erden, M. (1993). *Eğitime Giriş*, 4. Baskı, Ankara: Meteksan Matbaacılık.
- Giritli, İ. (2001). *Kemalizm İdeolojisi, Atatürkçülük II. Kitap, Atatürk ve Atatürkçülüğe İlişkin Makaleler*, İstanbul: Milli Eğitim Basımevi.
- Göksel, B. (1985). Atatürk'ün eğitim hakkındaki görüşleri ve misak-ı maarif, *AAMD*, Cilt:1, Sayı:3, 921-958.
- Gözler, K. (2004). *Türk Anayasa Hukuku Dersleri*, Bursa: Ekin Kitabevi Yayınları.
- Göztepe, E. (2003). Yurttaşlığın kamusal ve ulusüstü boyutu: Avrupa yurttaşlığı ve göçmen forumu örnekleri, *AÜHF Dergisi*, C.52, sayı 4, 229-248.
- Gülmez, M. (1999). *Cumhuriyet ve insan hakları eğitimi*. (Der: Z. Ronaj. Bilanço 1923-1998 Türkiye Cumhuriyetinin 75. Yılına toplu bakış c.1. İstanbul: Türkiye Ekonomik ve Toplumsal Tarih Vakfı Yayınları.
- Gültaş, V. (2004). *Geçmişten Günümüze İnsan Hakları*, Ankara: Bilge Yayınevi.
- Gündüz, M., Gündüz, F. (2007). *Yurttaşlık Bilinci*, 3. Baskı. Ankara: Anı Yayınları.
- Hicks D. (2001). Re-Examining The Future: The Challenge for Citizenship Education, *Educational Review*, 53(3).
- Heater, D. (2004). *A History of Education for Citizenship*. London: Routledge Falmer.
- Heater, D. (2007). *Yurttaşlığın Kısa Tarihi*, (Çev: M. Delikara Üst). Ankara: İmge Kitabevi Yayınları.
- Heath, M., Rowe, D. ve Breslin, T. (2008). Citizenship Education in The Primary Curriculum. <http://www.justice.gov.uk/reviews/docs/citizenship-education.pdf> 01, (Erişim Tarihi: 12.11.2013)
- Hoge J.D. (2002). Character Education, Citizenship Education, and The Social Studies, *The Social Studies*, 93(3).
- İlk Mekteplerin Müfredat Programı* (1926). Birinci Tab, İstanbul: Milli Matbaa.
- İnan, M. R. (1983). *Atatürk'ün Evrenselliği, Önder Kişiliği, Eğitimci Kişiliği ve Amaçları*, UNESCO, Ankara.
- İnan, R. (1981) *Atatürk ve Eğitim*, Ankara: Türk Eğitim Derneği Yayınları.
- İnan, A. (2010). *Medeni Bilgiler ve Atatürk'ün El Yazıları*. Ankara: AAM. Yayını.
- İşcan, C.D., Demir, K. (2009). Vatandaşlık eğitiminde değerler ve değerler eğitimi. *I. Uluslararası Avrupa Birliği, Demokrasi, Vatandaşlık ve Vatandaşlık Eğitimi Sempozyumu*, Uşak Üniversitesi, Uşak, 137-146.
- Karip, E. (2006). Avrupa birliği, yeni eğitim programı ve vatandaşlık eğitimi. Atatürk döneminden günümüze cumhuriyetin eğitim felsefeleri ve uygulamaları, *Atatürk Döneminden Günümüze Cumhuriyetin Eğitim Felsefesi ve Uygulamaları Sempozyumu Bildirileri*, Ankara, Gazi Üniversitesi.
- Kadioğlu, A. (2008). *Vatandaşlığın Dönüşümü, Üyelikten Haklara*, İstanbul: Metis Yayınları.
- Kafadar, O. (1997). *Türk Eğitim Düşüncesinde Batılılaşma*. Ankara: Vadi Yayınları.
- Kan, Ç. (2009). Değişen değerler ve küresel vatandaşlık eğitimi, Eylül Cilt:17, No:3 *Kastamonu Eğitim Dergisi*, s.895-904 (www.kefdergi.com/pdf/17_3/17_3-12.pdf) (Erişim Tarihi: 25.08.2017)
- Karagözoğlu, G. (1985). Atatürk'ün Eğitim Savaşı, *AAMD*, Cilt:2, Sayı:4, 193-213.
- Karakılıç, C. Müjdecı, M. (2014). Yurttaşlık bilgisi kitaplarında kimlik ve vatandaşlık (1950-1960), tarihin peşinde, *Uluslararası Tarih ve Sosyal Araştırmalar Dergisi*, Sayı:11, s.173-198)
- Karal, E. Z.; (1981). *Atatürk İlkelerinin Biçimlendirdiği Eğitim*, Ankara: Atatürk Türk E.D. Yayınları.
- Kastoryano, R. (2007). *Alman Birliğini Yeniden Tanımlamak; Milliyetten Vatandaşlığa, Vatandaşlık ve Etnik Çatışma*, (Ed. H. Güllalp). İstanbul: Metis Yayınları.
- Kayaalp, F. (2015). *İdeoloji-Vatandaşlık İlişkisi Bağlamında 1923-1950 Türkiye'sinde Sosyal Bilgiler Kapsamındaki Ders Kitaplarının İncelenmesi*, Yüksek Lisans Tezi, Atatürk Üni. Eğitim Bilimleri Ens. İlköğretim ABD. Sosyal Bilgiler Eğitimi Bilim Dalı, Erzurum.
- Kayıran, M. (1998). Atatürkçü düşünce ışığında çağdaş eğitim, *AAMD*, Cilt:19, Kasım 1998, Sayı:42.
- Kepenekçi, Y. (2008). *İnsan Hakları ve Vatandaşlık*. Ankara: Ekinoks Yayınevi.
- Keskin, Y. (2004). *Türkiye'de II. Meşrutiyetten Günümüze Kadar Uygulanmış Olan Sosyal Bilgiler Öğretim Programlarının Analizi ve Karşılaştırılması*, Marmara Üni. Eğitim Bil. Ens., Y. Lisans Tezi, İstanbul.
- Kymlicka, W. (2008). *Two Dilemmas of Citizenship Education in Pluralist Societies. Citizenship Education, The Purposes of Citizenship Education*, James Arthur ve Ian Davies (Ed.), Sage Publications, London, 2.



- Kılınç, H. H. (2013). 8. Sınıf Vatandaşlık ve Demokrasi Eğitimi Dersi Kazanımlarının Gerçekleşme Düzeyine İlişkin Öğretmen-Öğrenci Görüşleri İle Derse Yönelik Öğrenci Tutumları, Fırat Üni. Eğitim Bil. Ens. Eğitim Programları ve Öğretim ABD. Yayınlanmamış Doktora Tezi, Elazığ.
- Kıncal, R.Y. (2012). *Vatandaşlık Bilgisi*, 3. Basım, Ankara: Nobel Yayıncılık.
- Kili S. ve Gözübüyük, A. Şeref, (2000). *Türk Anayasa Metinleri*, Ankara: İş Bankası Yayını.
- Kili, S. (1982). *Türk Anayasaları*, İstanbul: Tekin Yayınevi.
- Kocatürk, U. (1999). *Atatürk'ün Fikir ve Düşünceleri*, AAM. Yayınları: Ankara.
- Koç, M. B. (2012). Atatürk'ün vatandaşlık anlayışı ve günümüzde yahudiler, *AAM.D.*, C.28, Sayı:84, 1-36.
- Korkut, L. (2014). Siyasi kimlik olarak vatandaşlık-türkiye'de ve dünya devletlerinde anayasal vatandaşlık tanımları, *İstanbul Medipol Üni. Hukuk Fakültesi Dergisi*, Cilt: 1 Sayı: 2, güz.
- Köknel, Ö. (1981). *Atatürkçü Çizgide Gençliğin Eğitimi*, Ankara: TED. Yayınları.
- Koutselini M. (2008). Citizenship Education in Context: Student Teacher Perceptions of Citizenship in Cyprus, *Intercultural Education*, 19(2).
- Lawson, H. (2001). *Active Citizenship in Schools and the Community*. The Curriculum Journal, 12(2), 163-178.
- Lehning, P.B. (1999). *European Citizenship: towards a European identity?*. Working Paper Series in European Studies, 2 (3).
- Marshall, I.H. (1992). *Citizenship and Social Class*. London: Pluto Press.
- Marshall, T.H. ve Bottomore, T. (2005). *Yurttaşlık ve Toplumsal Sınıflar*, (Çev. Ayhan Kaya), İstanbul: İstanbul Bilgi Üniversitesi Yayınevi.
- McCowan T. (2009). *Rethinking Citizenship Education: A Curriculum for Participatory Democracy*, London, Continuum International Publishing Group.
- MEB; (1993). Atatürk'ün I. Maarif Kongresi Açış Konuşması, *Millî Eğitim Dergisi*, Türkiye Cumhuriyeti'nin 70. Yılı, Özel Sayı:125, Millî Eğitim Basımevi, İstanbul.
- MEB. (2001a). *Atatürkçülük I. Kitap; Atatürk'ün Görüş ve Direktifleri*, İstanbul: Milli Eğitim Basımevi.
- MEB. (2001b). *Atatürkçülük II. Kitap Atatürk ve Atatürkçülüğe İlişkin Makaleler*, İstanbul: M. E. Basımevi.
- MEB. (2001c). *Atatürkçülük III. Kitap; Atatürkçü Düşünce Sistemi*, İstanbul: Millî Eğitim Basımevi.
- Menter I and Walker, M. (2000). How would a well-educated young citizen react to the Stephen Lawrence inquiry? An examination of the parameters of current models of citizenship education. *Curriculum Journal*, 11 (1) p.101-116.
- Nalçacı, Özdemir ve Şahin, (2002). Cumhuriyetten günümüze sosyal bilgiler programındaki değişmelerin değerlendirilmesi, *TSA*, Cilt 6.
- Nalbant, F. (2014). Türkiye'de vatandaşlık anlayışının gelişimi, *III. Türkiye Lisansüstü Çalışmalar Kongresi*. 15-18 Mayıs 2014, Sakarya, 79-93.
- Nomer, E. (2012). *Türk Vatandaşlık Hukuku Dersleri*, b. 19, İstanbul: Filiz Kitabevi Yayınları.
- Nomer, E. (2000). *Türk Vatandaşlık Hukukunun Genel İlkeleri, Vatandaşlık ve Yabancılar Hukuku Alanında Gelişmeler (Bilimsel Toplantı)*, İstanbul.
- Odyakmaz, Z. (2003). "Millî Birlik, Laiklik ve Evrenselleşen Atatürkçülük", *Atatürkçülük Konferansları I*, Ankara: Gn. Kur. ATESE Yayınları.
- Oğuzkan, T. (1973). "Türkiye'de halk eğitimi hareketine toplu bir bakış" *Boğaziçi Üni. Dergisi*, Sos. Bilimler, Cilt: I, İstanbul.
- Osler A. ve Starkey H. (2005). *Changing Citizenship: Democracy and Inclusion in Education*, Open University Press, Berkshire.
- Önder, A.T. (2005). *Türkiye'nin Etnik Yapısı, Halkımızın Kökenleri ve Gerçekler*, İstanbul: Pozitif Yayınları.
- Özalp, R. A. ve Ataüinal, A. (1977). *Türk Milli Eğitim Sisteminde Düzenleme Teşkilatı*. İstanbul: M.E.Basımevi.
- Özbek, R. (2006). Vatandaşlık ve İnsan Hakları Eğitimi Amaçlarının Gerçekleşme Düzeyine İlişkin Öğretmen Öğrenci Tutumlarının Değerlendirilmesi, *Uluslararası Demokrasi Eğitimi Sempozyumu*, Çanakkale Onsekiz Mart Üniversitesi Eğitim Fakültesi, Çanakkale.
- Özdemir, M.Ç., Bingöl, A.S. (2009). Çok kültürlü toplumlarda vatandaşlık eğitimi, I. uluslararası avrupa birliği, demokrasi, *Vatandaşlık ve Vatandaşlık Eğitimi Sempozyumu*, Uşak Üniversitesi.
- Özden, M. (2011). 4. ve 5. Sınıflar Fen ve Teknoloji Dersinin Vatandaşlık Eğitimi Bakımından İşlevselliği. Yayınlanmamış doktora tezi. Anadolu Üniversitesi Eğitim Bilimleri Enstitüsü, Eskişehir.
- Patrick, J. J. (2003). *The Concept of Citizenship in Education for Democracy*. (<http://www.ericdigests.org/2000-1/democracy.html>) (Erişim Tarihi: 26.03.2012)
- Polat, E. G. (2011). Osmanlıdan günümüze vatandaşlık anlayışı, *Ankara Barosu Dergisi*, 2011/3.
- Sağırılı, M. (2005). *Bir Konu Alanı Olarak Vatandaşlık Bilgisi*. E.Töre (Ed.).



- Sağlam, F. (1998). *Cumhuriyet döneminde insan hakları vatandaşlık 75. yılda tebaadan yurttaşla doğru*. (Ed. Artun Ünsal). İstanbul: Tarih Vakfı Yurt Yayınları.
- Schmitter P.C. ve Karl T.L. (1992). *Demokrasi Nedir Ne Değildir?* (Çev. Levent Gönenç), Bülten No: 12.
- Schnapper, D. (1995). *Yurttaşlar Cemaati, Modern Ulus Fikrine Dair*, İstanbul: Kesit Yayıncılık.
- Sadovnik A.R., Cookson P.W. ve Semel S.F. (2001). *Exploring Education: an Introduction to the Foundations of Education*, (2nd Ed.). Boston, Allyn and Bacon.
- Sunal, C. S. ve Hass, M. E. (2002). *Social Studies for the Elementary and Middle Grades a Constructivist Approach*. Allyn and Bacon, Boston.
- Şehirli, Y. A. (2007). Atatürk the education, *Science, Education and Time As Our Concern*, (Smolyan, November 30-December 1, 2007) Bulgaristan.
- Şehirli, Y. A. (2011). Türk eğitim sisteminde Atatürk'ün başlattığı çağdaşlaşma girişimi ve Atatürk'ün eğitim ile ilgili sözleri, 8. *Uluslararası Türk Dünyası Sosyal Bilimler Kongresi*, 9-13 Haziran 2010, Celalabat, Kırgızistan. (Kongre Tam Metin Kitabı, s.171-182, İstanbul: Türk Dünyası Araştırma Vakfı Yayınları)
- Şehirli, Y. A. (2012). I. dünya Savaşı ve milli mücadele döneminde eğitim (1914-1923), *Türk Eğitim Tarihi*, İstanbul: Lisans Yayıncılık.
- Şehirli, Y. A. (2010). İnsan hakları ve türkiye cumhuriyeti anayasası, *İnsan Hakları ve Demokrasi*, İstanbul: Lisans Yayınları.
- Şehirli, Y.A. (2009). *Seçmeli Türkiye Cumhuriyeti Tarihi Ders Notları*, T.Ü. Eğitim Fakültesi, Edirne.
- Şehirli, Y.A. (2010). İlköğretim alanlarına öğretmen yetiştirmenin tarihi gelişimi ve günümüzdeki mevcut durum, *Uluslararası Öğretmen Yetiştirme Politikaları ve Sorunları Sempozyumu II*, 16-18 Mayıs 2010-Hacettepe Üniversitesi, Beytepe-Ankara.
- Şenkal A. (2007). Sosyal politika ve sosyal vatandaşlık: kölelikten sosyal vatandaşlığa (Avrupa Birliği sosyal vatandaşlık örneği) .(www.iibf.kocaeli.edu.tr/ceko/ssk/kitap50/14.pdf) (Erişim tarihi: 15.03. 2013).
- T.C. Genel Kurmay Başkanlığı. (2001). *Vatandaşlık Bilgisi*. Ankara: Genel Kurmay Basımevi.
- Tercan, Y. (2014). *Meşrutiyet'ten Günümüze Tarih Ders Kitaplarında Türk Kimliğinin İnşası*, Marmara Üni. Eğitim B.E. Ortaöğretim Sos. Alanlar Eği. ABD.Tarih EBD.Yayımlanmamış Doktora Tezi, İstanbul.
- Tezcan, M. (1996). Eğitim bilimleri açısından Atatürk, *Uluslararası Atatürk Semp. AAMD*. Cilt:2, Ankara.
- Tezgel, R. (2008). *Yeni İlköğretim Programlarında İnsan Hakları Vatandaşlık ve Kentlilik Eğitimi*, Ankara: Araştırma Yayınları.
- Torney-Purta, J. ve Vermeer, S. (2004). *Developing Citizenship Competencies From Kindergarten Through Grade 12: A Background Paper for Policymakers and Educators*. Education Commission of the States web: (<http://www.ecs.org/html/projectsPartners/nclc/docs/DevelopingCompetencies.pdf>) (Erişim tarihi: 12.06.2012)
- Turner B. (1993). *Contemporary Problems in the Theory of Citizenship*, London, Sage Publications.
- Türkçe Sözlük*, (1992). İstanbul: TDK.Yayını.
- Uluocak, N. (1984). *Türk Vatandaşlık Hukuku*, İstanbul: Filiz Kitabevi.
- Uluskan, S.B. (2010). *Atatürk'ün Sosyal ve Kültürel Politikaları*, Ankara: AAM. Yayını.
- Üçok, C., Mumcu, A. , Bozkurt G. , (2010). *Türk Hukuk Tarihi*, 14.Basım.Ankara: Turhan Kitabevi.
- Ünsal, A. (1998). *Yurttaşlık Zor Zanaat, 75. Yılda Tebaadan Yurttaşla Doğru*, İstanbul: Tarih Vakfı Yayınları.
- Üstel, F. (1999). *Yurttaşlık ve demokrasi*. Ankara: Dost Yayınları.
- Üstel, F. (2005). *Makbul Vatandaşın Peşinde: II. Meşrutiyetten Bugüne Vatandaşlık Eğitimi*, İstanbul: İletişimY.
- Üstel, F. (2011). *Makbul Vatandaşın Peşinde: II. Meşrutiyetten Bugüne Vatandaşlık Eğitimi*, İstanbul: İletişimY.
- Waltzer, K. ve E. Heilman (2005). *When Going Right is Going Wrong*. Education for Critical Democratic Patriotism. The Social Studies, July/August, 152-162.
- Wiener,A.(1998).*European Citizenship Practice: Building Institutions for a Non-State*. Oxford, Westview Press.
- Yılmaz, D. (2002). *Vatandaşlık Bilgisi*. Konya: Çizgi Kitabevi.
- Zafer, T. (1988). 80. Yıldönümünde Hürriyetin ilanı (1908) ve Rehber-i İttihad, *Toplum ve Bilim*, S. 42.



Aspects of Social Work Professional Ethics in The Context of Interagency Collaboration in Latvia

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Abstract

With the development of the social worker's profession in Latvia, the ethical aspects of profession have become more and more topical. Ethical awareness is essential for any social worker in order to provide high-quality social services, and the ethical thinking and consequent behaviour are the cornerstones for a good professional practice. The Code of Ethics helps to regulate the behaviour of social work professionals involved in the problem-solving process as it implies clear guidelines and determines certain behaviours, principles and moral norms that sometimes might not coincide with the expectations of other professionals. The aim of this research is to assess the aspects of social work ethics in the context of interagency collaboration in Latvia. In this article the authors define the basic values of social work and analyse Latvian legislation that defines ethical social work practice. The current trends, which can be observed in the process of interagency collaboration in the context of ethics, are summarized. The social work professionals from different institutions were surveyed in one region of Latvia – Kurzeme with the aim to learn their opinion and experience when dealing with ethical issues in their practice emphasizing the specifics of interagency collaboration. The majority of respondents evaluate the interagency collaboration in ethical context as good, although several problem areas are identified. The research also reveals the main ethical dilemmas in social work practice in terms of ethical decision-making process. The suggestions and recommendations of respondents and other authors are summarized about the changes needed for interagency collaboration to be more ethical and more successful.

Keywords – social work ethics, dilemmas, interagency collaboration.

Introduction

Any profession or organization demands that its members adhere to and practice according to acceptable moral codes or ethics. The Hippocratic Oath, as practiced by the medical professions, is an early example of professional ethics. In all organized professions, also in social work, members have skills, knowledge and competences that are outside the scope of the rest of society. Ethical codes exist to regulate professional behaviour and performance.

Modern society is critically dependent on the ethical practice of its professionals in all its echelons. Within and between different agencies and departments strong professional ethics are critical for establishing effective, efficient inter- and intra-agency co-operation and collaboration. A strong code of ethics is an effective driver of organizational efficiency and integrity. Ethical behaviour dictates respect and adherence to key moral principles. It encompasses honesty, fairness, dignity, confidentiality, competence, trustworthiness, respect for individual rights, respect for group rights, striving for excellence, pride of performance, and a culture of productivity. From a holistic point of view, commonly accepted codes of ethics pave the way for greater efficiency, productivity, resource development and quality service delivery; therefore also social work organizations have an incumbent duty of ethical performance of individuals, teams and their leaders. Shared ethics enhance inter- and intra-agency collaboration and performance.

In Latvia, Code of Ethics for Social Workers is part of their professional activity. It is elaborated on the basis of documents of International Federation of Social Workers (IFSW) “Declaration of ethical principles of social work” and “International ethical standards for social workers”, which are approved in General Meeting at Colombo (Sri Lanka), in 1994. Latvian Social Work Code of Ethics states that social work is a profession that promotes the emergence of social change, solves problems in people-to-people relationships, and contributes to the expansion of people's freedom and opportunities in order to increase wellbeing (Latvijas sociālo darbinieku ētikas kodekss, 2001).



In social work the basic ethical principles are grounded in the general basic values of social work. According to NASW Code of Ethics, social workers uphold the following core ethical values and principles: service, social justice, respect for the inherent dignity and worth of persons, importance of human relationships, integrity in professional practice, competence in professional practice (NASW 2008). Thus, basic values of social work are closely linked to the code of ethics – justice, human rights, collective responsibility and respect for diversities (Global definition..., 2014).

G. Shennan quotes American sociologist R. Merton, who has embedded the values in explaining the essence of social work profession:

- 1) Value placed on systematic knowledge and intellect (*knowing*),
- 2) Value placed upon technical skill and trained capacity (*doing*),
- 3) Value placed upon putting this conjoint knowledge and skill to work in the service of others (*helping*) (Shennan, 2016).

This concept suggests that providers of social services must link global values to the daily practice – from global to local and individual values. Over time, values evolve and change, they vary in different cultures. Over the last decades, the society has undergone a rapid change in terms of morality and value system, and social work practices are faced with such controversial ethical issues as abortion, HIV/AIDS transmission, euthanasia, legalization of lesbian, homosexual, bisexual, transgender (LGBT) relationships, biomedicine and genetic technologies etc. Social workers should examine their personal values before identifying the problems, working with ethical dilemmas and making decisions. It is also one of the cornerstones for successful teamwork and collaboration between agencies and institutions.

Collaboration in social work on inter-agency level

In this article the authors explore the issues of partnership and information sharing across professional social work disciplines and organizations. In different countries different terminology is used describing this collaboration process between organizations. In many European countries terms such as interagency or inter-organizational collaboration are employed, but in Post-Soviet countries it is often referred to as inter-institutional collaboration. In our article we will use both ‘inter-agency collaboration’ and ‘inter-institutional collaboration’, depending on the context.

In social work of Latvia, due to the specifics of Latvian language, there is no distinction made between such concepts as joint working, cooperation, partnership and collaboration. Carnwell and Carson (2009), analysing concepts ‘partnership’ and ‘collaboration’ states that partnership is a shared commitment, where all partners have a right and obligation to participate and will be affected equally by the benefits and disadvantages arising from the partnership. Partners work together to achieve common goals and this relationship is based on mutual respect for each other's skills and competencies, reciprocity, empathy; the professional boundaries are blurring. Collaboration is the more active version of partnership. If the ‘partnership’ is who we are, then ‘collaboration’ is what we do. Henneman, Lee and Cohen (1995) describe the relationship between collaborators as non-hierarchical, when shared power is based on knowledge and expertise, rather than role or title. Carnwell and Carson (2009) analysing the various collaboration definitions conclude, that they repeatedly mention the following words: sharing, partnership, interdependency, sharing of expertise, willingness to work together towards an agreed purpose, trust and respect in collaborators, but recently, the rhetoric around partnership and collaboration is beginning to give a way to alternative terms, such as ‘working together’ with emphasis on social skills required to work together towards a common goal (Carnwell & Carson, 2009). Thus, it can be concluded that both of these concepts are similar, but it is important in what context they are used. Successful partnership is based on collaboration.

Interagency collaboration is often discussed in the same context as inter-professional (inter-disciplinary) collaboration. It is based on the work of inter-professional teams and takes place between different institutions, where team members come from different professional backgrounds and have different levels of expertise. In



such way it is possible to respond to the clients who require the help from more than one type of professionals. The goal of inter-agency collaboration is to provide high-quality services to the client and find the best possible solution to the problem situation. Inter-agency work can also easier attract the necessary resources.

In developed Western countries, particularly in Great Britain, inter-professional and inter-agency collaboration (IPIAC) has been promoted by legislation since 1960's viewing collaboration as a way to improve standards and reduce costs. The term "inter-professional and interagency collaboration" (IPIAC) was introduced by Whittington, Thomas & Quinney (2009) to convey the importance of collaboration at professional and agency level. In Latvia the collaboration approach between different organizations/ institutions for solving social problems has been applied since the end of 1990's. In the Dictionary of Social Work inter-institutional approach has been explained as integration of different professional activities and sciences in the social work practice. On the other hand, the concept "inter-professional team" is defined as a group of different professionals who work towards reaching the common goal. Inter-professional team includes representatives of different professions and organizations (Latvijas sociāla darba vārdnīca, 2000).

The Guidelines for the development of professional social work in Latvia for 2014-2020 states, that inter-professional and inter-institutional collaboration is an essential component for providing a qualitative social work. It implies that successful collaboration is based on each specialist's understanding about his/her professional tasks, knowledge, abilities and duties, as well as his/her sincere desire to use the knowledge of other professionals in the cases when necessary professional duties cannot be performed within a current position, profession or institution (Labklājības Ministrija, 2013). Thus, each social worker (or representative of another profession), solving a case and knowing the limits of one's own abilities, can search for other specialists (from other professions and institutions), who are able to provide the necessary help in order to solve the client's problems. Particularly for that reason the institutions have different functions and the specialists of different professions engage in different tasks. It also includes a provision that, in solving a client's situation, it is necessary to ensure the application of multidisciplinary and interdisciplinary cooperation principle in order to achieve the results of social services and ensure sustainability (Ministru kabinets, 2017). Although the need for inter-professional and inter-agency collaboration keeps growing as effective collaboration is a key of successful service provision, inter-professional and inter-agency collaboration does have its limitations when we come to the issues of ethics.

Main obstacles to collaboration with other professionals in the context of ethics

Inter-professional and inter-agency collaboration is vital for promotion of the client's welfare. In spite of its benefits, several authors (Paproski, Beth & Haverkamp, 2000; Bruner, 1991; Banks, 2004) in their findings have indicated various obstacles, limits and risks that professionals may face while collaborating:

1. Client protection: There can be a tension between the need to share the information between professionals and agencies and the preservation of confidentiality. All professionals must obtain informed, written consent prior to sharing any information. Although this ensures client's autonomy and confidentiality, it also requires time, effort, and clarity. Both Human Rights and Constitution of Republic of Latvia stress the inviolability of privacy (LR Satversmes sapulce, 1922). Also the Regulations of Cabinet of Ministers, Nr.338, "Requirements for providers of social services" stipulates that the acquisition, use and storage of customer-related information must take place in accordance with the status of access of restricted information and data protection requirements of physical persons, and must be grounded in ethical principles, respecting the privacy of the client (Ministru kabinets, 2017).
2. Differences in training and professionalism: The professionals and paraprofessionals involved in collaboration may have different training and knowledge about practices of informed consent, appropriate use of information, and other procedures that ensure a consistent standard of support; besides each profession and each organization follow their own Code of Ethics.
3. Time constraints: Due to the constraints related to funding and resources, all professionals are often busy and overworked, which creates a practical challenges for coordination of the meetings. Collaboration is not a quick-fix and it cannot take place without the adequate staff and other service-related resources. On the contrary, development of partnerships takes time and effort while building collaborative relationships can be



a gradual process (Townsend, 2004). Also our research proves that more than 20 % of professionals mention the lack of time as obstacle for observing ethical principles in inter-institutional collaboration.

4. Conflicts of values: A commitment among professionals to collaborate can bring along important differences in opinions that need to be voiced for the best interest of the service user or provider. For example, the limits of collaboration get tested when the attitudes of fellow professionals about gender, race, age or status get questioned (this was proven also by results of our survey); or a partner agency is challenged about a judgement that seemingly puts a service user at risk (Whittington, 2003), as it can be in a case of involuntary placement of the client in closed type institutions. Sometimes individuals are reluctant to collaborate because of tensions between the professions, which include territorial attitudes and stereotypes about roles, responsibilities, and abilities and also about personal characteristics (Paproski & Haverkamp, 2000). Banks suggests that when the members of different professional groups work together, the aim should be the improvement of the services, better-informed decision making and removing the overlaps or gaps in services, but this can result in conflicts of values and loyalties between professionals in the team, and/or blurring of boundaries (Banks, 2004). One of the issues raised when working in multi-disciplinary teams is whether or not it is productive to retain its own set of unique values or ethical principles for each profession. This also challenges the professional identity of social workers.

5. The professional and personal competence of professionals and paraprofessionals – lack of knowledge and awareness: Some professionals do not have the training or experience to know with who they could or should collaborate. They may not know how to elicit the information from clients or how to proceed with contacting other professionals (Paproski & Haverkamp, 2000).

6. Lack of coordination and case management: In many settings the case management is insufficient due to lack of a designated case manager or coordinator. In Latvia there are many cases being solved when a particular case manager is not assigned - each institution does its work until the positive result is reached.

In accordance with the normative documents, social workers must sign for non-disclosure of information and they must be familiar with the list of restricted access information, which is developed on the basis of Personal Data Protection Law, where Article 6 stipulates that every physical person has the right to protection of personal data (Latvijas Republikas Saeima, 2000). However, in practice often situations arise which question how secure is the information provided by the client about his or her personal life and to what extent the social worker is able to provide confidentiality if the case is handled within an inter-professional team, because there is no document that would specify the boundaries of inter-professional competence in relation to information of client's case, as this document contains the information of limited access. It is also not defined who is entitled to see it, in what cases and in what way. The Latvian Code of Ethics for Social Workers does not clearly define the duties, rights and activities of the social worker in the sphere of client's data handling and confidentiality, which points to the need for amendments to the Code of Ethics (Latvijas sociālo darbinieku ētikas kods, 2001).

Ethical dilemmas in social work practise

The observance of the Code of ethics is closely related to a particular institution and its organizational culture, as well as actions of each individual when carrying out their direct duties. There are lots of components that influence ethical decision-making, which Antle (2005) has summarized in a model outlining the components of ethical decision-making that social workers may find helpful as a reflective framework (see Figure 1).

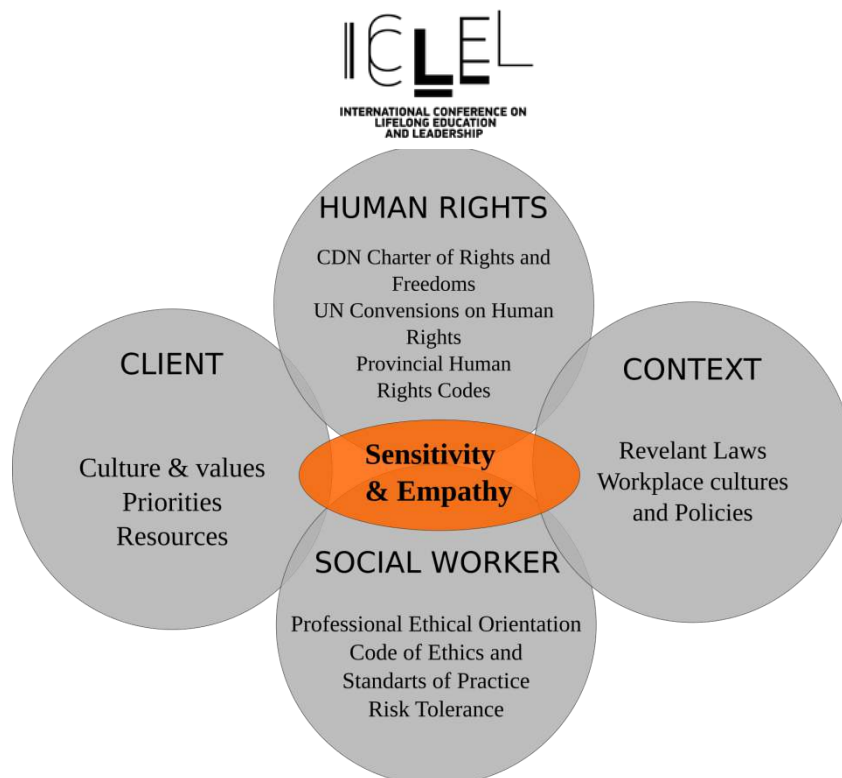


Figure 1. Components of Ethical Practice (after Antle, 2005)

For social work practice to be ethical, social worker must not only work with the client in accordance with legislation, but must use also a combination of the professional attainment (training, knowledge, techniques) with the personal self of who one is (personality traits, belief systems, and life experience). This is a hallmark of skilled practice, what Dewane (2006) calls – the use of Self. Social workers need such trait of personality as ethical sensitivity – ability to predict the development of situation, and identify ethical dilemmas during solving the social case issues.

The associate professor of Bradley University (USA), doctor of psychology, Nancy Scherman (2017) speaking about ethical dilemmas in social work practice at Social work conference in Riga, explained that what social workers do is based on values, and social work ethics are social work values in action. Therefore an ethical dilemma is a circumstance which occurs only when two or more social work values are in conflict. Scherman lists conditions for solving ethical dilemmas:

- Social worker must make a decision about which course of action is the best;
- There must be different courses of actions to choose from;
- Solving ethical dilemma, no matter what course of action is taken, some ethical principle is compromised (Scherman, 2017).

Keeping in mind Scherman's ideas based on F.G. Reamer's (1987) model, it is possible to conclude that social workers daily face the following ethical dilemmas which can also be attributed to interagency collaboration:

- Client's right to self-determination – from one side a client is responsible for his/her life, problems and decisions, regardless of the opinion of the social workers or other professionals involved in dealing with the issue about the correctness of the client's choice of action, professionals may recommend a solution, but the client's choice must be respected. From the other side, social worker must assess if the client's decision do not do harm the client him/herself or others, for example, as in cases with the suicidal risk.
- Confidentiality – how to draw a line when confidential information must be disclosed, how to determine the boundary behind which confidential information should be disclosed, for example, to which extent and to how many institutions domestic violence can be disclosed or the story of victims of human trafficking, in a way that disclosure does not lead the victim to even greater suffering.
- Differences of values and morals – conflicts between client's and professional's values, for example, a teenager wants an abortion but it clashes the values and moral principles of the social worker;



- Administrative dilemmas, for example, allocation of limited resources;
- Compliance with laws and regulations – in relation to support and caring about the client;
- Disclosure of colleagues' offenses - should a social worker always report on ethical breaches of colleagues in one's own organization or other organizations involved in solving the case; do specialists know where to go if breaching of ethical code is experienced, and how to maintain the reputation of the profession and organization in such situation in order not to lose the loyalty of the clients.

A Latvian practitioner – a Head and supervisor of Latvia Red Cross Crisis Centre “Burtnieks”, Ieva Antonsonsone, who also responded to the survey questions, adds the following dilemmas:

- Support and help vs client's own initiative and strength;
- Child's right to beneficial life conditions vs parents' rights to use the rights of family;
- Conflict that is created when one person's rights are protected vs interests of other family members;
- Loyalty towards organization vs needs and best interests of the client;
- Need for the services vs financial ability, disproportionate use of time and resources when working with clients with various problems (Antonsonsone, 2017).

Research methodology

In this research, besides analysis of literature, legislative documents and statistics data, a survey method was employed for exploring the actual situation in Latvia in terms of ethics and interagency collaboration. The survey was conducted in March and April, 2017 in 5 largest municipalities of the Western region of Latvia involving the social services and their subordinate organizations (Family departments and Social Benefits departments of Social Services, Social residential homes, Children homes, Old people's residential homes, Night shelters, Rehabilitation centres for persons addicted to psychoactive substances, a Day care centre for disabled people, Group apartments for people with disabilities), Municipal policy, Orphan Courts, 6 branches of the State Social Care Centre of Kurzeme Region, which provide long-term social care and rehabilitation services for children and adults with mental and physical disorders, and 12 non-governmental organizations, which provide social services or their work is related to social welfare (Crises centres for victims of family violence, day care centres for children from risk families, etc). All organizations, depending on the problems and specifics of clients, are involved in mutual collaboration.

The questionnaire consists of closed and multiple choice questions, leaving space for comments. The closed questions were used for gathering the general data about the respondents: gender, years of service in social welfare, organization in which they work, target group of clients, and with which institutions they interact when solving clients' cases. In order to understand how the respondents value mutual collaboration, what problems they as professionals face in the ethical context, and what are the most common ethical dilemmas in inter-institutional collaboration, eight multiple choice questions were asked. Knowing that the social service providers in Latvia are very busy, the choices of responses were offered, leaving space for the personal comments. At the end of the survey some space was provided for respondents to express and share their reflections, comments, and examples.

In total, 125 questionnaires were returned, which cannot be called a high respondents' activity, however, it is sufficient for the results of the study to be considered as valid. Moreover, the specifics of Latvia must be taken into account – most municipalities are small. For example, in the three of municipalities surveyed, the number of inhabitants ranges from 10,000-11,000, while two were the larger ones, according to official data - 39,000 and 78,000 people) (Iedzīvotāju reģistra statistika). In the reality the numbers are smaller as in the last decade many people have left Latvia due to economic considerations. Also, such social services as night shelters, half-way homes, group apartments, day care centres for people with special needs, addiction prevention centre, crisis centres for victims of violence, day care centres for seniors are only in the largest towns of Latvia.

From all the respondents 94% are women and 6% are men, which did not come as a surprise as in Latvia mostly women work in the social welfare system. In relation to social work, men would usually work in management positions, thus also from these 7 men who participated in our survey, 6 are heads of their organizations (4 –



heads of nongovernmental organizations (NGO), 1 – head of the municipal night shelter, and 1 – a deputy chief of municipal police). From all respondents 66% are social workers, 25 % – heads of organizations or departments, but 9% are representatives of other professions, such as members of the Orphan's Courts, medical assistants in social care institutions, etc.

Findings

To the question: how respondents evaluate the interagency collaboration in the context of ethics, only 12 % of respondents evaluated it as excellent when cooperating with all institutions involved, but 59% of respondents assessed the collaboration as *rather good*. 17% have noticed some ethical dilemmas, and they evaluated it as *average*, but 12% of respondents stated that it depends on the organizations and particular professionals involved in collaboration.

When asked, if during the inter-institutional collaboration respondents have met situations when basic social work values are violated against the client, mostly negative responses of different degrees were received: never, hardly ever, seldom, rather rare. But 20% of all respondents stated that the client's rights to freedom and self-determination have been violated rather often. The respondents who expressed this belief mostly work in different social care institutions or rehabilitation centres for persons with disabilities.

The same 20% percent of respondents consider, that in the process of interagency collaboration the clients' rights to receive professional assistance and principle of social justice are not respected rather often. 16% say that they have seen that clients get discriminated in cooperation with other professionals. These responses mostly came from NGOs and organizations involved in providing services and support to victims of violence and abuse, children and adults with disabilities, low-income people or socially disadvantaged seniors, as well as who work with addicts of psychoactive substances. 19 % of respondents believe that rather often confidentiality is not observed while collaborating, and this is mentioned also as aspect that causes ethical dilemmas.

Further, several multiple choice questions were asked, with the aim to clarify what obstacles or barriers respondents see in the process of inter-institutional collaboration, in order to follow fully the Code of Ethics. Most respondents (68%) have marked the response "lack of human resources", which proves that professionals are too busy to address in depth the multiple problems of the clients. Work with people requires tireless energy, empathy and self-control. A lot of time goes into completion of documents and transferring of them to other institutions. This creates an internal tension, which collaborating with professionals from other organizations with a different organizational culture can only increase. The lack of human resources could also mean that, according to the respondents, other professionals lack adequate professional and personal competence, which is evidenced by the next most popular answer – *ethical principles are not recognized*. I. Antonson (2017) tells a situation, when several specialists from different institutions had gathered at Crisis centre with the aim to discuss the situation of the client – a woman with children who all had suffered from domestic abuse. A local social worker from the client's village and an Orphan's court specialist from the same district expressed a great disliking towards this woman, indicating that she does not dress properly (during the summer, the client was wearing a shirt with a large neckline), saying that the woman cannot be a good mother, and other insulting statements were expressed as well. When the professional of the Crisis centre noted that the client's clothes have nothing to do with the women's skills to care for children, the other two began to question the professional competence of the specialist of the Crisis centre. Thus, interagency collaboration is not always supportive. 47% of respondents have stated that the collaboration is problematic because of the differences in the level of professionalism of the collaboration partners and differences in the profession/ ethical codes of each organization. Fewer respondents have chosen responses, such as 'inconsistencies in collaboration coordination/ management' and 'legislative imperfections'. But the further questions confirm the opinion about the high overload and the tensions experienced by professionals in their work. A large percentage of respondents mentioned professional burnout and lack of support as the greatest obstacles for following ethical practices.



In our research we wanted to clarify what ethical dilemmas face social work professionals in above mentioned region of Kurzeme, and how these dilemmas influence the decision making process when solving the client's cases. The survey results are revealed in Figure 2.

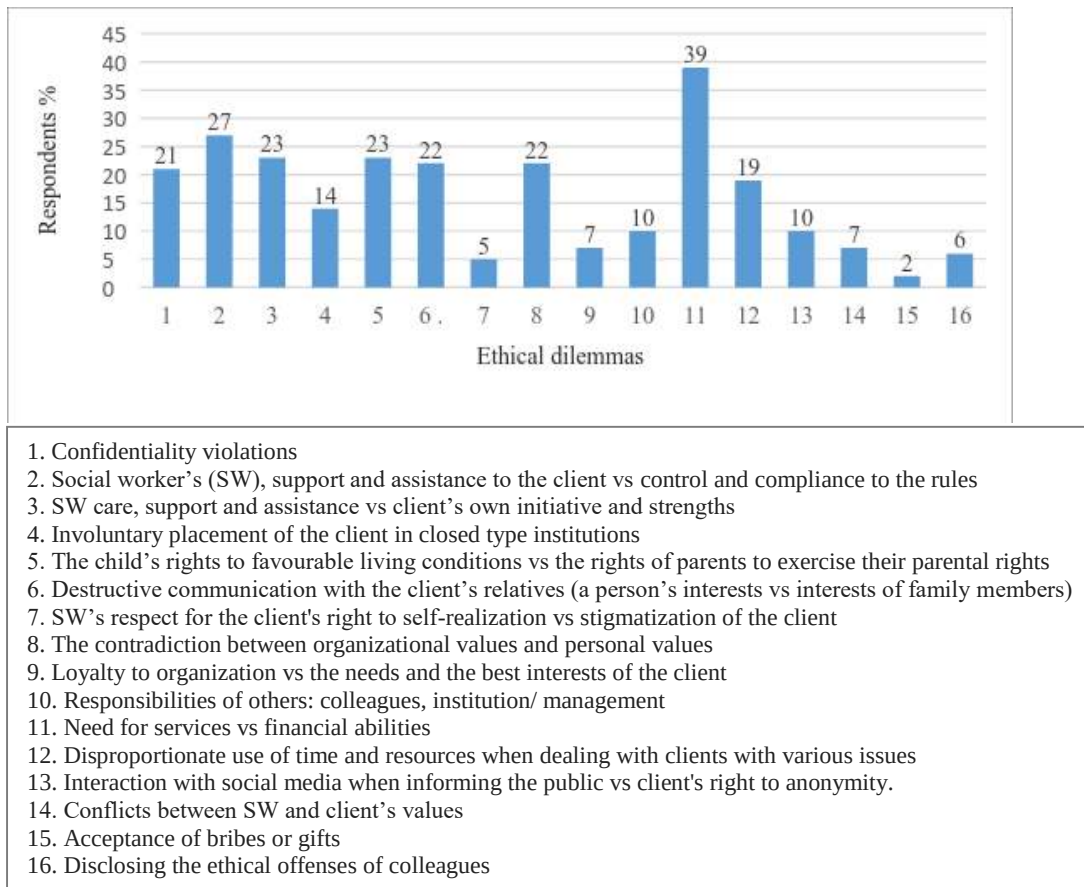


Figure 2. Ethical dilemmas in interagency collaboration

As it is seen in Figure 2, for Latvian social work professionals the greatest tension is created by the need for services vs financial possibilities. As it was mentioned before, many municipalities lack different alternative services. Presently, our country's high priority is moving away from residential care. According to statistics, in 2015, 1551 children and 5227 children and adults with disabilities still live in large long term institutions (to beginning of 2017, Latvia has 1 950 000 inhabitants) (Labklājības ministrija, 2015). In Latvia the deinstitutionalisation process is necessary for developing community based approaches and implement alternative systems of care based on the principles of providing family type or small group care. There is lack of such alternative services as foster families, host families, day care centres for street children, rehabilitation centres for children suffering from addictions as also other abovementioned services for children and adults with various problem issues.

The second most frequently chosen response was 'social worker's support and assistance to the client vs control and compliance to the rules'. It points at bureaucracy and many controlling institutions, which from one side are necessary, as they control the quality and lawfulness of services, but from the other side, the large amount of paperwork takes lots of time which otherwise could be spent supporting the client. The frequency of other responses can be seen in Figure 2. One of the respondents said: "I don't have such experience: we make decisions not according to ethical priorities but according to norms and regulations".

A separate section of the survey was devoted to the support system of professionals. Lithuanian authors Dirgėlienė and Veckienė (2016) in their study on Supporting Collaboration in Social Work Organizations admit



that social work professionals, performing complicated crisis intervention, seek to empower the client. In this empowerment process, the client with his/her unique needs is active as well. The fact that social work always takes place in the circumstances of intensively changing environment enhances the risk of “burnout” syndrome. Dirgėlienė and Veckienė sees supervision as the most effective method for avoiding professional “burnout”, therefore they advise that supervision as consulting on professional relations may efficiently contribute to social work as evaluation of new professional activity and construction of qualitative social work practice. Supervision (organisation, group, team, individual) may join together the resources of support providers and support receivers into a solid system while seeking for common goals of professional quality (Dirgeliene & Veckiene, 2016).

Our research results suggest that only 29% of surveyed professionals can attend regular supervisions, although the legislation states that each provider of social services must do so. In reality the supervisions are available only in largest cities. The smaller places lack professional supervisors, but the state financed long term institutions do not have funding for such staff member or for hiring one from outside. 26% of respondents receive support from the management of their organization, 8% confess that the support could be greater, but the largest part of respondents discuss the complicated situations with their colleagues. Antonsone stresses the importance of self-reflection in social work, saying that it is the ability to step back and ask oneself a serious question: why did things happen this way and what could anything be done differently? Reflection means thinking in present about the past for the future (Antonsone, 2017).

Responding to the question: “What do you think should be changed in order to provide more ethical social work services” the largest part of respondents (53%) suggest that regular supervisions should be provided with the possibility to choose the supervisor (See Figure 3).

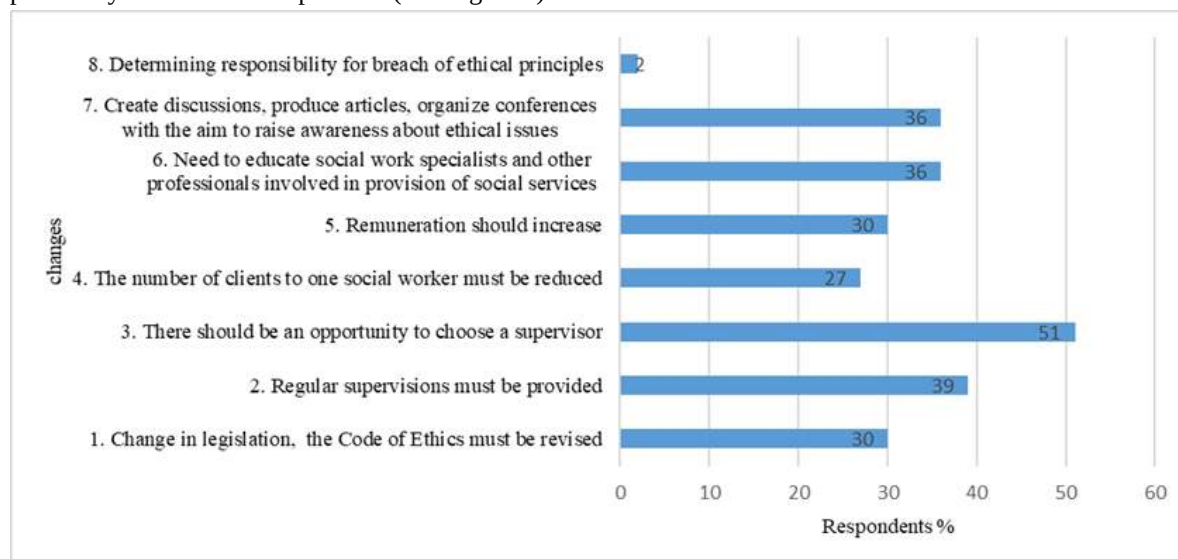


Figure 3. Changes needed for improvement of ethical practices

12% of respondents marked all suggested choices, but 2% added in their comments that there should be responsibility determined for breaching ethical principles. 37% of respondents emphasized the need to educate social work specialists and other professionals involved in provision of social services. The need for education was stressed also in Social Work Conference of Latvia, which was held in Riga, in 2017, suggesting that in social work learning programmes a particular course should be incorporated which not only would give a theoretical knowledge about issues of ethics, but would also provide practical examples that would allow to understand the challenges social workers will face in their practice. Also there is a need to teach self-reflection skills. Our research proved that there is also a need for productive discussions, qualitative articles, and conferences which would raise awareness on issues of ethics. 30% or respondents are convinced that there should be changes in legislation and that the Code of Ethics should be revised. In any case, all surveyed professionals acknowledged the need to actualize the ethics of social work.



Recommendations and conclusion

As shown by results of our research, the majority of respondents link their suggestions for improving interagency collaboration with accessibility of supervision and option to choose a supervisor. Attention must be paid also to the other comments expressed by respondents: *There is a need to reduce the work load in order to avoid professional burnout; Social workers must be careful when sorting out problems of other families, and do not leave one's own family unattended; Ethical principles are often neglected in senior care and social rehabilitation when collaborating with medical staff (family doctors, doctors, etc.), as unfortunately their opinion often is that a low-income or poor senior cannot desire a good state of health.* Another respondent writes that the collaboration is important for solving client's problems and working towards a unified goal. For example, if a child is abused, the Orphan court looks out that the best interests and needs of this child are supported, but the social work specialist works with the child's family that the offenses against the child would stop and that the child could either remain in the family or return back home. But the social work practice proves that the social worker often does not work on the actual issue of abuse, instead tries to eliminate unemployment, controls if the home is clean and well-organized, that that the parents would attend meetings with social worker and would allow the family to be examined at their place of residence. There were respondents who emphasized that social workers should become more active, engage in the work of various organizations, also in policy making and research. From gathered research data it can be concluded that in Latvia there are still several social work target groups, which face discrimination and do not receive equal treatment from different organizations. The social work clients rarely participate in the decision making process.

Conclusion

Ethics is at the basis of social work, as the basic values of social work are based on theories of moral and ethics. Since the beginnings of secular professional social work, social work specialists are facing a challenging task – to provide professional and ethically and morally based assistance and support to other people that are marginalized and excluded from society due to their dysfunctionality. As time goes by and the specifics of the problems change, social service providers also need to change. In order to solve the problems that are becoming more multi-layered and complex, not only high professional competence is needed but also a set of high-quality human qualities. Ability to successfully engage in inter-professional and interagency collaboration is of crucial value. However results of our research show that regardless of the generally positive evaluation of collaboration, there are several negative experiences in the context of ethics. Negative outcomes can be reduced by referring to the guidelines of Code of Ethics and social policy that needs to be updated from time to time. It was emphasized in the most recent Latvia's Social Work conference (2017) that was dedicated particularly to issues of ethics, and also it was proven by data of our research. Different professional groups must be encouraged to break down barriers and to work together collaboratively not only by carrying out statutory activities, but also by trying to maintain a respectful and ethical relationship both with the clients and other professionals.

References

- Antle, B. (2005). Components of Ethical Practice. Canadian Association of Social Workers' Code of Ethics Internal Training, Ottawa, Ontario. Retrieved from: http://www.nlasw.ca/sites/default/files/inline-files/Ethical_Decision_Making_Framework.pdf
- Antonsone, I. (2017). Supervīzijas un refleksijas nozīme ētikā balstītās attiecībās ar klientu (The role of supervision and reflection in ethics based relationships with the client). *Social work in Latvia*, p.21- 26.
- Banks S. (2004). *Ethics, Accountability and the Social Professions*. Basingstoke, Palgrave Macmillan.
- Bruner C. (1991). Thinking collaboratively: Ten questions and answers to help policy makers improve children's services. ERIC. Retrieved from <https://eric.ed.gov/?id=ED338984>
- Carnwell, R., Carson, A. (2009). The concepts of partnership and collaboration. In: R. Carnwell and Buchanan (Eds.) *Effective Practice in Health, Social Care and Criminal Justice: Working Together* (2nd Edition). Open University Press.
- NASW Code of Ethics (2008). National Association of Social Workers, Washington. Retrieved from <https://www.socialworkers.org/pubs/code/code.asp>



- Dewane C. J. (2006). Use of self: A primer revisited. *Clinical Social Work Journal*, 34 (4), 543 – 558.
Retrieved from https://www.academia.edu/939420/Use_of_self_A_primer_revisited
- Dirģelienė, I., Veckienė N. P. (2016). Supportive Collaboration in Social Work Organizations: Perspective of Supervision. Latvian Christian Academy. *Proceedings* 4, (194 – 206). Retrieved from <http://kra.lv/proceedings/42016/Proceedings%20LChrA%204%202016%20Dirgeliene,Veckiene%20Supportive%20Collaboration%0in%20Social%20Work%20Organizations%20Perspective%20>
- Global definition of Social Work (2014). International Federation of Social Workers (IFSW). Retrieved from: <http://ifsw.org/get-involved/global-definition-of-social-work/>
- Henneman, E.A., Lee, J.L. & Cohen J.I. (1995). Collaboration: a concept analysis. *Journal of Advanced Nursing*, 21: 103-9.
- Iedzīvotāju reģistra statistika uz 01.01.2017. (2017). Population registry statistics for 01.01.2017. LR IM Pilsonības un Migrācijas lietu pārvalde. Latvijas iedzīvotāju skaits pašvaldībās. Retrieved from http://www.pmlp.gov.lv/lv/assets/documents/Iedzivotaju%20re%C4%A3istrs/07022017/ISPV_Pasvaldibas_iedzivotaju_skaits.pdf
- Latvijas Republikas Saeima. (2000) Fizisko personu datu aizsardzības likums (Personal data protection law). Pieejams:<https://likumi.lv/doc.php?id=4042>
- Latvijas sociālo darbinieku ētikas kodekss (Latvian Code of ethics for social workers) (2001). Retrieved from: <http://www.lm.gov.lv/upload/publikacijas/sdetikaskodekss.pdf>
- LR Satversmes sapulce. (1922). Latvijas Republikas Satversme. Pieejams: <https://likumi.lv/ta/id/57980-latvijas-republikas-satversme>
- Ministru kabinets (2017) Prasības sociālo pakalpojumu sniedzējiem (Requirements for social work providers). Retrieved from: <https://likumi.lv/doc.php?id=291788>
- Paproski D. L., Haverkamp B. E. (2000). Interdisciplinary Collaboration: Ethical Issues and Recommendations. *Canadian Journal of Counselling*, 34 (2), 85-98. Retrieved from files.eric.ed.gov/fulltext/EJ609443.pdf
- Labklājības Ministrija (2013) Profesionālā sociālā darba attīstības pamatnostādnes 2014.-2020.gadam (Guidelines for the development of professional social work in Latvia for 2014-2020). Retrieved http://www.lm.gov.lv/upload/tiesibu_aktu_projekti_2/iesibu_aktu_projekti_3/lmpamatn_140613_sd.pdf
- Reamer F. G. (1987) *Value and Ethics. Encyclopedia of Social Work*. Vol. II, Silver Spring: National Association of Social Workers.
- Labklājības Ministrija. (2015). Rīcības plāns deinstitucionalizācijas īstenošanai 2015.-2020.gadam (Action plan for implementation of deinstitutionalisation for 2015-2020). Retrieved from http://www.lm.gov.lv/upload/aktualitates/null/2015_15_07_ricplans_final.pdf
- Scherman (2017). Video recording of Conference "Profesionālā integritāte sociālajā darbā II: Ētika sociālajā darbā" (Professional Integrity in Social work II: Ethics in social work), Part I, recorded on 24.03.2017. Retrieved from <https://www.youtube.com/watch?v=Ug14W2i834s&t=9140s>
- Shennan, G. (2016) Video recording of Conference "Profesionālā integritāte sociālajā darbā I" (Professional Integrity in Social work), Part I. Retrieved from <https://www.youtube.com/watch?v=p11j2S2Kj5E&t=5194s>
- Sociālā darba terminoloģijas vārdnīca* (Dictionary of social work terminology). (2000) Rīga: SDSPA "Attīstība".
- Townsley R., Watson D., Abbott D. et al (2004). The proof of the pudding: What difference does multi-agency working make to families with disabled children with complex health care needs? *Child & Family Social Work*. 10 (3), 229–238. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2206.2005.00362.x/full>
- Whittington C., Thomas J., & Quinney A. (2009) An introduction to interprofessional and interagency collaboration. SCIE IPIAC e-learning resource, Retrieved from at <http://www.scie.org.uk/assets/elearning/ipiac/ipiac01/resource/text/index.htm>
- Whittington, C. (2003). A model of collaboration. In J. Weinstein, C. Whittington, & T. Lieba (Eds.). *Collaboration in social work practice*, (p. 1-61). London: Jessica Kingsley Publishers.



Promoting Diversity Competence Development in Professional Profile of Teachers

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Abstract

One of the keywords characterizing the vision of modern society is diversity - not only related to ethnic background, culture and gender, but also to the differences of people, similarities and unique characteristics as individuals and groups. There is a need to learn to understand it both as a value and a positive educational resource in overcoming tensions generated by societal change and globalization. In this context, the issue of teachers' diversity competence development and being aware of its transversal character is of utmost importance for opening up possibilities to understand the way we relate to each other and the way we can live together. Although there are ongoing discussions on diverse learners' opportunities, minority schools and inclusive education in Latvia, the research findings indicate that there is an imbalance between existing diversity in society and skills to express tolerance and communicate. As learning to live together is an essential part of school education and equal opportunities and the development of human potential to its fullest is emphasized, the authors chose to focus on particular diversity aspects in the study, especially turning attention to the teachers' competence in the work with gifted children and children with special needs. The goal of the study – to investigate the manifestations of teachers' diversity competence in the context of inclusive education. The research question – how teachers' self-assessment reveal their 1) tolerance to the diversity of learners, and 2) application of professional skills in an educational environment. The quantitative research approach and methodology of the questionnaire as a data collection technique was applied in the study. Respondents were selected by purposeful random sampling strategy and the method of descriptive statistics was used to data analysis. The results of the study will be integrated in the process of teacher education, in order to deepen the awareness of teachers' diversity competence by encouraging the transfer from its visible aspects to the deeper layers - professional attitudes, knowledge, practical know-how and professional actions, thus preparing teachers to work with diverse learners in different educational contexts.

Keywords: Diversity, Inclusive education, Professional competence of teachers

Introduction

The article addresses diversity competence as a key competence for every individual necessary for effective functioning within the context of societal change and globalization. Moreover, recognizing the importance of the issue and being aware of its transversal character it is possible to open up opportunities, understand the way we relate to each other, and how we can live together. Therefore there is a need to learn to understand diversity both as a value and a positive educational resource in inclusive educational contexts.

The authors of the article conceptualize diversity as it refers to the extent a group reflects individuals from different identifiable backgrounds and represents a multitude of individual differences and similarities that exist among people. Our understanding is rooted in the works of, among others, Deardorff (2006), Delors (2013), Gardenswartz and Rowe (1998), Hanovs, Laicane and Mihailovs (2009), Mecheril and Plöber (2011), Sauter and Schroeder (2007), Sheets (2005), and Walgenbach (2014). These sources communicate diversity as oriented towards the characteristics of social groups' values and encompass different aspects such as race, age, national origin, religion, ethnicity, sexual orientation and others. In its turn, inclusive education ensures appropriate conditions for meeting the needs of diverse learners, including different perspectives and unique contributions of each



individuality. It has to be added that these individual differences and diverse perspectives are viewed as enriching and assessed as positive – like a common source of knowledge, growth and changes for all individuals involved in communication and collaboration, rather than being a burden for educational institutions.

Diversity is seen as a hallmark of European school education systems and the development of more inclusive schools as well as the provision of support for teachers are of utmost significance. However, the theoretical context reveals the complexity and mutual interconnectedness of the terminology relating to diversity and inclusive education due to the differences in interpretation and meaning both within and between countries. (Communication from the Commission to the European Parliament..., 2017; Rashid & Tikly, 2010; Thoma & Rehle, 2009) Although inclusive education is defined as a priority for strategic development of the education system and the ultimate goal of education policy in Latvia, there is no a single definition and shared understanding of the concept – in strategic documents it is viewed not as a promotion of every child's optimal development by using his/her individual resources, but as an exclusive form of education for special groups of learners. (Izglītības pamatnostādnes 2014.-2020. gadam, 2014) There are ongoing discussions on diverse learners' opportunities, but in most cases, they focus on children with special education needs and children at risk of social exclusion and leave unnoticed gifted and talented children, who also need individual approach if they are to realize their full potential. It has to be concluded that there is an imbalance between existing socio-cultural diversity in society and skills to express tolerance and communicate in the context of Latvia – society expresses insufficient competence in relation to diversity issues and does not ensure the dissemination and strengthening of diversity phenomenon in the process of education. (Hanovs, Laicane, & Mihailovs, 2009) Therefore it is sufficient for teachers, who educate young generation and serve as the role models for future teachers, to deepen the awareness of diversity competence that is one of the competence areas for the teaching profession, thus enabling them to engage with socio-cultural diversity in the classroom and in the school community. (Schratz, 2014)

There are several models developed by different authors that reflect the components of diversity competence. Aschenbrenner – Wellmann's (2009) diversity competence model is based on cognitive and affective components, characterized by the amount of theoretical knowledge and ability to appreciate mutual tolerance, as well as it includes a behavioural component – ability to use non-evaluative dialog, support heterogenic team and ability to implement diversity as a criterion for efficiency. Also, the aspects of diversity components developed by Rosken (2009) complement the components mentioned before, for example, ability to perceive and respect different and common features, particularly emphasizing the ability to reflect on personal actions and behaviour patterns, as well as the skill to avoid stereotypes. Thus, shared understanding of diversity means self-awareness, awareness of others and interpersonal dynamics – mutual interaction in ways that are efficient and respectful. (Loden, 1996) According to Sheets (2005), the potential of teachers depends on a capacity to perceive diversity as a norm and view it as fundamental to all aspects of the teaching-learning process. She focuses on the interconnectedness between teacher pedagogical behaviours and student cultural displays that are closely interrelated and complement each other, particularly turning attention to (1) diversity recognition; (2) didactic aspect; (3) communication, and (4) open microclimate for diverse social interactions.

In order to reveal the complexity of the diversity concept and the way how all of us process stimuli and information that promotes diversity competence development, the authors of the article focus on the four layers of Diversity model (Gardenswartz & Rowe, 1998). It consists of the personality aspect shaped early in life and is both influenced by, and influences, whereas the internal, external, and organizational dimensions are formed throughout one's lifetime and career choices. The dimensions



mutually interact and impact both the individual and the context itself encouraging and improving professional attitudes, values, knowledge, practical know-how and professional actions, thus preparing teachers to work with diverse learners in different educational contexts.

The Diversity model (Gardenswartz & Rowe, 1998) can also be used as a reflective tool, since interpretation, reflection and decision making form an important part of pedagogical professionalism. In order to further develop the competence, it is important to be particularly aware of how the contextual aspects are interpreted and reflected. Personal self-reflection might serve as a tool for the implementation of the socio-educational pedagogical activity, determined by previous personal and professional experience. (Hanovs, Laicane, & Mihailovs, 2009) This issue confirms the belief that values and attitudes significantly affect the process of diversity competence development – as noted by Deardorff (2006), it is necessary, to begin with attitudes and move from individual level to interaction level, since the degree of the developed and improved competence depends on acquired degree of attitudes, knowledge, comprehension, and skills.

In this context heterogeneity that includes the work with heterogeneous groups and respects differences, becomes of the utmost importance and is seen as a valuable and potential resource. However, it has to be mentioned that heterogeneous grouping might be harmful, particularly for gifted and talented learners, if there is no appropriate instructional and curricular differentiation across the ability levels that reduces excellence gaps (Plucker & Callahan, 2014). Therefore the authors of this publication emphasize pedagogical programmatic dimension of heterogeneity that encourages to find out pedagogical solutions in the context of inclusive education. (Sauter & Schroeder, 2007; Walgenbach, 2014)

As the result, the understanding and awareness of the diversity concept have become a vital requirement in nowadays complex and changing society and education is the only solution in promoting an attitude of tolerance and inclusiveness. (Delors, 2013) Since learning to live together as an essential part of school education, as well as the equality of the opportunity to develop one's own human potential to its fullest has been emphasized, the authors chose to focus the study on particular diversity aspects, especially turning attention to the competence of teachers to educate gifted and talented children and children with special needs.

Method

The aim of the research was to investigate the manifestations of teachers' diversity competence in the context of inclusive education. **The research question** was defined as follows: how teachers' self-assessment reveal their 1) tolerance to the diversity of learners, and 2) application of professional skills in an educational environment.

The quantitative research approach and methodology of the questionnaire as a data collection technique was applied in the study. The scientifically valid questionnaire for evaluating teachers' readiness to educate children with special educational needs, consisting of 78 questions ($\alpha = 0.962$), was elaborated at Siauliai University (Lithuania) with the aim to access the voices of participants as they reflect on their professional competence aspects. For statistical analysis of the research data, the SPSS 22.0 programme was used: a method of descriptive statistics, Kruskal-Wallis test, and Kendall's tau-b correlation test. Five answers were offered to measure the respondents' attitude on a Likert-type five point scale.

The data were obtained during the period of 2012 – 2017 and analysed in accordance with the diversity pedagogical dimensions reflecting teachers' professional competences and pedagogical behaviour



(Sheets, 2005). The respondents were selected by purposeful random sampling strategy and they represent educational institutions that are located in different regions of Latvia. The respondents are teachers (N = 284) of different age, different professional qualifications and seniority levels (see Table 1).

Table 1. The groups of respondents

Pedagogical work experience		Professional qualification	
Length in years (%)		Professional group (%)	
up to 1	2.8	Preschool education teachers	11.3
1-5	12.7	Basic education teachers	12.3
6-10	19.4	Subject teachers	27.8
11-15	10.9	Pedagogical and psychological support team personnel	11.6
16-20	9.9	Other	37.0
21-25	13.4		
26-30	11.6		
31-35	9.5		
36 -40	4.2		
more than 40	5.6		

It must be added that the dominating qualifications in the group of *Pedagogical and psychological support team personnel* are Speech therapists and School psychologists, but the indicator *Other* refers to the respondents with two professional qualifications in the field of education.

Analysing the respondents involved in the research, it can be concluded that different professional groups of teachers with different work experience are represented. In addition, the proportion of novice teachers with little work experience is relatively small. All respondents have higher pedagogical education, and, taking into account the national requirements for regular compulsory involvement in continuous professional development, they also have significant experience in the acquisition of various further education programmes.

Findings

The authors share the belief that teachers' professional competence requires not only specific professional attitudes, knowledge and skills but also concrete professional actions. Therefore, for the research purposes, the questions of the questionnaire were grouped into 4 categories: (1) teachers' self-evaluation related to their ability to provide education for diverse groups of students with: mental, sensory and physical development disorders, behavioural disorders, learning difficulties and giftedness; (2) didactics and assessment – indicators for pedagogical process organization for students and skills to use effective didactic technologies in the process of education; (3) indicators for efficient social interaction with students; (4) teachers' competence indicators in relation to the creation of an open microclimate for diversity in the educational institution.

The findings related to the first category of questions - **teachers' self-evaluation related to their ability to provide education for diverse groups of students** are reflected in Table 2.



Table 2. Self-evaluation of respondents related to their ability to provide education for diverse groups of students

Groups of students	Complete shortage (%)	Little shortage (%)	Do not know how to evaluate (%)	May be sufficient (%)	Completely sufficient (%)	Mean Rank
Students with mental, sensory and physical development disorders	15.5	30.6	15.1	29.6	9.2	2.836
Students with behavioural disorders	7.4	29.2	8.5	44.0	10.9	3.215
Students with learning disorders	4.2	26.1	12.0	45.4	12.3	3.356
Students with giftedness	7.7	21.8	15.1	34.9	20.4	3.384

In this context, the results of Kruskal – Wallis test allow identifying significant differences ($p=0,011$) that are dependent on the qualification of the respondents in relation to the skill *To organize education process for gifted students*. The highest self-evaluation is characteristic for the group of respondents representing subject teachers (Mean Rank 167,91). Equally high this skill has been self-evaluated by the group of basic education teachers and the respondents with two professional qualifications in the field of education (Mean Rank 137,81). In its turn, the lowest self-evaluation of the skill has been observed for the pedagogical and psychological support team personnel (Mean Rank 116,33).

In relation to the second group of questions reflecting **didactical and assessment aspect**, the research findings certify high levels in self-evaluation of several skills in the sample of respondents. Among the skills possessing the highest level of self-evaluation are the following ones: (1) *To organize holidays, excursions, exhibitions* (Mean Rank 4,155; 44,7% of the respondents consider it as completely sufficient); (2) *To select and apply teaching and learning aids* (Mean Rank 4,060; 34,2% of the respondents consider it as completely sufficient); (3) *To assess the students' abilities* (Mean Rank 4,007; 32,0% of the respondents consider it as completely sufficient); (4) *To assess the results of the education process* (Mean Rank 4,000; 32,0% of the respondents consider it as completely sufficient). The results of Kruskal-Wallis test point to the developed skills that might enhance the pedagogical process, including the quality of inclusion, for example, the skill *To assess the students' abilities* correlates with the skill *To promote education process for children with learning difficulties* and the skill *To organize education process for gifted students* (in both cases $r = 0,310$ and $p = 0,000$).

However, there has been identified a problematic issue during the analysis of the results – majority of pedagogues face difficulties to develop programmes, as well as adapt and modify them. The lowest level of self-evaluation is attributed to the skill *To develop special programmes* (Mean Rank 2,757) – 20,1 % of the respondents acknowledge a complete shortage of this skill. Also, the skills *To develop adapted programmes* and *To develop modified (restructured) programmes* have been evaluated as insufficient (Mean Ranks 2,930 and 2,9333). The low rating of the skills mentioned above influence the skill *To provide education process for children with developmental disorders* that is confirmed by the correlation of the indicators for the following skills: *To provide education process for children with mental, sensory (vision and hearing) and physical development disorders* and *To develop special programmes* ($r = 0,472$, $p = 0,000$).

Respectively, the results of Kruskal Wallis test revealed sufficient differences in the rating of only one skill that is dependent on work experience – *To analyse learning difficulties of students*, where the self-evaluation indicates relevant differences ($p = 0,017$): the highest self-evaluation is for the respondents with work experience from 16 to 20 years (Mean Rank 165,89) and with work experience from 31 to 35 years (Mean Rank 154,94), whereas the lowest – for the respondents, whose work experience is from one to 5 years (Mean Rank 100,83) and from 36 to 40 years (Mean Rank 102,71).



Depending on the qualifications of the respondents, Kruskal Wallis test results point to the essential differences ($p = 0,031$) in the self-evaluation levels for the skill *To develop special programmes*: equally low self-evaluation (Mean Rank 129,49) is found in the ratings of subject teachers and preschool teachers, whereas the highest self-evaluation – in the group of basic education teachers (Mean Rank 170,46) and slightly lower – in the group of pedagogical and psychological support team personnel (Mean Rank 167,23). At the same time very sufficient differences ($p = 0,008$) are found in the self-evaluation of the skills *To provide education process for children with special needs*: convincingly the highest self-evaluation is in the group of pedagogical and psychological support team personnel (Mean Rank 176,89), but the lowest – in the group of preschool teachers (Mean Rank 118,58). Similarly, very sufficient differences ($p = 0,007$) are found in the self-evaluation of the skill *To differentiate and individualize the process of teaching*: convincingly the highest self-evaluation is in the group of pedagogical and psychological support team personnel (Mean Rank 179,05). Respectively lower self-evaluation in this context is found in the group of preschool teachers (Mean Rank 163,41) and the lowest self-evaluation - in the group of basic education teachers (Mean Rank 124,50).

The third group of questions reflecting the **indicators for efficient social interaction with students** shows the findings in Table 3.

Table 3. Respondents' self-evaluation of the skill for efficient social interaction with students

Skills	Complete shortage (%)	Little shortage (%)	Do not know how to evaluate (%)	May be sufficient (%)	Completely sufficient (%)	Mean Rank
To apply knowledge of special education in everyday work	2.5	21.8	8.1	46.8	20.8	3.616
To prepare children with special needs for independent life	9.2	22.5	22.5	34.9	10.9	3.155
To organize work for children with special needs in the school of general education/preschool	7.7	27.1	15.1	39.8	10.2	3.176
To ensure individual help in accordance with learning difficulties for the students with special needs	3.2	16.9	8.1	53.5	18.3	3.669
To use individual approach of different kind	2.8	13.4	2.1	54.6	27.1	3.898
To determine the current needs of students	1.1	18.0	5.3	52.8	22.9	3.785
To use different kinds of grouping children in accordance with their level of knowledge and abilities	2.5	18.0	7.4	52.5	19.7	3.690
To promote self-education of students	3.2	15.8	9.9	55.3	15.8	3.648
To control the behaviour of students	1.1	20.8	5.6	48.6	23.6	3.912
To solve conflict situations with the students	2.1	9.5	4.2	49.3	34.9	4.053
To entrust responsibility to the students on different issues	1.8	11.3	6.3	48.2	32.4	3.982
To encourage the students and praise them	2.5	3.2	1.4	38.7	54.2	4.387
To create a contact easily	1.1	5.6	3.2	46.1	44.0	4.257
To express the ideas clearly	1.4	8.5	2.8	50.0	37.3	4.130

The results of Kruskal Wallis test revealed sufficient differences in the rating of the skills that are connected with the self-evaluation of efficient social interaction with students and are dependent on work experience: (1) sufficient differences ($p = 0,036$) are found in the self-evaluation of the skill *To*



apply knowledge of special education in everyday work: the respondents with the work experience from 31 to 35 years (Mean Rank 168,85) and the work experience from 16 to 20 years (Mean Rank 160,88) rate it higher than the respondents with the work experience from 36 to 40 years (Mean Rank 102,54) and the respondents with the work experience from 26 to 30 years (Mean Rank 107,24); (2) essential differences ($p = 0,015$) are also found in the self-evaluation of the skill – *To use individual approach of different kind*: convincingly the highest self-evaluation is for the respondents with work experience from 16 to 20 years (Mean Rank 171,39), whereas the lowest – for the respondents, whose work experience is from 36 to 40 years (Mean Rank 101,71) and over 40 years (Mean Rank 104,44). Depending on the qualifications of the respondents, this context points to the essential differences in the self-evaluation of the following skills: (1) *To apply knowledge of special education in everyday work* ($p = 0,016$) is evaluated higher in the group of pedagogical and psychological support team personnel (Mean Rank 163,65), but lower - in the group of preschool teachers (Mean Rank 103,06); (2) *To determine the current needs of learners* ($p = 0,013$): the highest self-evaluation is in the group of preschool teachers (Mean Rank 165,47) and pedagogical and psychological support team personnel (Mean Rank 163,08), whereas the lowest self-evaluation is found in the group of basic education teachers (Mean Rank 121,66); (3) *To create a contact easily* ($p = 0,027$): preschool teachers more often evaluate their skills to create a contact (Mean Rank 179,81), but the lowest self-evaluation for this skill is observed in the group of subject teachers (Mean Rank 129,34).

There have also been noticed the correlations between diversity groups and the indicators of social interaction with students. The most significant relationships were found between the skills *To promote education process for children with learning difficulties* and *To ensure individual help in accordance with learning difficulties for the students with special needs* ($r = 0,548$, $p = 0,000$) and the skills *To promote education process for children with learning difficulties* and *To use different kinds of grouping children in accordance with their level of knowledge and abilities* ($r = 0,403$, $p = 0,000$).

The results of Kendall's tau-b correlation test certify the lack of correlation between the skill *To provide education process for children with mental, sensory (vision and hearing) and physical development disorders* and the skills *To organize work for children with special needs in the school of general education/preschool*, *To promote self-education of students*, *To control the behaviour of students*, and *To entrust responsibility to the students on different issues*.

Finally, the fourth group of questions reflect **teachers` competence indicators in relation to the creation of an open microclimate for diversity in the educational institution** (see Table 4).

Table 4. Respondents` self-evaluation of the skill to create an open microclimate for diversity in the educational institution

Skills	Complete shortage (%)	Little shortage (%)	Do not know how to evaluate (%)	May be sufficient (%)	Completely sufficient (%)	Mean Rank
To influence the opinion of society on education and integration opportunities for children with special needs	13.4	20.1	19.4	40.1	7.0	3.074
To ensure physical and psychological safety for children with special needs	4.6	18.7	9.8	47.5	19.4	3.585
To create appropriate environment to ensure the education process for children with special needs	3.2	17.3	5.3	49.6	24.6	3.754
To strive for flexibility and diversification in the education process	3.5	14.1	4.9	46.2	31.3	3.877



To analyse pedagogical actions	2.1	14.1	3.9	53.5	26.4	3.877
To reveal inclinations and interests of the students	1.4	13.0	3.9	56.0	25.7	3.915
To strive for democratic relationship with children with special needs	1.8	12.7	7.7	46.1	31.7	3.933
To maintain the balance between the students' proposed education and the teacher's initiative	3.2	16.5	10.2	51.8	18.3	3.655
To promote the students' initiative and independence	0.4	9.5	4.1	59.2	26.8	4.025
To express a positive attitude towards the children with special needs	1.4	3.9	1.4	37.8	55.5	4.420
To foster creativity of children	1.1	6.7	2.4	50.0	39.8	4.208
To express positive attitude in solving problems	1.1	6.7	1.4	41.5	49.3	4.313
To maintain a positive emotional climate in the classroom/preschool group	4.6	4.9	2.1	48.6	39.8	4.141
To create a positive emotional climate in the classroom/preschool group	2.5	7.0	3.2	44.7	42.6	4.180
To be sensitive towards the child's inner state	2.8	15.5	6.7	50.0	25.0	3.789
To control personal negative emotions without losing self-control	1.8	11.3	3.8	51.4	31.7	4.000
To promote the child's self-reliance	2.5	10.2	6.7	53.5	27.1	3.926
To be more sensitive towards the child	1.1	5.3	1.1	40.7	51.8	4.366
To listen to the child and hear him/her	1.1	5.3	1.1	38.6	53.9	4.387
To create emotionally positive and efficient interpersonal relationships	1.1	4.9	1.4	43.0	49.6	4.349
To tolerate different views	1.4	8.1	1.4	39.8	49.3	4.268
To be patient in the work with the children with special needs	0.8	8.1	1.4	43.0	46.7	4.268
To be compassionate	1.8	4.2	0	35.2	58.8	4.444

The results of Kruskal Wallis test revealed existing differences that are dependent on work experience: (1) significant differences ($p = 0,022$) in the self-evaluation of the skill *To be sensitive towards the child's inner state*, where the highest evaluation is in the group of respondents with the work experience from 11 to 15 years (Mean Rank 165,98), but the lowest – in the group of respondents with the work experience from 36 to 40 years (Mean Rank 106,33); (2) very significant differences ($p = 0,010$) in the self-evaluation of the skill *To control personal negative emotions without losing self-control* – also here the highest evaluation is in the group of respondents with the work experience from 11 to 15 years (Mean Rank 160,29), but the lowest – in the group of respondents with the work experience from 36 to 40 years (Mean Rank 99,13).

In relation with the qualifications of the respondents, there were essential differences ($p = 0,035$) in the self-evaluation of the skill *To promote the students' initiative and independence*: preschool teachers rate it the highest (Mean Rank 179,27), but basic education teachers – the lowest (Mean Rank 128,43). The results of Kendall's tau-b correlation test identify in general low correlations ($r < 0,300$) between the groups of respondents and the indicators of open microclimate for diversity in the educational institution. Comparatively the most significant in this context are the correlations between: (1) the skill *To organize work for the students with behavioural disorders* and the skills *To ensure physical and psychological safety for children with special needs* ($r = 0,338$, $p = 0,000$), *To create appropriate environment to ensure the education process for children with special needs* ($r = 0,325$, $p = 0,000$); (2) the skill *To promote education process for children with learning difficulties* and the skills *To strive for democratic relationship with children with special needs* ($r = 0,342$, $p = 0,000$), *To maintain the*



balance between the students` proposed education and the teacher`s initiative ($r = 0,334$, $p = 0,000$), *To express positive attitude in solving problems* ($r = 0,320$, $p = 0,000$), *To ensure physical and psychological safety for children with special needs* ($r = 0,310$, $p = 0,000$), *To analyse pedagogical actions* ($r = 0,304$, $p = 0,000$).

There was indicated no correlation between the skill *To provide education process for children with mental, sensory (vision and hearing) and physical development disorders* and the following skills, like *To influence the opinion of society on education and integration opportunities for children with special needs*, *To strive for flexibility and diversification in the education process*, *To analyse pedagogical actions*, *To control personal negative emotions without losing self-control*, *To promote the child`s self-reliance*, *To be more sensitive towards the child*, *To listen to the child and hear him/her*, *To tolerate different views*, *To be patient in the work with the children with special needs*.

Results, Conclusions and Recommendations

Theoretical frameworks address the diversity competence of teachers as a positive resource for education process organization that can help to identify and meet the needs of every individual involved in the process of education. This also refers to the respect of different learning styles and pedagogical technologies, as well as ensures equity and equal attitude viewed as one of the preconditions for seeking out pedagogical solutions. It is important that teachers are able to recognise a socio-cultural context and aspects of diversity not as learners` deficits, but as fulfilling resources for promoting a rich learning environment.

The intention of the authors was to understand and reflect the manifestations of teachers` diversity competence in the context of inclusive education in Latvia and show the interconnections between the teachers` self-evaluation factors and professional skills to engage with possible challenges and present potential solutions in terms of diversity competence aspects. It is important to emphasize the interaction and interdependence of the diversity competence dimensions – attitudes, values, knowledge and skills, where often the knowledge dimension appears as the main, whereas attitudes, values and skills remain neglected. Based on our theoretical and empirical study, it is possible to reflect on and critically evaluate the findings of the study, consider what might count as successful aspects and identify some of the main challenges facing us as future teacher educators, as well as draw the following **conclusions**:

1. Inclusive education, including the idea of diversity, has been defined as a priority of education policy in the context of education system of Latvia, but still there is no shared understanding of the phenomenon - its meaning is mostly connected with an exclusive form of education for special groups of learners. However, education has to have a pivotal role in solving problem situations concerning the issues of diversity by acknowledging diversity as a value and ensuring availability and accessibility of education for diverse groups of learners, thus promoting equality, equity, and social inclusion and creating a culture where diversity is understood and valued.
2. Although there is a discourse on the equality of opportunities for diverse learners, in most cases, they focus on children with special education needs and children at risk of social exclusion and leave unnoticed gifted children, who also are very diverse in both characteristics and educational needs. Accordingly, the group of gifted learners appear to be neglected both by the society and education system as a whole that has been proved by the findings of our study – the correlations are present only in relation to the first group of questions reflecting teachers` ability to provide education for diverse groups of learners.
3. With regard to the attitude, the respondents have in general assessed it as positive, but there appear contradictions between their skills and searches for pedagogical solutions in the work with diverse groups in different contexts, for example, the skill to organize education for gifted children is evaluated as high among teachers, but there is no sufficient support from pedagogical and psychological support team personnel, since they have rated this skill as very low.



4. At the same time, the groups of respondents lack the skills to transfer the aspects of attitude into the process of education that is supported by the findings of the study, where the lowest levels of self-evaluation is attributed to the skills *To develop special programmes, To develop adapted programmes, To develop modified (restructured) programmes* that, in turn, influence the skill *To provide education process for children with developmental disorders*.
5. Although inclusive education has been politically defined as a priority, the results of the study reveal a very low correlation regarding the skills *To organize work for the students with behavioural disorders and learning difficulties* with the skills of respondents' to create an open microclimate for diversity in the educational institution, whereas there is a lack of correlation in this context regarding the skill *To provide education process for children with mental, sensory (vision and hearing) and physical development disorders*. The findings provoke assumptions that the skills to provide education are insufficient not only regarding the gifted learners but also *the children with mental, sensory (vision and hearing) and physical development disorders*.
6. Reflecting on the criteria in regard to the seniority levels of the respondents, the findings of the study point to the correlations dependent on pedagogical work experience and kind of professional qualification: (1) the respondents with work experience from 36 to 40 years do not have sufficient skills, for example, *To apply knowledge of special education in everyday work, To control personal negative emotions without losing self-control, To be sensitive towards the child's inner state* and others, whereas the highest ratings in this context are for those with work experience from 11 to 20 years; (2) the highest ratings for the skills relating to social interactions with children have preschool teachers, but the lowest - subject teachers; the skill *To determine the current needs of students* with the highest ratings is in the groups of preschool teachers and pedagogical and psychological support personnel, whereas the lowest - in the group of basic education teachers.

The authors hold a strong commitment to the idea that there exists an imbalance between existing socio-cultural diversity in society and skills in terms of applying the dimensions of diversity competence in practice, as well as giving voice to diversity and respecting it in the context of inclusive education. The **recommendations** regarding future prospects are supported by the findings of our study that indicate to the need to (1) emphasize the practical aspects of diversity competence in the education of future teachers; (2) provide special support, for example, continuous professional development courses in the area of teaching practice, particularly during the late stages of teaching careers; (3) consider the topics of continuous professional development in accordance with the needs of different groups of teachers; (4) improve the research tools that would allow deeper insight into the layers of diversity competence and be useful for self-evaluation of teachers in the context of education process implementation, consequently developing the professional agency of teachers.

References

- Aschenbrenner – Wellmann, B. (2009). Diversity – Kompetenz – Überlegungen zu einer Schlüsselqualifikation für Theorie und Praxis der Sozialen Arbeit. In B. Aschenbrenner – Wellmann (Ed.), *Mit der Vielfalt leben* (pp. 61-85). Stuttgart: S.
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social committee and the Committee of the regions: School development and excellent teaching for a great start in life. (2017, May 5). Brussels: European Commission.
- Deardorff, K. K. (2006). The Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization at Institutions of Higher Education in the United States. *Journal of Studies in International Education*, 241-266.
- Delors, J. (2013, March 20). The treasure within: Learning to know, learning to do, learning to live together and learning to be. What is the value of that treasure 15 years after its publication? *International Review of Education*(59), 319-330. doi:10.1007/s11159-013-9350-8



- Gardenswartz, L., & Rowe, A. (1998). *Managing diversity: A complete desk reference and planning guide*. New York: McGrawHill.
- Hanovs, D., Laicane, M., & Mihailovs, I. J. (2009). *Dažādības vadība multietniskā vidē (Diversity Management in Multietnic environment)*. Rīga: Drukātava.
- Izglītības attīstības pamatnostādnes 2014.-2020. gadam. (2014). Ielādēts no <https://m.likumi.lv/doc.php?id=266406>
- Loden, M. (1996). *Implementing Diversity*. Chicago: Irwin Professional Publishing.
- Mecheril, P., & Plößer, M. (2011). Differenzierungen, Pädagogik, und der Diversity – Ansatz. In P. P. Mecheril, & R. A. Spannring (Ed.), *Bildung – Macht – Unterschiede: Facetten eines Zusammenhangs* (pp. 59-79). Innsbruck: Innsbruck university press.
- Plucker, J. A., & Callahan, C. M. (2014). Research on Giftedness and Gifted Education: Status of the Field and Considerations for the Future. *Exceptional Children*, 80(4), 390-406.
doi:10.1177/0014402914527244
- Rashid, N., & Tikly, L. (2010). Inclusion and Diversity in Education: Guidelines for Inclusion and Diversity in Schools. (M. Levy, Ed.) British Council. Retrieved from <https://www.britishcouncil.es/sites/default/files/british-council-guidelines-for-inclusion-and-diversity-in-schools.pdf>
- Rosken, A. (2009). *Diversity und Profession. Eine biographisch-narrative Untersuchung in Kontext der Bildungssoziologie*. Wiesbaden.
- Sauter, S., & Schroeder, J. (2007). *Heterogenität – eine Einführung in eine pädagogische Leitkategorie*. Hagen.
- Schratz, M. (2014). The European teacher: transnational perspectives in teacher education policy and practice. *Center for Educational Policy Studies Journal (CEPS Journal)*, 4(4), 11-26.
- Sheets, R. H. (2005). *Diversity Pedagogy: Examining the Role of Culture in the Teaching-Learning Process*. Boston: Allyn & Bacon.
- Thoma, P., & Rehle, C. (Eds.). (2009). *Inklusive Schule. Leben und Lernen mittendrin*. Bad Heilbrunn: Verlag Klinkhardt.
- Walgenbach, K. (2014). *Heterogenität – Intersektionalität – Diversity in der Erziehungswissenschaft*. Opladen&Toronto: Verlag Barbara Budrich.



Relations Between Anomia and Subjective Well-Being in Population in Latvia and Lithuania

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Abstract

The purpose of this research was to investigate relations between anomia and subjective well-being in Latvian and Lithuanian population. The Latvian sample consisted of 1005 inhabitants of Latvia aged from 18 to 74 ($M = 44.77$, $SD = 14.58$), 47.8% males and 52.2% females. The Lithuanian sample consisted of 1005 inhabitants of Lithuania aged from 18 to 91 ($M = 52.15$, $SD = 17.75$), 42.2% males and 57.8% females. Four questions from Omnibus survey were used - three questions measured dimensions of anomia (normlessness, social isolation, and meaninglessness), and one question measured subjective well-being. It was found that both in Latvian and Lithuanian samples normlessness, social isolation, and meaninglessness are negatively related to subjective well-being, and all three dimensions of anomia are significant predictors for subjective well-being explaining 9% of variance in total. Psychological help in decreasing of anomia can be important for improvement of subjective well-being.

Keywords: Anomia, Normlessness, Social isolation, Meaninglessness, Subjective well-being

Introduction

Subjective well-being is one of the most important characteristics of human life. Subjective well-being is concerned with how and why people experience their lives in positive ways, including both cognitive judgments and affective reactions (Diener, 1984). The cognitive component of subjective well-being includes overall life satisfaction and satisfaction with separate life domains while the affective component of subjective well-being includes frequent positive affect and infrequent negative affect (Myers & Diener, 1995). The affective component of subjective well-being can be also operationalized as general sense of happiness.

There is empirical evidence that subjective well-being is an important indicator of psychological health and overall quality of life. For example, such global cognitive component of subjective well-being as overall life satisfaction is strongly positively associated with personal longevity (Qian, 2017). Subjective well-being has a negative and significant effect on adolescents' risky behaviors (i.e., smoking, carrying cutters like knives, jackknives, etc., spending more than necessary, risky sexual actions), namely, risky behaviors of adolescents with high levels of subjective well-being decrease significantly (Çakar & Tagay, 2017).

Different factors, such as work, housing, family life, social participation, leisure, health, environment, financial security, learning, can influence subjective well-being. Empirically it was found that low subjective well-being is associated with objective life circumstances such as food insecurity, t.i. individuals' inability to obtain adequate food in quantity and quality because of a lack of money or other resources (Frongillo, et al., 2017). Dimensions of job quality (such as individual task discretion, monetary compensation, job security, low intensity, safe working



conditions) has a significant impact on subjective well-being (Horowitz, 2016). Low subjective well-being is associated also with different aspects of family context such as a reduced leisure time affected by having an ill (in particular, blind) child (Sola-Carmona, et al., 2016). Else one important factor related to subjective well-being, is perception of own health (Sola-Carmona, et al., 2016).

In modern society anomia can be one of possible significant factors affecting subjective well-being. The process of globalization characterizes modern society. Globalization is defined as multidimensional phenomenon and includes economic, political, cultural, social, and technological interactions across countries (Dreher, 2006). Positive effects of globalization are promoting norms, values of democracy, human rights, and learning processes based on information exchanges and interactions among nations, and major features of globalization are free trade, open markets, capital flows and high technology, economic growth, and improvements in people's standard of living (Upadhyay, Singh, Singh, 2016). However, globalization can cause negative consequences – the necessity and inability to re-evaluate and re-organize a system of norms and guidance, difficulties of integration into the greater world society and a sense of mismatch between personal norms and values and norms and values of the greater society, a sense of uncertainty and instability – in the other words, anomie at the level of society and anomia at the individual level.

Anomie is a breakdown of social norms and guidance for the members of a society (Durkheim, [1897] 1951). In its turn, anomia is a breakdown of an individual's sense of attachment to society (MacIver, 1950), a generalized sense of "self-others alienation" (Srole, 1956), subjectively perceived anomie (Lytkina, 2012). While anomie is a state of a society, anomia is an individually psychological state, which can decrease a sense of subjective well-being.

In recent research (Ļevina, Mārtinsonsone, 2017; Ļevina, Mārtinsonsone, Kamerāde, 2015, 2016) different dimensions of anomia were described. An integrative multidimensional model was developed according to which it is possible to distinguish six sub-dimensions of anomia, namely, an individual's deviation from prescribed rules or customs, social distrust, estrangement to others, cultural isolation, lack of goal clarity and generalized sense of meaninglessness. In their turn, these six sub-dimensions of anomia can be grouped into three main dimensions, namely, *normlessness*, *social isolation*, and *meaninglessness*.

Normlessness is a perceived breakdown of the social order in which norms no longer regulate behavior. Main signs of normlessness are a lack of an individual's respect of presumed norms, an individual's readiness to engage in particular acts of deviance and to use non-normative means, a lack of trustworthiness to government and other social institutions as well as a lack of trustworthiness to other people (doubts that others are generally fair, honest and respect presumed norms). Social isolation is loss of a sense of community, which is experienced by an individual as a lack of social support, a sense of loneliness, a sense of alienation, a sense of inferiority, a sense of loss of internalized social norms and values. Finally, meaninglessness is an absence or a lack of clarity of terminal goals (life meanings) as prescriptions for an individual's behavior. Individuals with high level of meaninglessness fill that there are no desirable and sensible goals in their life, there is a lack of control and freedom; they can fill a sense of boredom and pessimism.

Thus, more likely, the main sign of normlessness is a sense that laws no more regulate and guide behaviour of citizens of a certain country. The main sign of social isolation is an individual's sense that in difficult life situations (e.g. accidents, illnesses) he/ she will not receive necessary help and support from government or other institutions. In its turn, the main sign of meaninglessness is a sense of loss of desirable life goals.

Negative consequences of anomia are empirically proven. Individuals with high levels of anomia lose a sense of significance of values of politics and religion (Ļevina, Mārtinsonsone, Kline, 2016). It is empirically found that anomie at the micro level, namely, at the level of family (in the other words anomia) has an effect on suicidality among adolescents and youth (Thorlindsson, Bjarnason, 1998; Wenz, 1978). Subjectively experienced anomie, t.i. anomia, is positively correlated with depression (Kállay, et al., 2016).



In some recent studies (Kállay, et al., 2016; Levina, Martinsone, Kamerade, 2015) negative links also between anomia and subjective well-being were found. It is found that subjectively perceived anomie is negatively correlated with such aspects of well-being as occurrence of positive mood states in the last two weeks (Kállay, et al., 2016), satisfaction with life (Kállay, et al., 2016; Levina, Martinsone, Kamerade, 2015), general sense of happiness (Levina, Martinsone, Kamerade, 2015). It was also shown that anomia allowed to predict subjective well-being (Levina, Martinsone, Kamerade, 2015).

In spite of the fact that there are some studies, that show negative links between anomia and subjective well-being, there are no nationally representative studies of relations between all three major dimension of anomia, namely, normlessness, social isolation, and meaninglessness, and subjective well-being in Latvia and Lithuania. Therefore, this research contributes to the literature and practices in this field.

Thus, the main purpose of this research is to evaluate which are the relations between anomia and subjective well-being in Latvian and Lithuanian populations. We propose the following hypotheses:

H.1: Major dimensions of anomia (normlessness, social isolation, and meaninglessness) are negatively related to subjective well-being.

H.2. Low normlessness, social isolation, and meaninglessness allow to predict high subjective well-being.

Method

In Latvia and Lithuania Omnibuss research was conducted. Fieldwork period was September 2016. Computer-assisted web interviewing was used as a method of the research.

The target population was all residents of the countries mentioned above, aged 18 or older. As a sampling method multistage stratified random sampling was used. Samples are representative to the general population of the countries mentioned above. Stratification criteria were administrative - territorial division. Subsequently, a random sample of households was drawn in each administrative-territorial division. The Latvian sample consisted of 1005 inhabitants of Latvia aged from 18 to 74 ($M = 44.77$, $SD = 14.58$), 47.8% males and 52.2% females. The Lithuanian sample consisted of 1005 inhabitants of Lithuania aged from 18 to 91 ($M = 52.15$, $SD = 17.75$), 42.2% males and 52.8% females.

In this study four questions from Omnibus survey were used. Three questions (statements) measured dimensions of anomia, namely, normlessness, social isolation, and meaninglessness, and one question measured subjective well-being. Questionnaires were in the national language of the country.

Questions that measure dimensions of anomia were: 1) for normlessness - "In my country laws regulate life of individuals" (in Latvian "Manā valstī cilvēku dzīvi regulē likumi" and in Lithuanian "Lietuvoje žmonių gyvenimą reguliuoja įstatymai"); 2) for social isolation - "In case of need (unemployment, disease, accident, etc.) I can rely on the help of the state or the local (municipal) authorities" (in Latvian "Nepieciešamības gadījumā (bedarbs, slimība, nelaime u.c.) varu palūgties uz valsts vai pašvaldību institūciju palīdzību" and in Lithuanian "Atsiradus būtinybei (bedarbybės, ligos, nelaimės atveju) ap galiu pasikliauti valstybės arba savivaldybės parama"); 3) for meaninglessness - "In my life there are significant purposes which I want to reach" (in Latvian "Manā dzīvē ir nozīmīgi mērķi, uz kuriem gribu tiekties" and in Lithuanian "Mano gyvenime yra reikšmingi tikslai, kurių siekiu"). Responses were made on a 4-point Likert scale (from 1-strongly disagree to 4-strongly agree). Thus, all three statements are negatively formulated, and in the subsequent statistical analysis the answer scale should be reversed - a higher score will indicate a higher level of anomia.

One question measures subjective well-being, namely, "How do you evaluate last year and near future perspective?" (in Latvian "Kā Jūs novērtējat pagājušo gadu un tuvāko perspektīvu?" and in Lithuanian "Kaip vertinate praėjusius metus ir artimiausią penkerių metų perspektyvą?"). Responses were made on a 4-point Likert scale (1 - „the year was happy, in future well-being will grow”, 2 - „the year was happy, in future it is necessary to make efforts to maintain well-being”, 3 - “the year was not happy, in future I hope for positive changes”, 4 - “the year was not happy, I don’t hope for positive changes in future”). Similarly, as in the case of anomia, in the



subsequent statistical analysis the answer scale should be reversed – a higher score will indicate a higher level of subjective well-being.

Considering validity of data it is necessary to emphasize that three statements about anomia do not cover all its signs and allow to measure only its main dimensions. Similarly, the question about subjective well-being also does not cover all its possible aspects and allow to measure only its global component, namely, generalized sense of happiness and global sense of well-being regarding future. On the other hand, it is important to mention that these statements were evaluated by three experts who concluded that questions constructed for this Omnibus research measure the concepts intended, namely, three dimensions of anomia (normlessness, social isolation, and meaninglessness) and subjective well-being. It is also necessary to remind that the limited number of questions is a typical characteristic of all Omnibus surveys what is connected to costs of such studies. However, a significant advantage of Omnibus research is an opportunity to conduct a concrete study in a nationally representative sample, more over in different countries at the same time. Nevertheless, in future criterion validity (e.g. convergent validity) and reliability (e.g. test-retest reliability) of the questions used in this research should be estimated.

In order to investigate relations between anomia and subjective well-being Pearson's correlation analysis and hierarchical regression analysis were used.

Findings

Firstly, it was clarified what are the relations between three main dimensions of anomia, namely, normlessness, social isolation, and meaninglessness, and subjective well-being in Latvian sample. At the first stage Pearson's correlation analysis was used (Table 1). At the second stage in order to evaluate whether dimensions of anomia allow to predict subjective well-being, and if yes than which dimensions of anomia allows to predict it best of all, hierarchical regression analysis was used.

Table 1. Pearson's correlations coefficients for measures of subjective well-being and anomia in Latvian sample

Variable	1.	2.	3.	4.
1. Subjective well-being	-			
2. Normlessness	-.17**	-		
3. Social isolation	-.19**	.14**	-	
4. Meaninglessness	-.17**	.07*	-.08*	-

Note. * $p < .05$; ** $p < .01$

It is found that in Latvian sample there are statistically significant correlations between subjective well-being and normlessness ($r = -.17$, $p < .01$), social isolation ($r = -.19$, $p < .01$), and meaninglessness ($r = -.17$, $p < .01$). Therefore, further using hierarchical regression analysis three models of prediction were evaluated (Table 2). In the first model as a predictor social isolation was used. In the second model two predictors were evaluated, namely, social isolation and normlessness. At last, in the third model three predictors were used – social isolation, normlessness, and meaninglessness.

Table 2. Regression analysis summary for dimensions of anomia, predicting subjective well-being in Latvian sample

Subjective well-being	β	R^2	F
Step 1		.04	39.14***
Social isolation	-.19***		
Step 2		.06	31.26***
Social isolation	-.17***		
Normlessness	-.15***		
Step 3		.09	32.68***
Social isolation	-.19***		
Normlessness	-.13***		



Meaninglessness

-.18***

Note. * $p < .05$; ** $p < .01$; *** $p < .001$

It was found that in Latvian sample low social isolation best of all predicted subjective well-being ($R^2 = .04$, $F(1, 1003) = 39.14$, $p = .00$). Low normlessness in the second model statistically significantly improved the prediction (R^2 change = .02, $F(1, 1002) = 22.54$, $p = .00$). Low meaningfulness in the third model also statistically significantly improved the prediction (R^2 change = .03, $F(1, 1001) = 33.50$, $p = .00$). In Latvian sample social isolation, normlessness, and meaningfulness are significant predictors for subjective well-being explaining 9% of variance in total.

Secondly, it was clarified what are the relations between three main dimensions of anomia, namely, normlessness, social isolation, and meaningfulness, and subjective well-being in Lithuanian sample. At the first stage Pearson's correlation analysis was used (Table 3). At the second stage in order to evaluate whether dimensions of anomia allow to predict subjective well-being, and if yes than which dimensions of anomia allow to predict it best of all, hierarchical regression analysis was used.

Table 3. Pearson's correlations coefficients for measures of subjective well-being and anomia in Lithuanian sample

Variable	1.	2.	3.	4.
1. Subjective well-being	-			
2. Normlessness	-.15**	-		
3. Social isolation	-.23**	.23**	-	
4. Meaninglessness	-.18**	.17**	.09**	-

Note. * $p < .05$; ** $p < .01$

It is found that in Lithuanian sample there are statistically significant correlations between subjective well-being and normlessness ($r = -.15$, $p < .01$), social isolation ($r = -.23$, $p < .01$), and meaningfulness ($r = -.18$, $p < .01$). Therefore, further using hierarchical regression analysis three models of prediction were evaluated (Table 4). In the first model as a predictor social isolation was used. In the second model two predictors were evaluated, namely, social isolation and meaningfulness. At last, in the third model three predictors were used – social isolation, meaningfulness, and normlessness.

Table 4. Regression analysis summary for dimensions of anomia, predicting subjective well-being in Lithuanian sample

Subjective well-being	β	R^2	F
Step 1		.05	56.90***
Social isolation	-.23***		
Step 2		.08	43.87***
Social isolation	-.22***		
Meaninglessness	-.16***		
Step 3		.09	31.33***
Social isolation	-.20***		
Meaninglessness	-.15***		
Normlessness	-.08***		

Note. * $p < .05$; ** $p < .01$; *** $p < .001$

It was found that in Lithuanian sample low social isolation best of all predicted subjective well-being ($R^2 = .05$, $F(1, 1003) = 56.90$, $p = .00$). Low meaningfulness in the second model statistically significantly improved the prediction (R^2 change = .03, $F(1, 1002) = 29.23$, $p = .00$). Low normlessness in the third model also statistically significantly improved the prediction (R^2 change = .01, $F(1, 1001) = 5.83$, $p < .05$). In Lithuanian sample social isolation, meaningfulness, and normlessness are significant predictors for subjective well-being explaining 9% of variance in total.



Results, Conclusions and Recommendations

As it was above mentioned, the main objective of this study was to investigate relations between three main dimensions of anomia, namely, normlessness, social isolation, and meaninglessness, and subjective well-being in nationally representative samples in Latvia and Lithuania. Two hypotheses were proposed. Firstly, it was expected that three main dimensions of anomia (normlessness, social isolation, and meaninglessness) are negatively related to subjective well-being. According to the second hypothesis low normlessness, social isolation, and meaninglessness allow to predict high subjective well-being.

Firstly, the results obtained in this research show that there are negative relations between all three main dimensions of anomia – normlessness, social isolation, and meaninglessness, - and subjective well-being. Also in previous research it was found that in Latvian sample such dimensions of anomia, as social isolation and meaninglessness, were negatively associated with general sense of happiness (*Levina, Martinsone, Kamerade, 2015*). The results of the present study allow to conclude that if a person considers that lows regulate life of citizens in his/ her country, if a person is sure that in difficult life situations such as accidents, illnesses, unemployment the government and the local (municipal) authorities will provide a necessary help and support, if a person feels no confusion regarding life goals and meanings, he/ she will feel general sense of happiness regarding the last year of life and will expect well-being in future.

Secondly, it was established that all three main dimensions of anomia – normlessness, social isolation, and meaninglessness, - allow to predict subjective well-being, and more over all these three dimensions of anomia are significant predictors for subjective well-being. Also in previous research it was found that social isolation and meaninglessness are significant predictors for overall satisfaction with life and general sense of happiness. The results of the present study allows to conclude that perceived existence of social order and of a stable system of norms and guidance, a sense of social integratedness and attachment to society and an individual's hope for social support as well as the existence of desirable and sensible are significant for prediction of an individual's subjective well-being.

A negative relationship between normlessness, social isolation, and meaninglessness, as the main dimensions of anomia, and subjective well-being as well as the role of normlessness, social support, and meaninglessness for prediction of subjective well-being were found both in Latvia and Lithuania. This finding allows to conclude that there exists a stable pattern of relations between anomia and subjective well-being in countries with similar geographically territorial, culturally historical, political, and socially economic characteristics.

The results of the present study are consistent with findings made in previous research which demonstrated a negative relationship between anomia and subjective well-being. However, these previous studies (*Levina, Martinsone, Kamerade, 2015*) have found relations, firstly, between two main dimensions of anomia, namely, social isolation and meaninglessness, and subjective well-being, and secondly, only in Latvian sample. In turn, the current research was focused on links between all three main dimensions of anomia (normlessness, social isolation, and meaninglessness) and subjective well-being, and secondly, was conducted in nationally representative samples in two countries – Latvia and Lithuania. Thus, this research expands our understanding of the relationship between the main dimensions of anomia and subjective well-being in different countries.

The results and conclusions obtained within this research can be widely used in professional psychological work with clients who suffer from insufficient subjective well-being. In order to provide for Latvian and Lithuanian citizens with a low level of subjective well-being circumstances that will allow to improve their subjective well-being specialists of psychological services should be aware of the aspects of anomia with a negative impact.



References

- Çakar, F.S., Tagay, Ö. (2017). The mediating role of self-esteem: The effects of social support and subjective well-being on adolescents' risky behaviors. *Educational Sciences: Theory & Practice*, 17 (3), 859-876.
- Chow, E.N.L. (2003). Gender matters Studying globalization and social change in the 21st century. *International Sociology*, 18 (3), 443-460.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Dreher, A. (2006). Does globalization affect growth? Empirical evidence from a new index. *Applied Economics*, 38 (10), 1091-1110.
- Durkheim, É. ([1897] 1951) *Suicide: A Study in Sociology*. London: Routledge.
- Frongillo, E.A., Nguyen, H.T., Smith, M.D., Coleman-Jensen, A. (2017). Food insecurity is associated with subjective well-being among individuals from 138 countries in the 2014 Gallup World Poll. *The Journal of Nutrition*, 147 (4), 680-687.
- Horowitz, J. (2016). Dimensions of job quality, mechanisms, and subjective well-being in the United States. *Sociological Forum*, 31 (2), 419-440.
- Kállay, É., Dégi, C.L., Pinteá, S., Kopp†, M.S. (2016). Investigating changes from 2002 to 2005/2006 in well-being, satisfaction with life, depression, and anomie in a nationally representative Hungarian sample. *Cognitie, Creier, Comportament/Cognition, Brain, Behavior*, 20 (2), 101-116.
- Levina, J., Martinsone, K., Kamerade, D. (2015). Anomia as a factor predicting subjective well-being. *Med. psihol. Ross* 3 (32). Available at: <http://www.mpri.ru>.
- Levina, J., Martinsone, K. (2017). Psychometric properties of the Anomia Questionnaire (AQ). *Society. Integration. Education. Proceedings of the International Scientific Conference*, 1. Rēzekne: RA, 580-590.
- Levina, J., Martinsone, K., Kamerāde, D. (2015). Sex and age differences in levels of anomia of Latvian inhabitants. *Society. Integration. Education. Proceedings of the International Scientific Conference*, 3. Rēzekne: RA, 567-576.
- Levina, J., Martinsone, K., & Kamerāde, D. (2016). A model of anomia in the Baltic States. *The International Journal of Interdisciplinary Civic and Political Studies*, 11 (3), 1 - 12. doi:10.18848/2327-0047/CGP.
- Levina, J., Martinsone, K., Kline, K. (2016). Relations between anomia and values of the inhabitants of the Baltic states. *Society. Integration. Education. Proceedings of the International Scientific Conference*, 1. Rēzekne: RA, 431-446.
- Lytkina, E. (2012). From anomie to alienation: An approach towards the measurement of social well-being and deviance. *Papers of the IV Russian Sociology Congress*. Moscow: Institute of Sociology RAN, Russian Sociological Society, 8227-8231.
- MacIver, R. M. (1950). *The Ramparts We Guard*. New York: Macmillan.
- Myers, D.G., Diener, E. (1995). Who is happy? *Psychological Science* 6, 10-19.
- Qian, G. (2017). Associations between longevity and subjective well-being by country. *Current Science*, 112 (5), 941-945.
- Sola-Carmona, J.J., López-Liria, R., Padilla-Góngora, D., Daza M.T., Aguilar-Parra, J.M., Salido-Campos, M.Á. (2016). Factors Associated with the Anxiety, Subjective Psychological Well-Being and Self-Esteem of Parents of Blind Children. *PLoS ONE*, 11 (9), 1-15.
- Srole, L. (1956). Social integration and certain corollaries: An exploratory study. *American Sociological Review*, 21 (6), 709-716.
- Thorlindsson, T., Bjarnason, T. (1998). Modeling Durkheim on the micro level: A study of youth suicidality. *American Sociological Review*, 63 (1), 94-110.
- Upadhyay, A., Singh, A.P., Singh, A. (2016). Globalization: Challenge and issues for Indian working women. *Indian Journal of Health & Wellbeing*, 7 (12), 1179-1184.
- Wenz, F.V. (1978). Economic status, family anomie, and adolescent suicide potential. *Journal of Psychology*, 98 (1), 45-47.

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Summary

Subjective well-being is an indicator of psychological health and quality of life in general. Subjective well-being is concerned with how and why people experience their lives in positive ways, including both cognitive judgments and affective reactions (Diener, 1984). A lot of factors affect subjective well-being, e.g. food insecurity (Frongillo, et al., 2017), dimensions of job quality (Horowitz, 2016), different aspects of family context (Sola-Carmona, et al., 2016), perception of own health (Sola-Carmona, et al., 2016).

In modern society which important characteristic is a process of globalization anomia as a negative consequence of globalization can be one of possible factors affecting subjective well-being. Anomia is an individually psychological state when a person perceives that there are no social norms and guidance for members of society, when he/ she endures a sense of social isolation and meaninglessness (Ļevina, Mārtinsonsone, 2017; Ļevina, Mārtinsonsone, Kamerāde, 2015, 2016).

In Latvia and Lithuania there are no nationally representative studies of relations between three main dimensions of anomia (normlessness, social isolation, and meaninglessness) and subjective well-being.

The purpose of this research was to investigate relations between the main dimensions of anomia, namely, normlessness, social isolation, and meaninglessness) and subjective well-being in Latvian and Lithuanian population. Two hypotheses were proposed: 1) Major dimensions of anomia (normlessness, social isolation, and meaninglessness) are negatively related to subjective well-being; 2) Low normlessness, social isolation, and meaninglessness allow to predict high subjective well-being.

The Latvian sample consisted of 1005 inhabitants of Latvia aged from 18 to 74 ($M = 44.77$, $SD = 14.58$), 47.8% males and 52.2% females. The Lithuanian sample consisted of 1005 inhabitants of Lithuania aged from 18 to 91 ($M = 52.15$, $SD = 17.75$), 42.2% males and 57.8% females.

Omnibus research was conducted. Three questions from Omnibus survey measured dimensions of anomia, namely, normlessness, social isolation, and meaninglessness, and one question measured subjective well-being.

In order to investigate relations between dimensions of anomia and subjective well-being Pearson's correlation analysis and hierarchical regression analysis were used.

Firstly, it was found that in Latvian sample there are statistically significant correlations between subjective well-being and normlessness ($r = -.17$, $p < .01$), social isolation ($r = -.19$, $p < .01$), and meaninglessness ($r = -.17$, $p < .01$). In Lithuanian sample there are also statistically significant correlations between subjective well-being and normlessness ($r = -.15$, $p < .01$), social isolation ($r = -.23$, $p < .01$), and meaninglessness ($r = -.18$, $p < .01$).

It was found that in Latvian sample low social isolation best of all predicts subjective well-being ($R^2 = .04$, $F(1, 1003) = 39.14$, $p = .00$). Low normlessness statistically significantly improves the prediction (R^2 change = .02, $F(1, 1002) = 22.54$, $p = .00$). Low meaninglessness also statistically significantly improves the prediction (R^2 change = .03, $F(1, 1001) = 33.50$, $p = .00$). In Latvian sample social isolation, normlessness and meaninglessness are significant predictors for subjective well-being explaining 9% of variance in total.

It was also found that in Lithuanian sample low social isolation best of all predicts subjective well-being ($R^2 = .05$, $F(1, 1003) = 56.90$, $p = .00$). Low meaninglessness statistically significantly improves the prediction (R^2 change = .03, $F(1, 1002) = 29.23$, $p = .00$). Low normlessness also statistically significantly improves the prediction (R^2 change = .01, $F(1, 1001) = 5.83$, $p < .05$). In Lithuanian sample social isolation, meaninglessness, and normlessness are significant predictors for subjective well-being explaining 9% of variance in total.

The results obtained in the research show that there are negative relations between all three main dimensions of anomia – normlessness, social isolation, and meaninglessness, - and subjective well-being. The results also show that low levels of all three dimensions of anomia statistically significantly predict subjective well-being. The obtained results demonstrate the negative role of perceived absence of social order, a sense of social disintegratedness and detachment to society and a sense of a lack of social support as well as being without desirable and sensible goals for individual's subjective well-being.

These patterns of relations between anomia and subjective well-being were found both in Latvia and Lithuania – countries which have similar geographically territorial, culturally historical, political, and socially economic characteristics.

These results can be used by psychological services in order to provide support for individuals with low subjective well-being. Anomia is a factor of low subjective well-being and decreasing of anomia can be a part of a process of psychological counselling.



The Importance of a Correct Approach in Music (for both Professional Instrumentalists and Amateurs) to Guarantee a Stable Lifelong Benefit

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Abstract

Could a learning method in music guarantee lifelong knowledge and, to some extent, independence from practice? In the author's opinion, the answers within certain realistic limitations should be positive. Since generalization is impossible, and for reasons of concision, this article puts professional musicians to one side and considers two other categories of student: firstly beginners, and secondly those people who previously studied music but for only a while, usually as children. Taken for granted that a lack of practice would damage even the most talented and skilled musician, current music teaching pays disproportionate attention to technical aspects of performance, to the detriment of other essential subjects such as improvisation and composition. The author will focus on the uselessness of a method based merely on reading the notes of the score whilst paying no attention to the music's meaning, and will analyze some of the disadvantages caused from this approach in the student's mind. The author will then explain how a proper teaching process, essentially based from the very beginning on improvisation and as a means to learn directly from the musical instrument, will produce enormous benefit and prevent several problems due to an incorrect method. Directly in consequence of such a method, students approach the musical score with a lively interest in other aspects than mere reproduction of the notes.

Keywords: music pedagogy, learning process, music mistake, music meaning

Introduction:

Lifelong education AND music, lifelong education IN music. Is daily practice essential to be a musician? Is it possible to imagine a different learning process in a discipline where it is generally accepted that daily practice is absolutely irreplaceable? Is there a way to free musicians from this invisible tie to their instrument? In my opinion, the answer to this last question should, within certain realistic limitations, be positive, and in this article I wish to share and discuss some of my points. Specifically, we should investigate further what we mean by "daily practice" and understand which part of it really is indispensable. Undeniably our body requires specific training to achieve otherwise impossible goals. Here, I refer to technical aspects of music, directly related to and dependent on motor skills and coordination. A valid comparison of these aspects of musical training can be made with sports training. Clearly, an athlete must train his body regularly to obtain satisfying results, and also a musician needs to practice finger dexterity, speed and control of his own instrument. Nevertheless, there are many other aspects of music that should not be compared with sport: not all musical genres require huge, endless physical training.

To clarify this point, and considering the limitations of generalization (age, repertoire, instrument played and personal goal of the player must be considered), I will put professional musicians to one side temporarily, since they constitute just one category of musician amongst many (although perhaps the most evident). Instead I will consider two other categories of musician: first beginners, and second those who previously studied music but for only a while, usually during childhood. Why these two categories? All of us started as beginners, whilst only some dedicated, keen music students fulfil their hopes of becoming successful professionals. Since many students yearn to become professional musicians, teachers tend to train them by letting them focus on traditional repertoire (to be performed in competitions and/or exams) and technique, while sadly paying insufficient attention, or no attention at all, to other music elements, such as improvisation, composition and counterpoint, understood as irrelevant for the performer's education, unless some specific test is included in the exam. I will



not include amateur musicians in my analysis. They behave in a rather different way. Normally they don't aim for some ambitious goal, or compete against other musicians, preferring to dedicate themselves to study of the music they really like. I do not discuss them further in this article, although their situation, in fact, is much less stressful and more enjoyable.

Following interviews with and comparisons between several students, I have identified some common characteristics. The first group (beginners) – naively but at the same time ambitiously striving for a high-flying musical career – put all their hopes in their teacher, whilst often admitting to being taught under quite similar and monotonous conditions, based often on mechanical repetitions of the same piece with regular use of the metronome. Moving to the second group we may notice other similarities, although within a different situation: students – or we should say ex-students – candidly declare they have forgotten almost everything about music after they quit practicing, whatever the instrument chosen. This perfectly justifiable reply is mainly due to the conditions in which they have been taught, very similar to the first group. These considerations lead to further questions. What do these two groups really think is musical practice – the music in its totality, or just some aspects of it? Which aspects should be considered more than others at a beginner level? Before answering, I wish to illustrate, by a short overview, past teaching of music in general and the piano in particular, in order to provide historical evidence for the method I will introduce. I have been privileged to acquire experience in teaching music teaching in a variety of both Western and Asian countries. As a piano teacher and also performer, my strongest and longest experience has been forged in front of a keyboard. Also, I often dedicated myself to in-depth analysis of diverse musical subjects and aspects, ranging from the study of early music by the use of period instruments to the composition of contemporary music; thus the considerations I will illustrate may easily be extended to music teaching in general. A brief analysis of musical pedagogy through various musical periods (baroque, classical and romantic) reveals many differences between past and present. In order to explore and better understand the matter, let us briefly compare some aspects of modern pedagogy that differ strongly from the past. It will be immediately clear how such a difference would constitute the heart of the matter, and how past learning and teaching methods could guarantee a real lifelong education. Generalizing for brevity: modern classical music curricula offered by schools and universities are usually arranged in a quite standard path: students have to attend one hour-long class a week for a total of 7 to 10 months per year. During class, students focus mainly on technical aspects of the music they are approaching, as well as on memorization and what is generally referred to as interpretation of the music. Normally other subjects such as aural training, history of music and theory are included in universities' curricula, but in the case of private classes they are usually not considered. As we know, subjects such as counterpoint, improvisation and basso continuo are rarely integrated in curricula, and in many schools they are totally ignored. Focusing more on the students' learning process, we cannot deny that piano students in particular spend most of their practicing time in absolute and almost monastic loneliness. They may have an occasional chance to accompany fellow musicians, but unlike wind and string students, they don't often have occasion to practice and perform chamber music. They usually focus on memorization – often mimicking their teacher without a true awareness or understanding of the musical content – and technical issues, working by means of mechanical repetition of the same musical passage.

Musical subjects that are rarely found in modern-day curricula show how different was the musical education of some of the greatest composers whose music we still perform. From Bach to Mozart, from Beethoven to Schumann and Chopin, not to mention Liszt, Brahms, Rachmaninoff (and of course many others), there was a different idea of music altogether. They were excellent composers AND improvisers, not only performers, as in their time improvisation and composition were considered essential skills for any musician, keyboard players in particular (Burkholder, 2014). Often, they were also conductors and could play a string instrument. They practiced a great deal of chamber music and – at least until the early romantic era – all musicians were able to realize a basso continuo on the keyboard (Ruiter-Feenstra, 2011 and Cooke, 1999). Further minor differences are worth remembering; these may be considered simply as consequences of this more practical approach, and were partly caused by the different organization of society and "lifestyle" of the time. Students generally studied with



their teachers for fewer years than today. Classes were usually held several times per week and – in my opinion extremely relevant – students sometimes served their teachers as assistants, gaining in return an excellent opportunity to learn through experience. Some activities, such as serving as copyist, orchestrator or arranger – jobs more likely thought of as apprenticeship – were considered part of the learning process, and so were regularly included in musical education (cf. Zanetti, 2011). Modern repertoire has not really changed. Musicians still play baroque, classical and romantic music 200-300 years later. Thanks to modern studies in early music and period instruments it has been possible to realize much more accurate musical editions, and awareness of ancient treatises widens our knowledge (cf. ancient treatises: Bach, 1753, Couperin, 1717, Quantz, 1752 e Mozart, 1756). Nevertheless, the approach to music, mainly in terms of the learning and teaching process, has changed drastically. In-depth analysis of this profound change is beyond the scope of this contribution. However, we may clearly notice that “ancient” and “modern” musicians approach the same musical repertoire in different ways. It is not my intention to judge the modern approach as such, simply compare it with the past in order to have an overview of what has changed and define some historical borders. At present, with some exceptions, classical performers, being no longer composers/improvisers, focus their attention on the performance of “written” repertoire. Furthermore, teachers in non-professional contexts are not (or have never been) regular performers. This different perspective has generated a drastic shift in the teaching process, with consequent impact on students’ learning. One of the worst consequences has been the depletion of the original meaning of notation from a set of symbols conveying musical and emotional thought in written form to a set of instructions to be performed mechanically, and perhaps to be embellished or stuffed with personal ideas about the music and the composer. This passive approach usually leads to inability to decode the true meaning of the notation, thus allowing modern teachers to focus on the most superficial and external aspects of the musical score and the music itself. The connection between what the notation aims to convey and what is usually performed is lost. In some way, students faced with, for example, a Mozart sonata, a Schubert lied or a Bach prelude are totally unable to identify the affect and are not in the condition to appreciate what musical choices composers have made in order best to express the musical idea in their mind. The only important and “digitally countable” parameter taken into consideration is the speed (tempo), often without any connection to the affective world that the music aims to evoke. There is a further reason for my choice of the two categories of students mentioned above: in spite of all their ambition, sometimes they do not really pay attention to the qualifications of their teacher they choose; thus, this approach to learning is much more evident in students than in professionals. Such an approach surely has little chance of success, rather causing dependence on rote practice without attention to the core of the music (Bonus, 2010). Why should this approach affect the learning process? Teachers emphasize to their students, directly or indirectly, the need to repeat the same passage for hours and hours, sometimes with the aid of the metronome, thus generating in their minds a mechanical automatism. Furthermore, in many cases, insecurity and bad feeling is induced in the students because of excessive emphasis accuracy of notes, mechanical regularity of performance and a lack of understanding of the real meaning of musical passages within the overall musical structure. To complete the picture, the difference between amateur and professional musicians from the past to the present should be considered, but such discussion would require sociological reflection beyond the scope of the present discussion (cf. Postiglione, 2007).

Method:

The alternative method I am going to illustrate arises in part from the historical considerations explained above, partly come from the Maieutic method applied to music which I have discussed elsewhere (Firrincieli, 2017). I try to provide a method that focuses on an effective teaching process and the strengthening of students’ skills, rather than learning through mechanical repetitions. Such a learning process should be based upon solid historical grounds, should be interesting and stimulating for students, and not based merely on training the memory and on physical technique. It should provide some essential points for development, should be based on mutual dialogue and reasoning and, with the aid of teacher, should empower students’ personality and creativity. This will ensure that students are aware of their skills and potential, and they will be able to acquire



independence and to seek for the correct way to solve musical problems, as explained in my previous article (Firrincieli, 2017),

the strongest point of this Method, and what makes it extremely valuable in a music setting, is in the discovery of induction, as Aristotle stated. Students are not directly led to the true as something that must be tacitly accepted (in our case the understanding of the music piece), rather they take into consideration different hypotheses, and through reasoning they eliminate those that lead to evident contradictions. The real target is an exploration of diverse perspectives on a given issue, a team work – students led by a teacher usually – which collaborate in order to construct a meaning and find out an answer, when possible. According to Socrates, knowledge was possible, but the preliminary condition was the admission of one's ignorance.

This method, as said, offers a concrete methodological approach applied to the study of music, together with a historical and stylistic perspective, indispensable for the true understanding of the music. Clearly, this method is a major modification of traditional teaching and learning, and must be adapted according to the individual needs of each student. Thanks to this new approach, music in all its aspects appears in a new light: as discipline for the mind, not only for the body; as interactive research where the roles of students and teachers may be interchangeable; and is led by reasoning applied to music, with the teacher simply supporting students with his experience.

It is a means to know the tangible world and its laws, to train logic and develop rational skills, to explore diverse emotional moods. The score is intended as a document compiled in a specific time and under specific conventions and notational rules which witnesses what a composer, as more sensitive individual, was able to intercept; represents the inaudible made audible; represents the perfection fixed on the paper through imperfect and limited symbols (Firrincieli, 2016).

It should be easy to understand how innovative this approach is: as a natural consequence,

it is something that must be understood, deciphered, respected, actualized and even contemplated, not something to be reproduced methodically without any awareness about its meaning. It shows an architecture built with notes, and only the respect of its internal rules can guarantee correctness of performance. In one sentence, I would say that Maieutic - through reasoning - helps student to find out the right direction to follow by excluding wrong ones (Firrincieli, 2016).

Whilst the historical approach has been frequently applied in many settings worldwide, its integration with the concept of basing music teaching on reasoning sounds quite new in our modern era (West, 1994 and Landels, 2014). I give some brief examples of the application of this approach in the class.

The starting point is usually the student's performance, his musical idea, and generally speaking his musical skills. The teacher, through questions and reasoning, assesses the strength and depth of the student's knowledge and awareness. The goal is simply to stimulate the student's attention and critical thinking, to check whether or not some musical choices have been made by intuition or by chance, and to probe the analytical skill of the student. Still, I wish to underline the role of teacher: he is supposed to be a mentor, a leader to inspire the student through his experience and love for music, and he should never superimpose on the student his own idea – whether right or wrong – and this for more than one reason. It would limit the student's sensitivity, analytical skills and understanding. Even worse, it would deprive the student of the pleasure of exploration and discovery, a dimension which should be never underestimated. Mere acknowledgement without any real research and study will never be effective or durable. The role and responsibility of the teacher cannot simply be reduced to ordering what should be done: the task is much more difficult, since the responsibility is to create informed, aware and independent musicians. The teacher may also propose different hypotheses, let the student reason,



think and take risks, find possible solutions and test different possibilities. The student, in simple words, should be stimulated to elicit the truth within himself. The process in its entirety is based on close and logical reasoning, and it should be led by teachers' experience; that is why it is strongly discouraged to choose an inexperienced musician as teacher. The most direct consequence is a deep development of the student's sensitivity, sense of observation and intelligence. The entire process should be supported, as already mentioned, by valuable knowledge of other subjects such as improvisation, counterpoint and composition. In my experience, both as student and teacher, such approach provides enduring and lifelong competence in music, can compensate for possible musical deficiencies through the concurrent comparative study of other music subjects, and offers a flexible learning process and real development of mental and musical skills in students.

Findings:

In order to clarify better my point and the efficacy of the method proposed, I will now consider a further classification of students, according to the typology of learning process adopted by them. A very few students have what I refer to as an active learning process: they approach the music by paying attention towards certain aspects generally regarded as of secondary importance. For example, in their practice consider the knowledge of harmonic rules and compositional aspects of the music they play. They also focus on some historical characteristics of the composition and the composer, and they try to contextualize the musical piece. They also consider technical aspects as one of the elements to be studied, not as the only element worthy of attention. In short, their learning process is already quite close to the method I have proposed above.

The second category of student exhibits what I refer to as the passive learning approach. Students with this approach basically consider the score as in a sort of unchanging dimension, with scant attention – or none – to the various elements of the music except for technical aspects, in particular the accuracy of the notes. Students – whether professional or not – with an active learning process develop a durable and sometimes lifelong method of practice, while the success of students with a passive approach is directly tied to the amount of time they spend with the instrument. If, for any reason, these students don't have time to practice for some time – days, weeks or months – their decline is sometimes devastating. They lose confidence and become insecure, and a sense of frustration pervades them when they re-approach the instrument. Consequently, they often need to spend a lot of time in training themselves again.

Usually, when a student enters my class, I ask about his musical past, so as to devise an appropriate teaching plan. Comparison, dialogue and reasoning always play an important role, especially at the beginning. Using this approach, I focus on the problems these students show (but have often ignored) and on observation of the possible causes, in order to fix them.

As we can imagine, a student with a passive learning approach usually lacks awareness of his "musical" condition, so to say. They simply ignore (how they could know?) that the largest part of their technical or musical problems is due to their approach to music and to an incorrect learning process. They have not really considered that a strategy for learning should be one of their first steps, since their previous teachers never or rarely focused on this. Rather, their teachers have provided them with some general advice on practicing their instrument, without really considering the learning process as something that should be studied and analyzed separately, before approaching the musical score. Unfortunately, there are contexts where for different reasons the majority of piano teachers do not practice regularly and constantly and they, in turn, have often been taught with a passive learning approach. In consequence they are not, or have never been, real musicians. In such a situation, it can easily be understood why students ignore their main problem. In summary, I attempt to change their passive learning approach into an active one by means of the above method, making them aware of musical problems and their causes which they previously ignored.



Results, Conclusions and Recommendations:

Let us now discuss some final considerations concerning the two approaches analyzed above. In my experience, the proposed approach which I define as an active learning process, presents many benefits: durability, vitality and efficiency. More than once I have noticed that the greatest obstacle is just at the outset. Starting with a new approach is not so complicated in itself: the main issue is represented by a drastic mental change. The less openminded and flexible is the student's mind, the more arduous will be the change.

One main problem arises from the expectations of individual students: normally students do not expect a teacher to ask questions, but rather to provide answers and solutions. Students do not initially regard the study of western music as an exploration or a route to knowledge; they view the musical score not as an enigma to be solved, but as a set of instructions to follow. However, their achievements are surprising; step by step, they realize that what they previously believed were the most important aspects – the accuracy of notes and other technical challenges of the piece – are just some part of the job, and probably not the most relevant. They become able, after two-way question and answer discussions, to investigate and to search for what they really want to know. Their interest concerning historical context, musical conventions, the composer's style, and characteristics of the time becomes more and more active. One of my greatest professional satisfactions is to notice that students become conscious of the density, complexity, and beauty of music.

For some people, aspects of this approach may sound new and revolutionary: from the outset, the roles of student and teacher are reversed. On the one hand, the student's status gains in dignity and he is considered as a unique person with his own sensitivity and talent, capable of making choices (and also mistakes). On the other hand, the teacher becomes a real educator and mentor, able to support students in their musical growth, rather than a person that controls the student's will, making choices for him based on his authority.

We may say that the weak point of the passive learning approach can most likely be found at its starting point: usually, since the very first class, students are taught to read notation, intended "as-is", without any connection to its emotional meaning. Teachers focus merely on tempo (usually metronomic one) and accuracy of notes; we have already discussed the consequences of this attitude. A brief comparison of this approach with the teaching of language in schools may help (the topic has been widely discussed in Firrincieli, 2015). We may start by saying that we first learned our mother tongue by listening and speaking; later we learned how to read and write, usually at school, after we could already talk. Here is the heart of the matter in music: for most people, the very first step consists of learning to read the notation, following which we are supposed to learn how to play. This is the opposite of what we used to do with spoken language. Spoken language is comparable with improvisation in music: through spoken language we learn how to use grammar and the functions of words in the sentence, so that we can convey emotions, feelings, concepts or simple data. When we improvise, the process is similar: we learn harmony, which is the grammar of the music, and the functions of notes and chords (degrees, passing notes and so on) in order to convey emotions, feelings, concepts. Let us imagine beginning to learn our language through reading, whilst focusing on pronunciation without regard for the meaning of the words we are learning. This would of course be absurd, but in music it is sadly what frequently happens.

References:

- Bach, C. Ph. Em. 1753. *Versuch über die wahre Art das Clavier zu spielen* (trad. Italiana a cura di Verona, G. G.). Milano: Edizioni Curci
- Bonus, A. E. 2010. *The Metronomic Performance Practice: a history of rhythm, metronome and mechanization of musicality*. Dissertation.
- Burkholder, J. - Grout, D. - Palisca, C., 2014. *A History of Western Music - 9th Edition*. Norton, New York.
- Cooke, J. F. 1999 *Great Pianists on piano playing*. New York: Dover Publications. Department of Music, Case reserve western university.
- Couperin, L. 1717. *L'art de Toucher le Clavecin* (Italian transl. by G. Gentili Verona). Milano: Curci Editore



- Firrincieli, A., 2016. *Modern piano teaching and practice methods: considerations and comparisons with language learning*, in *TOJET: The Turkish Online Journal of Educational Technology – September 2015, Special Issue for INTE 2015*. TOJET, Turkey, p. 413.
- Firrincieli, A., 2017. *Maieutic: a teaching and learning approach as applied to western music*, in *Procedia: Social and Behavioral Sciences 237C (2017)*, pp. 1520-1525
- Landels, J., 2014. *Music in Ancient Greece and Rome*. Routledge, New York
- Mozart, L. 1756. *Versuch einer gründlichen Violinschule* (English transl. by Knocker E.). New York: Oxford University Press
- Postiglione, G., 2007 - Tan, J. *Going to School in East Asia*. Greenwood Press, London
- Quantz, J. J. 1752. *Versuch einer Anweisung die Flöte traversiere zu spielen* (trad. Italiana a cura di Balestracci, S.). Lucca: Libreria Musicale Italiana
- Ruiter-Feenstra, P., 2011. *Bach & the Art of Improvisation, Volume one*. CHI Press, Miami.
- West, M., 1994. *Ancient Greek Music*. Oxford University Press, New York
- Zanetti, M. 2011. *Le strategie di studio dei grandi pianisti*. Padova: Armelin Musica.



Social Impact Measurement: an Innovative Tool For Fostering the Positive Social Change Created by Social Enterprises

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Abstract

Although social rights are an important part of human rights, in reality the well-being of the society depends on situation of national economy and its available resources to ensure the social security of the society. Thus, for the past 30 years the concept “social entrepreneurship” is well known across the world, and it is been considered as an innovative and effective solution to the social problems that countries are facing and can’t solve due to their limited resources. When discovering huge potential of social entrepreneurship in increasing social welfare and the development of social services, the research interest of the authors is related to the study of the field. To create a social impact is a main objective of social enterprises as a participant of social economy and market, rather than to make a profit for its owners and shareholders. Therefore European and international social enterprises use a wide spectrum of social impact measurement methods and approaches, while in Latvia it is not a widespread practice. Data of social impact provided by Latvian social enterprises are not available and there is no requirement for such data to be provided in the legislation, nor any guidelines or standards for developing a comprehensive picture of social objectives achieved by social enterprise.

Aim of the research: to explore the existing practice of social impact measurement among Latvian social enterprises in order to improve it in the future.

Methods of research: study of literature, semi-structured interview, expert interview, content analysis.

Results of the research: a research about an existing practice of social impact measurement among Latvian social enterprises and based on these findings, recommendations for further improvement of the practice

Key words: social enterprise, social impact, social impact measurement

Introduction

History of social entrepreneurship in Latvia is not long, but recently it has been a significant movement. Consequently, legislators have started working on drafting legal acts that regulate social entrepreneurship - Social Entrepreneurship Law - and an establishment of a support structure to be implemented with the cooperation of the Ministry of Welfare and the ALTUM program.

A social enterprise is an operator in the social economy whose main objective is to have a social impact rather than make a profit for their owners or shareholders. (Communication from the Commission..., 2011). Therefore in Europe and worldwide social enterprises use wide range of social impact measurement methods and approaches, while in Latvia this is not a widespread practice. As the research “A Map of Social Enterprises and Their Eco-systems in Europa: Country Report Latvia” (Feifa, Morica, Lešinska, 2014) shows, no data of social impact provided by Latvian social enterprises are available and there is no legal requirement for such data to be provided, nor any guidelines or standards for developing a comprehensive picture of social objectives achieved by social enterprise. But also social enterprises themselves do not show any interest to report on social impact, although in certain situations they analyse certain aspects of social impact – to provide the necessary information requested by state and local government institutions, as well as other donors. However, this is more considered as formal approach, and there is no information, whether or how these indicators are used for development of organizational performance and increasing of social impact. The situation in Latvia is complicated by the vague criteria of social impact measurement and the lack of a common methodology, therefore organizations measure social impact according to their understanding and capacity. Social impact measurement and evaluation in the context of social entrepreneurship in Latvia is necessary for several reasons:

- 1) To identify the existing situation in social enterprises and in the social business sector as a whole;
- 2) To assess the progress of the financial instruments received and therefore the impact achieved;
- 3) To obtain data and information for further in-depth analysis and research;



- 4) To predict possible scenarios for further development of the social business sector;
- 5) To improve the performance of Latvian social enterprises and increase their social impact. (Methodology of characteristics..., 2016).

The research hypothesis: if common guidelines are developed and practical support is provided during social impact measurement process, the understanding and capacity of social enterprises to measure social impact and to use the data obtained will increase, improving the performance and boosting the social impact, while improving the social business environment in the country as a whole.

Method

Methods to achieve the objective of the study are following.

Theoretical research methods: the analysis of literature sources and normative documentation.

Empirical research methods: a semi-structured interview, expert interview, content analysis.

Research base: members of Social Entrepreneurship Association of Latvia – social entrepreneurs and experts.

The development of social enterprises are associated with the emergence of the new needs of society, that private sector has not paid attention to, but public sector has not been able to respond adequately with an appropriate policy offer. Social entrepreneurship has been discussed since 1980s in Europe and Asia (e.g. Muhamed Yunus social business concept), as well as in North America. (European Commission, 2013). Within this research social entrepreneurship is discussed in the European context, as one of the first studies on social entrepreneurship “Latvia on the way to social entrepreneurship” (Lešinska et al. 2012) in Latvia shows – a Latvian approach to form, research and develop the social entrepreneurship environment is mainly based on a European experience and tradition.

In scientific literature, there is no consensus on the definition and characteristics of a social enterprise, therefore Table 1 summarizes the most commonly used definitions and criteria for social enterprises proposed by the authors.

Table 1. Summary of definitions of social enterprise

Source	Definition of social enterprise
OECD (1999)	Any private activity conducted in the public interest, organised with an entrepreneurial strategy, but whose main purpose is not the maximisation of profit but the attainment of certain economic and social goals, and which has the capacity for bringing innovative solutions to the problems of social exclusion and unemployment.
European Commission (2011)	A social enterprise is an operator in the social economy whose main objective is to have a social impact rather than make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives. It is managed in an open and responsible manner and, in particular, involves employees, consumers and stakeholders affected by its commercial activities.
Yunus (2008)	New kind of business, that like other businesses, employs workers, creates goods or services, and provides these to customers for a price consistent with its objective. But its underlying objective—and the criterion by which it should be evaluated—is to create social benefits for those whose lives it touches. A social business is a company that is cause-driven rather than profit-driven, with the potential to act as a change agent for the world. A social business is not a charity. It is a business in every sense. It has to recover its full costs while achieving its social objective.
EMES (Defourny, (2014)	Non-profit private organizations that produce goods or provide services directly linked to the objective of this company for the benefit of the community.



When looking at the formation of social enterprises in Latvia, then, like in Europe, social enterprises have evolved from different organizational and legal forms of entrepreneurship. It is hard to identify social enterprises due to not existing regulatory framework, certification or register (Feifa, Morica, Lešinska, 2014), however the most common legal forms are:

- Foundation;
- Association;
- Cooperatives;
- Individual merchant;
- Limited liability company (Dobele, 2015).

It has been found out that most of existing social enterprises in Latvia have chosen a legal form of association. Moreover, half of these organizations have the status of public benefit organizations. (Lešinska, 2014) However, an author N. Linde (2014) opposes the classification of non-governmental organizations as social enterprises, referring to the restrictions imposed by law on the pursuit of economic activities by associations and foundations, as a result of which non-governmental organizations cannot be considered as entities of social business, and only entities defined in the Commercial Law are to be considered.

In 2013 a survey carried out by Latvian Chamber of Commerce and Industry highlighted around sixty six active social enterprises in Latvia, but only a half of them consider themselves as social enterprises. Thirty five enterprises have an objective to solve social problems, but thirty three companies reinvest the profit to achieve social goals. (Social Entrepreneurship, 2014). In a research by A. Lesinska (2014), twenty five nongovernmental organizations that identify themselves as social enterprises or their activities comply with the criteria of social enterprise were interviewed, and this compared to Estonian experience may lead to a conclusion – a total amount of social enterprises in Latvia (both commercial and non-profit organizations) doesn't exceed 100. If we analyse companies according to their age and size – in general there are small and young companies (not older than 8 years). (Concept "On social entrepreneurship...", 2014). So far social enterprises have formed and operated without legal regulations and special support from state and other stakeholders, mainly due to the self-motivation of social entrepreneurs and the mission consciousness to make a positive contribution to solving the most pressing problems of society. European Commission is stated that in European context social impact is the main objective for social enterprises, but Commission also notes that social impact and development of social entrepreneurship in general is hampered by restrictions. (Communication from the Commission..., 2011). It is important to emphasize that although any business can have a social impact, non-profit organisations and social enterprises are explicitly designed to create social value while addressing social challenges and are therefore expected to produce social impact. (OECD "Policy Brief on Social...", 2013). Social impact enables the stakeholders to evaluate the contribution of the activities to achieve the identified outcomes, and for how long that effect may last. (GECES Proposed Approaches to Social..., 2014)

As we can see from international experience, the need for measuring social impact is both internal and external (see Table 2).



Table 2. Motivation to measure social impact

Internal motivators	External motivators
For prioritisation decisions (Clifford, 2014)	For philanthropists and grant makers
For effectiveness and its improvement (Clifford, 2014)	In social finance/investment – to balance risks and achievement of funding objectives; to report on the investment, the results of the social enterprise and the results of the joint investment.
For setting up realistic goals (Nicholls et. al., 2007)	Competition in public procurement
To increase competitiveness (Nicholls et. al., 2007)	Results according to consumer expectations
To realize the social mission (Rodert, 2014)	As an evidence to a efficiency of the use of financing in the provision of services; cost control mechanism and resource of information about implementation and development of policy
For cooperation with consumers and partners, responsibility to stakeholders (GECES, 2014)	1) As an evidence to a efficiency of the use of financing in the provision of services; cost control mechanism and resource of information about implementation and development of policy 2) To satisfy needs of private sector (investors, funding) – to initially assess the social enterprise's request for funding in order to monitor the performance of the social enterprise; to balance the risks and achievement of the funding objectives; to report on the investment, the results of the social enterprise and the results of the joint investment.

Therefore it is obvious that social impact data makes a significant contribution to the strategic management of the company and the quality of service provision. But if social enterprise does not measure social impact, it can not satisfies the needs of their stakeholders, thus also showing their best performance and benefit to society. Social impact data can be used also as a tool for creating public image and reputation of organization and communicating with stakeholders, media and society in general in order to serve as a tool to attract potential customers, partners and supporters.

Authors of research “Methodology of characteristics of social enterprises, selection criteria and their application” (2016) make a conclusion that by using the same approach it is possible to achieve several goals, but the best result can be achieved if all stakeholders have a clear picture why social impact needs to be measured and assessed, and how information obtained (data, descriptions, calculations, case studies, conclusions etc.) will be used afterwards. Consequently, measuring social impacts without further analysis and the use of the data obtained to improve the performance of the company is a resource-wasting process. Therefore, further application of the data obtained in the company's operation or management or other words – impact management is important.

Figure 1 shows the process of social impact measurement. Final step in impact measurement process probably is the most important, that involves monitoring – tracking progress against (or deviation from) the objectives defined in the first step and made concrete through the indicators set in the third step; and reporting – transforming data into presentable formats that are relevant for key stakeholders. It is a continuous process of improvement that results with setting up new objectives and starting new processes. According to Hehenberger, Harling & Scholten (2013) the goal of impact measurement is to manage and control the process of creating social impact in order to maximise or optimise it (relative to costs).



Figure 1. Social impact management process (Hehenberger, Harling & Scholten, 2013)

Regular social impact measurement process allows to focus on main objectives of social enterprise and make all necessary change based on these objectives. Measurement also provides a common understanding and an ability to create meaningful dialogue between the company's management and other stakeholders, such as financiers, investors, etc.

A selection of the method of measurement should work in such a way to maximize the efficiency of innovation throughout the process and minimizing the negative impact as far as possible. The promotion and development of innovation can be achieved through the application of guidelines, instead of strict adherence to strict methodological conditions that threaten the development of innovations. When the results of the impact measurement are incorporated into the service delivery process itself, the process of improvement is accelerated and a positive signal for investors is given. Taking into account that Latvian social enterprises are relatively new, the following aim of measuring the social impact of new enterprises (including innovative programs, experimental approaches and / or pilot programs) will be relevant to these companies: to demonstrate that the model of these companies can be a much more successful solution to the social problems than existing alternatives, if it is assumed that the social enterprise receives sufficient support for growth and development.

When interviewing Latvian social enterprises (members of Social Entrepreneurship Association of Latvia), it can be concluded that – how broad is the understanding of social entrepreneurship, also the social impact and its measurement are interpreted differently. Interviews confirmed the fact that social impact is still a relatively unknown concept and entrepreneurs interpret it according to their understanding or they even do not know the concept at all.

For many social enterprises, the social impact is related to improvement of the quality of life of their target group and other similar processes (self-esteem, integration into society, etc.). Organizations also point out that social impact are generated as a result of their activities (we can assume that is planned and targeted), and also indicate the need to measure it (to express monetary, numerically). At the same time, they mention a long-term effect that is not limited to the target group of the organization, but also affect the general well-being of the society, social decision making, etc. Entrepreneurs also emphasize the role of communication in educating and changing society. According to one of the respondents, the social impact can be also services they provide, which may be explained by a fact that if particular service is available, it will contribute to the increase of quality of life.

Data from the study show that only 1/3 of social enterprises measure the social impact (or partly measure), but this can be also a relative indicator, as it was mentioned before, social enterprises' perceptions of measuring social impact vary. However, the motivation of social enterprises to measure social impact does not differ from that mentioned in theory:



social impact is measured both for own needs and for external needs. Social impact measurement for the own needs is related to an opportunity to understand whether the organization's performance has achieved the goals and is meaningful. Social impact measurement is a management tool for assessing the organization's current performance, its results, and planning future interventions more effectively, thereby optimizing and expanding the scope of social impact.

External motivation to measure social impact is related to a current legal form of many social enterprises - an association or foundation. Therefore, the social impact data is summarized and reported as part of the annual report of organizations with the public benefit status or in the form of a report for its partners. One of the respondents, when explaining the social impact of his organization, acknowledges that social impact measurement provides the opportunity to verify the effectiveness of the proposed solution (a social innovation) to solve social problems, and it is also used as a marketing tool. The social impact assessment is also carried out thinking of future plans of the company – there is currently no tangible benefit to measure social impact, but it will be required as a part of business plan when company will apply for grant that is administrated by Ministry of Welfare and ALTUM (a state-owned development finance institution), also other donors. Similarly, the previous social impact is the information that company can use to communicate with potential sponsors.

Essential is also the motivation of social entrepreneurs to gain public support and acceptance of the organization's activities when it comes to the social enterprise's responsibility towards different parties – clients, employees, society as a whole. One of the respondents confirm: *“As we are a public organization, it is important to us that society understands our goals, and we also need to gather data to analyse our progress towards achieving our goals (whether and how public opinion and attitude change, do they receive a service they expect). We also use this information to explain / demonstrate our social impact to co-financiers.”*

Commenting on the benefits of measuring social impact, one of the interviewed social business experts, Jevgenija Kondurova (head of Reach for Change Latvia, an international non-profit organization that support social enterprises) emphasizes: *“Social enterprises need measure the social impact to use it as a tool of communication, as well as for attracting new partners, grants, etc. It is important to prove that their activity has directly affected the target group, and not it has been done by external circumstances. But yes, mostly for marketing and communication, for positioning your brand, for sale, which is some of the key factors to business development.”*

It is necessary to strengthen the entrepreneurial skills and knowledge of social entrepreneurs in order to enable companies to operate in a sustainable and independent manner, thus they are able to cover their operating costs and to earn money for further development. Therefore, measuring social impact could be one of the tools to promote the business-minded approach to the development of one's own business and selling products, at the same time attracting the investment.

Social enterprises use different methods and tools, both quantitative and qualitative, to measure their social impact, however, none of the organizations use one of the most popular methods of measuring social impact. The most commonly used tools by Latvian social enterprises are:

- Evaluation questionnaires;
- Experience stories (references);
- Individual discussion about needs;
- A summary of statistical data (annual report, internal statistics);
- Metric method;
- Numerically (number of products issued, amount of donations, number of beneficiaries etc.);
- Comparison (changes of official statistics).

This shows that the use of methods and tools meets the needs of social enterprises, but at the same time points to the need for more in-depth information, common methodology and guidelines, as well as a more comprehensive understanding of the use of social impact data in improving the organization's performance. Social enterprises are trying to prove their



social impact through performance indicators that result from the normal flow of activities→outcome, and choose methods that are useful and understandable to all stakeholders, satisfying their needs (both internal and external).

Responses also indicate that social impact is evidence-based and social enterprises seek to explain their validity in order to ensure transparency and compliance with services and results. However, an expert Jevgenija Kondurova, when assessing the practice of social entrepreneurs in measuring social impact, concludes that it is relatively weak and points to causes: *"Because there is no real understanding that it needs to be done. Mostly everyone talks about activities, but not so much about the impact. For example, look, how much we have accomplished during the year, but actually how it has affected their target audience and the state, not so much."*

Social enterprises partially carry out the social impact measurement and assessment from the very beginning of their activity as far as it is required by the annual report, management reports, etc., and when the organization uses external communication channels to promote its publicity and inform about their activities. But social enterprises start a conscious and more complex social impact measurement practice and methodology later, when there is a need for such data and they are aware that such data need to be collected and analysed and where this analysis should then be applied (for example, to improve service quality, negotiate with potential sponsors, as a proof of the effectiveness of social innovation, etc.) However, another interviewed expert, Diana Lapkis, director of the "New Do(o)r Riga" program, commenting on the capacity of social enterprises to measure social impact, states: *"The social impact, of course, must be measured in order to show what they have done good, but this should be done when they have been operating for at least 2-3 years. First you need to settle down, do something and only then start measuring the impact. The main thing is to create an action plan, to understand the basic business – liquidity, budget, etc. You do not need to waste time, capacity, therefore at first it's necessary to carry out some activities, then measure."*

The social enterprises also point to the difficulties encountered in measuring the social impact, as well as the barriers that prevent the gathering and analysis of social impact data. The main difficulty is the lack of awareness of both the social enterprise itself and society as a whole (including stakeholders). Organizations have limited capacity and insufficient competences that is a result of a lack of suitable human resources to carry out social impact assessment.

Considering that the majority of respondents represented organizations are NGOs, which means that human resources operates on a voluntary basis, this organization focuses more on the main activity of the company, there investing all their resources. Social enterprises also highlights the difficulties associated with the expressing performance indicators of solution of social problems - that means organizations have difficulty to identify the social impact, especially in cases where the effect on the target group is long-term and not so observable. There is also a need for specific criteria and guidelines to explain what is considered to be the social impact data and how to collected such data, because at present companies do not have clear understanding what is considered as the social impact and how to transfer their activities into appropriate social impact data so it would be possible to increase social impact created by social enterprises.

Table 3. Summary of respondent challenges

Challenges	Comment
IF SOCIAL IMPACT IS MEASURED	
Social impact is measured partly	<i>"We can't assess what social impact is – methods, results, how to create it in long-term, social impact is not fully summarized."</i>
Unreliable data	<i>"Data that is located in public databases usually have another purpose of use, therefore they are unreliable, because governmental and municipal institutions change them as needed."</i>
Difficulty to measure specific impact	<i>"It is difficult to measure integration in society."</i>
Lack of awareness within organization and society as a whole	<i>"In Latvia awareness about concepts, approaches, strategies and experience among stakeholders involved in the field of social and solidarity economy is still building. This is a main challenge we face, when measuring and assessing social impact, because it takes time to expand your horizon."</i>
Lack of resources	<i>"At the moment we don't have capacity to collect and analyse larger"</i>



Lack of methodology

amount of data and information.”

“The best way of measuring social impact should be understood, because we are not sure that our method is relevant to legal requirements.”

IF SOCIAL IMPACT IS NOT MEASURED

There has been no need to analyse in detail the social impact

Not existing formal criteria defining social enterprise

Organizations have not defined themselves as social enterprises

“While the state has not arranged the social entrepreneurship field, I don’t waste my time.”

“We are alike social entrepreneurs according to our activities, but we are not the most typical example. Our direct and indirect activity results from our team and especially from the way of thinking and values of our team leaders.”

Lack of interest

“There is no time and interest. We are doing what we are interested in.”

There is no opportunity to study international experience

Existing social impact is insignificant

“We are a new organization, therefore, there are few cases of re-socialization

There is no understandable methodology / tools for calculating the economic effect

Lack of resources

“We need a person that deals with publicity and other tasks what we don’t have a spare time for. However, we do not have the resources to hire additional people.

Hard to measure

“Basically I understand it, but there is no need and it is hard to measure. It is OK, that a person has found a job, his or her communication improves, but for health improvement it is long-term process that takes a lifetime.”

“There are no specific measurable units, we use the method of sensory stories.”

Results, Conclusion and Recommendations

Summarizing the needs and challenges of social enterprises, it brings to a conclusion that social enterprises require both a material and moral support, thereby various stakeholders including social enterprises themselves must contribute to an increase of social impact. It is necessary to raise an awareness about an added value of social impact measurement to achievement of social objectives and increase of quality of life of their target groups, and it should be done initially among social entrepreneurs. At the same time it is necessary to educate representatives from governmental and municipal institutions, as well as private sector about the opportunities of social entrepreneurship to contribute to the national and regional by addressing those social problems that state has not been able to solve. Social impact measurement serves as an evidence that social enterprises have a positive impact on the well-being of society, as well as social impact data allows to assess the effectiveness of social innovations, therefore contributes to a developing and providing of qualitative social service. Tab 3 provides a comprehensive picture describing recommendations to various stakeholders and proposing a wide spectrum of activities.

Table 3. Recommended activities for improvement of social impact measurement practice

Recommendation	Responsible organization	Activities	Expected results
To continue the development of social entrepreneurship ecosystem	-social enterprises; - support organizations; - Social Entrepreneurship Association of Latvia;	- Annual Social Entrepreneurship forum - round table discussions in Riga and regions with different stakeholders	- strong advocacy organization - social business ecosystem (state, municipalities, educational sector, research institutions, social enterprises, companies with corporate social



	- Ministry of Welfare	- business matchmaking with investors and potential partners - establishment of a common legal framework; - international visits for exchanging experience.	responsibility, NGOs, investors etc.); - strong social entrepreneurship environment in Latvia that can attract investment and provide solutions to urgent social problems.
To educate society and different stakeholders	-social enterprises; - support organizations; - Social Entrepreneurship Association of Latvia; - Ministry of Welfare	- Annual Social Entrepreneurship forum - informative seminars in Latvia - informative publications and articles in media; - good practice stories from social entrepreneurs; - meetings with municipalities and state institutions; - creating an educational programs, e.g. Social Entrepreneurship summer school, lectures in colleges and universities etc.	- the awareness of a wide range of social groups about social entrepreneurship, its specifics, contribution to solving social problems and the necessary support has been raised; - promotion of public and private sector cooperation; - establishment of an educational institution / program for acquisition of social entrepreneurship themes; - promotion of the recognition of social enterprises and its positive public image in society.
To build capacity and business skills for social enterprises	- support organizations; - Social Entrepreneurship Association of Latvia; - Ministry of Welfare	- establishment of a business incubator program targeted specifically to social enterprises - establishment of a network of mentors - training course on business topics	- a business incubator, where social entrepreneurs and social business idea authors can receive extensive business development support (including training, consulting, facilities, grants etc.); - a network of mentors where experienced entrepreneurs share their know-how and expertise with young and potential social entrepreneurs; - a training course that helps social entrepreneurs to study different business related topics (financial planning, marketing, business management, sales, etc.).
To develop a common methodology and common guidelines for measuring the social impact	- support organizations; - Social Entrepreneurship Association of Latvia; - Ministry of Welfare	- research on social enterprise's needs; - the foundation of a working group composed of the various stakeholders; - engagement of international experts to exchange an experience especially in areas that are relatively new and unknown in Latvia; - training of social entrepreneurs and practical support during social impact measurement process; - training of other stakeholders (e.g. common	- developed framework to measure social impact (including both qualitative and quantitative data), examples; - developed guidelines explaining how to use a methodological framework and adjust it to specific needs of a social enterprises (based on Theory of Change and its principle action→result; - raise of awareness of social enterprises and their capacity to measure social impact; - the integration of the social impact in social enterprise and its extension.



principles to provide comparable statistics from governmental or municipal institutions).

To build the capacity of social enterprises in social impact measurement and assessment	- support organizations; - Social Entrepreneurship Association of Latvia; - Ministry of Welfare	- consultative support during social impact measurement process; - the establishment of a team of specialists in measuring social impact that social enterprises can outsource (equivalent to existing practice of outsourcing marketing, accounting specialists)	- a capacity of social enterprises to measure and assess social impact and to integrate it into its activities has been built.

References

- Clifford, J. (2014). *Impact Evaluation by Social Enterprises: Measuring the un-measurable*. Available: <http://www.oecd.org/cfe/leed/10th-fplg-meeting.htm>
- Communication from the Commission to the European Parliament, the Council, the European Economic and social committee and the Committee of the Regions Social Business Initiative : Creating a favourable climate for social enterprises, key stakeholders in the social economy and innovation (2011). Available: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0682&from=EN>
- Concept “On social entrepreneurship implementation possibilities in Latvia” (2014). Available: http://www.lm.gov.lv/upload/aktualitates/null/lmkonc_271014_su_1_1807.pdf (Konceptija „Par sociālās uzņēmējdarbības ieviešanas iespējām Latvijā”)
- Defourny, J., Nyssens, M. (2010). Social enterprise in Europe: At the crossroads of market, public policies and third sector. *Policy and Society* 29, pp. 231–242.
- Dobele, L. (2015). *Social Entrepreneurship Development Scenarios in Latvia*. Riga: Drukātava. (Sociālās uzņēmējdarbības iespējas Latvijā)
- European Commission (2013). *Social economy and social entrepreneurship*. Social Europe guide. Vol.4. Luxembourg: Publications Office of the European Union.
- Feifa, I., Morica, I., Lešinska, A. (2014). *A map of social enterprises and their eco-systems in Europe : Country Report: Latvia*. Available: <http://ec.europa.eu/social/keyDocuments.jsp?advSearchKey=socentcntryrepts&mode=advance&dSubmit&langId=en&policyArea=&type=0&country=0&year=0&orderBy=docOrder>
- GECEs Sub-group on Impact Measurement (2014). *Proposed Approaches to Social Impact Measurement in European Commission legislation and in practice relating to: EuSEFs and the EaSI*. Available: http://ec.europa.eu/internal_market/social_business/docs/expert-group/social_impact/140605-sub-group-report_en.pdf
- Hehenberger, L., Harling, A. M., Scholten, P. (2013). *A Practical Guide to Measuring and Managing Impact*. EVPA.
- Lešinska, A. (2014). *Social enterprises - non-governmental organizations in Latvia*. Riga: . Riga: Centre for Public Policy PROVIDUS. (Sociālie uzņēmumi - nevalstiskās organizācijas Latvijā)
- Lešinska, A. et al. (2012). *Latvia on the Way towards Social Entrepreneurship*. Riga: Centre for Public Policy PROVIDUS. (Latvija ceļā uz sociālo uzņēmējdarbību).
- Linde, N. (2014). *Results of EU pilot project: what is social enterprise?* Available: https://www.chamber.lv/sites/default/files/inline-files/1_n.linde_su.pdf (ES pilotprojekta pētījuma rezultāti: kas un kāds ir sociālais uzņēmums?)



- Methodology of characteristics of social enterprises, selection criteria and their application* (2016). Riga: Social Entrepreneurship Association of Latvia. (Sociālo uzņēmumu pazīmju, atlases kritēriju un to piemērošanas metodika)
- Nicholls J, Lawlor E, Neitzert E, Goodspeed T, Cabinet Office (2009). *A Guide to Social Return on Investment*. London: Cabinet Office.
- OECD (1999). *Social Enterprises*. OECD, Paris.
- OECD (2013). *Policy Brief on Social Entrepreneurship: entrepreneurial activities in Europe*, EU Commission/OECD, Luxemburg, Publication Office of the European Union.
- Rodert, A. (2014). *Social Impact Measurement: why and for whom?* Available: <http://www.oecd.org/cfe/leed/10th-fplg-meeting.htm>
- Social Entrepreneurship* (2014). Available: <https://www.chamber.lv/sites/default/files/inline-files/buklets.pdf> (Sociālā uzņēmējdarbība).
- Yunus, M. (2008). Creating a world without poverty: social business and the future of capitalism. *Global urban development, Vol. 4 Issue 2*, pp. 1–19.



Could I do it again? One time experiences of Erasmus mobility teachers

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Abstract

This study aims to contribute to the growing literature on teachers' mobility by exploring perceptions and motivations to join these activities, in particular through the collection of evidence on the impact a first and only exchange experience has had on the participants. The research adopts a qualitative methodology in the form of phenomenological interviews with 6 teachers that engaged on only one mobility initiative. The interviewees shared their personal impressions on mobility, including reasons, facilitators, and outcomes of the experience. Bureaucratic, financial and residual professional impact, are among the most cited inhibitors for repeating the initiative. However, most of the participants expect to be become involved again on mobility assignments someday, especially teachers that identified greater impact from this first experience. The analysis provides interesting clues for international offices, Erasmus coordinators and university top managers, who devote considerable effort to the promotion and support of mobility practices.

Keywords: Erasmus mobility programme, Teacher mobility, Internationalization, Higher Education Institutions.

Introduction

Internationalization is an unavoidable hot topic in the agenda of Higher Education Institutions (HEIs) around the world, with a lot being discussed about the importance, frequency and impact of mobility within programmes such as Erasmus. The implementation of internationalized practices within HEIs is emerging in diversified ways, levels, strategies and engagements. One of the central purposes of the Erasmus programme (European Commission, 2017) has been to promote cross-boundary exchange of knowledge, methodologies and practices among HEI's faculty, encouraging and supporting initiatives that reflect a lifelong learning positioning in a global, digitally connected society. Staff mobility has become an important aspect of internationalization, namely through teaching assignments at a partner institution abroad, with the aim of establishing relevant connections with peers and transfer new teaching approaches and values to their pupils at home. Indeed, the programme foresees that 800,000 HEIs' staff members will be somehow involved in mobility initiatives between 2014 and 2020, ranging from a few hours to several months, in an attempt to offer "a greater understanding of



the opportunities available beyond their borders" (European Union, 2012, p.6). However, according to Sanderson (2011) and Jones (2013), it is no longer sufficient to rely on the number of students and academics that embark on mobility experiences, nor is it enough to measure the success of internationalization practices by the design of attractive curricula or courses delivered in foreign languages. The global reach of HEIs within internationalization should be analysed according to a widespread qualitative evaluation of the impact those practices actually have on the mission and intercultural contexts of the HEI.

Smith introduced the term 'flying faculty teachers' to define academics that "*find themselves living and working (albeit temporarily) within environments that are culturally different to their own*" (Smith, 2014, p.118), being commonly subject to a first perfect time period, followed by a cultural shock and a final process of acculturation. Similarly, Santoro and Major discussed the comfort zone model and pedagogies of discomfort derived from those regular or prolonged mobility experiences, which may facilitate a "*rethinking of ideas and, therefore, learning*" (Santoro & Major, 2012, p.311). Nevertheless, Tran and Nguyen (2015) state that the goal of intercultural preparation should contemplate and promote the adaptation between flying academics and the host institution, claiming that this aspect is frequently disregarded. In fact, according to the authors, what flying academics can bring to the host HEI can be transformed into an example of pedagogical practices in international education.

It is also commonly stated that risk taking and some level of discomfort are necessary conditions to construct knowledge. Labriola and Mangione (2013) highlight that besides the on-the-spot outcomes of a mobility experience - CV improvement, be familiar with diverse ways of teaching and learning or new instructional tools, improve language skills or having an enjoyable experience abroad – some other benefits can be addressed in a first-hand mobility experience. In fact, being exposed to a different educational system can also refresh thinking, promote the sharing of ideas or widen horizons. And probably more noteworthy than this, is the inspiration, passion and revitalization that different perspectives can provide.

Nonetheless, as acutely pointed out by Welzer, Družovec, Nemec, and Hölbl (2013), as a general rule academics are not willing to have an active participation in those new environments. Issues such as academic development, recognition and reward are important to assess the reasons for this alleged low level of involvement. Considering this evidence, Jones indicates that intercultural competences should be catered for and advocates that "*universities engaging in trans-national delivery of programmes may recognize and provide for the intercultural and/or linguistic needs of staff involved in teaching or supporting those programmes*" (Jones, 2013, p.174). Welzer and colleagues (2013) go further on this scrutiny and enquire whether or not teachers do not need or do not want to experience mobility, the major issue around teachers' mobility being rather the preparation for mobility, namely at the intercultural point of view.

Thus, several studies show that while some academics are staunch supporters of mobility assignments and apply regularly to teaching opportunities abroad, the majority has never participated in an exchange period (e.g., Barbosa *et al.*, 2017; Pinheiro *et al.*, 2016). In the middle, and apparently in a rather modest way, we have what we call one-timers, academics who applied to the programme, overcame all stages of mobility application, participated in a teaching assignment in a foreign country, but, for some reason, did not repeat the initiative. Despite the importance one-timers' perspectives and opinions may possess, they have been disregarded so far. Therefore, it is considered quite relevant to understand the decision process these teachers went through, together with their insights on the institutional and personal side of the experience.

Method

This research attempts to explore a gap in the literature concerning one-time mobility experiences of HEI's teachers by conducting an exploratory qualitative methodology in the form of phenomenological interviews. With the aim of determining what a particular experience meant for the interviewees, an empirical



phenomenological research obtains the participant's story through open-ended questions, providing the basis for a reflective analysis of the researcher, in order to obtain comprehensive descriptions (Giorgi, 1997). Thus, this method enables to explore how participants make sense of their own experience of teaching mobility. In order to obtain spontaneous narratives, we provided only one guiding question: "Can you share with us your mobility experience with the Erasmus programme?" and used active listening techniques in order to clarify topics mentioned by the interviewees.

Our study population comprises 42 teachers from one Portuguese university that in a 7-year period (2009-2016) engaged in one single mobility experience under the Erasmus programme. 6 randomly chosen teachers were invited to participate in the study, mostly supported by Giorgi's (1997) arguments on reflective analysis techniques. The sample includes both male and female teachers, with junior and intermediate levels of seniority by the time of the mobility experience, and had their mobility experience 1.5 to 3 years before the interview (Table 1).

Table 1. Participants' Characterization

Pseudonym	Gender	Seniority at the time of mobility	School year of mobility	Host country
Ana	Female	Intermediate	2013/2014	Poland
Berto	Male	Intermediate	2014/2015	Turkey
Catarina	Female	Junior	2014/2015	Turkey
Diogo	Male	Junior	2014/2015	Italy
Elsa	Female	Junior	2013/2014	Finland
Fernando	Male	Intermediate	2014/2015	Greece

Interviews were conducted in February and March 2017, had an average duration of 29 minutes, and were recorded, transcribed, and subject to content analysis.

Findings

Due to the open question that triggered the phenomenological interview, the narratives flew naturally into the description of the participants' experience, sharing their personal views on the mobility assignment, including reasons, facilitators, obstacles, and outcomes. Overall, mobility was expressed as a must-do event in a teachers' career - "*What is it to be a teacher today and not to have a mobility experience?*" (Catarina) -, a mandatory academic activity - "*Mobility for me is fundamental. And as a teacher it should also be almost compulsory*" (Berto) - that should be encouraged in order to "*see things outside your own space, your own microcosmos*" (Elsa).

Reasons for first mobility

There was not one single or main reason for the first mobility of these teachers. In fact, all mentioned a combination of reasons from professional, institutional, and personal domains.

One important goal was developing networks with peers from other countries that share their main research interests: "*when I look for a mobility, an Erasmus mobility, I try to establish contact with people that have a similar academic background*" (Catarina). In fact, to consolidate academic bonds with colleagues was a priority for the interviewees, as well as the possibility of creating joint post-graduations: "*joint research work, for instance, cooperation, to receive students with partnerships, master, for example*" (Ana). The reinforcement of cooperation between institutions stood out as one of the main reason for mobility: "*I would say that the main motivation was to galvanize people for international cooperation*" (Fernando). Also because, as Ana stated, teachers "*don't represent only themselves, but also (...) an institution*" (Ana).



There was also clear evidence that the participants established research as a goal when considering the mobility application: *"the strongest connection would be at research level"* (Ana). Elsa considered it *"a priority"*.

Similarly, one relevant aspect of the experience was the chance to observe how other institutions and colleagues work: *"We should understand how other schools teach, under which physical resources, with which human resources, how the culture of that scientific field is"* (Berto).

Another set of reasons was positively connected with the comfort zone model discussed by Santoro and Major (2012), namely the opportunity to break out from professional routines. This aspect of the mobility experience was highly valued by the participants: *"you let go of routines, you have that desire to eventually create something new out of an experience, of a didactic experience or even training, we will ultimately learn something new"* (Diogo). Moreover, in some of the narratives it appeared to be strongly connected with personal and professional career paths: *"It is something very strong, not only for professional reasons, but for others, but I feel that it is an inseparable part of me, I would say it is almost a philosophy of life"* (Fernando).

Facilitators

Among the facilitators are personal and professional characteristics, such as the desire to travel and being part of international research networks. As one of our interviewees exemplified, doing a first mobility is easier to a teacher who is used to work in international teams, has his/her own network, and recurrently has opportunities to interact with international partners: *"there are people like me and other colleagues that travel a lot (...) because it has more to do with personal traits and idiosyncrasies"* (Catarina). In fact, and in line with Enders and Teichler (2005), it was recognized by almost all participants that a prior personal contact at the host university was essential to this first mobility: *"My department already had a contact provided by a teacher that came to give some lectures. (...) It is an important condition"* (Elsa); *"It is extremely essential to have a prior connection, it seems to me it's not easy to decide to go to a university... it was a result of previous contacts"* (Fernando); *"it was established through the contact of a former student"* (Catarina); *"[there is] always a previous contact"* (Diogo).

Personality traits were evidenced as facilitators in the decision process: *"You have to possess certain personality traits to be ready for this. There are people that don't like to get out of their corner, are afraid of the unknown, don't feel comfortable"* (Ana). Among them, the participants mentioned the interest in travelling and in other cultures, supporting Tran & Nguyen (2015) and Jones (2013) position when referring to the importance of intercultural aspects in the internationalization of HEIs: *"it was a very important experience, firstly because it really is a very different culture"* (Berto). An interesting place had to be, as Fernando mentioned, a *"cultural destination"*, namely because *"I didn't know anything about the country of the partner university, I don't know what they eat, I don't know at what time they work, I don't know what they read, I don't know what they speak about, I don't know how they teach, I don't know how students are... for me it has an enormous amount of curiosity... and so we went, happy..."* (Catarina). The impact cross-cultural aspects may have in the participants' professional lives was mentioned also by Elsa: *"I was really curious to get to know that group of people and was also impressed. The colleagues invited me to exchange some ideas. I really enjoyed it!"*

Outcomes

The interviewed teachers highlighted both professional and personal outcomes of the mobility experience, emphasizing that cultivating mobility should be a recurrent activity: *"This recurrence gives an idea of continuity, of partnership that, this way, grants an open door all the time for any output that we might suddenly want to establish. It does you good, even psychologically. It is really the fundamental condition for being creative, if you're always moving in circles in your own little room, you lose sight of what's around you, you stop feeling that desire, and that's how it goes"* (Diogo).

However, the feelings the interviewees described during their mobility experience were both negative (e.g., anxiety, frustration) and positive (enthusiasm, motivation). The activity was described by Ana as *"a very big*



challenge, which is overcoming barriers, overcoming different cultures", so whenever the strength of a relationship was missing, such as the absence of opportunity to build a network, it was associated with disappointment and frustration: *"What I felt was that people were very cold, lacking warmth, lacking receptiveness (...) My idea was, ok, participate in mobility, but also try to create work bonds, network with the institution itself, or at least with this particular person from my field..."* (Ana). But even in circumstances where most professional goals failed (e.g., Ana), there were clear personal outcomes associated with the cultural and personal experience, as evidenced before.

Most teachers recognized a residual impact of the experience on their teaching methods. When directly enquired about the effect it had on their lectures and pupils at home, some answers were: *"No, it did not influence"* (Diogo); *"Not directly"* (Berto); *"Not as much as I would have wanted (...) I don't think my students felt that (...) it didn't influence my lectures"* (Ana). One interviewee mentioned that the experience resulted in specific outcomes, especially in the sense that it alerted students to *"intercultural aspects"* in education (Elsa). Effects on pupils at host institution were referred as well: *"[it had] an immediate impact, yes"* (Ana). As referred by Engel (2010), mobility normally takes place only for a few days, still with positive results on participants. However, these time constraints were decisively one important factor for a scarce impact: *"it was not a regular class in the sense that you accompany students (...) time was very short"* (Berto).

Amongst the most cited outcomes of their one time only mobility were coauthored papers, the edition of scientific books, and exchanging Erasmus students in the continuation of the cooperation agreement between the two institutions: *"I promoted this agreement and exchange among teachers and students and within this initiative we are writing a book (...) and working on a master"* (Diogo). Still, teachers recognized the limited outcomes that are possible to accomplish in the first mobility, as more occurrences are needed in order to further develop relationships: *"maybe after a second, third opportunity to meet, because you perhaps start to consolidate something, isn't it? Define things better, clarify the potential of that relationship better"* (Diogo). Nonetheless, most participants mentioned the opportunity to present their work and their institution to peers: *"to show how this scientific area works (...) how [my institution] positions itself"* (Berto) and to compare: *"there is no such thing as perfect schools"* (Catarina).

Overall, although one-timers were able to identify direct outcomes of their mobility, they referred that these outcomes depended on the development of the relationship with peers at the host university, as a one-time experience provides limited opportunity to produce results that should have a long-term nature. As Fernando explained: *"As for direct effects, I have some doubts. It is also a very short period, although the experience is intense. In my case, curiously, if the focus of the work was other kind of mobility schemes, I wouldn't hesitate in saying yes"*.

Intention to repeat the initiative

The participants showed different profiles in terms of goals for their first exchange experience, affecting both their overall assessment and future intentions. However, most expect to repeat the exchange activity someday, and some have already applied for a second opportunity. The teachers that identified greater impact from a first mobility are amongst the most enthusiastic ones when considering repeating it. *"Mobility is to be repeated. Of course I have to fill in more forms and I have to find funding and perhaps I don't make enough effort towards it"* (Catarina); *"In fact, it is expected to do one more mobility experience now, in 2017"* (Diogo).

Still, a second mobility initiative is analyzed in a more rational way, weighting carefully the known costs associated with the mobility, being emotional, financial, or other. As Berto described, *"I'm always looking into the scholarships, wondering... There have to be very special circumstances (...) in this situation it is really necessary to get all the facts and right circumstances together"*. Or, as stated by Fernando: *"I wanted to see if I could get time to repeat the mobility, it hasn't been easy... there was one open recently in that area, but I have no chances whatsoever to think about it"*.



In the case of the least successful experiences, there were both manifestations of unwillingness to repeat the experience (*"while I still remember, I won't do it again"* - Ana), as well as a learning process that changed their preferences and goals for an eventual repetition of the initiative. For instance, in the case of lack of success associated with interpersonal relationships, participants said that in a future experience they would *"go to countries with a culture more similar to our own"* (Ana). In addition, a low level of a so-called mobility culture at home institution was sometimes felt by the participants: *"we were the only ones so far [to do mobility] (...) you have to be willing to go (...) either you like it, or you don't like it"* (Ana), accounting, probably, for some degree of inertia when considering future application procedures, as mentioned by Elsa: *"I would really like to go, but I don't even know if I can repeat the experience at the same institution. I don't know, I have no idea"*.

Mobility obstacles

Bureaucracy, financial costs associated to mobility and residual professional impact, are among the most cited reasons enumerated by the interviewees as mobility obstacles: *"It is not attractive from the bureaucratic point of view, not attractive at all. Quite the contrary, it is even a strong obstacle"* (Berto). Again, another interviewee indicated: *"I have a lot of tasks piled up... one of them is Erasmus...I don't know, I always put other things on top of it. And then I sort of leave it behind. That's why I many times end up doing many things on mobility that don't exactly go through Erasmus, that go through other funding channels, because I have to fill this in, and I'm going to do it, and then I don't"* (Catarina).

Berto was one of the participants that most clearly associated his difficulty to repeat the mobility experience with the insufficient financial support, stressing that he had to cover for part of the expenses associated with his first mobility: *"In point of fact, I don't try more often because it is much more expensive for us than people think. Because it is really expensive. Actually the rules themselves seem to me a little discouraging"*. Berto said that having to pay from his pocket part of the travel expenses was a major negative aspect of the mobility, making him question if the outcomes are worth the effort, even when most of the goals set for the mobility experience were accomplished, because *"it is a financial investment that is hard to accomplish (...) the financial, personal and professional cost is not balanced in terms of what we're going to do professionally "*. That aspect was referred by some interviewees as a clear negative factor of the mobility experience, preventing teachers from applying on a regular basis.

Language skills can also be a clear limitation, which conditions the choice of the host university. For instance, participants included Anglo-Saxon countries in their wish list, but manifested their discomfort in teaching in English for natives, thus were more willing to choose non-native English countries: *"Sometimes, language is a barrier as well, it doesn't mean that I speak English very well, which I don't, but I made an effort and that was it. There are people who don't have this sort of personality traits for this kind of experiences"* (Ana).

Another noticed obstacle by almost all participants is the articulation between a period abroad and the current at-home activities. Most teachers choose to do mobility during school breaks, in order to avoid missing classes and having to negotiate substitution sessions with their home students. As Fernando puts it, *"at that time I would have around 12 lecturing hours per week. Therefore, it was extremely difficult to compensate all the classes"*, commenting on the hindrances caused by *"a high work load, the endless tasks to accomplish, all non-professional situations that also do not contribute to this"*, and adding that *"I have colleagues that despite not having participated yet, show some interest, but there's always something in the way, family, an appointment, a task to perform, or classes"*.

Other personal aspects that account for the limitations to repeat the mobility include family responsibilities, such as having children; *"In the meantime I had one daughter, the last two years were devoted to that"* (Elsa).

Still, some interviewees observed that overcoming obstacles also have to do with the way people approach their profession and, ultimately, life itself. As Berto mentioned, this type of decision *"normally implies a certain degree of disorder at personal, family and professional levels"*.



Results, Conclusions and Recommendations

This study aimed at exploring the perspectives of academics that embarked in a mobility program only once and never repeated the experience.

Our findings seem to be aligned with Labriola and Mangione (2013) and with Barbosa *et al.* (2017), namely that teachers recognize the stimulus and the opportunity for widen horizons that an exchange program can bring. Within this context, the results of this exploratory research seem to indicate different levels of outcomes: a residual impact on learning and teaching activities, and a relatively high impact on research (even if it appears to be difficult to maintain for a long term) and on the continuation of bilateral activities between both HEIs. Nevertheless, the impact of cultural aspects in the dynamics of knowledge creation is crucial. In fact, this study empirically supports the different phases of the pedagogies of discomfort postulated by Santoro and Major (2012), with academics experiencing both negative and positive feelings. As noted by Smith (2014), the challenges posed to those teachers that consider mobility, as we surfaced in the interviews, draw attention to the cultural differences and to the distinct phases of an acculturation process. The cultural impact of communities and the motivational aspects in the dynamics of adaptation is pivotal, yet difficult to be managed.

What this study also suggests is that academics' professional and personal characteristics are two central issues when pondering a mobility experience. Underlying this is the notion that if the professional expectations of collaboration are not accomplished, it will be rather challenging and difficult for an academic to repeat the experience. In such a case, the experience will be associated to negative feelings of displeasure caused by the non-fulfilment of prospects.

Furthermore, our findings indicate, as already mentioned by Jones (2013), that language skills are an important factor considered by teachers when they begin to think seriously about the option of embarking in mobility. Particularly interesting was the idea that teachers tend to choose countries where English is not the native tongue, in order to diminish their discomfort while communicating.

Ambivalence seems to emerge from this study. In fact, although a first mobility experience has been undertaken with enthusiasm, academics seem to think twice about the costs of embarking on a second mobility. Actually, with this study we could say that, for a second opportunity, teachers spend more time thinking about the pros and cons of the experience, at personal, familiar, financial, professional, or bureaucratic level. In accordance with the findings of Law, Muir and Thompson (2011) on the need to maximize the benefits of teacher exchanges through a structured participation and a post exchange monitoring, this paper considers that intercultural preparation matters. HEIs should, therefore, foster a more attuned definition of academic quality also in this regard.

Finally, and also as stated by Sanderson (2011) and Welzer (2013), we recommend that the conceptualization of how mobility is perceived and embraced by academics and policy makers should be re-evaluated, mainly regarding the real impact and the real difficulties academics have in the field.

Although this study is based on an exploratory research, it provides interesting clues for international offices, Erasmus coordinators and university top managers, who devote considerable effort to the promotion and support of mobility practices and, for that reason, can greatly benefit from the collected data. Among the limitations of this study we can mention the number of participants and the fact that all belong to the same home institution. Further research would be needed with one-timers to assess data saturation. Notwithstanding, the results obtained actively contribute to inform HEIs' internationalization strategies and confirm the relevance of future research on the topic as well as on the widespread qualitative evaluation of the impact those lifelong learning practices actually have on the mission and intercultural contexts of the HEI.



References

- Barbosa, B., Santos, C., Filipe, S., Pinheiro, M. M., Simões, D., & Dias, G. P. (2017). What makes a mobility champion? Qualitative insights on teachers' mobility experiences. In *Proceedings of the Edulearn2017, 9th International Conference on Education and New Learning Technologies*. Barcelona: IATED.
- Enders, J., & Teichler, U. (2005). Academics' view of teaching staff mobility: The ERASMUS experience revisited. In A. Welch (Ed.), *The Professoriate: Portrait of a Profession* (Vol. 7, pp. 97-112). Dordrecht: Springer.
- Engel, C. (2010). The impact of Erasmus mobility on the professional career: Empirical results of international studies on temporary student and teaching staff mobility. *Belgeo*, 4, 351-363
- European Union (2012). *ERASMUS: changing lives opening minds for 25 years*. Belgium: European Union.
- European Commission (2017). *Eramus+ Programme Guide*. Retrieved August 8, 2017 from https://erasmusmais.pt/uploads/documents/EProgramme_Guide_2017.pdf
- Giorgi, A. (1997). The theory, practice, and evaluation of phenomenological method as a qualitative research practice procedure. *Journal of Phenomenological Psychology*, 28(2), 235–260.
- Jones, E. (2013). The global reach of universities: leading and engaging academic and support staff in the condition of internationalization of higher education. In R. Sugden, M. Valania, & J. R. Wilson (Eds.), *Leadership and cooperation in academia: reflecting on the roles and responsibilities of university faculty and management* (pp. 161–183). Cheltenham, U.K.: Edward Elgar Publishing Ltd.
- Labriola, A. G., & Mangione, D. (2013). The transformational potential of staff Erasmus exchange: Reporting two experiences of teaching and learning in higher education. In *Proceedings of the ICERI2013, 6th International conference of Education, Research and Innovation* (pp. 6810-6816). Seville: IATED.
- Law, K., Muir, N., & Thompson, K. (2011). An evaluation of a European teacher exchange programme. *Nurse education today*, 31(1), 76-81.
- Pinheiro, M. M., Barbosa, B., Santos, C., Filipe, S., Simões, D., & Dias, G. P. (2016). HEI teaching mobility: Looking for dynamics in a seven-year period. In *Proceedings of the WCLTA2016, 7th World Conference on Learning, Teaching and Educational Leadership*. Budapest: WCLTA.
- Sanderson, G. (2011). Internationalisation and teaching in higher education. *Higher Education Research & Development*, 30(5), 661–676.
- Santoro, N., & Major, J. (2012). Learning to be a culturally responsive teacher through international education. study trips: transformation or tourism? *Teaching Education*, 23(3), 309–322.
- Smith, K. (2014). Exploring flying faculty teaching experiences: motivations, challenges and opportunities. *Studies in Higher Education*, 39(1), 117–134.
- Welzer, T., Družovec, M., Nemec, L., & Hölbl, M. (2013). Importance of Intercultural Preparation for Mobility Teachers and staff need it as well. In *Proceedings of the 24th EAEEIE Annual Conference*, (Vol. 21, pp. 48–51). Chania: EAEEIE.
- Tran, L. T., & Nguyen, N. T. (2015). Re-imagining teachers' identity and professionalism under the condition of international education. *Teachers and Teaching*, 21(8), 958-973.



Blackout Exercise Preparation and Organization by Crisis Management Authorities

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Abstract

The article presents an approach to the preparation of a selected part of the documentation of the crisis management authorities of both the region and municipalities with extended powers staff exercise in the South Bohemian Region, Czech Republic. The topic of the exercise was a simulated crisis situation - a long-term power outage (Blackout 2017 exercise) which represents an unacceptable risk for the regional area. In accordance with the timetable, exercise preparation was divided into activities that followed one another. Main tasks of the exercise preparation fell within the competence of the managing and working groups and crisis management staff of municipalities with extended powers. Results from the preparatory phase of the crisis management exercise show that a thorough and responsible territory analysis based on the time-consuming collection of input data and their evaluation is required. During the preparatory phase, a low number of operators connected to the back-up power sources as well as high requirements on their provision and fuel supply for their operation have been identified. Problems in connection provision (information exchange), complicated defining of functionality priorities and others have been found out. The total duration of the Blackout 2017 exercise preparatory phase was 11 months. The interconnectedness of individual activities was compiled using a Gantt chart. During this period, it was indispensable for the responsible staff to meet the set deadlines in due time according to the exercise preparation timetable.

Keywords: Blackout, Exercise, Crisis Management, Time Schedule, Preparation

Introduction

Education, teaching and professional training of the staff for crisis management needs were first introduced in the International Decade for Natural Disaster Reduction (IDNDR). Since then, their role and importance have been strengthened at the World Conferences on Disaster Risk Reduction in Yokohama (United Nations, 1994), Hyogo (UNISDR, 2005) and Sendai (United Nations, 2015a), at the United Nations Sustainable Development Summit in 2015 (United Nations, 2015 b) and the Global Assessment Report on Disaster Risk Reduction (United Nations, 2015c). Role of education and professional training of the population in the frameworks (United Nations, 1994), (UNISDR, 2005), (United Nations, 2015a) has been growing, especially with the emphasis on vulnerable groups of population, and has become part of the main instruments of disaster risk reduction.

It is essential to provide equal access to quality education for all identified stakeholders and to promote lifelong learning for all. It is especially education and training that help reduce human error, contribute to faster and more efficient decision making process which leads to building a culture of security and resilience at all levels of crisis management. Number of theoretical and empirical studies (Bahadur, 2010; Castleden, 2011; Manyena, 2006; Combaz, 2014) has identified education, learning, knowledge, communication and information among the driving forces of disasters resilience.

Concept of crisis management is broadly defined, such as the definition of authors. However, it is possible to find common features in the definitions which define crisis management as a process based on risk assessment, subsequent creation and planning of activities related to the preparation, solution and elimination of the consequences of an extraordinary event/crisis situations/crisis. For this reason, crisis management requires fast and efficient decision-making process (Fener and Cevik, 2015) at the appropriate state levels or an affected



entity level. Decision making in response to the emergency/crisis situation is carried out by responsible crisis management staff, so it is important to ensure that the requirements of professional qualifications are met. Education, teaching and professional training of the staff form the basis for acquiring skills and competences.

General educational target groups in the field of population protection and crisis management can be defined as follows:

- State administration and self-government staff,
- Security forces and armed forces members,
- Legal and natural entities' employees whose business activity is affected by the obligations in the field of crisis planning and population protection,
- Elected officials, i.e. mayors, regional governors, ministers, etc.,
- Pupils and students,
- Teaching and academic staff,
- Adult population,
- Disabled people.

Education of all identified groups is carried out in 4 phases (National Security Council, 2017):

- Identification of educational needs,
- Planning of education,
- Implementation of educational process,
- Evaluation of educational outcomes.

Detailed requirements for providing individual phases of education and the way of their implementation are defined in the Czech Republic by The Concept of Education in the Field of Crisis Management (National Security Council, 2017) and evaluated in the Report on the Results of a Detailed Analysis of the Current State of Teaching all Security Issues at Schools with Proposals for Further Progress (Government of the Czech Republic, 2017). Education and training for the needs of crisis management can be divided into formal and informal. Formal education is applied at individual levels of education, from basic schools to universities. The issue of human protection in emergencies has been included in The Framework Education Programme for Basic and Secondary Education since 2003. At tertiary level, security courses have been accredited to prepare professionals in the field of occupational safety. Further enhancement of crisis management staff qualification may be carried out by a legal or natural entity which holds a license for educational activities. Informal education in the crisis management field takes the form of educational activities. As a rule, non-governmental non-profit organizations, school facilities for interest-based education and educational centres participate in it.

Because of the article focus and Sendai framework requirements to increase knowledge of government officials at all levels through sharing experience, awareness, implementing best practices, implementing training and education in disaster risk reduction, including the use of already existing training and education mechanisms and mutual learning (United Nations, 2015a), the text below focuses on the system of education of public administration staff.

The system of education of public administration staff working in the field of crisis management, mayors of cities and municipalities and other experts is regulated by laws and other regulations. At the beginning of the term of office of mayors, the crisis management staff of the municipalities with extended powers or fire rescue service organize training of mayors in the area of population protection and crisis management, as mayor, in accordance with Act No. 240/2000 Coll. (Act, 2000), ensures the preparedness of the municipality to deal with crisis situations and is responsible for crisis management at the municipal level.



One position of a crisis management worker is usually established in municipalities with extended powers. The regional offices have a unit or crisis management departments. A low number of experienced experts in the area of crisis management represents a key problem in the Czech Republic (Ministry of the Interior, 2013).

Acquisition of knowledge and skills of crisis management staff is based on two approaches. The first approach is the above mentioned education course at the university or college. The second option consists of further professional training in 10 specialized modules. Part of the systematic approach to staff training is also the obligation to carry out crisis management authorities exercises at the staff level to test preparedness for crisis situations. Training in crisis management aims at (Rosenthal and Pijenburg, 2013):

- Giving decision makers knowledge of the stages of crisis development and resolution of the variety of types of crisis that may affect them,
- Giving decision makers skills in the cognition of crises through the use of certain key indicators and performance review,
- Providing them with techniques for developing plans to avoid crises,
- Providing decision makers with the skills required to manage the crisis as best as possible.

Part of the preparation and implementation of the tactical exercise is creation of the exercise documentation which consists of (Ministry of the Interior, 2009):

- Purpose of the exercise – it is the initial document that sets the basic framework of the exercise (objective, topic, list of participants and their tasks) and serves as the basis for processing the subsequent exercise documentation,
- Organizational instruction – it sets the rules for the exercise preparation and the organization support of the actual course of the exercise and includes: a list of people responsible for performing the exercise, setting up working groups to ensure the preparation of the exercise, organizing material, technical and financial provision of the exercise, organizing the preparation of the exercise management, issuing the instructions for providing participants' preparation, timetable of the exercise preparation, organizing of work meetings and the way of exercise evaluation,
- Exercise implementation plan – it is a comprehensive implementation document creating conditions for organized implementation of the exercise, meeting set objectives, practicing all assigned tasks and ensuring efficient exercise management,
- Exercise evaluation – it is a document for evaluating the set objectives of the exercise.

The paper presents a chosen approach to the creation and elaboration of organizational instructions, especially the survey of the involved people, forming working groups and their tasks and timetable for the Blackout 2017 exercise preparation for the crisis situation in the South Bohemian Region.

Method

Choosing the topic of the crisis management authorities' exercise was based on two requirements. The first requirement was related to the threat to selected elements of critical infrastructure and the second to the crisis situation which carried an estimated. Chosen crisis situation was a long-term power outage - blackout which has not been practiced by the crisis management authorities in the South Bohemian Region until now.

Managing and working groups used brainstorming method which is based on creative forming and solving ideas (Osborn, 1953; Paulus and Nijstad, 2003). Especially in the case of blackout, it is necessary to develop scenarios of impacts and solutions to the problems that arise. Brainstorming method was also used by the working groups dealing with stakeholders.



A questionnaire containing open and closed (yes or no) questions was created for both legal entities and business individual entities, public authority bodies and other entities. The purpose of a specially compiled questionnaire was to collect data on the entity crisis preparedness for blackout. Questions were directed to the area concerning the ownership of a motor generator, needs of operating fuels, requirements for human, financial and material resources, provision of assistance to crisis management bodies and components of the integrated rescue system as well as processing the emergency documentation.

Gantt chart was used for clarity and checking the fulfilment of the individual tasks of the exercise preparatory phase (Laster, 2014). Gantt chart depicts sequences of activities over time. The horizontal axis indicates the time period of exercise preparation and the vertical axis marks individual activities or tasks. Individual activities/tasks are marked by coloured bars with marked duration. Length of the bar determines expected time for task solution.

Findings

Preparation of the Blackout 2017 staff exercise in the South Bohemian Region was divided into four phases. In the first phase of exercise, corresponding stakeholders were identified. Key stakeholders involved in the exercise preparation are:

- The Regional Authority of the South Bohemian Region,
- 17 municipalities with extended powers in the South Bohemian Region territory,
- Energy Companies – ČEZ Group, ČEPS Inc., E.ON Inc.,
- Basic components of the Integrated Rescue System - Fire Rescue Service of the South Bohemian Region, the Emergency Rescue Service of the South Bohemian Region, the Police of the Czech Republic,
- Regional Veterinary Administration, Regional Hygiene Station.

In the second phase of the exercise, an exercise managing group was created which was responsible for creating the scenario of the exercise, the intention of preparation and exercise implementation, organization, exercise timetable for preparation and determining the leaders of the working groups. Managing group was responsible for preparing, implementing and evaluating the exercise, elaborating documentation for Blackout 2017 exercise which is going to be held in November 2017. At the position of the managing group leader was appointed an employee responsible for crisis management at the regional level. Other members were representatives of the Integrated Rescue System components and regional office staff. In order to fulfil the tasks of the managing group, negotiation with energy companies was initiated to discuss causes and extent of the blackout in the South Bohemian Region. The main objective of the meeting was to specify the purpose of the exercise. Two meetings between the managing group and representatives of energy companies took place. Based on them the initial exercise scenario was set and the areas affected by blackout in the region were identified.

In the third part of the exercise, working groups started their work. The managing group decided to create 13 working groups. Working groups devoted themselves to areas such as food, drinking water, fuel, education, transport, gas supply, healthcare, veterinary measurements, social issues, communication, funeral ceremonies, imprisonment and public administration. Created working groups dealt with areas affected by blackout with regards to ensuring security and protection to the population. The task of each working group was to:

- Identify elements belonging to the topic area,
- Determine the impacts of power failure,
- Identify the preserved activities,
- Decide what is necessary for emergency provision in the set area,
- Determine how to address impacts in the affected area,
- Select the entities for providing priority electricity supply basic functions in the affected area.



Subsequently, the appointed leaders of working groups appointed the individual working group members. Other stakeholders were approached by working groups depending on the topic issues. The aim was to get information, negotiate the possibility of using their machinery, materials and services to deal with the blackout crisis situation. For example, working group for food addressed all producers, distribution storerooms, wholesalers and chain stores in the region to collect required information, to assess the situation and to design a crisis management proposal. Meetings of individual working groups with addressed stakeholders took form of brainstorming. Subsequently, the stakeholders were asked in written form to fill in the created questionnaire. Working groups were allocated a two-month period for the complete analysis of the territory. It turned out that it was very time consuming to arrange meetings and get all the required input information, so the deadline for completing the task was extended by 2.5 months.

The fourth phase took place simultaneously with the third phase. It concentrated on analysing the areas affected by blackout from the level of individual municipalities with extended powers. The crisis management staff of the municipalities with extended powers was responsible for fulfilling the fourth phase. Because of the fact that usually just one person works in this position, analysis was limited to the relevant municipality and did not apply to all municipalities belonging to the administrative district of the municipality. The person responsible interviewed relevant stakeholders about ensuring their activities, impact of the blackout and possibilities of providing their functionality during the blackout. Subsequently, the same questionnaires as for the working group were sent to the subjects. As it was time consuming, the two-month processing time was also extended by another 2.5 months. The objective of involving crisis management staff of municipalities with extended powers in the area analysis was to make them sufficiently and thoroughly aware of the situation in their administrative district and to be able to respond to it and solve it. Another reason was the requirement to prepare preventive and mitigation measures for the selected territory based on the identified situation and ability to present requirements for the financial, material and technical provision of the given crisis situation to the superior authorities. Based on the meetings of the managing group and the energy company representatives as well as the proposed exercise scenario, likely influenced areas within the region were identified. Although four municipalities with extended powers were identified as influenced by the proposed power failure scenario during the meetings of the managing group and the energy company representatives, this information was not passed on to the municipal crisis management staff, so that everyone would have the same responsibility for preparing for the exercise. Involvement of specific areas was announced only after the analysis of the municipality territory was carried out.

Results of individual territory analyses of municipality with extended powers were presented at the meetings of the managing group with the staff of the municipality with extended powers. Crisis management staff complained about the duplication of some activities during conducting the analysis. In particular, it concerned interviewing some entities e.g. a working group that addressed the situation in healthcare provision from the point of view of the whole region contacted the hospital representatives as well as the corresponding municipality with extended powers on which territory the healthcare facility was located, did the same. Representatives of the managing group assessed the preparatory phase as highly beneficial from the point of view of municipalities as they learned useful information also for dealing with other crisis situations than just blackout, mapped out available resources and requirements for new resources. Based on the results, the municipal councils will apply for increasing the funds or material equipment for the eventual even addressing. In some municipalities the real functionality of alternative power sources was checked to ensure functioning of the municipal office in the case of blackout occurrence and the identified problems were removed.

Municipal staff and working groups have failed in sufficiently defining the basic priorities in the electricity supply even within the extended deadline. Increased requirements for the provision of motor generators and fuel have resulted from the territory analysis processed by the working groups and the crisis management staff. As a fundamental problem which has not been solved so far, appears to be especially provision of communication between the intervening components, the crisis management bodies and the affected population during the

The overall progress of all already implemented and planned activities (as to July 25, 2017) is shown through the Gantt chart in Figure 1.

Month	January			February			March			April			May			June			July			August			September			October			November																
Week	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
Activity																																															
Stakeholder's identification																																															
Managing group																																															
Establishing managing group																																															
Negotiations with energy sector																																															
Exercise preparation timetable																																															
Establishing working groups																																															
Negotiations with managing group																																															
Negotiations with municipalities																																															
Negotiations with working groups																																															
Designing and commenting on the exercise intent																																															
Designing and commenting on the exercise topic																																															
Negotiations with the Regional Security Council																																															
Designing the exercise programme, timeline and scenarios																																															
Presentation of mayors and crisis staffs																																															
Plan of exercise implementation																																															
Plan of connection																																															
Joint preparation for the exercise																																															
Exercise publicity in the media																																															
Working group																																															
Processing territory analysis																																															
Negotiations with specific entities																																															
Municipalities																																															
Processing territory analysis																																															
Joint preparation for the exercise																																															
Negotiations with specific entities																																															
Date of the exercise																																															
Note:																																															
Implemented activity																																															
Activity fulfilment extended deadline																																															
Planned activity																																															



In the following period, it is necessary to elaborate a notification scheme for a long-term blackout, to create an exercise timetable, to define the area priorities to be addressed by municipalities with extended powers and region within the exercise. Food, drinking water, and fuel supply, healthcare, social care and security seem to be the key areas.

Results, Conclusions and Recommendations

It is very difficult to compare the preparation process carried out with other staff exercises implemented in response to the crisis situation of a large-scale power outage, i.e. blackout in the Czech Republic area (Prague 2014, the South Moravian region 2015, Olomouc 2015, Hradec Králové region 2015 and Vysočina region 2016) as the subjects keep the exercises preparation secret as their know-how. Despite the above mentioned facts, the research succeeded in collecting information that shows that all exercises were managed and organized from the regional level. The South Bohemian Region is the first region to involve municipalities with extended powers in the exercise. This increased the involvement of crisis management staff of municipalities and strengthened their theoretical knowledge and practical skills in dealing with crisis situation. This resulted also in their higher concern and interest in the issue. The people in charge will then implement gained experience in the municipalities with extended powers crisis plans modifications. Preparing the exercise, namely the territory analysis has proved to be the best suitable form of staff training and checking their competencies.

When analysing the territory, personal communication with stakeholders from the corresponding area, proved to be more appropriate form of obtaining information than just a written questioning through a questionnaire. The disadvantage is that a personal meeting is more time demanding than written questioning. On the other hand, the advantage is that the stakeholders provide broader responses and establish personal contacts than by mere questionnaire completion.

Defining priority consumers of electricity in the case of an island system or supply by motor generators is also a complicated issue for the processors of territorial analyses (i.e. working groups and municipality staff).

By comparison with other exercises it was found that the number of working groups created for exercise preparation in the South Bohemian Region was one of the most extensive. After the territory analysis in all the exercises performed, there was a restriction in the exercise solution regarding the selected areas. The reason for the area restriction is the wide range of impacts of blackout on the population. The choice of the exercise area was made depending on the needs of the regions, as it is not possible to check all the affected areas from time, technical and logistical point of view during the exercise.

The most serious issue that needs to be resolved is the connection between the crisis management bodies, the Integrated Rescue Service components and the population, because the functionality of the standard communication means is temporally and technically limited or totally nonfunctional. Significant communication problems have been identified which should be addressed by measures from the state level and not by individual regions. Some regions practice the danger of blackout with functional communication which cannot be considered a suitable approach to the corresponding type of danger.

The preparation phase of the exercise was highly time-consuming. In the case of exercise in the South Bohemian Region, it took 11 months. The other regions devoted a similar time to preparation.

For the regions that have not carried out exercises or will repeatedly perform exercises, it would be advisable to create a methodological process of blackout exercise preparation. Methodological process should include a set of key activities that should not be omitted within the preparation. On the other hand, excessive restriction in the



form of a methodological process may reduce creativity of exercise managing and working groups as well as other exercise participants.

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References

- Castleden, M. et al. (2011). Resilience thinking in health protection. *Journal of Public Health*. 33, 3, pp. 369–377. doi:10.1093/pubmed/fdr027.
- Bahadur, A. V. et al. (2010). The resilience renaissance? Unpacking of resilience for tackling climate change and disasters. *fsnnetwork*. [Online] 2010. [quoted: 03. 07. 2017]. http://www.fsnnetwork.org/sites/default/files/ids_resilienc_e-renaissance.pdf.
- Combaz, E. (2014). Disaster resilience: Topic guide. *GSDRC*. [Online] 2014. [quoted: 03. 07. 2017]. http://innovation.brac.net/fif2016/images/library/GSDRC_Disaster%20Resilience.pdf.
- Drennal, L. T. and McConnell, A. (2007). *Risk and crisis management in the public sector*. New York: Routledge, Routledge masters in public management series. ISBN 978-0-415-37815-4.
- Fener, T. and Cevik, T. (2015). Leadership in Crisis Management: Separation of Leadership and Executive Concepts. *Procedia Economics and Finance*. 26, pp. 695–701. doi: 10.1016/S2212-5671(15)00817-5.
- Government of the Czech Republic. (2017). *Zpráva o výsledcích podrobné analýzy současného stavu výuky všech bezpečnostních témat ve školách s návrhy dalšího postupu*. Praha: Vláda České republiky, 2017. Usnesení Vlády České republiky č. 174 ze dne 8. března 2017.
- Haddow, G. D. et al. (2014). *Introduction to emergency management*. Fifth edition. ISBN 978-0-12-407784-3.
- Kapucu, N. and Özerdem, A. (2013). *Managing emergencies and crises*. Burlington, MA: Jones. ISBN 978-0-7637-8155-2.
- Lester, A. (2014). *Project management, planning and control: managing engineering, construction and manufacturing projects to PMI, APM and BSI standards*. Sixth Edition. ISBN 978-0-08-098324-0.
- Manyena, S. B. (2006). The Concept of Resilience Revisited. *Disaster*. 30, 4. DOI: 10.1111/j.0361-3666.2006.00331.x.
- Ministry of the Interior. (2009). *7 Pokyn generálního ředitele Hasičského záchranného sboru ČR ze dne 2. 2. 2008, kterým se stanoví postup pro přípravu a provedení prověřovacích a taktických cvičení*. Praha: Ministerstvo vnitra – Generální ředitelství Hasičského záchranného sboru České republiky.
- Ministry of the Interior. (2013). *Koncepce ochrany obyvatelstva do roku 2020 s výhledem do roku 2030*. Praha: Ministerstvo vnitra – Generální ředitelství Hasičského záchranného sboru České republiky, 2013.
- National Security Council. (2017). *Koncepce vzdělávání v oblasti ochrany obyvatelstva a krizového řízení*. Praha: Bezpečnostní rada státu, 2017. Sv. Usnesení Bezpečnostní rady státu č. 508 ze dne 10. července 2017.
- Osborn, A. F. (1953). *Applied imagination: principles and procedures of creative problem solving*. New York: CH. Cribner's Sons.
- Paulus, P. B. and Nijstad, B. A. (2003). *Group Creativity. Innovation through Collaboration*. Oxford: Oxford University Press. ISBN 978-0195147308.
- Rosenthal, U. and Pijnenburg, B. (2013). *Crisis Management and Decision Making Simulation Oriented Scenarios*, Springer Verlag. ISBN 978-940-1055-031.
- UNISDR. (2005). Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. *UNISDR*. [Online] 22. 01. 2005. [quoted: 01. 07. 2017]. <http://www.unisdr.org/2005/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>.
- United Nations. (1994). E/1994/85 International Decade for Natural Disaster Reduction: Yokohama Strategy for a Safer World. *PreventionWeb*. [Online] 21. 06. 1994. [quoted: 01. 07. 2017]. <http://www.preventionweb.net/files/resolutions/N9425945.pdf>.



- United Nations. (2015a). A/RES/69/283 Sendai Framework for Disaster Risk Reduction 2015–2030. *PreventionWeb*. [Online] 23. 06. 2015. [quoted: 01. 07. 2017]. <http://www.preventionweb.net/files/resolutions/N1516716.pdf>.
- United Nations. (2015b). A/RES/70/1 Transforming our world: the 2030 Agenda for Sustainable Development. *United Nations*. [Online] 21. 10. 2015b. [quoted: 01. 07. 2015]. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.
- United Nations. (2015c). Global Assessment Report on Disaster Risk Reduction 2015. *PreventionWeb*. [Online] 2015. [quoted: 01. 07. 2017]. http://www.preventionweb.net/english/hyogo/gar/2015/en/gar-pdf/GAR2015_EN.pdf. ISBN 978-92-1-132042-8.



Supports methods of the Social work what improving the quality of clients life

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Abstract

The current economic situation in Latvia has highlighted the need to develop social work education in the country and to use innovative methods in social work. The aim of this study is to analyse the basic conditions for the unity of social work education and practice, to find out what additional resources and methods of support social workers can be use in the practical work, and to identify use of the Reittherapy (hippotherapy) method to help to improve the life quality of clients. As a result, the aim of the study is to offer recommendations for promoting cooperation and the development of the profession in the field of education, practice and science. Changes in economic relations, rapid stratification of the society, migration under the influence of global processes have caused a lot of problems also in Latvia. Stress, overload, chronic fatigue, despondency, depression are only a part of today's pressing challenges affecting the quality of life of a society. The theoretical basis of the research is based on research and literature on the topical issues of social work education and practice. In the practical part, an empirical method is used – questionnaires, methods of data processing, analysis. The research respondents were divided into three groups: social work students, social work professionals and clients, in total 600 respondents living in Latvia. The study was conducted in 2016-2017 by survey of 200 students of the Social worker study program at the University of Liepaja. Students of the study year were enrolled with the detection method. The random sampling method was used in the questionnaires of 250 social workers at different professional conferences and through the internet. The same method was used also through the internet for clients who reseave the Reittherapy. The data was processed by the Microsoft Office Excel program. The results of the study are the following: students believe that the Reittherapy method is a resource for social work with clients; social workers believe that Reittherapy is offered to clients as a cure, believe method and it be used to prevent clients' stress, depression, overload, chronic fatigue in recovery in cases were clients do not have access to such services near the place of residence; this method was recommended by social workers and on their own initiative; the comments for this method indicate that there has been a recovery process, the client has obtained psychological satisfaction, improved client's well-being and quality of life and it can be used by a person of any age. The research demonstrates that the use of the Reittherapy method improves the quality of clients life and it needs to be developed in the future. The research reveals new opportunities and challenges in social work, emphasizing the team's united and co-ordinated cooperation. More research is needed to improve the social work, which should be the basis for the development of social work as a science in Latvia.

Keywords: Education, social work, methods, Reittherapy, the life quality.

Introduction

Education is important for everyone, family, society and the state as a whole. It is a path to the quality of the individual's individual life, the formation of building society with society knowledge, the country's economic growth and prosperity. Global processes influence the continuous development of social work education, progress according to the needs of social work practice. The practice of social work requires competent professionals with a broad, comprehensive view, and who are balanced. The people have to be sure, creative, and also critical thinking, be prepared to deal with non-standard situations with everyday challenges. Be able to work in a team, to properly choose and use all possible resources, theories and methods in the professional work. In social works education and practice interacting with the basic values of social work must be respected. The social values are formed in cultural processes. They may be subject to global processes of change in society. Šilņevs (2000) The Social Work terminology dictionary of the most important values emphasized in social work



- human dignity, equal social chances, social solidarity, social well-being for all, fair division of benefits, harmonious social relations, social security (Šilņeva 2000, p.211.).

Changes in economic relations, rapid stratification of the society, migration under the influence of global processes have caused a lot of problems in Latvia as well. Stress, overload, chronic fatigue, dejection, depression are only part of today's topical issues. These and other issues affect the quality of society's life and social well-being. Alternative methods and resources are needed in order to solve the problems, in addition to the methods already used in social work. In order to maintain customer quality of life, it is necessary to seek cooperation with specialists from other fields.

The aim of the research: To analyze the basic conditions for the unity of social work education and practice, to identify the necessary resources and to support methods, to study the possibilities of application of the Ritthertherapy method, and to improve the quality of life of the clients.

Tasks of the research:

1. To analyze theoretical literature, normative acts on topical issues of social work education and practice.
2. To study social works education and factors which are influencing social works professional practice.
3. To identify the use of the Ritthertherapy method which is used to improve customers quality of life.
4. Empirical research project to develop a questionnaire and carry out a survey of respondents.
5. To perform mathematical processing and analysis of the obtained data.
6. Offer suggestions between professionals in the promotion and development of the profession.

Research Hypothesis: If social work clients are provided with the opportunity to receive as a support method for the Reittherapie, then the quality of life of the clients improves.

Method

Research methods:

Theoretical research methods - literature, study of documents on the chosen topic. The basis is based on research and literature on the topical issues of social work education and practice, factors affecting it, methods of support in social work, quality of life, Reittherapie as a support method.

Empirical research method - questionnaire. Respondents of the study were divided into three groups: social work students, working professionals in social work, clients, and in common view living in general 600 in Latvia. In the sample, we were using the method of detection, with the students who, where studying in the "Social Worker" study program at Liepaja's University, and were it is included in the study program. The survey of social work specialists and practitioners used a random selection method at social work conferences and using the internet. The customer survey uses an online selection method for clients who receive Reittherapie service.

The mathematical processing and analysis of data. Data is processed using the Microsoft Office Excel program.

Research respondents: Students of the study program "Social Worker" at Liepaja's University. Social work specialists. Customers receiving Reittherapie service. The survey was attended by respondents from 72 regions and cities in Latvia, the total is 564 out of 600 distributed questionnaires.

Research time: Year 2016-2017



In the time of the research, literature and theoretical knowledge about the chosen topic were analyzed and summarized. The results of empirical research have been summarized and interpreted.

Findings

The Education Systems highlights

Educational system in the 21st century. What should it be? What does it affect? What requirements are imposed? During the research, the authors of the work sought to find the answers by studying documents and literature sources. In the 21st century, education is a sustainable further development. It encourages people to take responsibility in their everyday lives, to realize themselves in accordance with the social, cultural, economic and natural environment around them. It means living with a positive perspective and view on the future, being able to respond creatively to emerging crisis situations in order to be part of a new environment.

The document "Guidelines for the Development of Education for 2014-2020" was approved by the Latvia's Republic's Saeima in year 2014, emphasizes the human-oriented education, education for sustainable development, education-enhancing education for the societies knowledge (Saeima, 2014). Human oriented education focuses on human self-improvement and self-development. This should take place throughout the life of a person at every stage of his life. It is a prerequisite for the entrepreneurial mindset of each citizen, for the development of skills for social inclusion, employment and active civics participation. Education for sustainable development is a life-long process. Its purpose is a person who is able to realize himself fully in the national economy and society as a whole, ensuring the long-term and prudent use of resources. A person needs to understand local problems as well as their global context. It is also necessary to understand and accept other cultures with dignity, to promote a peaceful and sustainable society and its economic growth. The modern society is multicultural. The knowledge and its use in the development process of multicultural contemporary society are changing rapidly.

Social work education was historically formed in Latvia at the beginning of the 90's. Its necessity and development were guided by the ongoing social processes, which led the Saeima (2002) to adopt the "Law on Social Services and Social Assistance". The law regulates the provision of social services and social work in Latvia. The development of social work education and practice in Latvia is in year 2013 approved as the basic document "Guidelines for the development of professional social work for 2014-2020". The document indicates the priority directions and tasks for the relevant period. As the most important tasks and measures related to education are - to promote the competitiveness of social workers, to improve the professionalism of social workers, to create a targeted approach to the support of students who study in social work education programs, to provide support for the development of a science and research base in social work. In order to ensure affordable high quality higher education, to facilitate the supply matching with the requirements of the labor market, to strengthen the link with science and research, and to use the state budget resources efficiently, cooperation and the integration of local governments, employers and sectoral organizations in the management of higher education institutions and study process (The Republic of Latvia, Cabinet of Ministers, 2013). As a result, it is objectively possible to assess the demand of specialist field specialists, to follow changes in professional activity and to adapt the structure of the knowledge acquisition process accordingly, to improve study programs, which are also carried out at higher education institutions. Involving professional practitioners in the implementation of the study process contributes to the development of respective study programs in accordance with employers' demand, development trends in practice, while respecting the development of social welfare, using innovative methods. One of the most important preconditions for providing social work education is the unity of theory and practice as a mutually interactive process. There is some kind of tension between knowledge and application of knowledge, the interaction of theory and practice, although the questionnaires collected by the graduates of Liepaja's University indicate that the level of knowledge and skills acquired corresponds to the demands of the labor market. The proof or the denial of this can be proved by the studies carried out and the reasons therefor.



The question could be asked: what kind of knowledge is needed for the profession and what are the done researches? Is there a comparison of these studies at regional, national and transnational contexts? There is no clear answer, there is an underdeveloped scientific research base. One of the reasons is that social work in Latvia is not a separate branch of science, as in Europe and other countries - Lithuania, Estonia, France, Sweden, Russia and somewhere else. Every University's lecturer, including students, conducts research activities as much as possible, participates in international conferences, and takes part in programs, international projects. It is a valuable contribution to the development of study programs and the provision of scientific research activities, the expansion of cooperation with other European higher education institutions. The addition of social works theory and methodology is the involvement in international projects. The problem that scientists, educators and practitioners have been researching is a social issue that explored how to deal with those who are left behind. They are both children and adolescents, and old people. Scientists conducted questionnaires and comparative studies to discover and identify what these people need, how practitioners work and what can be improved more. In the international project RELAIS PLUS, which took place from 2010 to 2012, there were eight universities from seven countries - France, Germany, Norway, Romania, Slovenia, Greece and Latvia, represented by the University of Liepaja (Project RELAIS PLUS, 2012). The collected extensive scientific research material is integrated into various study courses and demonstrates the similar social problems of the involved countries. Valuable is also Latvia's experience in social development.

Lawrence (2015), Svensson (2016), will be mentioned in the European context of the necessary changes in the system of social work education, in practical work and in promoting social development in the European context.

Social work and support methods

Social work at the development stage has always been a compromise. It developed the methodology of its work, but also used the theoretical and practical concepts of related branches. Today's social work theory and practice recognize the diversity of social work methods and their applications at micro, mezzo, and macro levels. Several authors of social work education and practice Payne (1997), Zemīte (2003), Brooks (2000) acknowledge that all people or groups of people are in systems, and undoubtedly have an impact on each other. System effects can be circular and linear. From the revelation of the authors, it can be concluded that the choice of social work methods depends on the professional competence of each social worker. To find, attract and use customer resources is not easy. Successful and quick solution to customer problems is a proof of the professional skills acquired in the Social Work Education programs and the work of the interprofessional team. Resources in social work have been researched and described by many authors in various ways. Camerron, (2014) explains that emotional support is what constitutes collaboration and is acquired through mutual communication, talks based on empathy and understanding, and allowing the client to be open and safe in overcoming disturbances. The informational support options shorten the time to deal with the crisis and provide additional information about unknown things to the client (Camerron 2014). Social work clients in Latvia are not always materially able to pay for their social services themselves. The task of a social worker is to be able to evaluate the client's situation and find the opportunity to captivate additional resources.

According to Rothery (2016), Social workers are practically the people who want to work, are creative, and are ready to attract other industry professionals and related disciplines (Rothery, M., p. 95-104, 2016). Czerw (2017) acknowledges Reittherapy as a method for resocialization programs. In Poland, the method is popularized as an alternative to classic social work methods. It is applied in the fields of social work and social pedagogy, and the study of the application of the method Poland continues (Czerw, 2017, p. 159).

In Latvia, social work has increased interest in Rittherapy as a supportive method for improving the quality of clients' life. According to Zundāne (2014), Knipše (2010), in 1981, the Republic of Latvia implemented the first projects of the Rreitherapy, but in 2000 Reittherapy was acknowledged as the technology of medical rehabilitation.



Topicalities of social work practice

Definitions of social work arose in the 60s-70s of the last century. They emphasize the professional and practical side of social work, which is why it is difficult to defend social work as a branch of science. Social work requires extensive knowledge, borrowed from other sciences, such as - sociology, psychology, pedagogy, economics, medicine, philosophy, law, management science, and others. For comparison, some definitions of social work. National Association of Social Workers (NASW) in 1973 According to Zemīte (2003), social work is accentuated as a professional activity: ***Social work** is a professional action that helps individuals, groups, families, organizations and communities rebuild or strengthen their social functioning and create social conditions according to their goals. Social work provides humane and effective social services to individuals, families, groups, communities and society in order to improve social functioning and quality of life* (Zemīte, 2003, p. 27). In Latvia, with the formation of the social system, the Law on Social Services and Social Assistance (2002), gave the definition of social work, which is referred to both by practitioners in the field of practical work and educators, as well as by social politics and social development developers. ***Social work** is a professional activity to help individuals, families, groups of persons and society as a whole to promote or renew their ability to socially function and create conditions conducive to this functioning* (Saeima of the Republic of Latvia, 2002). The purpose of social work is to help a person, family and group of people identify, resolve or mitigate social problems by developing their own resources and involving support systems. The law states that ... the right to perform social work is for persons who have obtained second-level professional higher or academic education in social work or charitable social work (Saeima, 2002). The International Social Work School Association (IASWS) and the International Federation of Social Workers (IFSW) agreed in 2001 on the other definition of international social work. The social work profession promotes social change. Principles of human rights and social justice are fundamental to social work (Šiļņeva 2008, p.14., Global standards for social work education and internships: <http://ifsw.org/policies/global-standards/>). This means that for the first time an international reference point for social work education and practice has been created, taking into account local, cultural and historical perspectives. The global guidelines for social work education and internship practice explain that professional social work is geared towards change and problem solving. Social workers are the change makers. Social work is a system of interdependent values, theory and practice. So in turn, the methodology of social work is based on systematic, knowledge-based knowledge that has developed in the process of evaluating research and practice. The profession in practice is based on theories, social systems, analyzing complex situations and promoting individuals, organizations, social and cultural changes. Social work uses a variety of skills, and activities. The priorities of social work practice are different in each country and at any time (Global Standards for Social Work Education and Practice, 2008, pages 4 to 13). The Global Agenda for Social Work and Social Development should also be taken into account. The Global Agenda - Human-centered sustainable social progress! (*The Global Agenda for Social Work and Social Development*, 2010). The next stage in which this operational program was viewed was in 2012. The International Conference in Stockholm, the Program Implementation and Action Strategies. Priority efforts to achieve the target was indicated. They are concentrated in four important areas. As stated, in the field of education, such development, dissemination and knowledge sharing among all social professionals should be supported. This requires the creation of innovative communication channels. To promote research, regional research and development centers for social work should be supported. This would encourage positive results in the The Global Agenda. As communication channels for social work professionals, educators operate a free discussion website on the Internet, where you can share experiences, exchange of ideas, conferences, and seminars.

Social work is in continuous development, in a direction where global processes have a certain influence. International partners (IASWS, IFSW) have agreed that every 10 years they will update and review the issues of the social system. In July 2014, held Global social workers, educators and social work development makers' conference in Melbourne, the participants agreed on a Global definition of social work. Social work is a practice-based profession and an academic discipline. Underpinned by theories of social work, social work engages



people and structures to address life challenges and enhance wellbeing (Global Definition of the Social Work Profession, 2014.; <http://ifsw.org/policies/definition-of-social-work/>).

It follows from the definition that social work is both interdisciplinary and transdisciplinary, based on extensive scientific research not only in social work but also in other humanities. Most of the research is done with the recipients of social services, clients in an interactive, dialogue process, and therefore the research is based on the practice-specific context. Social work practice has a wide range of activities. The new definition was discussed at the International Conference on Social Work Education in Europe: towards 2025 (2015) in Milan. The participants discussed the necessary changes in professional social work, social work education, theory and practice relations, research and other topics. An insight into the development of the social work profession and the presentation of the conference materials was provided by Lolita Vilka (2015). In contrast, Christensen (2015) from the University of Malmö, Sweden, in a research paper entitled "Acting locally, thinking globally in social work education" (translated by the author), points out that social workers must be prepared for challenges, changes to address social work in the local and global context, solving communities problems. Christensen (2015) in the scientific study reveals that the cases promotes mutual sharing of global social problems. In this way, it is possible to gain knowledge about other countries and their social system. In Sweden, Social Work Education is well established, but International Education in Social Work is required. The required in-depth knowledge of international social work, the driving forces, but also have to be studied as possible to increase the mutual understanding of social work, to develop a global understanding and aware of their own traditions and values. The individual and the environment change over time, it is important to understand how different systems affect the development of an individual. Social workers are faced with new responsibilities, and this is important for the development of education at the national level. The success factor in acquiring knowledge in international social work, it needs endless education continuing, international courses where you can work independently, opportunities for integrating existing programs. According to Christensen (2015), internationalization involves six levels of intervention: intra-personal level (capacity sustainability); Micro-social level (person, client, emphasis on interaction); Mezzos social level (group, institution, coherence); Exo-social level (society, institutions, education system); Macro-social level (culture, nation, traditions, language); Ex-macroeconomic social level (international relations and EU influence). The study is described at the Ex-Macro level - Global Mobility Perspectives - Student and Teacher Exchange Programs, Mezzo-Social Level - The Perspectives of Social Work Local Education - Integration with Visitor, Practicing Opportunities and Work Abroad, Micro-Social Level - Social Work from a Professional Perspective- They have good knowledge of other countries, their culture, norms, the ability to respond quickly, and apply social work skills in different contexts (Christensen, 2015). Members of the European Social Action Network (ENSACT) have been working with the objectives of the Global Social Agenda since 2007 to promote a human rights-based approach to social work, social work education and social policy and to find practical solutions at local and regional level. In line with the objectives of this organization, it is necessary to promote much closer cooperation between service providers, social workers' educators, politic makers, service users and communities. A stakeholder in each activity needs to be supported in order to optimize joint efficiency (European Network for Social Activation (ENSACT)). The Professional Standard of the Latvian Social Worker (Cabinet of Ministers of the Republic of Latvia, 2010) specifies professional tasks that are in line with international guidelines. Social work is based on the needs of social work client groups, problem solving methodology developed and approved. Customer needs, goals, and causes of stress in life determine the choice of the type of social work and the choice of appropriate methods. Germain, C. B., Gitterman, A (1996) explain that some methods and skills are common to all types of social work.

Quality of life.

In each country, the public welfare indicator is the quality of life of its inhabitants. After.Šķesteres (2012) view, the quality of life is a broad and capacious term that includes both objective indicators and subjective satisfaction



and assessment and an individual's capacity to organize their lives in accordance with their intentions. Objective indicators of quality of life are income, work, education and others; Subjective indicators are a combination of self-esteem, satisfaction, ability to act (activities, skills and others) (Šķestere 2012, p. 3). I.Šķestere (2012) believes that the quality of life is ensured by the needs of people. Consequently, the quality of life can be equated with the level of satisfaction of people's needs. The ability of a person to satisfy his needs is directly related to the opportunities available, and they form social, human, environmental and time capital. Of social capital is considered to be of human cooperation and rules that encourage cooperative behavior. Human capital is human knowledge and accumulated information, as well as health and working capacity (Šķestere, 2012, p. 13). An essential aspect of the quality of life is the subjective perceptions of people about what is good life, their subjective life assessment and satisfaction with different areas. Šīļņeva (2000) explained that the quality of life of individuals, families, groups, public well-being index, which includes physical and mental health ... Social workers working on improving quality of life, must take into account the subjective and objective character (Šīļņeva, 2000, p. 50). Latvian Social Work legislation The Saeima of the Republic of Latvia (2002) defines the following: the quality of life is defined as the following: persons, families, groups of persons, public welfare indicators, which include physical and mental health, work, education, links with society, rights (Saeima, 2002). It can be concluded that there are different views and definitions of quality of life. It is important that an individual of any age, with or without a disability, ensures the quality of life and the needs that society considers to be normal.

Support Method – Reittherapy

Reittherapy also known as therapeutic riding. When translating from German, 'der Reiter' it means 'rider'. According to Agafoničev (2008), the French therapist I. Lalerie is considered to be the founder of modern Reittherapy. He theoretically studied the effects of horses on various diseases in the 60s-70s of the 20th century. Lalerie was convinced that a horse is better able than any other animal to help a person get rid of a wide variety of diseases (Agafoničev 2008). Dreimane (2015) explains in her handbook that Reittherapy is used to solve physical problems, but pedagogical hunting and volunteering is used for people with mental and social problems. Voltiation is a race discipline combining static and dynamic elements executed on a moving horse. There is also rider sport for people with special needs - paralympic entry in case of physical problems and drivings. Driving is a horse racing discipline that does not have riders, but there are drivers on a 1, 2 or 4 horse-drawn vehicle. All exercises on horses are monitored by Reittherapys trainers. Reittherapeits are a medical practitioner performing the patient's functional ability assessment and the physical, psychological and social potential for improvement through riding horses (Dreimane 2015 14 to page 15.). According to Gulbe (2011), the concept of Reittherapy has been emerged in Latvia, and on the global scale it sounds like riding for disabled people. Reittherapy is divided into three broad directions: 1. Reittherapy (hypotherapy) - is intended for human medical rehabilitation and is applicable to people with physical problems (diagnoses). 2. Pedagogical riding and voltiation (persons with a qualification of a teacher, psychologist and social worker diploma and reiteration instructor). 3. Equestrian sport for people with special needs. Gulbe (2011) explains that Reittherapy is a method of treatment in which the main healer is the horse. It includes solving problems in medical, psychological and social rehabilitation. The factors contributing to the beneficial effects of Reittherapy – it includes horse rhythmic and three-dimensional movements, warmth of a horse's body, therapist's, aide's and client's cooperation, as well as the location of unusual therapies. Horses feel the way humans feel today and how people touch it. Horses are amazingly well aware of their therapist's functions, they feel the needs of a person. Horse positively affects the somatic and psychic state of the client. The horse moves in four strokes. The similarity of the horse and human movement have been proven. Reittherapy is a globally recognized treatment method for both children and adults in the treatment of various diseases: central and peripheral nervous system diseases, musculoskeletal system disorders, respiratory diseases, cardiovascular disease. It has a beneficial effect on people suffering from chronic stress, increased anxiety and depression, and can also be used for prophylaxis. Gulbe (2011), Dūdiņa (2015),



Dreimane (2015), explain that horse, horse movements, and the natural environment helps to increase the effectiveness of various therapeutic activities, as well it helps to improve the client's psychological health, cognitive, communication skills and behavior, and positively affects the client's physical and emotional state. The authors indicate on the beneficial effect of the horse on the client's psychic functions. 1. Rises self-confidence. The horse listens to riders given commands, and this is the opportunity to stimulate the patient to continue classes. For a person whose full life is hampered by a physical or psychological problem, it is nice to be aware that there is someone who obeys him. Even for more self-confidence is brought by the fact that many healthy people are afraid to ride a horse. And therefore, there are, cases when the training of healthy people and people with health problems do not go away, and recommend that they start to race as equivalent players. 2. Facilitate communication with the surrounding people. Before and after the class, the client looks at the relationship between the therapist and assistant, the other clients and their family members who come to visit them. During the lesson, the therapist involves the client in a conversation, and arise questions about the various details seen in the stall or in the neighborhood. Negotiations that do not only deal with the client's problem, they facilitate the release, facilitate communication with other people. Improvements are also expected in the use of other means of communication such as gestures, mimicry, and pantomime. The client is introduced to different situation models. Partial communication improvements are related to the development of the speech engine center. This is facilitated by the client's awareness that the horse is listening to his given voice commands. In this way, the customer learns the need for speech. 3. The processes of cognitive and deliberate actions improve. During the lesson, the concepts used to indicate the movement in the room are intensified. It is also easier for the customer to understand and use plain words on a daily basis, widen the vocabulary, and improves memory. The multiplicity of Reittherapy is evidenced by the fact that it is used abroad both for the rehabilitation of child victims and for the cultivation of juvenile offenders. In Latvia, the method of Reittherapy is used as a method of medical rehabilitation but is not widely used in social work practice. There is no known research in the social work about the Reittherapy method, its impact on the quality of clients' life. Based on the research of the theory, an empirical study was carried out to test the hypothesis.

Results

In the course of the research, 182 questionnaires received from social work students, 238 questionnaires received by social work practitioners and 144 customer questionnaires were analyzed, in total 564 questionnaires.

The results of the study are as follows: 1. 76% Students believe that Reittherapy is a support method and resource for social work with clients from different groups. 2. Social workers consider 53% of the patients to be offering Reittherapy as a cure for clients, however, 68% of the respondents believe that Reittherapy could be used for customer stress, depression, overload, chronic fatigue recovery, socialization disorders. 3. Social workers, as an obstacle to the use of the method, mention the following reasons: 1) The service is not available to clients near home to 42%; 2) The 28% of customers do not want to use the Reittherapy method; 3) 30% is a weak interinstitutional cooperation in the use of the Reittherapy method as a reason for identifying different sources of funding like for example - social budget, health budget. 4. 58% of the customers would like to use Reittherapy if it were closer to their place of residence, 14% of clients have used it after illness and as doctors recommendation, 9% of clients used this method, as recommended by social workers, 19% used this method on their own initiative; While observations and feedback on this method indicate that there has been a recovery process, the client obtain psychological satisfaction, improved client's well-being and quality of life, and it can be used by a person of any age. 5. 88% of clients' indicate that after using the Reittherapy method, they have improved their well-being and quality of life. 12% do not observe any change. Negative assessment about the method used, customers indicated in their responses.



Conclusions

The theoretical part of the research reveals the process of formation of the basis for social work education, practice and normative acts in Latvia based on international experience in social work. In social work practice, along with methods of social work, are used methods by other related fields. The use of Reittherapy as a method of support for improving the quality of client's life is positively evaluated in the environment of social workers, clients and social work students. The research shows that the use of the Reittherapy method improves the quality of client's life. In the future, the method needs to be developed in order to be able to use for the widest range of customers. Students, educators and practitioners of social work always seek effective and best practices that can be implemented with clients. The research reveals new opportunities and challenges in social work, emphasizing that the teams are united and coordinated cooperation.

Recommendations

More research is needed to get proof of the use of the Reittherapy method in social work and to complement the diversity of social work support methods.

Social workers need to update multidisciplinary and interinstitutional teams that would allow the wider use of the Reittherapy method as a support method for improving the quality of client's life.

References

- Agafoničevs, V. (2008). *Dzīvniekterapija. Mūsu zāles- ūsas, ķepas un astes*. Rīga.:Tapals.
- Broks, A. (2000). *Izglītības sistemoloģija*. Rīga.: Raka.
- Cameron, M. (2014). *This is common factors*. *Clinical Social Work Journal*, 42, 151-160.
- Christensen, J. (2015). *Acting locally, Thinking Globally in Social Work Education*. Pieejams: <http://dspace.mah.se/bitstream/2043/20864/2/ConferencePaperActingLocallyThink>.
- Czerw, M. (2017). *Animals in resocialization*. No: *Sabiedrība. Integrācija. Izglītība. Starptautiski zinātniskās konferences materiāli. III daļa*. Rēzekne, (149.-159.lpp.).
- Dreimane, N. (2015). *Reitterapijas rokasgrāmata*. Rīga.
- Dūdiņa, K. (2015). *Reitterapijas teorija un prakse. Bērniem draudzīgs*. Pieejams: <http://www.berniemdraudzigs.lv/2015/02/reitterapijas-teorija-un-prakse/>.
- European Network for Social Activion (ENSACT)*. Pieejams: <http://ensact.com/european-observatory-call-good-practices>.
- Germain, C.B., Gitterman, A. (1996). *The Life Model of Social Work Practice*. New York: Columbia University Press.
- Global Definition of the Social Work Profession*. (2014). Pieejams: <http://ifsw.org/get-involved/global-definition-of-social-work/>.
- Gulbe, I. (2011). *Kas ir reitterapija?* [tiešsaiste]. © Ponijls.lv 2011. Pieejams: http://www.ponijls.lv/kas_ir_reitterapija.
- Heine, B. (1997a). *Introduction to Hippotherapy*. - *NARHA Strides Magazine*, Vol.3, No.2. Pieejams: <http://narha.org/hippo.html>.
- Lawrence, S. (2015). *Social Work Education in Europe: towards 2025 - EASSW*. Pieejams: www.lm.gov.lv/upload/prezentacija2/sjuzena_lorensa_sd_izglit.pdf.
- LR Ministru kabinets (2010). *Sociālā darbinieka profesijas standarts*. Pieejams: http://www.lm.gov.lv/upload/darba_devejiem/profesiju_standarti.pdf.
- LR Ministru Kabinets (2013). Rīkojums Nr.652., *Par Profesionāla sociālā darba attīstības pamatnostādņēm 2014.-2020.gadam*. Pieejams: <http://likumi.lv/doc.php?id=263299/>, <http://www.lm.gov.lv>.
- LR Saeima, (2002). *Sociālo pakalpojumu un sociālās palīdzības likums*. Pieejams: <http://likumi.lv/doc.php?id=68488>.
- LR Saeima, (2014). *Paziņojums, Par Izglītības attīstības pamatnostādņu 2014.-2020.gadam apstiprināšanu*. Pieejams: <http://likumi.lv/doc.php?id=266406>.
- Payne, M. (1997). *Modern Social Work Theory*. London.: Macmillan Press Ltd.



- Projet RELAIS PLUS. (2012). Pieejams: www.adam-europe.eu/prj/7439/prj/1_LV_lv.doc.
- Rothery, M., (2016). *Critical Ecological Systems Theory*. In Coady, N., Lehmann, P. (Eds.) *Theoretical Perspectives for Direct Social Work practice*. (p.p. 81-107). New York.: SPRINGER PUBLISHING COMPANY.
- Svensson, K. (2016). *Promoting the Dignity and Worth of People. Report 2016*. Pieejams: <http://ensact.com/sites/ensact.com/files/REPORT%20European%20observatory%202016%20v3.pdf>.
- Šilņeva, L. (2000). *Sociālā darba terminoloģijas vārdnīca*. Rīga.: JUMI.
- Šilņeva, L. (2008). *Globālie sociālā darba izglītības un prakses standarti*. Rīga.: JUMI.
- Šķestere, I. (2012). *Pētījums par dzīves kvalitātes izvērtējuma metodēm un instrumentiem (1.daļa)*. Pieejams: http://www.sif.lv/nodevumi/nodevumi/4881/petijums_dz_kvalit_1.pdf.
- The Global standards of Social Work*. Pieejams: <http://ifsw.org/policies/global-standards/>.
- The Global Agenda for Social Work and Social Development*, (2010). Pieejams : <http://ifsw.org/get-involved/agenda-for-social-work/>.
- The Global Agenda*. Pieejams: [http://www.swsd-stockholm-2012.org/Default.aspx](http://www.swsd-stockholm-2012.org/Default.aspx;);; <http://cdn.ifsw.org/assets/globalagenda2012.pdf>.
- Vilka, L. (2015). *Jaunas trajektorijas Sociālā darba profesijas attīstībā. //Zināšanu pārnese sociālā darba praksē*. Nr.2. (13.-17.lpp).
- Zemīte, Ē. (2003). *Sociālā darba pamati*. Rīga.: JUMI.
- Zundāne, I. (2014). *Reitterapija*. Pieejams: <https://arsts.lv/jaunumi/reitterapija>.



The Use Of Montessori Pedagogy In Children's Speech And Language Development Promotion

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Abstract

The article carries out a research and analysis of theoretical knowledge and empirical observations by Maria Montessori in the context of contemporary discoveries in neuroscience, as well as a summary of the practical use of the didactic principles and materials by Montessori pedagogy for promoting the speech and language development of preschool children. There is a short summary of the research results and analysis carried out on the operating basis of the Alternative Education Centre by Liepaja University Institute of Educational Sciences. The results of the theoretical and empirical research confirm that the theoretical knowledge and empirical observations by M. Montessori coincide with the conclusions of neuroscience nowadays, playing a significant role in the development process and promotion of language development, in the comprehension of the disorder pathogenesis of language development from a holistic approach in a context of competence-based preschool education acquiring. Whereas the practical use of Montessori pedagogy and Montessori therapeutic pedagogy, promote the development of preschool children's speech and language, considering the multi-structural model of speech and language development.

Keywords: pre-school age, speech and language development, Montessori Pedagogy.

Introduction

Currently there is a project initiated in the Latvian Education system in order to carry out a gradual transition to the education acquisition based on competencies in all education levels, including pre-school education. It means for children not only to acquire knowledge based on the practical experience and skills to use those in new situations, but also to develop abilities and a desire to study. At the same time, it will have to be paid a greater attention to children's personality development and formation of their characteristic habits in the pedagogical process. However, the achievement of such goals is endangered in case of determination an insufficient or disrupted speech and language development for almost every second pre-school child in Latvia at the age group of three to five years. Insufficient speech and language development level encumbers with information grasp, knowledge acquisition and reproduction, as well troubling communication with peers and adults. If it is not timely ascertained, prevented or reduced, then there is a risk to have difficulties at a later age group with written language acquisition and learning, and also there is a possibility of behavioral and socialization problems. For about half of the cases of speech and language development insufficiency have a functional nature and it could be reduced by using pedagogical methods. As one of them it has to be mentioned a method, which is known formore than a hundred years - Montessori Pedagogy. Its theory and practice is rooted not only in previously noted competence based education acquisition approach, but it considers the language either as an important factor ina child's development. By using Montessori Pedagogy in a process of speech and language development there is a holistic approach carried out following the multi-structural model of speech and language development (Tomele, 2015; Lidaka, Tomele, 2016).

Problem statement and sub-problems (hypotheses)

The use of Montessori pedagogy in preschool education process and speech therapy correction promotes the development of children's speech and language:

- on the basis of the multi-structural model of speech and language development;
- considering the principles of the humanitarian pedagogy;
- by providing the child's development in wholeness and the competence-based preschool education acquirement.



Method

The theoretical substantiation of Montessori Pedagogy application in speech and language development promotion is based on the research and analysis of works by Maria Montessori and other authors.

The empirical substantiation of Montessori Pedagogy application in speech and language development promotion is based on the research, observations and case study of Montessori Pedagogy practice.

The theoretical substantiation of Montessori pedagogy application in speech and language development promotion

At the beginning of the last century Italian physician and educator Maria Montessori (1870 - 1952), when studying the theoretical knowledge of medicine, psychology and pedagogy, and by using the method of empirical observation, developed a complex method of medical, psychological and pedagogical approach in education. At the same time Montessori pedagogy besides interdisciplinary solidarity has also a transnational and intercultural one worldwide. By considering the culture and traditions of each nation, the same didactic material is acquired the same way, followed by the same basic didactic principles and philosophical viewpoints, especially emphasizing Montessori pedagogy as a humanitarian pedagogy tendency centered at the child, his interests and needs. In 1988 the significance of M. Montessori's pedagogical work was acknowledged by a resolution of United Nations Educational, Scientific and Cultural Organization (UNESCO) confirming M. Montessori as one of the four educators (J.Dewey, G.Kerschensteiner, A.Makarenko, M.Montessori), who have influenced the pedagogical way of thinking in the 20th century (Lüse, Miltiņa, Tübele, 2012).

During her pedagogical activity M. Montessori has studied various aspects of child's development, including speech and language development, as well as she developed the didactic materials and recommendations for oral and written language development and acquisition. In addition to the empirical observations of children's language development process, there has been performed the research of language origin theory (*Ursprung und Vorgeschichte der Sprache*, 1946) by G. Revesz, the child's language development studies (*Psychologie der frühen Kindheit*, 1914) by W. Stern and the studies on language disorders (*Die Störungen der Sprache*, 1877) by A. Kussmaul, also a practical use of breathing exercises (*Cura della balbuzie e dei difetti di pronunzia: metodo teorico-pratico ad uso degli alunni scuole normali, delle scuole elementari, delle direttrici e maestre dei giardini d'infanzia*, 1906) according to methodology by A. Sala (Montessori, 1994a, Монтеessori, 2005).

The child's speech and language development issues are mentioned and described in many works by M. Montessori, but there are three books, which should be rated as the most important ones from this particular aspect:

- in the book "The Method of Scientific Pedagogy Applied to the Education of Children in the Children's Houses" (*Il metodo della pedagogia scientifica applicato all'educazione infantile nelle case dei bambini*, 1909) there are analyzed the physiological and psychosocial aspects of speech and language development, there is a general overview on types of speech and language disorders, review of formation preconditions for written speech and its mechanism, and it also provides recommendations for the development of children's speech and language for children from 3 to 6 years of age;
- in the book "The Advanced Montessori Method Self-Education in Elementary School" (*L'Autoeducazione nelle scuole elementari*, 1916) there is described a lesson methodology of the language development for elementary school children in grammar, reading and literature, a connection between the other types of lessons and language lessons, and there is highlighted the significance of the early and preschool period children's development in the progressing of speech and language functions;
- the book "The Absorbent Mind" (1949) examines the development of the child's speech and language from birth to 3 years of age, it appraises the importance of the language environment, the pathogenesis of language disorders, also it substantiates the legitimate role played by language in the history of mankind.

M. Montessori interpreted the meaning of the language out of the society's cultural-historical development process position - the language has formed and evolves under the impact of the process of mankind's cultural-historical development, public socialization and implementation of needs. At the same time the importance of the child in this process was also emphasized - solely through the child's ability to acquire the language it is possible to provide



cultural succession for generations, preserve the knowledge acquired by society and transfer it to the future generations (Montessori, 1994a).

In her works M. Montessori brings out the language as a social phenomenon that can only develop in a human society - by interaction between a child and an adult. An essential part of this process is the "prepared environment" that provides the preconditions for language development. The prepared environment is created by a mother, but the child learns the language himself (Montessori, 1994a).

By analyzing a link between the development of child's language and thinking function, M. Montessori pointed out that the language of the child becomes more complicated as more complicated becomes the thinking process. It is not said, which one (thinking or language) could be the primary or the leading factor in the development process, but it is indicated to the connection between the language complication level and the development of thinking (Montessori, 1994a). Modern studies in neuropsychology also confirm that none of those processes is primary or dominant - thinking and language are in a mutual interaction, dependent on child's age group (Voigt, 2013).

M. Montessori believed that the child "absorbs" the native language - by acquiring it continuously, unconsciously and entirely. The period of time from birth to three years of age is the most active developing period in the child's life. The child is like a "sponge", as a "camera" that perceives and stores up all the information unconsciously. During this period the language development occurs only on the basis of the child's social and his own subject matter practical experience. From three to six years of age the child begins to differentiate his impressions, he is able to mark out separate parts from the whole and begins to understand the abstract interconnections as well. M. Montessori believed that the information received up to six years of age deeply penetrates into the child's subconscious and forms the child's character, memory, intelligence and will (Holstiege, 1999; Montessori, 1994a, Oswald, Schultz-Benesch, 1993). From a modern point of view M. Montessori's term "absorbent mind" should be interpreted as specific neurobiological processes at the early stage of child's development - a synaptic formation process that is directly influenced by the child's early experience in the realms of feeling, movement, language and social emotional experience.

However, the phenomenon of child language development cannot be explained only as a result of the "absorbent mind". M. Montessori believed that the child has an unconscious instinct or the "human tendencies" to acquire a language. The term "human tendencies" refers to the need for self-development or self-formation. The language development process is unconscious and it is provided by the child's "self-activity" (*Eigenaktivität*). A healthy child has an unconscious need to learn a language by using self-activity, as well as it has the need to get up, walk and explore the world (Montessori, 1994a). In the scientific researches on mirror neuron activity by J. Bauer (2006) it is stated that there are nerve cells in the human brain affecting language production the same way mirror neuron activity affects the development of movement system. On the operating base of mirror neurons, the children in their early age acquire the first social and communicative approach (Behrens, 2009).

To the terms "prepared environment", "absorbent mind", "human tendencies" and "self-activity" by M. Montessori's child's developmental concept is also added the term "inner development (construction) plan" (*innere Bauplan*) - the child is born with his own definite development plan fulfilled by the support of the child's self-activity and the environment (Montessori, 1994b). Nowadays the concept of the "inner development plan" stands for the peculiarities of genetically conditioned central nervous system (CNS) - an organization of genetically determined and hierarchically arranged morphological, neurobiological and neurological base structures. The scientific researches confirm that, although the CNS structure and its features are genetically appointed, nevertheless it is a plastic and evolving system capable of adapting to the specifics of the current developmental stage as well as to the influence of the external and internal factors. Different development blocks (including development of motility, language and socialization) are exposed to the child's environmental impact (Michaelis, Niemann, 1995) and the learning process results in structural changes of the CNS (Lebeer, Rijke, 2003).



M. Montessori believed that the child's language development has an "explosive" nature (*explosionartige Phänomene*), not a linear one. The child's language development periods without any external display of development dynamics, M. Montessori associated with the process of accumulating information. When a sufficient amount is accumulated, there is a rapid growth of language development featured by qualitative acquiring of new skills. Hence the relatively quiet periods of information accumulation interchange with rapid periods of language development reaching the height of the oral language development at two and two and a half years of age. By the age of two and a half years the basics of child's native language system are already evolved. In the further development period til about five or six years of age there is just an ongoing process of perfection (Montessori, 1994a).

According to M. Montessori the child develops through several "sensitive periods", which have a gradual beginning, culmination and closure. Sensitive periods in the child's development last for a specific time span, when the child learns with joy, interest and endurance; during these periods it is possible to develop and to improve certain qualities and skills without making much effort for the child (Holstiege, 1999; Montessori, 1994a). Since birth til the age of five or six there is the sensitive period of oral and written language learning, that goes into the next age group as a grammar acquisition sensitivity (from 6 to 12 years of age). The sensitive period of language development is relatively divided in the sub-periods:

- oral language acquisition (0-3 years);
- written language acquisition (3 - 6 years):
 - acquisition of writing (3,5 - 4,5 years),
 - acquisition of reading (4,5-5,5 years);
- acquisition of grammar (6 - 9 years).

After the six years of age the development of language evolves by other regularities - there is a transition from an unconscious or absorbent form of language acquisition to a deliberate learning process (Монтессори, 2006).

On the basis of empirical cognitions by M. Montessori and contemporary neuroscientific researches, A. Winkler specifies the sensitive periods of language development mentioned above and notes that it is possible to improve certain skills in a language field all through the lifetime:

- the pre-sensitive stage of oral language starts from birth to 1 year of age, the sensitive stage - 1 to 4 years, the post-sensitive stage - 4 to 12 years, the end of the sensitive stage - at about 12 years of age (Winkler, 2010);
- the pre-sensitive stage of the written language acquisition - from 1 to 4 years, the sensitive stage - from 4 to 9 years, the post-sensitive stage - from 9 years of age, there is no end of the sensitive stage - the deliberate improvement of the written language is possible throughout the lifetime;
- the pre-sensitive stage of grammar acquisition - from 1 to 5 years, the sensitive stage - from 5 to 8 years, the post-sensitive stage - from 8 years of age, there is no end of the sensitive stage - the deliberate improvement of grammar is possible throughout the lifetime (Winkler, 2008).

Also M. Montessori believed that the function development and the acquisition of skills is possible after the end of the sensitive periods, but then the learning process continues at a conscious level and it requires a willpower of a child (Montessori, 1994a) - consequently there is no longer possible an unconscious and easy language acquirement, what was based on the morphological, neurobiological and neuropsychological development of the child's brain in the early and preschool age. Also S. Kannengieser (2009) in the context of speech therapy science notes that the sensitive periods do exist and they are defined by the maturation processes of brain structure, however their initial, final and critical stages still have to be appraised.

M. Montessori indicated that the general interconnections of language development mentioned above (absorbent mind, human tendencies, sensitive periods) are the same for all of the children, but not the preconditions for language development (inner development plan, self-activity, environment).. It also defines both the different levels of language development and the emergence of speech and language development disorders.



The origin of child language disorders M. Montessori associated with insufficient or incorrect speech environment and a child's specific sensitivity towards environmental incentives. Language acquisition is the road to gain greater independence, but at the same time it is also related to the possibility of regression (the occurrence of disorders). M. Montessori indicated that children's speech and language disorders may be functional or based on organic peripheral or central lesions (Montessori, 1994a; Монтессори, 2005). If the development of speech and language functions is delayed and does not correspond to the general regularities of the ontogenetic language development, then the retention of language development can leave negative consequences onto those language system levels, which were supposed to be developed. M. Montessori also indicated that during the following development periods to the oral speech disorders aligns incorrect spelling (Монтессори, 2005) or written language disorders (Tomele, 2013). M. Montessori believed that it is necessary to start a correction of speech and language disorders timely - early at the preschool age (Монтессори, 2005), but when correcting linguistic defects, the laws of physiology and ontogenesis of the child's development should be taken into consideration - the lessons and their content have to be formed based on those laws as well as an adjustment of the level of complexity (Montessori, 1994a).

The critics of Montessori pedagogy, such as W. Bohm (*W. Böhm*) (2012) notes that certain of M. Montessori's statements are defined unclearly and wrapped in mysticism. However, the author of the paper G. Tomele believes that at the time the works of M. Montessori have appeared, there was not yet developed a scientifically reasoned and reliable evidence-based regularity research of the child's brain development and activity, as well resulting in no adequate scientific terminology. Only at the end of the last century and at the beginning of this century, thanks to the introduction of advanced technologies in medicine, there has been a significant turnabout in the development of neurological sciences (Hütner, 2008). On the basis of the child's development empirical observation, M. Montessori, has done the most fundamental discoveries (absorbent mind, sensitive periods, child's self-activity, human tendencies, inner development plan, the role of prepared environment and social communication in child's development, etc.), which are approved nowadays by the latest scientific researches in the fields of psychology and neurology sciences (Hütner, 2008; Milz, 1999; Polk-Lillard, 2008).

In the conclusion of the theory analysis of Montessori pedagogy it can be concluded:

- M. Montessori's empirical observations coincide with the contemporary discoveries in field of neurosciences;
- M. Montessori's language development conception combines the variety of language development theory recognitions (nativism, constructivism, interactionism, behaviourism) and it (the conception) meets the guidelines of a holistic approach in medicine, psychology, pedagogy and speech therapy.

The research of Montessori pedagogical practice in the context of speech and language development promotion

The theoretical knowledge by M. Montessori is essential for understanding the language development process, language development promotion and language development disorders within the meaning of pathogenesis from the point of view of a holistic approach, but also important is the understanding of the practical use of Montessori pedagogy - the didactic principles, the didactic materials and the educator's competence.

M. Montessori believed that the child "learns" not only by working with the didactic materials during a lesson, but "absorbs" the knowledge continuously and in every situation. Thereby the use of the pedagogical didactic principles by Montessori (the principle of individual approach, the principle of free choice, the principle of development, the principle of self-sufficiency, the principle of "an error is not an error", "from a capture to a comprehension" or the principle of subject activity, "from the specific to the abstract" or the principle of visibility, "from the simple to the complex" or the succession principle, the systemic principle) has to be viewed widely - in a teaching and a learning (playing) process, in the correction procedure of development disorders, and in daily situations in a kindergarten or at school, in public places, in the family, etc. (Tomele, 2010). Due to that, the didactic principles, materials and pedagogical competence are not the only essentials in the children's training, educating and development disorder



correction, but also the cooperation with parents, educating them and involving in the pedagogical process play a significant role.

In the context of language acquiring, M. Montessori emphasized several skills to be acquired - listening, speaking and written language (writing and reading). The key to acquiring the listening skills is The Silence Games, which activate the speech and hearing center and promote the sound perception, also essential is the word-economy principle, when working with any didactic material to make it easier for a child to perceive and understand the most important information. To acquire the sound pronunciation and for the speech improvement, M. Montessori suggested daily exercises of the respiratory and articulation apparatus to all children. Whereas, the methodology of acquiring the written language is intended not only for the acquisition of graphic images, writing and reading, but also for a completion of sound pronunciation and perception. The expansion of vocabulary, and the acquiring of morphology (linguistics) and syntax norms happen during any activity, and all groups of Montessori didactic materials (the practical life tasks, the sensory material, the language material, the mathematical material, the cosmic education material) can be used to promote the development of the child's language - by direct and indirect forms of work.

Originally, M. Montessori used her method in a training for children with learning disabilities, but from 1907 - 1967, Montessori pedagogy was used only as a general education method for educating and training of children. In 1967 it was started to be used again for the training of children with developmental disabilities - Montessori pedagogy earned the status of the revitalizing or therapeutic pedagogy, and was included in the concept of social pediatrics by Th. Hellbrügge, intended not only for early diagnostics and correction of disorders, and parental training, but also for the social inclusion for children with various developmental disabilities in the society of healthy children (Hellbrügge, 1981, 1986). Th. Hellbrügge believed that the isolation of children with special needs in the special educational institutions deepens a disorder manifestation in the social sphere, because it is impossible to obtain a social experience by being in a contact with children without developmental disorders. Also children with language disorders are not provided with the environment promoting language and social development, during their stay in the special education institutions. An optimal solution would be to include these children in the general education institutions, providing an effective support system for correcting the language disorders at the same time. Nowadays, the social pediatric centres by the concept of Th. Hellbrügge are located not only in Germany but worldwide - there are 23 centres in Europe, 6 in Asia and 12 in the United States, including that one in Latvia (University of Latvia Centre of Social Pediatrics) (Tomele, 2011).

The idea of revitalizing pedagogy (*лечебная педагогика* - therapeutic pedagogy) also appeared in Russia at the end of the last century. E. Mastjukova (*Е.М.Мастюкова*) (1997) described it as a new pedagogical specialization arisen in the interaction of medical and pedagogical sciences for the training of children with movement, language, intellectual, behavior, communication and socialization disorders and correction of those disorders. V. Prusakov (*В.Ф.Прусаков*), M. Belousova (*М. В. Белоусова*) and M. Utkuzova (*М.А.Уткузова*) (2009) classify the revitalizing pedagogy by Montessori as one of the methods of neurorehabilitation.

Both abroad and in Latvia Montessori pedagogy is used in the educational institutions, the development centers, in the rehabilitation institutions for educating, training, development promoting of children and disorder correction. Two kind of interchangeably independent directions of Montessori pedagogy have evolved - the classical and the revitalizing (special, therapeutic) Montessori pedagogy (Tomele, 2011). Nowadays, when the inclusion process of children with special needs in the general education system is topical, both directions of Montessori pedagogy successfully complement each other.

In the Alternative Education Centre of Liepaja University Institute of Educational Sciences (LiepU IES) the use of Montessori pedagogy in the speech and language development promotion and disorder correction is being studied since 2007, because the didactic principles by Montessori pedagogy coincide with the general principles of



development, systemic and the complex approach, and the didactic principles of language acquiring, as well as with the speech therapy work specific principles (individual approach, visibility, practical activity, succession, scrupulosity, etc.).

In 2008-2009 G. Tomele made the comparative research in a social care institution to carry out a study of development and development dynamics for two groups of children - one group of children was trained and educated by using Montessori pedagogical methods and materials, but the other by the classic approach methods. Munich Functional Development Diagnostics was used to evaluate the development of children. The research lasted for 5 months and there were 24 children taking a part in it. The results confirmed that Montessori pedagogy promotes a development of child's personality and language in whole, and also positively affects the general development - the general and subtle motor skills, the cognitive development processes, the social and self-sufficiency development. It was concluded that the social development and language disorders have to be viewed in a context of the child's development in a specific social environment, and the normalization process has to be focused on a further development of the child's individual activity and communication abilities. The main goal in this process is to improve the communication and the social environment. As a successful model, was acknowledged the "prepared" environment in terms of Montessori pedagogy (Tomele, 2010).

The second comparative research was conducted in 2015-2016 in two preschool education groups to explore the early literacy development, developmental dynamics and opportunities to prevent the reading disorders. There were 29 children of senior preschool age from two preschool educational institutions taking part in the research. In the preschool educational institution (PEI) Y the general education program was acquired by Montessori pedagogical methods, in the PEI X - by the classic approach methods. There was used DIBELS Next method to test the early reading skills. The test took place twice - in winter and spring. Overall the results of the winter test for PEI Y (n = 11) were good - 90.9% of children had reasonable early reading skills, and 9.1% of children needed an intensive support. The PEI X (n = 18) winter test results showed a lower level of early literacy acquiring - only 50% of the children's literacy test results were sufficiently, 22.22% of the children needed a strategic support to improve the early reading skills, whereas 27.78% needed an intensive support. In the second test in spring, it was ascertained that in PEI Y the early literacy level is still reasonable to 90.9% of the children, while 9.1% of the children have improved and they need just some strategic support in the future. Whereas in the PEI X it was ascertained that the percentage of a sufficient early literacy acquiring, and the need for the strategic and intensive support remained unchanged (Tomele, Antoneviča, 2017). The results of the research confirmed that in the Montessori group the children's early literacy has a higher level, the dynamics is more positive, the parents are more involved in a promotion of the early literacy, and the risk of having possible reading disorders at school is lower.

A systematic individual work with children with a linguistic development delay or disorders at the Alternative Education Centre of LiepU IES since 2007 confirmed that the practical life materials, sensorial materials, language and mathematical materials by Montessori successfully provide the development of motor and cognitive sphere, while lessons using Montessori didactic materials have to be adjusted, so their therapeutic effect would be intensified and the expected result in the language development promotion would be achieved. In cases of language disorders, it has to be integrated additionally specific speech therapy technologies in the lessons. Whereas the philosophy by Montessori pedagogy and didactic principles coincide with both - the speech therapy correction implementation and the cognitive development promotion, socialization and behavior normalization for children with language development problems considering the principles of the humanitarian pedagogy. An essential factor is the cooperation with parents and the consolidation of acquired skills, knowledge and mindset in daily situations in the family. The studies carried out confirm the view of T. Hellbrügge that the development of children's language and cognitive abilities in Montessori pedagogy occur on the basis of:

- the training of the general motions and subtle motility;
- the activities with objects and the development of game activities;
- the sense of sensitization and differentiation;



- the improvement of the social relations;
- the creativity and thinking development;
- the promotion of attention, concentration, patience;
- the development and stability foundation of will, personal activity, initiative, self-sufficiency and self-awareness (Hellbrügge, 1977, 1981; Tomele, 2011).

By using Montessori Pedagogy in a process of speech and language development there is a holistic approach carried out following the multi-structural model of speech and language development (Tomele, 2015; Lidaka, Tomele, 2016).

In 2004 within the framework of the program "Education and Training 2010" in the European Union (EU) it was made a set of eight core competencies that should be acquired by children during the educational process:

- Communication in the mother tongue;
- Communication in foreign languages;
- Mathematical competence and basic competences in science and technology;
- Digital competence;
- Learning to learn;
- Social and civic competences;
- Sense of initiative and entrepreneurship;
- Cultural awareness and expression.

It is noted in the EU recommendations that basic language skills, reading and writing skills, the proficiency of calculation, and informatics and communication technology skills (ICT) are an essential basis and support for all kinds of the learning activities (*Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning*, 2006). It follows that the competence of mother tongue is one of the most significant key competencies in child's personality development and education. Currently Latvia is implementing a project "The competency approach in the learning content" with the support of the European Social Fund. Within the framework of the project until a school year of 2021/ 2022 there will be implemented a gradual transition to the education acquiring based on the competences at all levels of education, which means that:

- the children will have to acquire knowledge on the basis of practical experience, and they will have to be able to use the knowledge in new situations;
- it will have to be developed children's abilities and a willingness to learn;
- will have to pay greater attention to children's personality development and a formation of character habits (*Kompetenču pieeja mācību saturā*, 2016).

Analyzing the theory and practice by Montessori pedagogy in the context of competence-based education, it can be concluded that the concept of pedagogy developed by M. Montessori, right from the beginning is based on the competence-based education acquirement (skills, knowledge, mindset) both theoretically and practically, by developing and improving the child's personality. By promoting the development of children's speech and language by diminishing the risks of speech and language disorders and by implementing an optimal procedure process of correction in cases of disorders, the acquirement of mother tongue competence is provided primarily, but secondarily - the competence-based education acquirement in general. The concept of Montessori pedagogy in practice has proven that there is a possibility of different approach to the children's training and educating (for both children with and without special needs), including the promotion of language development.

Conclusions and Recommendations

Carrying out the theoretical and empirical research on an operating base of LiepU IES (Institute of Educational Sciences) The Alternative Education center from 2007 – 2017, the drawn conclusions are as follows – Montessori Pedagogy (theory, didactic materials, practice) promotes the speech and language development of pre-school age children.



The pedagogical didactic principles by Montessori coincide with the general preconditions of language development promotion, the speech therapy didactic (the individual approach, visibility, practical activity, succession, conscience, etc.) and general basic principles (development, systemic and the complex approach principles), and they are applicable to the promotion of speech and language development.

The environment prepared by Montessori pedagogy, the professional competence of experts and the involvement of parents in the process of training, educating and disorder correcting provide the preconditions for positive speech and language development, whereas the child's biological potential defines the individual nature of this process. The use of Montessori pedagogy philosophy, the didactic principles and materials, based on the multi-structural model of speech and language development, and by considering the principles of humanitarian pedagogy, provide a successful process of speech and language development, as well as the child's development in wholeness and the competence-based preschool education acquirement.

In the promotion process of children's speech and language development at the preschool age, the general and individual preconditions of language development have to be followed in the speech therapy of speech and language disorder correction in the context of the multi-structural model of speech and language development, as well as the principles of the holistic approach and humanitarian pedagogy.

References

- Bauer, J. (2006). *Warum ich fühle, was du fühlst: Intuitive Kommunikation und das Geheimnis*. München: Heyne Verlag.
- Behrens, G. (2009). *Wie kommt die Welt in den Kopf? Prinzipielles zur Gehirnforschung nebst einigen Konsequenzen für das ‚gehirnge-rechte‘ Lehren und Lernen in der vhs*. Retrieved from <http://www.vhs-bw.de/abteilung/politik-gesellschaft-umwelt/wie-kommt-die-welt-in-den-kopf.pdf>
- Böhm, W. (2012). Maria Montessori (1870 – 1952). In H.- E.Tenorth (Ed.), *Klassiker der Pädagogik. Von John Dewey bis Paulo Freire* (pp.74-88). 2.Auflage. München: Verlag C.H.Beck.
- Hellbrügge, T. (1981). Montessori-Pädagogik als ärztliche Pädagogik. In T. Hellbrügge (Ed.), *Klinische Sozialpädiatrie* (pp. 397-403). Berlin, Heidelberg, New York: Springer Verlag.
- Hellbrügge, T. (1986). Integrierte Erziehung durch Montessori-Heilpädagogik – Ein Bericht über die gemeinsame Erziehung mehrfach und verschiedenartig behinderter und nichtbehinderten Kindern in den Montessori-Schulen des Kinderzentrums München. In H.Roehrs (Ed.), *Die Schulen der Reformpädagogik heute*, (pp. 305-322). Düsseldorf: Schwann.
- Holtstiege, H. (1999). *Das Menschenbild bei Maria Montessori*. Freiburg im Breisgau: Verlag Herder.
- Hütner, G. (2008). Montessori-Pädagogik und die Herausbildung friedfertiger und lernförderlicher innerer Einstellungen aus neurobiologischer Sicht. *Das Kind. Zeitschrift für Montessori-Pädagogik*, 44, 8-28.
- Lebeer, J., Rijke, R. (2003). Ecology of development in children with brain impairment. *Child: Care, Health & Development*, 29 (2), 131-140. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12603358>
- Lidaka, A., Tomele, G. (2016). Multistructural Model of Speech and Language Development in Montessori Pedagogy. In O.Titrek, I.Mikelsone, L.Pavitola, G.Sezen-Gültekin (Eds.), *ICLEL 2016 CONFERENCE PROCEEDINGS BOOK* (pp.429-437). Sakarya: Sakarya University Faculty of Education. Retrieved from http://www.academia.edu/32409662/ICLEL_2016_CONFERENCE_PROCEEDING_BOOK_d%C3%BC%C5%9F%C3%BCK_megabaytl%C4%B1.pdf
- Lüse, J., Miltiņa, I., Tübele, S. (2012). *Logopēdijas terminu skaidrojošā vārdnīca*. Rīga: Izdevniecība RaKa.
- Michaelis, R., Niemann, G. (1995). *Entwicklungsneurologie und Neuropädiatrie*. Stuttgart: Hippokrates Verlag.
- Milz, I. (1999). *Montessori – Pädagogik neuropsychologisch verstanden und heilpädagogisch praktiziert*. Dortmund: borgmann publishing.
- Montessori, M. (1994a). *Das kreative Kind*. Freiburg, Basel, Wien: Verlag Herder.
- Montessori, M. (1994b). *Kinder sind anders*. München: Klett-Cotta im Deutschen Taschenbuch Verlag.
- Oswald, P., Schultz-Benesch, G. (1993). *Grundgedanken der Montessori – Pädagogik*. Breisgau: Verlag Herder Freiburg.
- Polk-Lillard, P. (2008). Montessori, das Gehirn und junge Erwachsene. *Das Kind. Zeitschrift für Montessori-Pädagogik*, 44, 30-44.



- Tomele, G., Antoneviča, M. (2017). Prevention of reading disorders in 6 to 7 years old children. In L.Laganovska, S.Tūbele (Ed), *Book of Abstracts. 4th Congress of Baltic Speech and Language therapists* (pp.24-26). Riga: LLA. Retrieved from http://logopedi.lv/faili/faili/kongr_2017/book%20of%20abstracts%2015022017.pdf
- Tomele, G. (2015). Runas un valodas attīstības multistrukturālais modelis veseluma pieejas aspektā. In *Sabiedrība, integrācija, izglītība. Starptautiskās zinātniskās konferences materiāli 2015.gada 22.-23.maijs, III daļa* (pp. 222-233). Rēzekne: RA Izdevniecība. Retrieved from <http://journals.ru.lv/index.php/SIE/article/viewFile/392/501>
- Tomele, G. (2013). Rakstu valodas apguves un traucējumu korekcijas priekšnosacījumi Montessori pedagogijā. In *Sabiedrība, integrācija, izglītība: starptautiskās zinātniskās konferences materiāli 2013.gada 24.-25.maijs, II daļa* (pp. 222-232). Rēzekne: RA Izdevniecība. Retrieved from <http://journals.ru.lv/index.php/SIE/article/viewFile/571/345>
- Tomele, G. (2011). Montessori atveseļojošā pedagogija pasaulē un Latvijā. In *Pedagoģija un teorija: VI zinātnisko rakstu krājums, Izglītība un pilsoniskā sabiedrība* (pp. 704-716). Liepāja: LiePa.
- Tomele, G. (2010). Valodas attīstības un sociālās vides mijiedarbība Montessori pedagogijas aspektā. In *Zinātnisko rakstu krājums Sociālā pedagogija: izglītības un sociālās vides mijiedarbības sociāli pedagogiskais aspekts* (pp. 313-327). Liepāja: LiePa.
- Van der Wolf, K. (2010). Kinder mit besonderen Bedürfnissen und Inklusion in der Montessori-Pädagogik. In E.Eckert, I.Waldschmidt (Eds.), *Inklusion: Menschen mit besonderen Bedürfnissen und Montessori-Pädagogik* (pp. 72-83). Berlin: LIT Verlag.
- Voigt, F. (2013). Sprache und Kognition. In T.Hellbrügge, B.Schneeweiß (Eds.), *Sprache, Kommunikation und soziale Entwicklung* (pp. 68-79). Stuttgart: Klett-Cotta.
- Winkler, A. (2008). Grammatik oder die Sprache als Kunstwerk. *Das Kind. Zeitschrift für Montessori-Pädagogik*, 44, 112-141.
- Winkler, A. (2010). Menschen mit besonderen Bedürfnissen. Prinzipien und Perspektiven der Montessori-Pädagogik. In E.Eckert, I.Waldschmidt (Eds.), *Inklusion: Menschen mit besonderen Bedürfnissen und Montessori-Pädagogik* (pp. 84-99). Berlin: LIT Verlag.
- Мастюкова, Е.М. (1997). *Лечебная педагогика*. Москва: Просвещение.
- Монтессори, М. (2005). *Дом ребёнка. Метод научной педагогики*. Москва: Астрель.
- Монтессори, М. (2006). *Мой метод. Метод научной педагогики. Начальное обучение*. Москва: Астрель.
- Прусаков, В.Ф., Белоусова, М.В., Уткузова, М.А. (2009). *Нейрореабилитация детей раннего возраста*. Монография. Казань: Печатный двор.



Teacher's Perspectives on Collaboration and Professional Development in Portuguese Schools

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Abstract

This paper is part of a broader international research project, which includes eight case studies carried out in public schools in Portugal and in Chile. It is a comparative study, which aims to understand the way teachers describe formal and informal opportunities for collaboration in their schools and its effect in terms of practical knowledge; to identify the enablers and inhibitors that influence professional collaborative learning at school; to understand the role of teacher evaluation and student academic results on teacher's professional development; to analyse how teachers with different skills, experiences and schools view their own professional development. In this case study, a public school, located in the north of Portugal, with sixty years of history, was selected. The participants in the study are teachers from different disciplinary areas and teaching departments. The school includes elementary and secondary school level, with regular and professional study programmes. Data collection is based on semi-structured interviews to the school director and to eight teachers, mainly coordinators of teaching departments. Results based on findings from teachers point out the importance of collaborative work, but they also recognize that schools need a reorganization that includes time for this purpose, integrated on teacher's schedule. Informal opportunities are also seen as fundamental for professional development and to improve student outcomes. Conclusions and implications for teacher collaboration and professional development will be discussed in the paper.

Keywords: Collaboration, Professional Development, Informal and Formal Learning, Teacher's Perspectives, Portuguese Schools

Introduction

Collaboration is a key challenge and opportunity for schools and teachers to improve their performance and contribute to their own professional learning and development. Collaboration may assume different forms, such as collaborative planning, peer coaching, mentoring, collaborative action research, or even ranging from advice and consultation to shared decision-making (Hargreaves, 1998; Little, 1990). School culture and leadership is also an important variable influencing teacher collaboration and professional development, as collaborative cultures foster and build on qualities of openness, trust and support among teachers (Flores et al. 2007). Basically, culture is related with people when they are with each other in classroom, or at their disciplinary departments. In this relationship, comes out their values, beliefs and behaviors, shared by all organization members (Schein, 1985, in Day, 2004). Day (2004) refers that school is a physical canary, a formal organization, an employer. It's a rich social and psychological context where teachers develop a professional sense of practice, efficacy and community. For the author, this last aspect seems to be the most important value for the teaching and learning process, for teachers and students.

As referred by Day (2004), teachers understand that shared objectives, collegiality, taking risks, support, mutual respect, open mind, humor and celebration, life formation contributes to the collective passion for professional development. This passion helps to reject the tendency for individual cultures (like autonomy, isolation, and insularity rule), artificial collegiality (the relationships at work are imposed by autocracy), balkanization (exists a competition to obtain resources and rewards; loyalty to the discipline or to the department comes before the



loyalty to the school). According to Day (2004), the ideal would be for schools to assume collegial relationships, where people are as important as the professional, where the work by sharing should prevail towards an emotional comprehension. Denzin (1984, p. 137), mentioned by Day (2004), refers that shared emotions are the center of the meaning to understand, in a significant way, the others emotional experiences. According to Forte & Flores (2014), collaborative work brings several benefits such as moral support, which allows teachers to respond in a more successful way to the problems, among other advantages such as new ideas, reflection about practice, more analytical and creative energy to deal better with students and a stronger capacity to learn from others and to improve continuously. However, the construction of learning collaboration networks takes a long time to function, literature suggests that they offer significant effects, on teachers and, also on students (Day, 2004). Those effects are related with: less teacher's isolation, a bigger compromise to the mission, the objectives of the school and to teaching work, a better chance for teachers to be informed, skillfully renovated and inspired to inspire their students, significant development to adapt teaching to students, and a greater chance to look for a systematic and essential change.

This paper aims to analyze teacher's perspectives on collaboration and professional development and understand the way teachers describe formal and informal opportunities for collaboration in their schools and its effect in terms of practical knowledge and professional development. The study is part of a broader international research project, which includes eight case studies carried out in public schools in Portugal and in Chile.

Method

This study is part of a broader international research project and also a Masters Dissertation on Educational Management and Administration, carried out at the Portucalense University, in Portugal.

The objectives of the project include the following:

- To understand the way teachers, describe formal and informal opportunities for collaboration in their schools and its effect in terms of practical knowledge.
- To identify the enablers and inhibitors that influence professional collaborative learning at school.
- To understand the role of teacher evaluation and student academic results on teacher's professional development.
- To analyze how teachers with different skills, experiences and schools view their own professional development.

This study aims to analyze and discuss teacher collaboration and professional development based on findings from a case study carried out in Portugal, in a public school, located in the north of Portugal. The following research questions were defined to guide the study:

- How important are formal and informal experiences of teachers for their practical knowledge?
- What are the facilitating and inhibiting features that contribute to the development of collaborative teacher work?
- What is the role of teacher evaluation and student results for teacher collaboration and professional development?
- What conditions contribute to teacher's professional development and learning?

Data Collection

The research design of the study combines a qualitative and quantitative approach. The methods for data collection include a questionnaire, semi-structured interviews and participant observation. The questionnaire was applied to all teaching staff at the school (N=173), from October to December 2016. For the semi-structured interviews, the school director and teachers with coordination roles in the school were selected (N=8). The semi-structured interviews were carried out from January to March 2017. Table 1 presents a summary of the phases and methods of data collection.



Table 1. Phases and methods of data collection

Phases	Moment	Participants	Data collection	Data Analysis
1st Phase	October to December 2016	Elementary and secondary school teachers. (N=173)	Questionnaire	Statistical analysis using the SPSS program. Content analysis of written comments by the participants.
	January to March 2017	- School Director - Department Coordinators - Coordinator Internal	Semi-structured Interview	Content analysis of interview transcriptions.
2nd Phase		Evaluation (N=8)		
3rd Phase	March to June 2017	Teachers that authorize the observation	Participant Observation	Content analysis of field notes and observations.

For the purpose of this paper, only qualitative data from the 2nd phase of data collection, this is, from the semi-structured interviews to school leaders and teachers with coordination roles in the school, will be analyzed and discussed.

Ethical procedures were considered during the data collection. The research protocol was provided to the School Director, who authorized the development of the study in the school. Informed consent (to the director and teachers) and confidentiality of the data were assured at all research procedures.

The school

The school participating in this case study is a secondary school, with historical reference and over 60 years of existence. It was the first industrial and commercial school in the region and it aims to be a reference in education/training, offering basic level education and a wide range of secondary level education (nighttime inclusive). The school receives students coming from different socio-economic and cultural backgrounds and it is designated as a TEIP school (Educational Territory with Priority Intervention), concerned with disabilities, overcoming absenteeism and social exclusion in early school. The school includes a multidisciplinary team, including a psychologist, a social worker, a coordinator of social and cultural activities, special education specialists, etc. It is the school with the highest number of students and teachers in the region: 1273 students (between the teaching daytime and nighttime); 173 teachers (day and night). In Portugal, schools are organized in mega-groups, according to recent changes in the Portuguese legislation. This organizational change introduced many challenges for teachers work, their pedagogical practices, collaboration with others, and their personal and professional development. Besides this "problem", the different policies or external regulations, produce a permanent conflict toward teachers' identity and a stable culture of the profession. For these reasons, the context chosen for the study seemed relevant and enriching, considering the objectives of the international project and the impact of its results on the school analyzed. Besides this, the report of the external evaluation of the school called attention to the importance of the development of collaborative practices amongst school teachers and departments. Therefore, the participation of this school in the international research project seemed to be an excellent opportunity to develop further steps in this direction.



Participants

The selection of the participants in the study followed the research protocol of the international project, which suggested the selection of six to eight teachers, with roles of coordination and leadership, besides the role of teaching in the school. The teachers of this case study were selected by the researcher, based on the criteria of those who were involved in intermediate leadership processes, such as the ones with the role of Coordinators of Curricular Departments (CCD), from different disciplinary groups, and also other teachers who play a significant role in the school, such as the Responsible for the Library and the Internal Evaluation Coordinator. A brief description of the characterization of the participants in terms of sex, age, academic qualification, years of teaching, years of teaching in this school, school department and coordination roles are presented in Table 2.

Table 2. Characterization of Participants

#	Sex	Age	Academic Qualification	Years of Teaching	Years of Teaching in the School	School Department	Coordination Roles
T1	M	66	Master degree	36	17	Philosophy	Director of the school and top leader
T2	F	50	1 ^o cycle of graduation	28	23	Portuguese	CCD – Intermediate leadership and teacher
T3	F	52	Post-graduation in mathematics	31	31	Mathematics	CCD – Intermediate leadership and teacher
T4	F	54	1 ^o cycle of graduation	30	27	Foreign languages	Coordinator of the national reading plan. Responsible for the school Library. Coordinator of the French disciplinary group and teacher
T5	F	54	1 ^o cycle of graduation	31	28	Mathematics	Internal evaluation coordinator and teacher
T6	F	53	Master degree	26	25	Experimental sciences	CCD – Intermediate leadership and teacher
T7	M	54	Post-graduation in School administration and management	25	25	Social sciences	CCD – Intermediate leadership and teacher
T8	F	51	Master degree	24	24	Foreign languages	CCD – Intermediate leadership and teacher

CCD – Coordinator of Curricular Department

Data Analysis

For data analysis, a content analysis was carried out and data from the semi-structured interviews was organized in different categories (Bardin, 2009). The major categories emerging from the data were the following:

- School leadership and culture;
- Enablers and inhibitors of professional collaborative learning at school;
- Opportunities for professional development: formal and informal experiences;
- Being a teacher today and in the future

In the next section, findings will be presented and discussed, according to the data analysis and the review of literature in this field.



Findings

This section explores the main findings from the interviews to the coordinators of curricular departments and the school director. As referred previously, the data was organized in four main topics, which are presented and discussed in detail in this section. Evidence from the interviews, based on the participants' quotes, is also provided to support the findings.

a) School Leadership and Culture

According to the school director's opinion, the school culture is still under construction, since the school was recently grouped. However, this school has a strong culture related with the professional teaching and also with higher level training. About leadership, the director reinforces the co-responsibility and a democratic leadership. Coordinators, in regard to the school leadership and culture, refer the great environment to work.

"Well the culture of the school group is still under construction, it is still very recent. Secondary school has a very strong culture linked to vocational training and higher level training. It is rooted in the community, having turned 60 years in March. It is definitely a school that has formed many medium-high level individuals in this city. It has a professional training culture, but also a very great concern with the academic training of the students, in addition it also invests a lot on student active citizenship. It is a grouping of schools that wants to build a new identity based on and supporting the identity and culture of the secondary school already rooted in the community, matching it with other schools, in which the reality is clearly very different, even by the geographic location of the Secondary school that is in the center of the city and the others in the periphery."

(Teacher #1_SchoolDirector)

"As a student I attended two different schools in this city, one of them was this one and it was this one that I preferred. There was a better environment between students and teachers here, almost 40 years ago."

(Teacher #5 Internal evaluation coordinator)

"The environment is very good among teachers. Especially in my disciplinary group, there is a lot of sharing, it is almost a family, with the other groups we also relate very well, there is a good environment, I think."

(Teacher #7 CCD)

"I am not the right person to talk about this as I am the school leader, but when I joined the school management team, I have always defended a democratic, participative management, of joint responsibility of all the intermediate leaderships. That is why I have given the intermediate leaderships adequate conditions and they know that they have the necessary autonomy to make decisions, within the framework of the legal normative. The delegation of competences is a fact here, it shows a democratic management and with the basic principle that I have always defended: he who is in the school has the capacity to decide. This means that when the director is not there, there will always be someone who has the ability to decide and to solve problems in the immediate."

(Teacher #1 School Director)

b) Enablers and inhibitors of professional collaborative learning at school

Coordinators on their interviews consider that facilitating features are related, mostly, with emotional issues like empathy, capacity to collaborate and availability. The inhibitors are mostly related with incompatible schedule, different interests, difficulty on following the rules, different academic backgrounds and qualifications, values and age.



I notice that sometimes we go on opposite directions, in terms of class council, the teachers who are more involved with the class ... we should have identical directions. I realize that some colleagues, by their way of being, do not follow the rules ... I like to follow the rules because an organization with rules is essential for the success of students and also for us teachers, to have a good environment, ensuring a better quality of teaching and learning.

(Teacher #7 CCD)

Schedules are the main obstacle, incompatible schedules that do not allow us to sit down and talk about anything, we often exchange ideas by e-mail, regarding the preparation of a test, for example. Factors that facilitate are the spirit of collaboration and availability among colleagues.

(Teacher #6 CCD)

I have more affinity with people of my own age, it is usually with them that I talk and I share the work more. Colleagues from the same year in which I finished my degree, there is greater empathy with them. There is probably not so much affinity in terms of certain people, with more complicated personalities, for example, to develop conversations.

(Teacher #8 CCD)

c) Opportunities for professional development: formal and informal experiences

The coordinators interviews reveal that formal experiences fallow higher and independent initiatives both from the Ministry of Education, by several education legislations.

We are together in the same boat and we help each other, we celebrate our birthday days, sharing little snacks and gifts. Our relationship is great, we know each other well. The colleagues who are placed here feel this and, most of them, like to be here. We also cherish them, we try to help, and so they feel sorry for not being able to continue in school.

(Teacher # 5 Internal evaluation coordinator)

Disciplinary areas meet at least twice per period. It may happen that it is necessary to meet every month, but this regularity is not always needed. But at least twice a period, I think that all disciplinary areas meet. The class directors meet with the equivalent periodicity.

(Teacher #1 CCD)

The informal experiences are associated with teacher's daily work at school. Collaboration in this way of thinking is viewed like a simple sharing process, this means, that there seems to be a difficulty to understand the real mean of the concept of collaboration. When asked about the informal experiences of collaboration, some of the teachers gave answers such as "No, not that I know of." or "No, I do not know what you mean. Our meetings are held in an informal way , maybe...". Another teacher, however, answered the following:

Yes, for example to prepare tests and activities and to share and / or discuss something that may have occurred or is occurring outside of what should be the normal development of the teaching and / or learning process.

(Teacher #3 CCD)

d) Being a teacher today and in the future

When asked to find metaphor that suggested how to be a teacher today and in the future, the teachers interviewed had some difficulties to answer this question. Some preferred to write about the discouragement and negative thoughts they feel, when thinking about the disrespect for the teaching career today.

I want to continue to think that we are the sun that will illuminate the minds of these kids, although we are increasingly more substitutable because they will gather information from sources we do not know ourselves, their rhythm is different from ours, but we (teachers) and the school will still continue to be a privileged space of information and knowledge for some more time.

(Teacher #1 CCD)



In the near future, a change in the process of teaching versus learning must take place in an disruptive way, in the sense that, first of all, it will attract the students and we, the teachers, will do not feel anymore in class as if we were "preaching to the fish."

(Teacher #3 CCD)

At the moment, I am in a phase of great demotivation, so I only think about negative things. Maybe in the port without a shelter, at this moment I feel unmotivated about my profession.

(Teacher #8 CCD)

I am a person that knows very little, I am always trying to improve what I know and my practices, because I feel that I know little very more and more. It is a fast pace in personal and professional life. In the future, I want to be here experiencing what is next, but I have some fear about the future, in practice, this is what we have ... Regarding the students we can have in the future, the citizen that we are going to have is what worries me.

(Teacher #7 CCD)

A gear, which needs to be well oiled so that it can continue to work in the future, because I think that as an education professional, I am not isolated and it is necessary that things interconnect I am thinking of those wheels that spin in the same direction, if there is something that stumbles, they will stop working ...

(Teacher #6 CCD)

As parents are very, very absent, the school seems to be a kindergarten; The students have very little autonomy, they want to learn by playing; They are less and less responsible.

(Teacher #5 Internal evaluation coordinator)

Results, Conclusions and Recommendations

Results based on findings from teachers point out the importance of several aspects related to collaboration and professional development in schools. Some of the results can be summarized according to the following points:

- a) positive perception of the importance of collaborative work, recognizing its importance for teaching work, professional development and organizational performance;
- b) nevertheless, this positive perception is mainly focused on a vision of collaborative work in its informal dimension;
- c) reinforcing the idea that collaborative work, in order to be maximized, presumes the existence of a democratic, participatory and responsible organizational culture, allowing teachers to have high degrees of autonomy in the exercise of their functions;
- d) recognition that the main inhibiting factors of collaborative work refer to the organizational dimension (especially schedules) and to the socio-affective dimension (difference / diversity of interests, values, attitudes, academic culture, etc.);
- e) the importance of certain attitudes to facilitate collaborative work, such as empathy, openness and willingness to collaborate, and teachers are relatively apprehensive about the future, both for the challenges they face and for the autonomy of the students, absence of parents, demotivation, etc.)

These findings are in accordance with previous research and studies in this field, as for example, the study carried out by Forte and Flores (2014), about teacher collaboration and professional development in the workplace, which points out to the problems and limitations situated at the organizational level, such as time and working conditions, the lack of training in collaboration, and issues such as motivation and personal difficulties. Teachers recognize the importance of collaborative work, but they also argue that schools need a reorganization that includes time for this purpose, integrated on teacher's schedule. Informal opportunities are also seen as fundamental for professional development and to improve student outcomes.

Based on these results, recommendations for future improvement should focus on the following strategies:



- a) to foster the positive perception of collaborative work in all its dimensions, whether informal or formal, creating opportunities for teachers to experiment and innovate;
- b) reconfigure teaching work in a more flexible and integrated way, especially with regard to schedules and curricula, so that effective collaborative work is possible outside and within the classroom;
- c) develop opportunities for continuous training that allow the experience and acquisition of skills and attitudes that facilitate collaborative work;
- d) reinforce an organizational culture based on democracy, autonomy and participation, so that collaborative work can take place in an environment of trust and recognition.

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References

- Bardin, L. (2009). *Análise de Conteúdo*. Lisboa: Edições 70.
- Day, C. (2004). *A Paixão pelo Ensino*. Porto: Porto Editora.
- Forte, A. M. & Flores, M. A. (2014). Teacher collaboration and professional development in the workplace: a study of Portuguese teachers, *European Journal of Teacher Education*, 37 (1), pp.91-105.
- Flores, M. A., R. Rajala, A. M. V. Simão, A. Tornberg, V. Petrovic, And I. Jerkovic. (2007). "Learning at Work Potential and Limits for Professional Development." In *Addressing challenges and making a difference. Making a difference: challenges for teachers, teaching, and teacher education*, edited by J. Butcher and L. McDonald, (pp. 141–56). Rotterdam: Sense Publishers.
- Forte, A. M. (2009). *Colaboração e Desenvolvimento Profissional de Professores: Perspectivas e Estratégias*. Tese de doutoramento em Ciências da Educação. Universidade do Minho: Instituto de Educação e Psicologia.
- Hargreaves, A. (1998). *Os professores em tempos de mudança: o trabalho e a cultura dos professores na idade pós-moderna*. Alfragide: McGraw-Hill.
- Little, J. (1990). The Persistence of Privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, 91 (4), pp. 509–536.



Education of Seniors in the Area of Cybersecurity

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Abstract

Cybersecurity is a current and frequently discussed topic, which affects all members of society, although they may even not realize it. Many economically active people are interested in cybersecurity on their own initiative. It is connected mainly with their active use of technologies in their private lives. Due to information technologies we may encounter an entirely new type of social setting, which is reflected in seniors' lives. As the number of seniors has been growing and they long for being further educated and acquainted with new technologies also after their working age, it is necessary to provide them with adequate IT education. The paper includes the assessment of current situation in education of seniors in the Czech Republic. Education of seniors with the use of modern technologies is described in more detail. The final part of the paper includes proposals for easy and comprehensive education of seniors in the area of cybersecurity.

Keywords: Digital society, Education of seniors, Cybersecurity, University of the Third Age

Introduction

Introduction of first computer technologies raised a number of reactions in society. Some sceptics saw first computers as a futuristic sci-fi, where machines replaced human element and the world fell into darkness. However, positive emotions and desire to try new things prevailed in more numerous groups of optimists. Many projects existing already at the beginning of computer technology came true in order to serve people in their every-day lives. Every user had to cope with the functioning of new technologies and often mechanically learn the functions of new machines, though. Software was the biggest barrier, because at the beginning it was not fully comprehensible for ordinary users.

At present people do not have to deal with similar problems when learning computer technologies. Almost since their toddler age children have been capable of finding intuitively the sense of using computer technology, mainly smart phones and tablets. We get to the issue of personality categories at present age. Marc Prensky, an American author and education advisor, classified such categories in digital age as digital immigrants and digital natives (Ondrušová, 2011; Vágnerová, 2007).

Szymon Marycki was the first in history dealing with education of seniors. He introduced the concept of preparation for old age. Szymon Marycki is the author of "O szkołach czyli akademiach ksiągdwoje" ("Two books on schools or academies"), written in Krakow in 1551. Jan Ámos Komenský (Comenius), a bit better known author in the Czech Republic, included seniors into the educational cycle. He distinguished several types of educational cycles from birth to death in his "Pampaedia" – pre-school, primary vernacular school, adult education and old age education. He defended the necessity to educate people in their old age by stating that education had to include all and be managed in several various directions (Gruss, 2009; Příbyl, 2015).

Gerontopedagogy is a pedagogical discipline dealing with education of elderly people. It is not only education in old age, but also education for old age. From the narrower standpoint, gerontopedagogy is defined as a theoretical-empirical discipline providing seniors with complex support in the effort to meet their needs in a non-medical dimension.

The main international documents dealing with lifelong education include "Learning: the Treasure Within" (UNESCO); "Lifelong Learning for All" (OECD); and "White Paper on Education and Training". There is "The



National Program of Preparation for Ageing” in the Czech Republic. All the above mentioned documents have some common thoughts, such as the use of media and educational technologies in educational processes, the analysis of social problems and the issues of financing. The importance of these documents is in the fact that they indicate new prospects in life for elderly citizens (Skoruša, 2014).

Why to be Educated in the Area of Cybersecurity

At the birth of cybersecurity many people might even not anticipate the benefits of such area. However, with the increasing number of cyberattacks and the spread of malware, society started registering new threats, which might affect its life. Therefore, it is necessary to inform all age categories in society about the existence of such threats. Children and teenagers are the age categories to which much attention is paid regarding cybersecurity at present. Special lectures on the above mentioned topic are delivered already at primary schools and children often take part in various projects. Many people take initiative and deal with cybersecurity during their careers. It is related mainly to their active use of technologies in their personal lives. Seniors constitute the last group. They might be on a similar level as children to a certain extent. They are, similarly to children, over-trusting and naive.

Old age is a period of life every person will inevitably reach. Old age is symbolized by autumn in literature. Hectic modern age does not have much understanding for this period of our lives, the period which is perceived as something almost negative, something without joy and active approach to life (Příbyl, 2015). Retirement is a social change, which gives a person the status of a senior. This event is a fundamental change for many people. It often changes their life style and financial needs. Such fundamental changes may cause problems to a person. It is a big advantage for a senior if he/she got in contact with information technologies already in a pre-retirement age (Ondrušová, 2011; Vágnerová, 2007). Such experience becomes invaluable as it is much easier for seniors to remain in contact with other people. It is also invaluable that they keep social contacts and search for various information. The pensioners suffering from various illnesses and immobility may have PC and internet connection as the only option for maintaining contact with their families. Advantages of contact through internet include free calls and e mails. Seniors also surf the internet to look for help in order to maintain their life comfort (Janiš, 2016).

Life Does Not End at Retirement

The slogan “**Life Does Not End at Retirement**” is true more than ever before. One of the main reasons to educate seniors in this area is to eliminate their resistance to new technologies and threats posed by technological media. Seniors could thus overcome many negative perceptions, which they get to know in old age. It is mainly lack of social integration from which many seniors often suffer. Thanks to proper use of technologies they can regularly communicate with family and friends even when they have bad health and lack of financial resources. Last but not least, such abilities may lead seniors to new hobbies, new friendships with peers and new activities (Skoruša, 2014).

Education of seniors is provided through activities organized by centres and clubs for seniors, citizens associations, homes for the elderly, cultural centres, libraries, free time universities, and universities of the third age. These institutions enrich and improve life of senior citizens and support their self-realization. **National Programme of Preparation for Ageing** set up education of seniors as a crucial point in its support delivered to seniors in the Czech Republic.

To be Educated All Life

Life-long education includes every study during our lives. It is considered to be a continuous process of acquiring and developing knowledge, intellectual capabilities and practical skills, even beyond initial education.



It may be carried out in an organized way or through individual leisure activities. Seniors have to be self-motivated to learn how to master information technologies. Motivation is easier among younger seniors, who had computers and mobiles in their jobs. Free time, which they did not have in their jobs, contributes to their willingness to master modern technologies. They are also motivated to remain in contact with their neighbourhood (Příbyl, 2015).

Life-long learning includes **initial education and further education**. Initial education includes primary education (at primary schools), secondary education (at secondary schools) and tertiary education (at universities). Further education follows after certain degree of education is achieved, thus after entering the labour market. One form of further education is focused also on education of seniors. There are many educational courses for seniors, the aim of which is to improve seniors' literacy in the area of information technologies and thus make their lives more pleasant (Janiš, 2016). It is so called University of the Third Age. The term University of the Third Age was introduced by professor Pierre Vellas at the Faculty of Law and Economics in French Toulouse in 1973. Thus, education of seniors began in France. Older students were offered lectures corresponding with their interests and needs (Müllpachr, 2009).

University of the Third Age (U3A) includes activities of universities, which are oriented on the assistance in education of seniors. They provide neither complex university education, nor any other complex education, but they focus on e.g. set of lectures from certain interest area. They might last one or more terms and be of different specializations. The main prerequisite is to pass information on at university level. The aim is the personal development of an individual (in our case a senior), not the acquisition of a university degree. Education is carried out in various forms and educational methods with the use of information technologies. This type of study is finished with a diploma, the award of which is conditioned mainly by attendance, elaboration of certain essays and sometimes also by proof of knowledge.

The Association of Universities of the Third Age was established as citizens' association in the Czech Republic in 1993. There are several U3A in the Czech Republic. They are established at big Czech universities, e.g. Brno University of Technology, Charles University in Prague, Czech University of Life Sciences in Prague, Chemical-Technological University in Prague, University of South Bohemia in České Budějovice, University of West Bohemia in Pilsen, University in Hradec Králové, Palacký University in Olomouc, and Tomáš Baťa University in Zlín.

At present we may also encounter so called virtual university of the third age. It represents new, modern alternative to a typical attendance study at U3A and develops mainly information and computer literacy.

Seniors should get acquainted with the fact that using technologies is very comfortable and beneficial, but it also brings drawbacks which may threaten users. The current offer of courses for seniors is mostly of purely informative character. Seniors get acquainted with the use of technologies, but the topic of cybersecurity is not tackled too much (Hromada, 2015). Seniors are offered courses focused on computer technology at U3A either within certain branches of study or separately. Many universities, mainly technical ones, offer these courses also in several categories according to students' levels of advancement. The courses were analysed in detail from the information system database of The Association of Universities of the Third Age (AU3A), in which all the current courses are included. Not surprisingly, not a single course is dedicated primarily to security. Majority of mentioned courses lacks this element completely. The topic of security is included in the structure of courses for more advanced students. However, security in computer technology, cybersecurity, cannot be covered sufficiently with regard to the number of lessons and topics in a course. After analysing all ongoing courses and study programmes listed in the information technologies section of the AU3A database it may be stated that there are 31 courses with this specialization available at the U3A in the Czech Republic at present. A detailed analysis of their structures revealed that all of them, besides those requiring knowledge from previous courses,



include the following topics: internet, browser, Microsoft Windows office packages, search engines, email and email clients, work with pictures and photos, and communication clients. Advanced courses follow the basic courses and add the following topics: cloud storage, manuals for internet shopping, google services and social networks (Hromada, 2015). Thus, it may be stated that the main topics are internet, communication through communication technology and graphics. Such topics are logical and correctly focused, but the absence of at least basic security elements is alarming. Seniors should not only be aware of at least fundamental risks during their activities in cyberspace, but also respond to them adequately.

Course Content Proposal

If seniors (students) are taught just the theoretical principle of using computer technology without real use of computer technology and internet in practice, they may easily be discouraged. The main thing is to try everything in practice several times. The educational process has to be slow and very clear, with regard to the age of students (seniors). Therefore, the course proposal includes just general rudiments, which are sufficient and easily comprehensible for seniors.

An adequately proposed course with cybersecurity elements should include the following general topics:

- Positive motivation to be interested in cybersecurity on a user level;
- Devices and their operating systems (PC, smartphone, tablet ...);
- Security of devices and their operating systems (firewall, antivirus software ...);
- Internet;
- Security on the Internet (HTTPS, choice of proper password, e-shops ...);
- Social networks (Facebook, Twitter ...);
- Security on social networks (caution when sharing private information ...);
- Cybersecurity (explanation of terms cyberspace, cybersecurity ...);
- Principles of behaviour in cyberspace (do not respond to suspicious emails ...);
- Methods and motivation of attackers in cyberspace (deceptive mails, attacks ...);
- Cyberattacks (simple analysis and examples of possible attacks ...); and
- Principles how to prevent becoming a victim of cyberattack (do not convey sensitive data ...).

The course for active seniors should be scheduled into 3 days. The schedule is in accordance with the course time demand and the content mentioned above. The course has to be thoroughly prepared and all the topics clearly explained.

The first day of the course includes introduction with initial information on the topicality of the course, basic information on informatics and security elements. Seniors can then see the both sides of the topic. They will automatically become aware of not only benefits of technologies and services, but also their duties to be fulfilled if they are willing to maintain security principles. The second day continues with clarifying other aspects of cyberspace. The course participant will thus gradually become more informed about the subject matter. The third day will be devoted to cyberattacks and attackers frequently operating in cyberspace. Finally, they will get acquainted with the types of attacks and the attackers' motivation to conduct them. Defence against such attacks and efficient prevention will be part of the third day of the course as well.

Conclusions and Recommendations

New technologies generated new problems related to education of seniors in the area of information technologies and their employment. As the number of seniors is increasing and they want to be further educated and familiar with new technologies even after their productive age, it is necessary to provide them with adequate education. Care for elderly people is on the increase in modern era. Many producers of information technologies develop



hardware and software for seniors. Seniors have possibilities to attend newly established associations where they can learn how to use information devices and become literate in this area. Computer courses, seminars and similar events are very popular among seniors. Therefore, this age group should be cared for much more. The final part of the paper includes the proposal of a new course for seniors focused on cybersecurity.

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References

- Gruss, P. (2009) *Perspektivy stárnutí: z pohledu psychologie celoživotního vývoje*. Praha: Portál, ISBN 978-80-7367-605-6.
- Hromada, M., Hrůza, P., Kaderka, J., Luňáček, O., Nečas, M., Ptáček, B., Skoruša, L., Složil, R. (2015) *Kybernetická bezpečnost: teorie a praxe*. Praha: Powerprint, ISBN 978-80-87994-72-6.
- Janiš, K., Skopalová, J. (2016) *Volný čas seniorů*. Vydání 1. Praha: Grada, Pedagogika. ISBN 978-80-247-5535-9.
- Müllpachr, P. (2009) *Gerontopedagogika*. Brno: Masarykova univerzita, ISBN 978-80-210-5029-7.
- Ondrušová, J. (2011) *Stáří a smysl života*. Praha: Karolinum, ISBN 9788024619972.
- Příbyl, H. (2015) *Lidské potřeby ve stáří*. Praha: Maxdorf, Jessenius. ISBN 978-80-7345-437-1.
- Skoruša, L., Saliger, R. (2014) *Potřeba vysokoškolské edukace vojenského personálu v právních disciplínách*. In: XXXII. Mezinárodní kolokvium o řízení vzdělávacího procesu. Brno, Univerzita obrany, p. 1-8. ISBN 978-80-7231-958-9.
- Vágnerová, M. (2007) *Vývojová psychologie II.: dospělost a stáří*. Praha: Karolinum, ISBN 978-80-246-1318-5.



Acceptance of Disability, Self-Efficacy and Hope For Success in Students With Physical Disability

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Abstract

The literature indicates that beliefs about abilities to cope with difficult situations and to succeed using given competences are crucial to the psychosocial functioning of people with disabilities in higher education. They are also relevant to their academic achievement and predicting professional career possibilities after graduation. The article presents an analysis of the correlations between acceptance of disability and self-efficacy together with hope for success in students with motor disability. The research was conducted with 114 people who were diagnosed with acquired locomotor system limitations, studying at Polish universities on the second level of their studies. Most participants were men with various lesions of the spine, coming from large cities and moving on a wheelchair or with a crutch. The following tools were used to collect data: Multidimensional Acceptance of Loss Scale, Hope for Success Questionnaire and General Self-Efficacy Scale. The level of included variables and dependence structure was determined. The results show a high level of self-efficacy and hope for success in students included in the study. These two beliefs remain in a significant and relatively strong correlation to the dimensions of acceptance of their disability: subordinating physique relative to other values, enlarging the scope of values, transforming comparative-status values into asset values, containing the effects of disability. An applied regression analysis revealed the predictive function of disability acceptance in determining the level of both self-efficacy and hope for success. The two aspects of disability acceptance: enlarging the scope of values and containing the effects of disability, were of the greatest meaning to explain the severity of both variables. It should be noted that disability acceptance allows a greater anticipation of self-efficacy in coping with difficult situations rather than hope for success. The obtained results are significant from both cognitive and practical point of view. They provide valuable information on academic support and career guidance for students with disabilities.

Key words: acceptance of disability, self-efficacy, hope for success, student with disability

Introduction

The psychosocial functioning of persons with disability at a higher education institution encompasses a variety of phenomena, i.a. academic adaptation, social inclusion, acquisition of social and professional competences, satisfaction with the studies, development of individual dispositions oriented towards overcoming difficulties, effectively fulfilling tasks expected of students, achieving learning goals and being successful. The quality of this functioning is analysed from three perspectives: 1) social including stigma, the image of disability in society, and social support (e.g. S. E. Green, 2007; M. F. Olney, K. F. Brockelman, 2003; S. Holloway, 2001); 2) individual, focusing on personal resources and deficits, and factors related to disability (e.g. K. S. Adams, B. E. Proctor, 2010; H. Livneh, E. Martz, L. M. Wilson, 2001); 3) organizational, such as legal regulations, institutional support, adaptation of academic infrastructure to the needs of people with mobility disabilities (M. Schreuer, D. Sachs, 2014; S. E. Eckes, T. A. Ochoa, 2005). The following study focuses on the individual perspective and two personal resources of students with mobility disabilities: self-efficacy and hope for success. These are two categories of beliefs that relate to effective functioning of a student.

Self-efficacy is a subjective belief about the ability to act and cope with a task in a specific situation (A. Bandura, 2003a). It is a self-regulation mechanism and the main determinant of decisions, choices and actions. As stressed by A. Bandura and E. A. Locke (2003b, s. 87), “among the mechanisms of human agency none is more central or pervasive than beliefs of personal efficacy. Whatever other factors serve as guides and motivators, they are rooted in the core belief that one has the power to produce desired effects by one’s actions, otherwise one has little incentive to act or to persevere in the face of difficulties”. These beliefs can impact human functioning directly and indirectly by influencing aspirations, goal intention, perception of possibilities and obstacles. People with high self-efficacy choose more ambitious goals and expect satisfactory results after taking appropriate action. Perceiving oneself as a person capable of coping with difficulties, working effectively, helps setting ambitious goals, and persevering in maintaining the efforts to achieve them. For people with high self-efficacy a greater range of opportunities seem worth using and obstacles seem less threatening for achieving the goal (A. Bandura, 1997).

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Self-efficacy is usually understood as the ability that is specific to a particular task or area, even though the notion of general self-efficacy has been introduced as a sign of general beliefs about the competences that are needed to take on challenges and to deal effectively with difficult situations (R. Schwarzer, Jerusalem, 1995). General self-efficacy is considered a universal construct relating to the basic beliefs held by all people (U. Scholz et al., 2002). Studies have shown positive and close correlation between general self-efficacy, self-regulation, adaptive problem-oriented coping, greater involvement in planning (A. Luszczynska, U. Scholz, R. Schwarzer, 2005), optimism, and self-assessment (A. Luszczynska B. Gutiérrez-Doña, R. Schwarzer, 2005). Research with students revealed a positive correlation of general self-efficacy and subjective well-being (R. Dave et al., 2011), life satisfaction (F. S. Cakar, 2012), having a goal in life (S. J. DeWitz, M. L. Woolsey, W. B. Walsh, 2009), college readiness (L. Ramos-Sánchez, L. Nichols, 2007), academic achievement at college, reported sense of academic competence and confidence in career pathway (B. E. Fenning, L. N. May, 2013), belief in academic success, and academic achievements of university students (J. Lane, A. M. Lane, A. Kyprianou, 2004; J. Lane, A. M. Lane, 2001). High self-efficacy is associated with effective learning, perseverance, effort in achieving academic success (M. Bong, E. M. Skaalvik, 2003), and a sense of being competent in academia and career planning (B. E. Fenning, L. N. May, 2013).

Research into general self-efficacy among students with disabilities provides ambiguous results. Researchers revealed both lower general self-efficacy scores in this group of students compared to their able-bodied peers (T. R. Blake, J. O. Rust, 2002; cf. M. J. Reed, D. J. Kennett, M. Emond, 2015), as well as no significant differences in intensity of this type of beliefs between students with disabilities and without disability (J. Albiero-Walton, 2003). Positive correlations were found between self-efficacy, self-esteem (collective self-esteem, membership self-esteem, private and public self-esteem) (T. R. Blake, J. O. Rust, 2002) and adaptation (C. Murray, A. Lombardi, D. Kosty, 2014) in students with disabilities. It was also found that women with academic disabilities who studied at college and achieved academic success had a stronger sense of self-efficacy. Students with mobility disabilities experience different challenges and difficult situations (including every day situations) while studying at a university (M. Fuller, A. Bradley, M. Healey, 2004a; M. Fuller, A. Bradley, M. Healey, 2004b). However, research shows that disability itself is almost insignificant for academic achievement and competence acquisition (J. T. E. Richardson, 2009). A more prominent role may be played by the belief of having the capacity to effectively deal with any encountered difficulties (E. E. Getzel, C. A. Thoma, 2008; D. R. Jameson, 2007, cf. D. F. Garrison-Wade, 2012). The role of self-efficacy in this group of individuals is also reflected in its impact on career decision-making and the career path taken after graduation (R. W. Lent, A. Morrison, I. Ezeofor, 2014; D. A. Luzzo et al., 1999).

Hope for success is defined, following C. R. Snyder et al. (2002), as interrelated beliefs of strong will and having the competence to find solutions and construct plans in the process of achieving the goal. They are related to an intensified expectation of positive effects of the undertaken actions. Hope for success is a cognitive-motivational phenomenon which refers to the individual's own belief that they are capable of initiating and continuing goal-oriented activities. C. S. Snyder, J. Cheavens, S. C. Simpson (1997) recognizes hope primarily as a cognitive process, but at the same time indicates that it is a component of pursuing the goal which is related to positive emotions. Hope is correlated with self-efficacy, but they are two distinct constructs (F. B. Bryant, J. A. Cvengros, 2004). People with a high level of hope for success perceive goals as challenges, they generate more goals, focus on following their pursuits, they are more flexible in overcoming obstacles, overcome stressors caused by barriers (which block achieving goals) more effectively, and they reach their goals more often compared to those with low levels thereof (C. S. Snyder et al., 2002). Because the goals of high-hope individuals are more specific and realistic, these individuals are more effective, creative and motivated to look for alternative ways to achieve their goals. What is more, they enjoy not only the achieved success but also the process of achieving it (C. S. Snyder et al., 2006a; C. S. Snyder, J. Cheavens, S. C. Simpson, 1997).

It has been shown that hope (understood this way) can directly (K. L. Rand et al., 2011; L. Day et al., 2010; C. S. Snyder et al., 2002) and indirectly influence academic success of university students, i.e. by allowing students to expect good grades (K. L. Rand, 2009) and by affecting learning goals (S. J. Peterson, M. W. Gerhardt, J. C. Rode, 2006). Hope was also an independent variable of career adaptability (A. Buyukgoze-Kavas, 2016). It also significantly differentiated the career decision-making process (A. K. Zaleszczyk, 2015) among university students.

Hope (including hope for success) is more and more often analyzed among people with disabilities, mainly in the context of coping and adapting to limitations. C. S. Snyder and coresearchers (2006b) point out that people with high hope have characteristics that help overcome the challenges of disability. A positive correlation was found between hope, satisfaction in life (J. S. Krause, P. A. Edles, 2014; K. B. Kortte and and., 2012), self-esteem, perception of disability seen as a challenge, and applying task mode to coping with problems (H. Livneh, E. Martz, 2014; P. Dorsett, 2010) in people with spinal cord injury. In contrast, there is little research on hope among students with disabilities. Their results indicate a close and positive correlation between hope for success with psychological empowerment and locus of control (M. Morningstar et al., 2010) and its mediating role in



determining loneliness and academic self-efficacy (D. B. Feldman et al., 2016). Considering the importance of self-determination in pursuing goals and attaining good academic results among students with disabilities (E. E. Getzel, C. A. Thoma, 2008) one can expect a significant role of hope seen as a conviction of being able to accomplish goals and overcome difficulties.

In conclusion, self-efficacy and hope for success are significant beliefs for the educational and psychosocial functioning of students with disabilities. It is also possible to predict their role in the course of professional development after graduation (S. Burgstahler, 2001; W. E. Hitchings et al., 2001). Determinants of these beliefs are interesting in this context. The present paper will analyze the predictive function of accepting disability (C. D. Friedland, 1990).

Acceptance of disability, following B. Wright's theory, reflects the process of change in values requiring the individual to recognize values other than those previously accepted - which were in conflict with the acquired disability (B. Wright, 1983). Disability is not perceived here as devaluing; the individual is able to successfully cope with the consequences of their limitations. In this theory, disability is perceived as a "loss of worth" that is conducive to lowering the importance of one's abilities and even devaluing oneself as a person. It is therefore necessary to make changes in the value system preferred so far to prevent or reduce this devaluation and create conditions for optimal functioning of the individual in particular areas of life. Acceptance of disability refers to such adjustment of the system of values that actual and perceived losses connected to disability do not adversely affect the value of preserved abilities (in: D. S. Dunn, 2015; K. C. Keany, R. L. Glueckauf, 1993). It is seen as a process which encompasses four mutually dependent values: a) enlargement of the scope of values; B) subordination of physique; C) containment of disability effects; D) transformation from comparative to asset values (B. Wright, 1983). A positive correlation was found between acceptance of disability and self-esteem (L. Li, D. Moore, 1998), adaptive problem-solving capabilities, problem-oriented coping disposition (D. A. Groomes, M. J. Leahy, 2002), positive orientation to problem resolution, goal orientation (T. R. Elliott et al., 2000), quality of life (R. K. Chen, N. M. Crewe, 2009), and perceiving disability as a challenge (D. A. Groomes, M. J. Leahy, 2002). Results of research with students indicate a correlation between acceptance of disability with functional impairment and perception of disability as a characteristic defining the individual (B. C. Carl, 2013). If acceptance of disability is seen as a process of change in values, and thus, holding beliefs about oneself and one's opportunities and limitations, it can be assumed that this variable will be significant for the intensity of other beliefs including self-efficacy and hope for success (cf. DS Dunn, 2015).

The following question was asked in the present study: What is the share of acceptance of disability in explaining the intensity of general self-efficacy and the hope for success in students with physical disability. Based on the available theoretical and empirical literature, the following hypotheses were tentatively posited: 1. Acceptance of disability has a significant and positive contribution to explaining the level of general self-efficacy in students with physical disability. 2. Acceptance of disability has a significant and positive contribution to explaining the level of hope for success in students with physical disability.

Method

Quantitative studies were conducted using a set of instruments to measure the discussed variables: general self-efficacy, hope for success and acceptance of disability. The study was conducted among students with acquired mobility impairments at 8 Polish universities, with postgraduate degrees (Master's degree). Data was collected with the help of Representatives of Students with Disability and groups and societies for students with disabilities at the universities participating in the study. The main criterion for participation in the study was a disability certificate, which states that there is a mobility impairment. Encoded data were stored in accordance with valid personal data protection regulations.

114 students with acquired physical restrictions, including spinal cord injury and various spinal disorders participated in the study. All respondents had significant mobility problems - they moved using wheelchairs or crutches. Most of them are male (82 - 71,93%) and people living in big cities (87 - 76,32%). The median age of the subjects was $M = 23.99$ years, $SD = 11.09$. Mean age when permanent motor damage was acquired was $M = 17,13$; $SD = 8,87$. The respondents studied primarily humanistic and social studies (71-62.28%), while others studied science (32-28.07%) and natural sciences (11-9.65%). The vast majority of respondents were full-time students (85-74.56%).

The following research instruments were used to collect data: The Generalized Self-Efficacy Scale (GSES) by R. Schwarzer and M. Jerusalem, adapted by Z. Juczyński; The Hope for Success Questionnaire by C. R. Snyder, adapted by M. Łaguna, J. Trzebiński and M. Zięba (2005) and Multidimensional Acceptance of Loss Scale by J. M. Ferrin, F. Chan, J. Chronister, C. Y. Chiu, adapted by S. Byra (2017). GSES consists of 10 items, answers are



given on a 4-point scale. Possible scores range from 10 to 40 points. The scale is used to determine the general belief of the individual about the effectiveness of coping with difficult situations. This tool has satisfactory psychometric properties. The reliability index is 0.85 (*Cronbach alpha*), while stability is 0.78 (*rPearson*) (Z. Juczyński, 2001). The Hope for Success Questionnaire consists of 12 statements (including 8 diagnostic ones), the answers are given on an 8-point scale (1-8). Possible scores range from 8 to 64 points. The questionnaire is used to determine your overall score and, in addition, the scores in its two subscales. Internal reliability of the tool is satisfactory, *Cronbach alpha* is 0.82 (M. Łaguna, J. Trzebiński, M. Zięba, 2005). The Multidimensional Acceptance of Loss Scale consists of 42 items, all are diagnostic, the answers are given on a 4-point scale. It is a tool to diagnose the structure of disability acceptance, as defined by B. Wright. It includes 4 subscales: Subordinating physique relative to other values (SPV), Enlarging the scope of values (ESV), Transforming comparative-status values into asset values (TSV), Containing the effects of disability (CED). The psychometric properties of the scale are satisfactory, the indices of reliability of individual subscales remain within the limits: 0.79-0.89 (*Cronbach alpha*), while the stability indicators fall within the range of: 0,61-0,88 (*r Pearsona*) (S. Byra, 2017).

Data was analyzed using the Statistica 7.0 suite (Statsoft Poland, Cracow, Poland). First, the descriptive statistics for the variables: general self-efficacy, hope for success, and acceptance of disability were calculated. A correlation analysis was then performed to determine the relationship between these variables (Pearson's correlation coefficient). Finally, a standardized stepwise regression analysis was conducted to determine the contribution of disability acceptance (and its dimensions) to the explanation of two independent variables: self-efficacy and hope for success in students with physical disabilities. Scatter plots and collinearity statistics were first verified to meet the linearity and normality assumptions.

Findings

Table 1 presents descriptive statistics for general self-efficacy, hope for success and acceptance of disability. By comparing the average scores of individual dimensions of disability acceptance, the lowest intensity of value changes is found in enlarging the scope of values, and the highest one containing the effects of disability.

Table 1. Descriptive statistics for variables

Variables	M		SDScore rangeScale range (min-max) (min-max)	
General self-efficacy	26,46	6,58	11-38	10-40
Hope for success	43,89	10,87	19-63	8-64
Acceptance of disability				
Subordinating physique relative to other values (SPV)	27,05	5,48	13-39	10-40
Enlarging the scope of values (ESV)	25,96	3,99	18-37	10-40
Transforming comparative-status values into asset values (TSV)	26,54	4,25	17-37	11-44
Containing the effects of disability (CED)	28,95	4,34	15-38	11-44

Results of general self-efficacy and hope for success indicate relatively different levels of these variables in student respondents (Table 2). Most respondents are characterized by high general self-efficacy, but at the same time more than 1/3 of the respondents have low self-efficacy. In the case of hope for success, the majority of respondents have a moderate or low level of this type of belief. It should be stressed that more respondents have a higher level of general self-efficacy than hope for success.

Table 2. Results level of general self-efficacy and hope for success

Variables	Level of results					
	Low		Moderate		High	
	n	%	n	%	n	%
Self-efficacy	40	35,09	26	22,81	48	42,10
Hope for success	43	37,72	59	51,75	12	10,53%

Correlation coefficients (Table 3) show significant and strong correlations between dimensions of accepting disability and the two types of beliefs: general self-efficacy and hope for success in students with physical disability. It should be emphasized that both general self-efficacy and hope for success correlate positively with all dimensions of disability acceptance. In addition, correlations between the age of disability acquisition and its duration, and the variables explored in the study (general self-efficacy, hope for success and acceptance of disability) were also examined. No significant correlation was found between these variables and the age of disability acquisition in the students participating in the study. In contrast, there was a weak positive correlation between the duration of disability, general self-efficacy ($r = 0.19$) and acceptance of disability ($r = 0.21$).



Table 3. Correlation matrix of acceptance of disability and general self-efficacy and hope for success

	General self-efficacy	Hope for success	SPV	ESV	TSV	CED
General self-efficacy	1					
Hope for success	0,11	1				
SPV	0,35**	0,21*	1			
ESV	0,51**	0,39**	0,11	1		
TSV	0,43**	0,19*	0,13	0,43**	1	
CED	0,49**	0,43**	0,49**	0,16	0,21*	1

Abbreviations: Acceptance of disability:

SPV, ESV, TSV, CED * $p < 0,05$; ** $p < 0,01$

Next, a standard regression analysis was performed to determine whether disability acceptance (its individual dimensions) has a predictive role for general self-efficacy and hope for success. Table 4 presents the results of this regression analysis.

Table 4. Results of the stepwise regression analysis – general self-efficacy and hope for success

Predictors	B	SEB	β	SE β	t	p
General self-efficacy						
R=0.48; R ² =0.23; Adjusted R ² = 0.21; F(3.11)=11.12; $p < 0.000$						
Enlarging the scope of values	0.04	0.01	0.36	0.08	3.52	0.001
Containing the effects of disability	0.08	0.02	0.46	0.12	3.92	<0.001
Transforming comparative-status values into asset values	0.05	0.02	0.27	0.12	2.30	0.023
Hope for success						
R=0.27; R ² =0.12; Adjusted R ² = 0.10; F(2.87)=9.12; $p < 0.011$						
Enlarging the scope of values	0.04	0.02	0.23	0.09	2.48	0.014
Containing the effects of disability	0.04	0.02	0.24	0.10	2.30	0.023

The regression model created for general self-efficacy includes three dimensions of disability acceptance. They all explain 23% of the variance of the self-efficacy level in this sample. Acceptance of disability: containing the effects of disability made the most important contribution to determining the intensity of the belief in having the ability to effectively deal with difficult situations. The obtained results show that a higher level of general self-efficacy promotes the acceptance of disability manifested by increased transformations of values related to: 1) reducing the impact of disability on the overall perception how the individual functions; 2) the desire to expand the values and focus on abilities and goals that have not been lost due to the acquisition of the impairment; 3) changes in standards and criteria for assessing personal characteristics without making comparisons to external, often unreachable standards, or models.

There are two dimensions of disability acceptance which clarify the level of hope for success: enlarging the scope of values and containing the effects of disability. They explain 12% of the variance of this type of belief in the respondents. Contribution of both these dimensions to acceptance of disability is similar. Higher levels of hope for success can be predicted but with relatively little success, by significantly reducing the impact of disability on the overall self-assessment and broadening of interests and goals, formulated on the basis of the preserved capabilities.

Results, Conclusions and Recommendations

To conclude, the intended research goal has been achieved. Proposed hypotheses have been confirmed. Acceptance of disability plays a significant predictive role both in explaining general self-efficacy and hope for success in students with physical disabilities. A particular contribution to explaining the intensification of this type of belief in the students who participated in the study lies in two dimensions of disability acceptance: the enlarging of the scope of values and containing the effects of disability. It seems that the transformations to reduce the impact of disability on the overall self-assessment, quality of functioning, and capabilities are likely to be significant for the intensification of general self-efficacy and hope of success. In addition, widening the range of values by areas not damaged by disability acquisition, with preserved abilities and opportunities, can also correlate significantly with the strength of beliefs about the ability to successfully handle difficult situations



and the competence to achieve goals in students with mobility impairments. The obtained results are consistent with previous evidence of a positive correlation between disability acceptance, goal orientation (T. R. Elliott et al., 2000), and convictions about oneself (L. Li, D. Moore, 1998).

It should be emphasized that acceptance of disability, as understood by B. Wright, explains intensification of general self-efficacy to a greater extent than hope for success in student respondents. This suggests great significance of the necessary and beneficial transformations in understanding the consequences of having a disability for shaping and strengthening beliefs about the ability to deal with them effectively. These results converge with M. Bishop's assumptions of the disability centrality model of psychosocial adaptation (2005) in which the importance given by the individual to their disability and the specific functional areas are highlighted. According to M. Bishop (2005) perception of the impact of disability and the constraints associated with it are shaped by the person's sense of control expressed in the belief that they have the ability to maintain life balance despite significant changes affecting them. The significance of containing the effects of disability and enlarging the scope of values falls in line with M. Bishop's theory (2005), who points to the need for a long-term process of adaptation to life with disability, a commitment to re-estimate one's goals, priorities and life dimensions, which impact general life satisfaction. An active attitude towards the performance, characteristics, and functioning of areas without disabilities - central to self and life assessment - is the basis for a rapidly changing acceptance of disability; it results in greater efficacy in managing consequences of disability, and greater control over change, and difficult experiences (M. Bishop, L. Shepard, D. M. Stenhoff, 2007). The above interpretation of the positive correlation between acceptance of disability and self-efficacy is especially important for the psychosocial functioning of students with motor disability. Considering the dynamic nature of accepting disability, making the necessary reevaluation is a long-term and extremely important process in dealing with the dual challenges of studying and the multiple consequences of having a disability (K. McNulty, H. Livneh, Ch. L. Livneh, 2015; por. S. M. Smedema et al., 2015; Ch. Murray, A. Lombardi, D. Kosty, 2014).

The difference in the role of acceptance of disability in explaining the intensity of general self-efficacy and hope for success in students with motor disability, found in these studies, shows that disability-related variables can be more predictive in beliefs related to having the abilities for coping with difficulties. These predictions corroborate the results of research into the consequences disability visibility (self-assessment, able-bodied peers' attitudes and assessment, perception of needs and difficulties) in college students (J. Goode, 2007; M. F. Olney, K. F. Brockelman, 2005). On the other hand, hope for success related to persistent pursuit of goals and expecting positive outcomes may be more strongly influenced by personal or social factors (D. F. Garrison-Wade, 2012; M. E. Morningstar et al., 2010). It would be interesting to analyze the role of academic achievements, beliefs about achieving success, and the reasons for studying expressed by students with disabilities against their level of hope for success (M. J. Reed, D. J. Kennett, M. Emond, 2015; D. R. Jameson, 2007; J. R. Nelson et al., 1993). Clarifying the determinants of hope for success among this group of students is all the more significant, as relatively a small percentage of them (only 10,53%) demonstrate high levels of this disposition. The nature of the correlation between hope for success and academic success in students with disabilities (see J. A. Graf, T. Whelley, L. Jones, 2004) also requires further exploration.

The obtained results are important both for research and practice oriented towards providing counseling and support for students with mobility disabilities. They contain initial findings about the determinants of beliefs related to competence in coping with difficulties and achieving goals. They are presented from the perspective of personal resources (H. Livneh, E. Martz, 2014) relevant for coping with experienced challenges, and in the case of students, significant for academic adaptation and the quality of psychosocial functioning as a student. The conclusions are as follows:

1. General self-efficacy and hope for success in students with physical disabilities are explained by acceptance of disability, but to a relatively small degree (explained variance - 23% general self-efficacy, 12% hope for success).
2. Individual dimensions of acceptance of disability, and therefore the specific categories of reevaluation, differ in their impact on self-beliefs, one's coping capacities, and competences that ensure effective achievement of goals for students with disabilities.
3. Personal and social factors may be more important in explaining self-efficacy and hope for success. The intermediary role of acceptance of disability in establishing this relationship is likely, though.

Future research should therefore focus on analyzing a broader set of individual and social determinants of self-efficacy and hope for success in students with disabilities. In addition, it would be important to explore the correlations of this type of beliefs with various aspects of their psychosocial functioning. It would also be interesting to look at the role of general self-efficacy in relation to academic self-efficacy in this group of



students. On the other hand, an important research problem in the case of hope for success would be to determine its impact on the career path of people with disabilities who graduate from university.

The presented study is not free from limitations. Firstly, it focuses on the narrow aspect of explaining self-efficacy and hope for success, involving only acceptance of disability. Although it provides interesting findings for explaining the intensity of such beliefs in students with disabilities, these should nevertheless be regarded as preliminary assumptions and a justification for further extensive research. Secondly, the group of respondents is not uniform, it consists of people with different types of motor damage, who may vary in degree of functionality and the range of experienced challenges (including those related to studying). Thirdly, due to the lack of other explorations into the discussed issue, a relatively simple model of correlation analysis was adopted, limiting explanatory possibilities. Fourthly, all data was collected using self-report measures, whose reliability may be influenced by reactive confounds such as social desirability, defensiveness, agreeableness. However, this issue is not exceptional for the present study, and it penetrates most empirical research in the field of special education and rehabilitation psychology.

With the limitations of the study in mind, one can focus on its usefulness for practice since the present results may be used by institutions and associations supporting students with disabilities at universities. The identified significance of acceptance of disability for general self-efficacy and hope for success can be used in programs of therapeutic-rehabilitation training, or aimed at raising academic competencies and promoting professional success of students with disabilities.

References

- Adams, K. S., Proctor, B. E. (2010). Adaptation to college for students with and without disabilities: Group differences and predictors. *Journal of Postsecondary Education and Disability*, 22(3), 166-184.
- Albiero-Walton J. (2003). Self-Efficacy gender difference in college students with disabilities. Information analyses. Retrieved June 9, 2017, www.eric.ed.gov.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: Freeman & Co.
- Bandura, A. (2003a). Social cognitive theory in cultural context. *Applied Psychology: An International Review*, 51(2), 269–91.
- Bandura, A., Locke E. A. (2003b). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88(1), 87-99.
- Bishop M. (2005a). Quality of life and psychosocial adaptation to chronic illness and acquired disability: Preliminary analysis of a conceptual and theoretical synthesis. *Rehabilitation Counseling Bulletin*, 48(3), 219-232.
- Bishop M., Shepard L., Stenhoff D. M. (2007). Psychosocial adaptation and quality of life in multiple sclerosis: Assessment of the disability centrality model. *Journal of Rehabilitation*, 73(1), 3-12.
- Blake, T. R., Rust, J. O. (2002). Self-esteem and self-efficacy of college students with disabilities. *College Student Journal*, 36(2), 214-221.
- Bong, M., Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: how different are they really? *Educational Psychology Review*, 15(1), 1-40.
- Bryant, F. B., Cvengros, J. A. (2004). Distinguishing hope and optimism: two sides of a coin, or two separate coins? *Journal of Social and Clinical Psychology*, 23(2), 273-302.
- Burgstahler, S. (2001). A collaborative model to promote career success for students with disabilities. *Journal of Vocational Rehabilitation*, 16(3/4), 209–215.
- Buyukgoze-Kavas, A. (2016). Predicting career adaptability from positive psychological traits. *The Career Development Quarterly*, 64(2), 114-125.
- Byra, S. (2017). Polish adaptation of the Multidimensional Acceptance of Loss Scale by James M. Ferrin, Fong Chan, Julie Chronister and Chung-Yi Chiu. *Human - Disability - Society (Człowiek – Niepełnosprawność – Społeczeństwo)*, 1(35), 29-50.
- Cakar, F. S. (2012). The relationship between the self-efficacy and life satisfaction of young adults. *International Education Studies*, 5(6), 123-130
- Carl, B. C. (2013). *Acceptance of disability in college students*. Doctoral dissertation. Brigham Young of University. Retrieved June 9, 2017, from All Theses & Dissertations.
- Chen, R. K., Crewe, N. M. (2009). Life satisfaction among people with progressive disabilities. *Journal of Rehabilitation*, 75(2), 50-58.
- Dave, R., Tripathi, K. N., Singh, P., Udainiya, R. (2011). Subjective well-being, locus of control, and general self-efficacy among university students. *Amity Journal of Applied Psychology*, 2(1), 28-32.



- Day, L., Hanson, K., Maltby, J., Proctor, C., Wood, A. (2010). Hope uniquely predicts objective academic achievement above intelligence, personality, and previous academic achievement. *Journal of Research in Personality*, 44(4), 550-553.
- DeWitz, S.J., Woolsey, M.L., Walsh, W.B. (2009). College student retention: An exploration of the relationship between self-efficacy beliefs and purpose in life among college students. *Journal of College Student Development*, 50(1), 19-34.
- Dorsett P. (2010). The importance of hope in coping with severe acquired disability. *Australian Social Work*, 63(1), 83-102.
- Dunn, D. S. (2015). *The social psychology of disability*. New York: Oxford University Press.
- Eckes, S. E., Ochoa, T. A. (2005). Students with disabilities: transitioning from high school to higher education. *American Secondary Education*, 33(3), 6-20.
- Elliott, T. R., Uswatte, G., Lewis, L., Palmatier, A. (2000). Goal instability and adjustment to physical disability. *Journal of Counseling Psychology*, 47, 251-265.
- Feldman, D. B., Davidson, O. B., Ben-Naim, S., Maza, E., Margalit, M. (2016). Hope as a Mediator of Loneliness and Academic Self-efficacy Among Students With and Without Learning Disabilities during the Transition to College. *Learning Disabilities: Research and Practice*, 31(2), 63-74.
- Fenning, B. E., May, L. N. (2013). "Where there is a will, there is an A": examining the roles of self-efficacy and self-concept in college students' current educational attainment and career planning. *Social Psychology of Education*, 16(4), 635-650.
- Friedland, C. D. (1990). *Relationship between adjustment to physical disability and belief systems in persons with physical disability*. Unpublished doctoral dissertation, Hofstra University, Hempstead, NY.
- Fuller, M., Bradley, A., Healey, M. (2004a). Incorporating disabled students within an inclusive higher education environment. *Disability & Society*, 19(5), 455-468.
- Fuller, M., Bradley, A., Healey, M. (2004b). Barriers to learning: A systematic study of the experience of disabled students in one university. *Studies in Higher Education*, 29(3), 303-318.
- Garrison-Wade, D. F. (2012). Listening to their voices: factors that inhibit Or enhance postsecondary outcomes for students' with disabilities. *International Journal of Special Education*, 27(2), 113-125.
- Getzel, E. E., Thoma, C. A. (2008). Experiences of college students with disabilities and the importance of self-determination in higher education settings. *Career Development for Exceptional Individuals*, 31(2), 77-84.
- Goode J. (2007). 'Managing' disability: early experiences of university students with disabilities. *Disability & Society*, 22(1), 35-48.
- Graf, J. A., Whelley, T., Jones, L. (2004). Success for people with disabilities after postsecondary education. *Review of Disability Studies*, 1(2), 67-77.
- Green, S. E. (2007). Components of perceived stigma and perceptions of well-being among university students with and without disability experience. *Health Sociology Review*, 16(3/4), 328-340.
- Groomes, D. A. G., Leahy, M. J. (2002). The relationships among the stress appraisal process, coping disposition, and level of acceptance of disability. *Rehabilitation Counseling Bulletin*, 46(1), 15-24.
- Hitchings, W. E., Luzzo, D. A., Ristow, R., Horvath, M., Retish, P., Tanners, A. (2001). The career development needs of college students with learning disabilities: In their own words. *Learning Disabilities Research & Practice*, 16(1), 8-17.
- Holloway, S. (2001). The experience of higher education from the perspective of disabled students. *Disability & Society*, 16(4), 597-615.
- Jameson, D. R. (2007). Self-determination and success outcomes of two-year college students with disabilities. *Journal of College Reading and Learning*, 37(2), 26-46.
- Juczyński, Z. (2001). *Measurement instruments in promotion and health psychology (Narzędzia pomiaru w promocji i psychologii zdrowia)*. Warsaw: PTP.
- Keany, K. C., Glueckauf, R. L. (1993). Disability and value changes: An overview and analysis of acceptance of loss theory. *Rehabilitation Psychology*, 38(2), 199-210.
- Kortte K. B., Gilbert M., Gorman P., Wegener S. T. (2010). Positive psychological variables in the prediction of life satisfaction after spinal cord injury. *Rehabilitation Psychology*, 55(1), 40-47.
- Krause J. S., Edles P. A. (2014). Injury perceptions, hope for recovery, and psychological status after spinal cord injury. *Rehabilitation Psychology*, 59(2), 176-182.
- Lane, J., Lane, A. M., Kyprianou A. (2004). Self-efficacy, self-esteem and their impact on academic performance. *Social Behavior and Personality*, 32(3), 247-256.
- Lane, J., Lane, A. M. (2001). Self-efficacy and academic performance. *Social Behavior and Personality*, 29(7), 687-694.
- Lent, R. W., Morrison, A., Ezeofor, I. (2014). The career development of people with disabilities: a social cognitive perspective. In. D. R. Strauser (Ed.) *Career development, employment, and disability in rehabilitation. From theory to practice* (pp. 113-124). New York: Springer Publishing Company.



- Li, L., Moore, D. (1998). Acceptance of disability and its correlates. *The Journal of Social Psychology*, 138(1), 13-25.
- Livneh H., Martz E. (2014). Coping strategies and resources as predictors of psychosocial adaptation among people with spinal cord injury. *Rehabilitation Psychology*, 59(3), 329-339.
- Livneh H., Martz E., Wilson L. M. (2001). Denial and perceived visibility as predictors of adaptation to disability among college students. *Journal of Vocational Rehabilitation*, 16(3/4), 227-234.
- Livneh, H., Martz, E. (2012). Adjustment to chronic illness and disabilities: Theoretical perspectives, empirical findings, and unresolved issues. In P. Kennedy (Ed.), *Oxford handbook of rehabilitation psychology* (pp. 47– 87). Oxford: Oxford University Press.
- Luszczynska, A., Gutiérrez-Doña, B., Schwarzer, R. (2005). General self-efficacy in various domains of human functioning: evidence from five countries. *International Journal of Psychology*, 40(2), 80-89.
- Luszczynska, A., Scholz, U., Schwarzer, R. (2005). The General Self-Efficacy Scale: multicultural validation studies. *The Journal of Psychology*, 139(5), 439-457.
- Luzzo, D. A., Hitchings, W. E., Retish, P., Shoemaker, A. (1999). Evaluating differences in college students' career decision making on the basis of disability status. *The Career Development Quarterly*, 48(2), 142-156.
- Łaguna, M., Trzebiński, J., Zięba, M. (2005). *Hope for Success Questionnaire (KNS – Kwestionariusz Nadziei na Sukces)*. Coursebook (*Podręcznik*). Warsaw: PTP.
- McNulty K., Livneh H., Livneh Ch. L. (2015). Psychosocial adjustment to college among lower division students with disabilities. *International Journal of Academic Research in Education Review*, 3(6), 129-142.
- Morningstar, M. E., Frey, B. B., Noonan, P. M., Ng, J., Clavenna-Deane, B., Graves, P., Kellems, R., McCall, Z., Pearson, M., Wade, D. B., Williams-Diehm, K. (2010). A preliminary investigation of the relationship of transition preparation and self-determination for students with disabilities in postsecondary educational settings. *Career Development for Exceptional Individuals*, 33(2), 80-94.
- Murray, C., Lombardi, A., Kosty, D. (2014). Profiling adjustment among postsecondary students with disabilities: a person-centered approach. *Journal of Diversity in Higher Education*, 7(1), 31-44.
- Nelson, J. R., Smith D. J., Appleton V., Raver K. (1993). Achievement-related beliefs of college students with disabilities. *Journal on Postsecondary Education and Disability*, 10(2), 9-20.
- Oazi, T. (2009). Parenting style, locus of control and self-efficacy: a correlational study. *Revista Costarricense de Psicología*, 28(41/42), 75-84.
- Olney M. F., Brockelman K. F. (2005). The impact of visibility of disability and gender on the self-concept of university students with disabilities. *Journal of Postsecondary Education and Disability*, 18(1), 80-91.
- Olney, M. F., Brockelman, K. F. (2003). Out of the disability closet: strategic use of perception management by select university students with disabilities. *Disability & Society*, 18(1), 35-50.
- Peterson, S. J., Gerhardt, M. W., Rode, J. C. (2006). Hope, learning goals, and task performance. *Personality and Individual Differences*, 40(6), 1099-1109.
- Ramos-Sánchez, L., Nichols, L. (2007). Self efficacy of first-generation and non-first-generation college students: the relationship with academic performance and college adjustment. *Journal of College Counseling*, 10(1), 6-18.
- Rand, K. L. (2009). Hope and optimism: latent structures and influences on grade expectancy and academic performance. *Journal of Personality*, 77(1), 231-260.
- Rand, K. L., Martin, A. D., Shea, A. M. (2011). Hope, but not optimism, predicts academic performance of law students beyond previous academic achievement. *Journal of Research in Personality*, 45(6), 683-686.
- Reed, M. J., Kennett, D. J., Emond, M. (2015). The influence of reasons for attending university on university experience: a comparison between students with and without disabilities. *Active Learning in Higher Education*, 16(3), 225-236.
- Richardson, J. T. E. (2009). The academic attainment of students with disabilities in UK higher education. *Studies in Higher Education*, 34(2), 123-137.
- Scholz U., Gutiérrez-Doña, B., Sud S., Schwarzer R. (2002). Is general self-efficacy a universal construct? Psychometric findings from 25 countries. *European Journal of Psychological Assessment*, 18(3), 242-251.
- Schreuer, M., Sachs, D. (2014). Efficacy of accommodations for students with disabilities in higher education. *Journal of Vocational Rehabilitation*, 40(1), 27-40.
- Schwarzer, R., Jerusalem, M. (1995). Generalized Self-Efficacy Scale. In J. Weinman. S. Wright. M. Johnston. *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.
- Smedema S. M., Yagmaian R. A., DaSilva Cardoso E., Muller V., Keegan J., Dutta A., Ebener D. J. (2015). The relationship of core self-evaluation and life satisfaction in college students with disabilities: evaluation of a mediator model. *Journal of Postsecondary Education and Disability*, 28(3), 341-358.
- Snyder, C. R., Cheavens, J., Sympton, S. C. (1997). Hope: an individual motive for social commerce. *Group Dynamics: Theory Research and Practice*, 1(2), 107-118.



- Snyder, C. R., Lehman, K. A., Kluck, B., Monsson, Y. (2006b). Hope for rehabilitation and vice versa. *Rehabilitation Psychology*, 51(2), 89-112.
- Snyder, C. R., Ritschel, L. A., Rand, K. L., Berg, C. J. (2006a). Balancing psychological assessments: including strengths and hope in client reports. *Journal of Clinical Psychology*, 62(1), 33-46.
- Snyder, C. S., Shorey, H. S., Cheavens, J., Pulvers, K. M., Adams, V. H., Wiklund, C. (2002). Hope and academic success in college. *Journal of Educational Psychology*, 94(4), 820-826.
- Wright, B. (1983). *Physical disability – A psychosocial approach*. New York: Harper & Row.
- Zaleszczyk A.K. (2015). Hope for success and difficulties in the career decision-making process. *Annals of Psychology*, 4, 611-621.



Violin Colourstrings Method in Czech Music Education for Older School-Age Children

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Abstract

The Colourstrings violin method has become the initial point for creating the model situation which is supposed to contribute to increasing the Czech music teachers' didactic use of the violin in music lessons with older pupils. The aim of the examine was verifying the effectiveness of the model situations in junior and senior pupils in the 8-year grammar school in an experimental way. The results of the study proved that the pupils in the experimental group, where the Coloustrings method was applied, were more interested in music forms learning process and they managed to use more effectively their gained knowledge in integration of vocal, instrumental, motoric and listening activities.

Keywords: Music education, Innovation in playing the violin, Colourstrings method

Introduction

In the history of Czech music education, the teacher's violin playing has always been one of the basic means of effective development of musicality in children of all ages. Due to the growing number of pianos¹ in schools in the mid 1900's and the ongoing frequent use of electrophones, the violin continuously lost its dominant position in music teaching. Although violin and piano are currently the only options in instrument preparation of future teachers at Czech universities, the predominance of the piano as a didactic aid in music education is significant. One of the main reasons for this is the high demand for professional instrument competences² in teacher-violinists. Achieving violin interpretation of good quality is significantly determined by the choice of methodical procedures used in violin teaching, as early as at elementary level. Contemporary Czech violin teachers prefer using methodologies developed by their predecessors - Otakar Ševčík, Jan Mařák and Josef Míčka and the violin school of the late 1900's represented by Jindřich Pazdera, Jaroslav Foltýn, Bohumil Kotmel, Zdeněk Gola and Eva Bublová. Methodical practices of foreign violin schools are currently applied rather selectively³. Only professor Shinichi Suzuki's method, and since 2011 also the Colourstrings method have been systematically applied in teaching violin in the Czech Republic.⁴

The violin Coloustrings method was developed after 1971 by a significant Hungarian educator Géza Szilvay⁵, a teacher at East Helsinki Music Institute in Finland. The method is based on the principles of Zoltan Kodály system of music education, on the Suzuki violin school and on the methodology of violin playing by Paul Rolland. Based on Kodály's idea that "music belongs to all", it is aimed at children and young people

¹The main reason for expansion of pianos in schools was the ministry's decision to distribute confiscated pianos, harmonius and organs among schools in 1948 (Věstník ministerstva školství, věd a umění, 1948, p. 563).

² Instrumental competences can be specified as one's personal attitude to violin play, the ability and skill to play the violin as a basis for didactisation of music theory, as an artistic expression and an expression of violin creativity.

³ HORÁKOVÁ, Marie. *Vývoj vybraných českých houslových metodik druhé poloviny 20. století*. Olomouc: Univerzita Palackého v Olomouci, 2006. ISBN 80-244-1543-7.

⁴ The only certified department teaching violin through the Suzuki method in the Czech Republic is Studio Dobeška in Prague 4, the Coloustrings method is used for teaching violin only at Základní umělecká škola Nový Jičín.

⁵ Csaba Szilvay Géza Szilvay's brother) created this for violoncello and double bass.



from nursery school to university. The main objective of Colourstrings is based on Kodály's principles⁶ for educating "*a good musician*"⁷. The objective is to educate a violinist with "*well-trained hearing, well-trained intellect, well-trained hands and a well-trained heart.*"⁸ The method thus includes training of intonation using solfeggio and relative solmization, improvement of fingering technique, teaching musical theory and developing emotions through chamber music. For optimal development of a violinist it is essential that all the above mentioned kinds of training are developed simultaneously and that they are always in well-balanced. Reading notes, which Szilvay considers the most problematic intellectual activity in small children, is abandoned at the first stage of instruction. Instead of classical notation the method based on a scientifically proven relationship between colour and tone⁹ works only with colour bars and subsequently with one line and notes of four colours (g string – green, d¹ string – red, a¹ string – blue, e² string – yellow). This simplification of notation allows the children to read "music" easily right from the beginning, and does not put a strain on them.

The complex approach to music teaching and child development which is applied in the Colourstrings method is reflected in very high level of present-day music arts education in Finland. With regard to the fact that this concept of teaching corresponds with the current requirements¹⁰ of present-day Czech music pedagogy for integrative approach to music education and optimal development of pupils' music abilities and skills, the violin Colourstrings method has become the basis for creating model situation called "The Violin In an Encounter with the Music Form".

Modelling didactic situations¹¹ is one of the methods which are relatively often used in music pedagogy and contribute to higher quality of music teaching. Professor Jaroslav Herden defines this method as "*creating models of functionally ideal procedures which respect theoretical background and comply with practice. Such a model captures essential features of the didactic practice recommended for solving a given problem, however, it does not close the space for individual applications of the scheme on the specific conditions of a given educational situation.*"¹² The importance of model situations lies in the possibility to check how

⁶ The Kodály method deals with ten principles, all of the same importance. It is the principle of pure intonation, in-tune singing, the principle of descending tone rows, the principle of rhythm priority, relative solmization, the principle of solmization priority, priority of a two-beat measure, principle of being playful and entertaining, the principle of learning about other nations' music cultures, knowing (experiencing) musical forms, sufficient supply of music literature.

⁷ SLOŽIL, Alois. *Maďarská hudební výchova*. Praha: Supraphon, 1977, p. 22.

⁸ SLOŽIL, Alois. *Maďarská hudební výchova*. Praha: Supraphon, 1977, p. 22.

⁹ First scientific research of the relationship between colour and sound was conducted in the 19th century. Significant artists who took into consideration the relationship between colour and sound included for instance composers A. N. Dvořák and painters V. Kandinskij, P. Klee and T. Wilfred. (PEČMAN, Rudolf. *Barva a tón aneb Zavátá cesta umění i apercpece. Universitas - revue Masarykovy univerzity*. Brno: Munipress, 2006, No. 4, 11-15. ISSN 1211-3387.)

¹⁰ Curricular documents defining the content and outputs of education at different levels of schools in the Czech Republic are the Framework Educational Programmes. The Framework Educational Programme for Elementary Education (FEP EE) has been in force since 2004, the Framework Education Programme for Grammar Schools (FEP GS) since 2007.

¹¹ Creation of model situations for example in connection with listening activities was dealt with by Jaroslav Herden, Eva Jenčková creates model examples of music educational situations with focus on music motor activities.

¹² HERDEN Jaroslav. *Modelové situace v přípravě na poslech*. In *Poslech hudby. Sborník příspěvků z konference konané ve dnech 27. a 28. dubna 1998 na Pedagogické fakultě UK v Praze*. Praha: Pedagogická fakulta Univerzity Karlovy, 1998, p. 39.



the suggested teaching methods work in practice while encouraging teachers to use effective practices in music teaching.

The model situation "The Violin In an Encounter with the Music Form" is structured into five sections of varied level of difficulty. Its content complies with the requirements of the Framework Education Programme for Elementary Education (hereinafter FEP EE) and the Framework Education Programme for Grammar Schools (hereinafter FEP GS)¹³. A closer characteristic of individual sections is provided through the keywords in the introductory part. Practices suggested in the model situation are based on the principles of the violin Colourstrings method. At the same time the method of "experiential learning" is applied, i.e. the learning process moves from experiencing music activity to acquisition and consolidation of theoretical knowledge of music forms. To achieve maximum effectiveness of the model situation, the "spiral learning" principle is also used¹⁴, combining progressively organised activities with the element of returning to previously acquired knowledge. Time recommended for the realization of individual sections is one lesson.

Due to the large scale of the model situation, the following part of the article only presents one of its sections titled Period as an illustration.

PERIOD

Internal division of a period, aural analysis of tonal closure of the antecedent and the consequent, playing on the body, vocal and instrumental execution of the period, arms movement in connection to the course of the antecedent and the consequent, metro-rhythmic coordination

Objective: To describe the structure of a period in music with the help of a complex of musical activities. To explain the terms antecedent and consequent, and to identify antecedent and consequent by hearing according to the tonal closure of individual sentences.

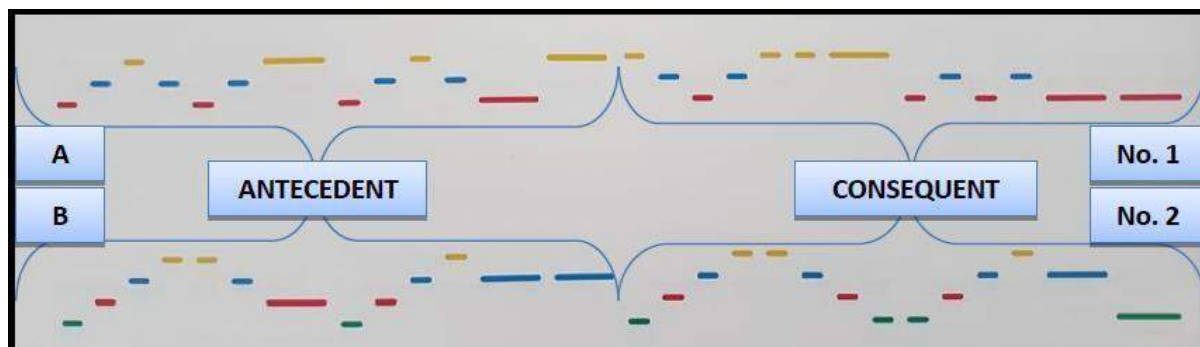
Findings: Period is the smallest musical form. It consists of two phrases, usually four measures long. The first phrase is referred to as the antecedent, the second is called the consequent. The antecedent mostly ends on the dominant, the consequence on the tonic. The antecedent-consequent relationship can be compared to a question and an answer.¹⁵

- The division of the period into two symmetrical parts - antecedent and consequent is shown in the figure. From violin playing the antecedent and the consequent and the colour differentiation of bars in the graphic score, pupils are supposed to deduce the usual tonic conclusion of the antecedent phrase on the dominant and of the consequent phrase on the tonic.

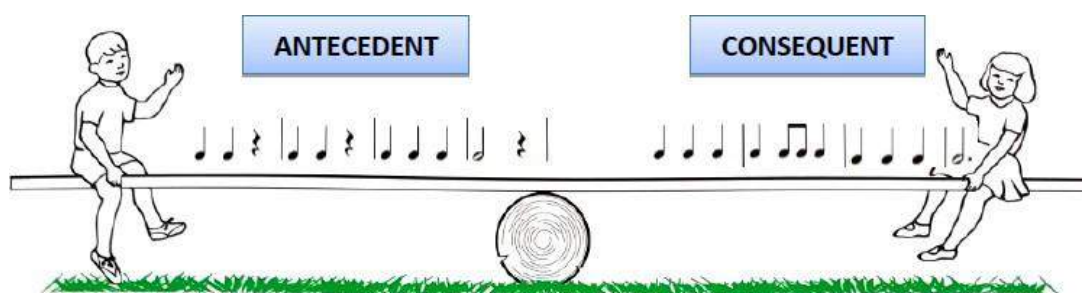
¹³ FEP EE and FEP GS are curricular documents defining the content and outputs of education at elementary (basic) schools and grammar schools.

¹⁴ This term is used by Eva Jenčková, who characterises it as a range of progressive model situations which enable optimal structuring of music teaching and differentiating children's assumptions. Adapted from (Jenčková, 2002, p. 22)

¹⁵ SOUŠKOVÁ, Dana. *Hudební druhy a žánry 1. díl*. Hradec Králové: Gaudeamus, 2007. ISBN 978-80-7041-393-7, p. 12.



- In this task, having listened to a violin interpretation of the antecedent, pupils improvise the consequent through an activity of their individual choice - singing, movement, instrumental play. Other pupils decide which parts were used, or whether it was improvisation of the given phrase, at the same time they check the correct tonic conclusion of the antecedent and consequent phrases.
- To enhance the comprehension of the antecedent-consequent relationship, we can use for example comparison to a question and answer relationship or to the movement of a swing. Another illustrative aid is also movement visualisation in the form of a plane manoeuvre, during which arms are deviated from a lateral raise, and with added up measures they return back to the lateral starting position.



- In this task pupils respond to violin improvisation of a rhythmic antecedent played on one tone. They clap a rhythm of their choice in the same number of beats, thus balancing "the music swing".
- A more complicated variation of the previous task is to create a rhythmic-melodic consequent on carillons. Pupils must respect not only the symmetric structure of a period but also the tonic conclusion of the antecedent and consequent.

Verification: Sing the folk songs Koulelo se, koulelo, Ach, synku, synku and Spievanky, spievanky and decide which of them feature the form of a period. With applicable songs subsequently support the internal division of the period with singing in groups. Girls sing the antecedent, boys sing the consequent.

Research survey method

As a method of empirical survey to verify effectiveness of the model situation we chose didactic experiment. Its aim was to verify the effectiveness of the model situation in lower and upper school classes of eight-year grammar school. With regard to the above mentioned objective of the research survey we formulated the following working hypothesis: Pupils in the experimental group, in which Colourstrings method principles are used in teaching understand the structure of music forms better and are able to use acquired knowledge more effectively when integrating vocal, instrumental motor and listening activities. The first stage



of the research survey included 25 first-year pupils¹⁶ of a four-year grammar school. During April 2017 we gradually realised all music activities suggested in the model situation.¹⁷ Following observations and individual interviews with pupils, tasks for some of the activities were re-formulated more precisely and the number of activities was reduced so that individual activities could be realised within one lesson¹⁸. The research survey itself was conducted in May and June 2017 in two parallel first year classes 1B and 1A, two parallel fifth year classes 1G and 5A and two parallel sixth year classes 6A and 6B¹⁹. In the experimental group of sixty pupils the topic of musical forms was presented according to the suggested principles based on the Colourstrings method. Sixty-three pupils of the control group were presented musical forms through exposition without using violin play.

The experiment which was carried out in parallel classes enabled us to compare the outcomes in the classes, to compare motivation practices based on the Colourstrings method with exposition-based teaching of musical forms, and thus assess the effectiveness of the practices based on the model situations.

When processing the survey results, we used a recording sheet for observation of experimental teaching, video recording, both quantitative and qualitative analyses, contingency tables and graphs.

Findings:

Based on observation and analysis of video recordings, the model situation was critically assessed as shown in the following table:

Activity	Author's (verifier's) assessment		Overall assessment of activity
	positive	negative	
No. 1 Development of musicality	+ first -year students' strong interest and motivation ++pupils' interest in a new form of work ++all pupils absorption with the sound of the violin ++ strong interest of all pupils in the violin play itself +expression of positive emotions when playing on the body	- some task assignments inadequate for older students - not all first-year students participating in group declamation - pupils having great difficulty creating a couplet for a given rhythmic figure, failure leading to subsequent passivity in some of the pupils	<i>positive</i> : suitable choice of activity and of most specific tasks within it, high level of pupils' interest , necessary modification of task formulation and modification of rhythmic figure supporting the text

¹⁶ At some grammar schools in the Czech Republic the first year is referred to as kvinta.

¹⁷ In this grade, the subject Music Education is allocated two lessons a week.

¹⁸ In compliance with Section 26 School Act No. 51/2004 Sb. duration of a school lesson in the Czech Republic is 45 minutes.

¹⁹ The above mentioned classes correspond with the following ages: first year (prima): 11-12 years, fifth year (kvinta): 15-16 years and seventh year (septima) 16-17 years of age.



No. 2 Period	+ spontaneous improvisation of the antecedent and consequent ++ great interest of all children in motor visualization of the antecedent and consequent ++ pupils' violin play	- pupils' difficulty closing the consequent on the tonic - carillon playing activity too noisy at times	<i>positive</i> : suitable choice of activity and of most specific tasks within it, relatively high level of pupils' interest, might be useful to incorporate another exercise practicing tonic closing of the antecedent and consequent
No. 3 Song form	+pupils' interest during motivational listening ++ joy from the final realization of Hungarian Dance + pupils' interest in finding differences in the layout of the form	-most boys' difficulty with rhythmic-motor coordination - in the first-year class relatively big noise while using Orff instruments	<i>very positive</i> : suitable choice of activity and of most specific tasks within it, high level of pupils' interest
No. 4 Rondo	+ pupils interest in creating a tonic cluster + support for correct intonation when singing a rondo part ++ pupils pleased with singing in foreign languages + interest in working with cards + pupils' positive emotions over creating the rondo	- pupils not too keen on writing rhythmic figures into the stave - pupils' problems with intonation of rondo part <i>b</i>	<i>very positive</i> : suitable choice of activity and of most specific tasks within it, high level of pupils' interest, optimal outcome of the lesson
No. 5 Variation	++ drawing a picture based on violin play + spontaneous motor improvisation + joy from the final realization of variations	- lack of time for drawing hat designs - motoric étude too noisy at times - pupils' difficulties playing the carillon	<i>satisfactory</i> : suitable choice of activity, some of the activities too difficult for pupils, duration, overall benefit from the lesson still positive

The contingency tables below present the results of a test which was carried out in both the experimental and the control group after the presentation of musical forms. Pupils from both groups were supposed to fulfil the tasks assigned at the end of individual sections in the model situation. Every correct answer scored one mark in evaluation. The results stated in percentage show that the experimental group, which was taught using activities based on Colourstrings principles, achieved higher scores in all tested tasks.

CONTINGENCY TABLE EXPERIMENTAL GROUP Activity 2			
1B age:11	1G age: 15	6A age:16	total
73,5632	78,5714	90,1916	80,78

CONTINGENCY TABLE EXPERIMENTAL GROUP Activity 3			
1B age:11	1G age: 15	6A age:16	total
59,7701	69,0476	86,2745	71,70

CONTINGENCY TABLE CONTROL GROUP Activity 2			
1A age:11	5A age: 15	6B age:16	total
60,00	60,4167	68,6275	63,01

CONTINGENCY TABLE CONTROL GROUP Activity 3			
1A age:11	5A age: 15	6B age:16	total
51,1111	66,6667	72,5490	63,44



CONTINGENCY TABLE EXPERIMENTAL GROUP Activity 4			
1B age:11	1G age: 15	6A age:16	total
68,9655	71,4286	82,3529	74,25

CONTINGENCY TABLE EXPERIMENTAL GROUP Activity 5			
1B age:11	1G age: 15	6A age:16	total
51,7241	67,8571	88,2353	69,27

CONTINGENCY TABLE CONTROL GROUP Activity 4			
1A age:11	5A age: 15	6B age:16	total
40,0000	62,5000	58,8235	53,77

CONTINGENCY TABLE CONTROL GROUP Activity 5			
1A age:11	5A age: 15	6B age:16	total
36,6667	59,3750	67,6471	54,56

Results, Conclusions and Recommendations

The aim of this paper was to present the results of a research survey which was designed to verify the effectiveness of teaching practices based on the Coloustrings method. The didactic experiment which verified the effectiveness of suggested practices, was carried out in parallel groups of pupils in lower and upper classes of grammar school. The above mentioned results of the research survey show that pupils in the experimental group, in which the proposed practices were used, were more active in lessons and were able to use the acquired knowledge better in other musical activities - vocal, instrumental and motor. The results of the research also show that the test assignments at the end of individual sections of the model situation caused greatest difficulty to first year students. With regard to their low success rate in some of the test assignments it is possible to say that it is not appropriate to present musical forms in full in the first year of grammar school.

The research survey proved that teaching practices applied in the model situation "Violin in an Encounter with Musical Form" may contribute to better results in music education for older school-age pupils while increasing the attractiveness of music teaching both for pupils and teachers.

References

- HERDEN J. Modelové situace v přípravě na poslech. In: *Poslech hudby. Sborník příspěvků z konference konané ve dnech 27. a 28. dubna 1998 na Pedagogické fakultě UK v Praze*. Praha: Pedagogická fakulta Univerzity Karlovy, 1998, s. 39. DOI: 80-86039-67-6.
- HORÁKOVÁ, M. *Vývoj vybraných českých houslových metodik druhé poloviny 20. století*. Olomouc: Univerzita Palackého v Olomouci, 2006. ISBN 80-244-1543-7.
- CHRÁSKA, M. *Úvod do výzkumu v pedagogice: Základy kvantitativně orientovaného výzkumu*. Univerzita Palackého v Olomouci. Olomouc: Tiskservis, 2003. ISBN 80-244-0765-5.
- JENČKOVÁ, E. *Hudba a pohyb ve škole*. Hradec Králové: Tandem, 2002. ISBN 80-903115-7-1.
- KOVARÍK, V. *Vývoj hudební výchovy na českých školách*. 1. vyd. Praha: SPN, 1960.
- NOVOTNÁ D. *Analýza stavu hudební výchovy na čtyřletých gymnáziích*. Ústí nad Labem: Univerzita J. E. Purkyně v Ústí nad Labem, CDSM, 2011. ISBN 978-80-7414-413-4.
- PRŮCHA, J. *Pedagogický výzkum: Uvedení do teorie a praxe*. Praha: Karolinum, 1195. ISBN 80-7184-132-3.
- SEDLÁK, František. *Didaktika hudební výchovy 2: Na druhém stupni základní školy*. 2. Praha: SPN, 1984. ISBN 14-352-84.
- SEDLÁK, F.: *Psychologie hudebních schopností a dovedností*. 1. vyd. Comenium musicum 20. Praha: Editio Supraphon, 1989. ISBN 80-7058-073-9.



- SEDLÁK F., H. VÁŇOVÁ *Hudební psychologie pro učitele*. 2. vyd. Praha: Univerzita Karlova v Praze, Karolinum, 2013. ISBN 978-80-246-2060-2.
- SKALKOVÁ, J. *Úvod do metodologie a metod pedagogického výzkumu*. 2. Praha: SPN, 1985. ISBN 14-275-85.
- SLOŽIL, A. *Maďarská hudební výchova*. 1. vyd. Comenium musicum 14. Praha: Supraphon, 1977.
- SOUŠKOVÁ, D. *Hudební druhy a žánry 1. díl*. Hradec Králové: Gaudeamus, 2007. ISBN 978-80-7041-393-7.
- SZILVAY, G. *Violin ABC, book A*. Helsinky: Fennica Gehrman, 2016. ISMN 979-0-55009-325-6.
- SZILVAY, G. *Violin ABC, book B*. Helsinky: Fennica Gehrman, 2014. ISMN 979-0-55009-326-3.
- VÁŇOVÁ, H., J. SKOPAL. *Metodologie a logika výzkumu v hudební pedagogice*. Univerzita Karlova v Praze. Praha: Karolinum, 2007, s. 171. ISBN 978-80-246-1367-3.
- VUUREN, Catharina Jansen. *A structured comparison between the Suzuki and Colourstrings violin methods with critical reference to the teaching of notation reading skills*. [online]. Pretoria: University of Pretoria, 2016. [vid. 8. 7. 2017]. Available from: <http://repository.up.ac.za/handle/2263/57187>



Current discussion on human resource management: corporate social responsibility and law viewpoints

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Abstract

The present study seeks to review the current state of research on human resource management –HRM- in order to propose an alternative view from a Corporate Social Responsibility – CSR - and a Law perspective. To do this effect, a bibliometric analysis has been conducted, to identify as challenges for HRM, factors such as the role of stakeholders, climate change, conception of the company, technological changes and management of diversity; this analysis also confirms that the studies of HRM oriented from CSR and Law perspectives are few. In this regard, an alternative view of HRM from the CSR and Law perspectives is proposed. To that end, this article analyze from the ongoing theories, tensions and tendencies, the relations between Law and the CSR. This is justified insofar as the exchanges between the extremes of legal and business, between market and State, which can be seen as conflicting, complementary and concurrent.

Keywords: human resource management HRM, Corporate Social Responsibility CSR, Law, bibliometric analysis, current status of the discussion

1. Introduction

The rise of studies on HRM in recent years has favored its discussion from different disciplinary approaches such as psychology, anthropology, sociology, economics, and, to a lesser extent, (Calderón, Álvarez, & Naranjo, 2006). In this context, this study sets two objectives: 1. to review and synthesize the current state of research in the area of HRM, as well as the main trends and challenges facing this area in the current context, and 2. to establish a connection between law and management from a CSR viewpoint. To achieve the proposed objectives, a chronological analysis is conducted on the four schools—the schools of scientific organization of work, human relations, neohuman relations, and systems—that have made significant contributions to the structuring and consolidation of the HRM area in organizations. This analysis begins with the work of the predecessors to Taylor (1911), that is, Metcalfe (1885), Towne, Halsey, & Taylor (1896) and Gantt (1910).

A bibliometric analysis of the literature indexed by Web of Science (WOS), the KCI Korean Journal Database, the Russian Science Citation Index, and the SciELO Citation Index during the last five years (2012–2017) is conducted using VOSviewer software, version 1.6.4. The study sample corresponds to 9,797



papers studied through a concurrency of terms analysis that creates a knowledge map of terms, with a minimum concurrency of 483. This network identifies the challenges of HRM and related disciplines of study. Finally, an alternative view is proposed for HRM from perspectives of law and CSR. This is justified insofar as the exchanges between the two ends of the legal and business aspects, that is, between the state and the market, can be perceived as a conflictual, complementary, and concurrent relationship. According to the context described above, this paper comprises six sections: Section 1 provided the introduction; Section 2 discusses the historical foundations of studies in HRM; Section 3 presents a literature review; Section 4 summarizes the current challenges and trends in HRM; Section 5 shows an alternative view of HRM from the perspectives of CSR and law as disciplines of knowledge; and finally, Section 6 presents the conclusions, discussion, and recommendations.

2. Method

a. Historical background and concurrence analysis of studies in HRM

As a consequence of the Industrial Revolution, the first practices of HRM in organizations date back to the end of the 19th century, with the development of large companies of the industrial sector in the U.S. environment (Barley & Kunda, 1995). Since then, social, cultural, economic, political, legal, and technological characteristics of the environment have changed, as well as the psychological contract signed between workers and the company. These changes have, in turn, led to three major lines of thought that, in practice, reflect the evolution and study of HR through four differentiated schools (Puchol, 2007): the schools of scientific organization of work, human relations, neohuman relations, and systems. The school of scientific organization of work—of which the main exponent is Taylor (1911), Metcalfe's (1885) successor—highlights the need to maintain a detailed record of operating and administration costs for the sake of the precision and responsibility that must characterize administrative and operative personnel in organizations. This school established the first foundations for the study of management in a scientific way. In this context, scholars such as Towne et al. (1896); Gantt (1910) and Gilbreth and Gilbreth (1917) manage to position management in the field of science with significant contributions to the progression of the production and HRM fields.

Works by the greatest exponent of this managerial school of thought, F. W. Taylor, are oriented to the study of the methods that lead to greater physical performance of the labor force. In this sense, Taylor (1911) focused on studying the time and movements necessary for using tools and machines for the development of work at production plants under the most efficient conditions available. He identified two closely linked variables: productivity and quality of work. The man–machine–production relationship posed by Taylor (1911) has been questioned because of the dehumanization of man in this model and because the organization as a whole was not taken into account in his studies. Notwithstanding the foregoing, it must be recognized that the school of scientific organization makes an indisputable contribution to the direction and management of human resources by regarding man as a central factor of production.

In a chronological order, the school of human relations, which arose as a response to the school of scientific organization of work, is discussed. This school was consolidated through works developed by the social sciences and particularly the psychology of work. In the first stage, works following the school of human relations focused on the selection of workers, professional orientation, and methods of learning and analyzed accidents and fatigue produced by work. In the second stage, the school focused on the individual and on the groups of workers, with efforts devoted to issues such as the study of personality, motivations, incentives,



leadership, communication, and team work, wherein exponents such as Mayo (1945) and Follett (1924, 1941) stand out, among others.

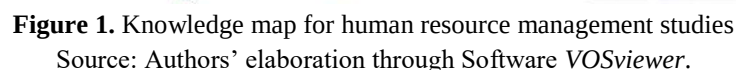
The experimental work developed by Mayo (1945) at Western Electric Company aimed at determining the relationship between job satisfaction and production efficiency. In the first phase of the experiment, Mayo (1945) found that better lighting brings greater productivity and that psychological conditions affect productivity. The second phase aimed at recording the productivity of an experimental group of individuals without them knowing that they are being observed and without variation in schedules or working conditions. Further, the participants' salaries were increased according to the increase in individual production; they also had rest times. The result of this second phase of the experiment is an increase in production from the experimental group. Accordingly, Mayo (1945) concluded that production is based on social norms and expectations of workers. He also reported that individual behavior is supported by the reference group and that the behavior of the group is based on social norms. Further, Mayo (1945) asserted that the greater the social interaction by the worker, the greater his/her production capacity will be, and that any positive or negative social or environmental change will impact workers' reaction. Despite the fact that Mayo's (1945) work has been strongly questioned with regard to the way the experiments were developed, it must be noted that his study has had a pioneering influence in recognizing that the organizational climate affects production. The results of the experiments conducted at Western Electric Company have been the basis of works focused on increasing productivity by improving the organization's environmental conditions. Also, Mayo (1945) influenced organizational studies focused on the study of formal and informal groups in organizations; this would later be the focus of works by Follett (1924, 1941).

M. P. Follett was a follower of Mayo's (1945) original line of thought and is considered to be the mother of industrial psychology. Follett (1924, 1941) suggested that organizations function under the principle of power and that the worker requires belonging to a group to feel satisfied. From this perspective, personal and group growth is achieved by uniting group members with their different skills or abilities. In this way, the synergies that lead to a better group performance are generated in comparison with the individual performances achieved by each one of the different members of the group. Follett's (1924, 1941) contributions are summarized in circular response and constructive conflict. On the one hand, in the circular response, Follett (1924, 1941) affirmed that the relations between people are modified by the contact and interaction between the related individuals, so the contact changes the way each member participating in the relationship conceives the other. On the other hand, constructive conflict is oriented to the importance of the divergence of opinions among the persons involved and the emergence of conflict and the consequent solution thereof through domination, conciliation, or integration.

In this same timeline and after the school of human relations, the school of neohuman relations comes next, with exponents such as Maslow (1943); Herzberg, Mausner, and Snyderman (1959); and McClelland (1961). These scholars complement the theories and postulates from the exponents of the school of human relations. Maslow (1943) proposed the well-known pattern of hierarchical needs by means of a five-step pyramid. The base of this pyramid is formed by physiological needs, followed by the needs of security, feeling of being a member, and self-esteem. The top of the pyramid includes the needs of self-realization, which are achieved through what is known as "peak experience." In this same line of thought, the contributions by Herzberg et al. (1959) have been considered by different scholars to be very significant for the school of relations, especially for the direction and management of human resources in organizations (Griffin, 1972; Kelly, 2001). The bifactorial theory of Herzberg et al. (1959) includes two types of factors: 1. hygienic factors that relate to vital and non-motivational factors for the human, such as the wages earned from work, and 2. motivational factors

Next, the general school of systems is discussed, the main exponent of which, Bertalanffy (1968), outlined a theory based on rules applicable and generalizable to any system. From this perspective, the system is the group of inter-related elements that fulfill a common goal and that has four elements to consider: input, process, outputs, and feedback. For Bertalanffy (1968), every system must be open, receive information from the environment, possess functions according to the structure of the system, and be contained in a larger system. The company as a system is made up of a group of inter-related elements that meet a common goal—the satisfaction of the needs of the market—and for this receives input from the environment—labor market, raw materials and supplies, financial resources, technology, innovation, information, and knowledge—that transforms into products and/or services for the market under a process of continuous improvement, achieved through feedback regarding the processes and communication from consumers.

In line with the historical foundations reviewed through traditional schools, a literature review on HRM indexed in the main collection of WOS, the KCI, the RSCI, and the SciELO from 2012 to 2017 is conducted to verify the recent state of the discussion. This review shows that 9,744 papers have been oriented to the study of HRM as an indexed topic in databases, a figure reached after reviewing the search equations “human resources management” (shown in Figure 1). Once data about author, title, source and summary are extracted, they are processed through the VOSviewer software, version 1.6.4. Therein, a bibliometric analysis (application of statistical methods to different means of communication) is conducted to measure quantity, performance, and some structural indicators that determine the connections between publications, authors, and research areas (Durieux & Gevenois, 2010; Romo Jiménez, Valencia-De-Lara, & Escobar-Sierra, 2017).





The concurrence of studies on HRM is highlighted, wherein concepts such as behavior, perception, information, leadership, challenges, risks, health, job satisfaction, and attitude are reviewed. These concepts are repeated more than 483 times in the 9,797 papers analyzed. These findings coincide with the historical moment of HR, described by authors such as Calderón et al. (2006), who, after synthesizing the evolutionary process of the subject, proposed the conception of the psychological man as a guideline in the current evolution period. In the evolutionary context described, the theoretical confluence in the study on the subject and the conceptualization of the terms “management of personnel” or “HRM” are recognized for the current historical moment. The notions, the distinction of which has not yet been solved, emphasize the management of personnel as an administrative, micro-organizational, static, and transactional matter, whereas the direction of human resource suggests an eminently directive, organizational, dynamic, and constantly evolving function (Puchol, 2007).

3. Findings

a. Challenges of HRM

When verifying the current discussion on the challenges of HRM, various positions are identified, including that of Al Ariss & Sidani (2016), who, when analyzing the future human resources research agenda, identified theoretical and practical gaps related to the HRM, international mobility, and diversity. Calderón et al. (2006) referred to trends in personnel management and identified the following challenges to be taken into account by staff management: (A) intangibles as new competitive advantages, (b) imminent reorganization or globalization, (c) the required organizational redesign, (c) the evolution of employment by employability, (d) the re-conceptualization of organizations, and (e) social responsibility policies. Meanwhile, in analyzing the new perspectives of human resources in the global context, Tung (2016) proposed brain circulation and multicultural teams, specifically geographic and/or cultural separation or distance; differences in type, source, and category; and disparity in economic and technological development. Stone & Deadrick (2015) proposed changes in the economy, globalization, domestic diversity, and technology as the new organizational demands, whereas Alcázar, Romero Fernández, & Sánchez Gardey (2013), in reviewing future lines of research on the subject, highlighted both internal and external factors as well as diversity management practices.

Finally, more specific positions such as that of Puchol (2007) to refer to the challenges of HRM were identified. Puchol (2007) proposed the incidence of what he called environmental forces, including (a) legislation; (b) trade unions; (c) lobbyists; (d) new technologies (Bondarouk & Ruël, 2009); (e) competition; (f) new social values; (g) human resources (globally distributed teams (Agrawal, Khatri, & Srinivasan, 2012), internationalization of departments (O’Sullivan, 2010), and training needs (Wimbush, 2008), among others); (h) the critical conception of the company; and (i) diversity management. Werther & Davis (2014) studied new technologies, nanotechnology, biotechnology, climate change, Asia and new superpowers (Budhwar & Debrah, 2009), English as a global language (Lauring & Selmer, 2012), demographic aging, migration, the female role and labor revolutions, and the 10 mega trends of the environment that impact the challenges of personnel management or human resources. However, these challenges are categorized between external and internal; external issues include governmental and social issues, such as changes in the position of women; labor migration; demographic expansion or contraction; and economic, cultural, technological, ecological, and



political changes. The internal challenges faced by companies include trade unions, information systems, organizational culture, conflict management, and corporate practices.

The evolutionary process undergone by HR has migrated from a purely administrative function to a strategic function wherein human beings are recognized as a source of competitive advantage, as noted by Calderón et al. (2006). This development, in addition to increasing the complexity of this field of knowledge, suggests the need to relate HRM with other disciplines than management (Calderón et al., 2006) such as psychology, sociology, anthropology, law, and economics. In this regard, after the first decade of the 21st century, the most recent studies on HRM have begun to integrate several issues. Each issue has different interests, and this is apparent from the volumes of studies devoted to each. Some topics like management by competences and knowledge management (Donate & Guadamillas, 2015; Hollenbeck & Jamieson, 2015); organizational culture (Tataw, 2012; Wei, Liu, Zhang, & Chiu, 2008); corporate entrepreneurship (Kusa, 2016; Tang, Wei, Snape, & Ng, 2015; Ziyae, 2016); and CSR (Cheema & Javed, 2017; Voegtlin & Greenwood, 2015) are increasing its count. Among the different points of view of recent studies, the psychological, anthropological, sociological, and economic aspects are the most highlighted or popular. However, analysis from the point of view of Law has been less prolific (Ferrary, 2009; Finkin et al., 2013), particularly for examining the relationship between HRM, Law, and CSR (Cadet, 2014; López-Francos de Busturia, 2015). The next section seeks to explain the different elements of this relationship and establish nodal points.

b. An alternative view of HRM from CSR and law

The State and the market are in constant conflict. Such a phenomenon is complex because it involves factors such as politics, economy, and development of technology and telecommunications. This influences the norms that regulate human behavior, with market practices serving as a good example. In this scenario, the relationship between (a) Law and CSR makes sense, and (b) to understand it, it is necessary to make two conceptual approaches and formulate a question with its corresponding answer. Doing so will help (c) identify certain points of interaction between human resources and CSR from the perspective of Law.

(a) The first conceptual approach makes it necessary to affirm that Law is a system of rules that responds to principles and variable dogmas, which according to the branch or specialty (civil, criminal, administrative, constitutional, etc.), provide rules for their enforcement (Hart, 1961). It is necessary to complement the above by stating that there are two different legal orders: one as a national space and the other as an international one (Guastini, 2016). Law is applied in a different way, i.e., according to logic and autonomous principles. Thus, it is known from the outset that Law is a normative system that changes according to the normative, national, or supranational order. However, the second conceptual approach is aimed at establishing that CSR intends for States to favor policies friendly to the right of free enterprise so that this is reflected in the development of a community (López-Francos de Busturia, 2015). Colombian magazine “Semana (2017)” recently explained how large companies are committed to sustainable development and the development of human rights (HR) such as education, work, and healthy environment to further promote the support of individual liberty rights (Quinche Ramírez, 2015). This applies to “a control over their production processes, their products or services, water quality, air, staff (training course), transparency, and integrity” (López-Francos de Busturia, 2015, p. 78).

(b) The two previous approaches show what the scenario is. But a guiding question is still needed: What is the relationship between CSR and the Law? Providing an answer will allow us to establish another relationship—of a second order—that leads to the analysis on human resources. To begin with, it is necessary to state that CSR is not a legal concept beyond a reference to the Law (Cadet, 2014, p. 41). In light of the theories that



validate CSR (García, 2017), the role of the Law is to set the minimum standards of respect for companies in their relations with communities, following the principle of non-regression in the field of HR, but more specifically on social, economic and cultural rights (Sepúlveda, 2006). However, regulatory gaps that put the relationship to test. For companies, the search for economic profit in an environment without legal regulation means that the rules of the market and free competition are the ones that prevail. This does not apply to HR, for example.

The affirmation of Cadet (2014) about the nature of CSR does not escape an analysis on the activity of the company as a new source of Law. Today, rules are not formulated solely by the State; companies themselves agree on certain rules to regulate their relations with society (Cadet, 2014, p. 122). CSR turns out to be a third way, assuming that the first is the Law and the second anarchy. Thus, in the scenario described in the previous paragraph, companies must be competitive and, for this reason, it is not strange that they claim that labor law or social guarantees hamper the production of profits (López-Francos de Busturia, 2015, pp. 208–247). The average entrepreneur's reasoning against the domestic law of states leads one to think that if profits are reduced, the creation of sources of employment and the welfare of the community run the risk of following the same fate (García, 2017). Faced with this legitimized behavior by capitalism and the market economy, the enforcement of social justice as an ideal comes from the efforts of the international community with the creation of supranational norms. In effect, organizations venture to impose an ethics of respect of minimum standards imposed by HR on companies (Truchet, 2002, pp. 89–91); this is the case, for example, with Organization for Economic Co-operation and Development (OECD) recommendations. The phrase venture to impose deserves particular attention. First, the verb “to impose” reveals a paradox of the State–market tension. Some theorists of CSR defend that it departs from the norms of immediate fulfillment and happens to be governed by what the companies simply want because of the simple liberality (García, 2017). For this reason, free decisions made by the companies constitute regulations parallel to the legal or state regulations. Second, it may be said that the first end of the phrase (“venture to ...”) that engages companies allows them to say that they resist—for reasons of economic convenience—to abide by the Law but propose to committing themselves to be responsible to the society, i.e., to abide by the norms that they themselves impose. In this manner, CSR becomes an added value, a distinctive sign that consumers want to support (Observatorio de RSC, 2007). International organizations that represent, in some way, business interests or their vision, venture to propose recommendations to States, aimed at promoting freedom of enterprise; in turn, these [states] receive development or improvement of the quality of life of a community as a consideration. A transnational company, for example, settling in a country where HR are not protected by laws [those of the hosting country] can choose to be socially responsible and prefer to respect international standards linked to human dignity and employee dignity. What is said counts from the strict point of view of the State, the Law, and political theory (Cadet, 2014; López-Francos de Busturia, 2015).

However, from a market point of view, CSR represents a competitive advantage in a society where communities and their members have greater and better access to information. If referring to responsible consumers (Adam-Lachèze, 2012; François-Lecompte, 2009), it is inevitable to think that they can see how synchronized a particular company is with CSR. In the 21st century, this simple fact substantially modifies the consumption habits from a sector of the world population that believes in a responsible use of their access to information (François-Lecompte, 2009). Then, if the perspectives cross, it may be thought that the relationship between Law and CSR shows that the company has a certain capacity to alter the traditional (i.e., state-wise) regulation of its activity. This is what López-Francos de Busturia (2015) and Cadet (2014) perceived as the ability to create a legal order different from the national order.



Three different positions can be analyzed at this juncture. The first position is that of international law. It ventures to propose timid self-regulation guidelines (e.g., Draft Code of Conduct for Transnational Corporations, which was proposed by the UN in 1983) (Berdeja Prieto, 1979; ONU, 1983). The second position is the one proposed by domestic law. Attempts by States are getting increasingly aggressive under the concepts of government regulation and legal CSR. Legalization requires large national and transnational corporations to adopt statutes that take into account anti-labor slavery and human trafficking policies (see the Royal Society of Chemistry's (2017) website), to cite two cases directly related to the area of human resources. The third position is the one that combines both systems, as happened before the Supreme Court of the United States, in the case *Kiobel v. Royal Dutch Petroleum Co.*, 133 S.Ct. 1659 (2013) (United States District Court S.D. New York., 2013), or more recently in the following cases: *Nestlé U.S.A. v. Doe* de 2016 and *Jasner et al. v. Arab Bank, PLC* of 2017 (United States Court of Appeals for the Second Circuit, 2017).

Kiobel v. Shell served to analyze the possibility that the Alien Tort Statute (ATS) of 1789 (Ruggie, 2012) was used to oppose the violation of HR by a transnational corporation in a place outside the national territory, before the Supreme Court of the United States. In this case, as in *Nestlé U.S.A.*, this form of holding companies responsible for their actions was not given significance. But in 2017, in *Jesner v. Arab Bank, PLC*, the Supreme Court reversed its decision. Certainly, the third case handled CSR from a broader perspective and served to teach the primary importance played by the States in their implementation (Ropes & Gray, 2017). The main debate relies on the doubt—more than reasonable—about the binding force of CSR against the market; therefore, the Law has the advantage of being mandatory. On the other hand, when voluntary CSR closes the possibility for States to set parameters for their use than through their laws, then they only follow the recommendations adopted by organizations such as the OECD.

Two comments must be added to this discussion. The first is that the relationship that is the purpose of this study has been scarcely approached or reviewed (Ferrary, 2009; Finkin et al., 2013), despite the considerable number of sources and issues linked to its problems. The second comment approaches not from intellectual production but from the very foundations of the modern liberal constitutional state. After the Second World War, respect for HR and human dignity became an immediate consequence, transforming them into an ontological condition for all States in the Western culture. In addition, this has a double connotation. The State ensures that its population has a duty to respect HR while providing the legal mechanisms for this to occur. In addition, it adjusts internal rules to create mechanisms with which rights humans can be defended. (c) The discussion to be addressed in this paper is very extensive. Therefore, the areas of interference of the debate (i.e., rights, CSR) and an area of administrative science can be revealed. To this end, the topic of human resources was chosen. How does the indeterminate character, ranging from voluntary to obligatory, of CSR affect the protection provided by the States in the field of human resources? Certain elements for proposing a response are given by the following: the criteria for recruitment; labor and personal development of employees; and the promotion of worker safety, implementation of policies for risk prevention, and assurance of worker access to health service. It was previously stated that there are those who are in favor of CSR for its being outside of the scope of mandatory state law, but the truth is that HR—and the doctrine arising from them—are minimum conditions that no company can avoid complying (Capelli, Guillot-Soulez, & Sabadie, 2015). Thus, not only are labor rights and social security included but also other guarantees are adopted and implemented beyond a minimum with a certain vision of participatory government within the company (Igalens & Tahri, 2012).



4. Results, Conclusions and Recommendations

In the existing literature on HRM, the development and evolution undergone by the discipline since Taylor's (1911) study can be appreciated. Indeed, Taylor lays the groundwork for the study of scientific administration with his works on times and movements within the production plant. But it is also true that the worker is completely absent from any humanity in his studies. In this context and with the emergence of work psychology theories, approaches and schools originated around the psychological and legal contract between human resources and organization begin to take shape. These approaches and schools have been marked by advances in the social sciences (in particular, organizational psychology) and changes in the economic, social, cultural, technological, political, and legal environments. Thus, the need to humanize the worker gave rise to studies from the school of human relations, with exponents such as May (1945) and Follett (1924, 1941), and the works of the neohumanist school, with exponents such as Maslow (1943), Herzberg (1959), or McClelland (1961). Later, this gave way to the emergence of the school of systems, with its greatest exponent Bertalanffy (1968), who conceived the organization as an open system with reference to the biological analogy of the system.

When verifying the current discussion on HRM, both challenges and related disciplines of study are identified. Challenges include issues such as the role of stakeholders, climate change, critical business thinking, rapid technological change, and management of diversity. Meanwhile, when reference is made to related disciplines of study, a marked psychological, anthropological, sociological, and economic tone is recognized in the study on HRM, leaving behind its review through the perspective of Law. Law has a tendency in the Western world to apply CSR effectively. The State regulates the actions of companies, showing how they can be socially responsible, especially through labor guarantees. These must be protected within the framework of CSR.

In the logic of finding new research perspectives on HRM, from the perspective of the Law and CSR, the topics of major importance are listed as follows: criteria for selection of personnel; labor and personal development of employees; promotion of safety, aimed at implementing risk prevention policies; and access to the worker's health service. All these themes show the road map to researchers and academics. Thus, on the basis of the new perspectives, some recommendations for future studies are proposed below. First, governance of the company should be studied. This constitutes the theoretical platform that allows the application of labor policies so that the company becomes compatible with the legal systems of the States. Second, comparative studies on the internal law of the countries in the region must be conducted in the light of international law that proposes recommendations to States on CSR (OECD and ILO). This type of analysis seeks to define and propose tailor-made business policies and management tools in tandem with the growing need for each company to become socially responsible. Third, the relationship of HRM and norms that regulate labor guarantees should be studied in the contexts of mass migration and diversity. These studies would serve to prevent labor slavery or to identify cases and even practices that prevent it. In summary, these types of studies have a general objective: to theorize about the possible modifications of the behavior of companies so that they bridge—through social justice and under the banner of respect for HR—the gaps left by the State. Companies now face a challenge: humanization of HRM aided by the rules of CSR.



References

- Adam-Lachèze, A. (2012). Consommation responsable. In *dans Dictionnaire du commerce équitable* (Hors colle, pp. 74–78). Versailles: Editions Quæ. <http://doi.org/10.3917/quæ.blanc.2012.01.0074>
- Agrawal, N. M., Khatri, N., & Srinivasan, R. (2012). Managing growth: Human resource management challenges facing the Indian software industry. *Journal of World Business*, 47(2), 159–166. <http://doi.org/10.1016/j.jwb.2011.04.002>
- Al Ariss, A., & Sidani, Y. (2016). Comparative international human resource management: future research directions. *Human Resource Management Review*, 26(4), 352–358. <http://doi.org/10.1016/j.hrmr.2016.04.007>
- Alcázar, F. M., Romero Fernández, P. M., & Sánchez Gardey, G. (2013). Workforce diversity in strategic human resource management models. *Cross Cultural Management: An International Journal*, 20(1), 39–49. <http://doi.org/10.1108/13527601311296247>
- Barley, S. R., & Kunda, G. (1995). Estructura y diseño vs. lealtad y sentimiento: oleadas de ideologías racionales y normativas de control en el discurso gerencial. *Tecnología Administrativa*, 9(20), 135–192.
- Berdeja Prieto, T. G. (1979). Código de conducta para empresas transnacionales. *Jurídica. Anuario Del Departamento de Derecho de La Universidad Iberoamericana*, 1(11), 185–208. Retrieved from <https://revistas-colaboracion.juridicas.unam.mx/index.php/juridica/article/view/10820/9894>
- Bertalanffy, L. von. (1968). *Teoria general de los sistemas*. Fondo de Cultura Económica.
- Bondarouk, T. V., & Ruël, H. J. M. (2009). Electronic Human Resource Management: challenges in the digital era. *The International Journal of Human Resource Management*, 20(3), 505–514. <http://doi.org/10.1080/09585190802707235>
- Budhwar, P., & Debrah, Y. A. (2009). Future research on human resource management systems in Asia. *Asia Pacific Journal of Management*, 26(2), 197–218. <http://doi.org/10.1007/s10490-008-9103-6>
- Cadet, I. (2014). *Responsabilité sociale de l'entreprise (rse), responsabilités. Éthiques et utopies. Les fondements normatifs de la rse. Étude de la place du droit dans les organisations. Gestion et management. Conservatoire national des arts et métiers - CNAM*. Conservatoire national des arts et métiers - CNAM. Retrieved from <https://tel.archives-ouvertes.fr/tel-01142683/document>
- Calderón, G., Álvarez, C. M., & Naranjo, C. (2006). Gestión humana en las organizaciones un fenómeno complejo: evolución, retos, tendencias y perspectivas de investigación. *Cuadernos de Administración*, 19(32), 225–254. <http://doi.org/10.120-3592>
- Capelli, S., Guillot-Soulez, C., & Sabadie, W. (2015). Engagement RSE et attractivité organisationnelle: la communication protège-t-elle en cas de crise? *Revue de Gestion Des Ressources Humaines*, 96(2), 3. <http://doi.org/10.3917/grhu.096.0003>
- Cheema, S., & Javed, F. (2017). The effects of corporate social responsibility toward green human resource management: The mediating role of sustainable environment. *Cogent Business & Management*, 4(1). <http://doi.org/10.1080/23311975.2017.1310012>



- Donate, M. J., & Guadamillas, F. (2015). An empirical study on the relationships between knowledge management, knowledge-oriented human resource practices and innovation. *Knowledge Management Research & Practice*, 13(2), 134–148. <http://doi.org/10.1057/kmrp.2013.36>
- Durieux, V., & Gevenois, P. A. (2010). Bibliometric indicators: quality measurements of scientific publication. *Radiology*, 255(2), 342–51. <http://doi.org/10.1148/radiol.09090626>
- Ferrary, M. (2009). A stakeholder's perspective on human resource management. *Journal of Business Ethics*, 87(1), 31–43. <http://doi.org/10.1007/s10551-008-9868-z>
- Finkin, M. W., Cutcher-Gershenfeld, J., Araki, T., Filho, R. F., Stewart, A., & Waas, B. (2013). *Multinational Human Resource Management and the Law: Common Workplace Problems in Different Legal Environments*. Cheltenham: Edward Elgar Publishing. <http://doi.org/0019793914537461>
- Follett, M. P. (1924). *Creative Experience*. New York: Longmans, Green.
- Follett, M. P. (1941). *Dynamic Administration: The Collected Papers of Mary Parker Follett*. (H. C. Metcalf & L. Urwick, Eds.). London: Pitman.
- François-Lecompte, A. (2009). La consommation socialement responsable: oui mais.... *Reflets et Perspectives de La Vie Économique*, XLVIII(4), 89. <http://doi.org/10.3917/rpve.484.0089>
- Gantt, H. L. (1910). *Work, wages, and profits: their influence on the cost of living*. New York: Works management library - the engineering magazine.
- García, D. F. (2017, March). Editorial: Los réditos de la RSE. *La Nota Econonómica*, 4.
- Gilbreth, F. B., & Gilbreth, L. M. (1917). *Applied motion study, a collection of papers on the efficient method to industrial preparedness*. New York: Sturgis & Walton company. <http://doi.org/10.1017/CBO9781107415324.004>
- Griffin, A. R. (1972). Consultation and conciliation in the mining industry: the need for a new approach. *Industrial Relations Journal*, 3(3), 29–48. <http://doi.org/10.1111/j.1468-2338.1972.tb00115.x>
- Guastini, R. (2016). *La sintaxis del derecho. Ediciones Jurídicas y Sociales*. Madrid: Marcial Pons.
- Hart, H. L. A. (1961). *The concept of law*. Oxford: Clarendon Press.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work* (1st ed.). New York: John Wiley & Sons. <http://doi.org/978-1560006343>
- Hollenbeck, J. R., & Jamieson, B. B. (2015). Human Capital, Social Capital, and Social Network Analysis: Implications for Strategic Human Resource Management. *Academy of Management Perspectives*, 29(3), 370–385. <http://doi.org/10.5465/amp.2014.0140>
- Igalens, J., & Tahri, N. (2012). Perception de la RSE par les salariés: construction et validation d'une échelle de mesure. *Revue de Gestion Des Ressources Humaines*, 83(1), 3. <http://doi.org/10.3917/grhu.083.0003>
- Kelly, J. (2001). The costs of job redesign: a preliminary analysis. *Industrial Relations Journal*, 11(3), 22–34. <http://doi.org/10.1111/j.1468-2338.1980.tb00319.x>



- Kusa, R. (2016). Pro-Entrepreneurial Human Resource Management in Non-Profit Organizations. *Problemy Zarzadzania-Management Issues*, 14(3), 32–44. <http://doi.org/10.7172/1644-9584.61.2>
- Lauring, J., & Selmer, J. (2012). Linguistic diversity and English language use in multicultural organizations: is there a moderating effect of the age of organizational members? *The International Journal of Human Resource Management*, 24(10), 1–12. <http://doi.org/10.1080/09585192.2012.723020>
- López-Francos de Busturia, A. A. (2015). *Derechos humanos, empresas transnacionales y responsabilidad social empresarial. Biblioteca de derechos humanos* (1st ed.). Madrid: Fundación Berg Oceana Aufklärung.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370.
- Mayo, E. (1945). *Social problems of an industrial civilization* (4th ed.). Andover: Division of research, Graduate school of business administration, Harvard university.
- McClelland, D. C. (1961). *The Achieving Society*. Princeton, NJ: D. Van Nostrand.
- Metcalfe, H. (1885). *The Cost of Manufactures and the Administration of Workshops Public and Private*. New York: John Wiley and Sons.
- O’Sullivan, S. L. (2010). International human resource management challenges in Canadian development INGOs. *European Management Journal*, 28(6), 421–440. <http://doi.org/10.1016/j.emj.2010.06.006>
- Observatorio de RSC. (2007). Guía para un consumo responsable. El papel de los consumidores y consumidoras en la Responsabilidad Social Corporativa. Retrieved July 13, 2017, from <http://observatoriorsc.org/guia-para-un-consumo-responsable-el-papel-de-los-consumidores-y-consumidoras-en-la-responsabilidad-social-corporativa/>
- ONU. Proyecto de código de conducta de las naciones unidas para las empresas transnacionales (1983). Retrieved from <http://investmentpolicyhub.unctad.org/Download/TreatyFile/2893>
- Puchol, L. (2007). *Dirección y gestión de recursos humanos* (7th ed.). Madrid: Díaz de Santos.
- Quinche Ramírez, M. F. (2015). *Derecho constitucional colombiano* (6th ed.). Bogotá: Editorial Temis.
- Romo Jiménez, A. M., Valencia-De-Lara, P., & Escobar-Sierra, M. (2017). Un análisis bibliométrico sobre responsabilidad social empresarial y consumidores. In *Diversidad y complejidad organizacional en América Latina. Perspectivas de Análisis* (Primera, pp. 181–207). Mexico: Red Mexicana de Investigadores en Estudios Organizacionales (REMINEO) A.C.
- Ropes & Gray. (2017). *The Supreme Court Considers Whether Companies Can Be on the Hook for Human Rights Violations Under the Alien Tort Statute*. Retrieved from <https://www.ropesgray.com/newsroom/alerts/2017/04/The-Supreme-Court-Considers-Whether-Companies-Can-Be-on-the-Hook-for-Human-Rights-Violations.aspx>
- Royal Society of Chemistry. (2017). Modern Slavery Act statement. Retrieved from <http://www.rsc.org/help-legal/legal/modern-slavery-act-statement/>
- Ruggie, J. (2012). *Kiobel and corporate social responsibility*. Harvard Kennedy School. Retrieved from <https://www.hks.harvard.edu/m->



rcbg/CSRI/KIOBEL_AND_CORPORATE_SOCIAL_RESPONSIBILITY.pdf

- Semana, R. (2017). Las 100 empresas más grandes de Colombia. *Revista Semana*, (1826), 92–140. Retrieved from <http://www.semana.com/100-empresas/articulo/100-empresas-2017-el-reto-del-sector-privado-ayudar-a-construir-un-mejor-pais/523653>
- Sepúlveda, M. (2006). La interpretación del Comité de derechos económicos sociales y culturales de la expresión “progresivamente.” In C. (Compilador) Courtis (Ed.), *Ni un paso atrás: La prohibición de regresividad en materia de derechos sociales* (pp. 117–149). Buenos Aires: CEDAL, CES y Editores del Puerto s.rl.
- Steers, R. M., Mowday, R. T., & Shapiro, D. L. (2004). Introduction to special topic forum: The future of work motivation theory. *Academy of Management Review*, 29(3), 379–387. <http://doi.org/10.2307/20159049>
- Stone, D. L., & Deadrick, D. L. (2015). Challenges and opportunities affecting the future of human resource management. *Human Resource Management Review*, 25(2), 139–145. <http://doi.org/10.1016/j.hrmr.2015.01.003>
- Tang, G., Wei, L.-Q., Snape, E., & Ng, Y. C. (2015). How effective human resource management promotes corporate entrepreneurship: evidence from China. *The International Journal of Human Resource Management*, 26(12), 1586–1601. <http://doi.org/10.1080/09585192.2014.953973>
- Tataw, D. (2012). Toward human resource management in inter-professional health practice: Linking organizational culture, group identity and individual autonomy. *International Journal of Health Planning and Management*, 27(2), 130–149. <http://doi.org/10.1002/hpm.2098>
- Taylor, F. W. (1911). *The principles of scientific management* (1st ed.). New York: Harper & Brothers.
- Towne, H. R., Halsey, F. A., & Taylor, F. W. (1896). *The adjustment of wages to efficiency: Gain-sharing, The premium plan, A piece rate plan* (1st ed.). New York: For the American economic association by the Macmillan company.
- Truchet, M. (2002). Les transformations de la notion de responsabilité civile et pénale depuis 40 ans. *Gazette Du Palais*, 187.
- Tung, R. L. (2016). New perspectives on human resource management in a global context. *Journal of World Business*, 51(1), 142–152. <http://doi.org/10.1016/j.jwb.2015.10.004>
- United States Court of Appeals for the Second Circuit. *Jesner v. Arab Bank, PLC* (2017). Retrieved from <http://www.scotusblog.com/case-files/cases/jesner-v-arab-bank-plc/>
- United States District Court S.D. New York. *Kiobel v. Royal Dutch Petroleum Co.* (2013). Retrieved from https://scholar.google.com/scholar_case?q=kiobel&hl=en&as_sdt=2006&case=9750031164443439262&scilh=0
- Voegtlin, C., & Greenwood, M. (2015). Corporate social responsibility and human resource management: A systematic review and conceptual analysis. *Human Resource Management Review*, 26(3), 181–197. <http://doi.org/10.1016/j.hrmr.2015.12.003>



- Wei, L., Liu, J., Zhang, Y., & Chiu, R. K. (2008). The role of corporate culture in the process of strategic human resource management: Evidence from Chinese enterprises. *Human Resource Management*, 47(4), 777–794. <http://doi.org/10.1002/hrm.20244>
- Werther, W. B., & Davis, K. (2014). *Administración de recursos humanos: gestión del capital humano*. (M. P. Guzmán Brito, Ed.) (7th ed.). México: McGraw Hill.
- Wimbush, J. C. (2008). Human resource management: Challenges for graduate education. *Business Horizons*, 51(2), 151–154. <http://doi.org/10.1016/j.bushor.2008.01.001>
- Ziyae, B. (2016). Presenting an evaluation model of human resource management's effect on corporate entrepreneurship. *World Journal of Entrepreneurship, Management and Sustainable Development*, 12(3), 228–242. <http://doi.org/10.1108/WJEMSD-03-2016-0013>



Computer Science Students' Perception Of Attractiveness Of Prospective Employers: Identifying The Factors Of Attractiveness And The Use Of Social Media In The Context Of The Czech Republic

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Abstract

Human Resources have become essential when speaking about a competitive advantage in the marketplace nowadays. Brand and corporate reputation are crucial when talented and highly-skilled job seekers consider applying for a job as they have often several options. The boom of the internet has opened new opportunities for companies/employers to lead their branding campaigns and advertise job vacancies. This paper reacts to the call of Sivertzen, Nilsen and Olafsen (2003) to test their model with a different group of respondents because the industry the respondents belonged in may have a substantial impact on the responses and relationships of the model. The original research model identifies important factors organizations should focus on when building their employer brand online and it investigates the relationships that connect dimensions of employer attractiveness with variables measuring corporate reputation, the use of social media and intentions to apply for a job. Their study explores whether the perception of employers by potential employees based on the social media promotion influences their intentions to apply for a job in a company. In the research, an electronic questionnaire distributed to computer science students in the Czech Republic was used, where responses are related to well-known Czech computer science companies. The model is replicated not only within a different industry but also in different geographical and cultural terms compared to the original paper. The proposed model was tested by a structural equation modelling in R statistical software. The purpose of this paper is to verify the validity of the original model, to extend the context of its application and to re-evaluate the limits of the model to increase the possibility of generalization. On the one hand, the results indicate positive relationships between variables of the model. On the other hand, we need to take into consideration weak fitting statistics and a low number of observations which limited the validation of the proposed model.

Keywords: Resource-Based View, Employer Attractiveness, Social Media, Corporate Reputation

Introduction

Human resources management has always fought for its position in a company budget. This is precisely why financial difficulties of a company have been in many cases associated primarily with spending cuts on human resources systems (Wright et al., 2001). Nowadays, human resources have become the key to competitive advantage. Successful companies effectively competing in the marketplace have already integrated their talent strategic steps into their daily operations (Bergeron, 2004). A theoretical shift in the concept of human capital and human resources (HR) decisions as a source with strategic nature is grounded in the resource-based view (RBV) and the resultant resource base theory (RBT). This basis also serves as grounds for related areas emerging from human resources that arise from growing acceptance of the importance of people as part of the strategy leading to a firm's success. Therefore, this paper begins with a brief insight into this issue as is the foundation for the original model.

The thought of a resource-based view is referred to Wernerfelt (1984). However, it is important to note that the importance of strengths and weaknesses of a company's internal resources had already been emphasized by Harvard Design School (e.g. Andrews, 1971). This perspective, where companies are viewed from the side of resources and not from the side of the product, allows a new view on strategic options of companies. By resources are meant tangible and intangible assets tied semi-permanently to the firm (Wernerfelt, 1984), although the list of definitions has become much longer during the time. Jay Barney, probably the most influential RBV theorist (Boxall, 1996), later, for the purposes of the discussion, classified possible resources into three categories, physical capital resources, human capital resources and organizational capital resources (Barney, 1991). So then, the core



of RBV consists of analysing and interpreting these resources of the organisations as a source of superior performance and competitive advantage (Wernerfelt, 1984; Barney, 1986). This concept is quite different from the traditional market-based view (MBV), as RBV sees companies as heterogeneous – every firm is different from another one due to the combination of resources it consists of. MBV, on the other hand, sees companies as fairly homogenous, gaining competitive advantage by branding and positioning efforts (Madhani, 2010).

RBV contributed significantly to the development of strategic management and came to be a dominant framework in the 1990s (Boxall, 1996; Wright, 2001). Due to its shift from external to internal factors, RBV provided a logical link between the theories of human resources management (HRM) and strategic development (Boxall, 1996), and, therefore, has been clearly instrumental to the development of strategic human resource management (SHRM) (Hoskisson et al., 2016). Resource-based thinking supported the assertion (if needed) that people are the strategic cornerstone of the corporate success (Wright et al., 2001). It means that theoretical contribution of HRM was not only seen as an useful tool for implementing given strategical scenarios but it was also valued for its potential to generate strategic competitive sources (Barney, 1991). HR may lay down the foundations for a company's competitive advantage by hiring and developing talented staff and by combining talents better than competitors (Boxall, 1996). Gradually, people have come to be a crucial source with an indisputable benefit for companies, precisely because companies compete in information, knowledge and services. Managing human capital as part of strategic planning is now a must and should be an immediate interest of the top management if the company wants to be competitive and successful (Armstrong, 2015). Especially in a period in which there is an excess of demand over supply on the labour market, it is indispensable knowledge for an employer how to be attractive for employers (Kasper, 2005; Mahroum, 2000).

As a consequence of talent shortage, companies, especially those operating in the knowledge-intensive area, need to differentiate themselves on the labour market. In order to offer a unique employment proposition, they need to build an employer's brand that will allow them to keep up in the tug of war for talents (Ewing et al., 2015). The phrase *employer brand* was conceptualized for the first time in 1996 in the very well-known article by Ambler and Barrow (1996), who tested the application of brand management techniques to human resource management. They defined employer brand as „the package of functional, economic and psychological benefits provided by employment, and identified with the employing company “. Naturally, new and narrower definitions appeared later; the authors of this article, however, used the definition from the original paper (Sivertzen et al., 2013) as „the process of building employer identity directed at existing and potential employees, in order to differentiate the firm from its competitors“, which corresponds with the main idea of being different on the market of employers (Ewing et al., 2015). Employer branding, whatever changes its definition has undergone, is one of the attributes that boost competitive advantage. It is also worth mentioning that probably every company has a brand, but only some of them have their brand based on effective branding efforts (Backhaus, 2016a). A number of studies were concerned about brand attributes, finding the most effective or most attractive of them in contributing to employer attractiveness.

This paper contributes to scientific progress related to this phenomenon through replication, as replicability is an important component in research (Brandt et al., 2014). It seeks to determine the most important factors when building an employer branding campaign and therefore contribute to better and deeper understanding of how processes of branding should be managed. The paper uses a model by Sivertzen et al. (2013), which consists of four parts. First, it investigates the relations between five dimensions of employer attractiveness and corporate reputation. Second, the relations between corporate reputation and intentions to apply for a job and the use of social media as a moderator factor between them. Factors are measured by using both the existing scales used as the original and slightly modified scales for the purposes of the model. These relationships are characterized by four hypotheses based on the current knowledge (reviewed theory). The research model is presented in Figure 1 followed by full text hypotheses. The findings of our research are also compared with the results from the original paper, as the intention of this paper is to test the model and verify its validity. To reach this goal, different groups



of respondents, different industries, as well as different geographical and cultural terms were chosen compared to the original paper. These differences could influence the relationships of the model considerably.

As follows from the text above, employer brand is the opportunity to improve and differentiate an organisation's attractiveness as an employer. Therefore, there is a new concept applied in research, *employer attractiveness*. Berthon et al. (2005) defined this as „the envisioned benefits that a potential employee sees in working for a specific organization“, and says that employer's value proposition is perceived and evaluated based on this attractiveness. Based on the research findings, attractiveness is positively related to the needs of target audience. That means that a potential employee or group of employees are attracted to a company if they feel it could fulfil their personal needs (Botha et al., 2011). Employer branding helps building an image of the company so as to achieve this. However, it is often difficult for companies to differentiate if they are from the same industry, demanding the same job positions, and related factors are similar. Nevertheless, Lieven and Highhouse (2003) found that instrumental job and organisational attributes such as salary and similar benefits are overvalued when dealing with employer attractiveness by symbolic trait inferences of particular companies. Similarly, Milkovich and Newman reveal that the attraction is affected by the level of the fit between job offer and its benefits and inherent preferences of a potential employee (Milkovich and Newman, 2008). Many studies have focused on determining the most attractive factors. In the contemporary academic community prevails the consensus about the multidimensionality of this construct (Alınçık, 2012). However, it is not a surprise that, due the use of different samples, the hierarchy of preferred traits reveals dissimilarities. The differences are shown to be given for example by the firm's nationality, within particular countries or within certain professions (Backhaus, 2016c) or by gender, age or employment status (Alınçık, 2012). Despite the differences in the importance of individual factors, the consensus prevails in the contemporary academic community about the multidimensionality of this construct. A widely used tool for uncovering the preferences was created by Berthon et al. (2005). The employer attractiveness scale (EmpAt) is a result of a mixed research. The scale consists of 25 indicators constituting 5 dimensions. Strong foundations for this scale were provided by Ambler and Barrow's (1996) research. Berthon's scale was used in this paper as part of the model as well.

Company's reputation appeared to represent significant connectivity to employer attractiveness. The reputation of the organisation may serve as a source of information about working in a particular company when a job seeker is considering their choices. Awareness of a company and high corporate reputation ratings are significantly related to organizational attractiveness according to Cable and Turban's (2003). This positive relation is part of the research model. Although corporate reputation has been subject of interest for practitioners as well as academics for decades, there is no generally accepted definition of the term. The existing definitions could be merged into two streams, either the term is analogous to the corporate image or it is differentiated (Gotsi and Wilson, 2001). For the purposes of this article, the identical definition from the original paper is used, which describes corporate reputation as „an organisation's set of socially constructed characteristics, defined by the organisation's previous actions and future prospects“ (Sivertzen et al., 2013). According to the resource-based view, the reputation of a particular company can be considered as a specific strategic asset (Branco and Rodrigues, 2006).

When a company seeks to build its reputation, managers can use demand-based instruments to target at employees who seek out firms with better reputation (Auger et al., 2011), thereby enhancing a potential employee's *intentions to apply for a job*. Several studies have found a positive relation between the level of reputation and intentions to apply. Following the research model, Collin's and Steven's (2002) paper is used. They confirmed the relation between positive perceptions of organisations and intentions to apply for a job in a particular organisation on a student sample. The findings also suggested that firms which understand how to communicate the value have a strategic advantage on the labour market, as it turned out that the possibility that a student will apply for a job in a particular company rises if they have been exposed to early recruitment-related activity (Collins, 2002). Within recruiting, different types of marketing channels are used (Sivertzen et al., 2013). Along with the dramatic



transition of communications technology, recruiters are faced with different needs of workforce and new generation of potential employees, which means different expectations of building relationship with potential employers (Gravili and Fait, 2017). With emphasis on the generation in which our respondents belong, social media should definitely be considered by employers as a recruiting tool to attract and recruit (Wazed, 2015).

Nowadays, as *social media* penetrate society, they have impacted the field of HRM in a number of ways (Kluemper et al., 2016). Social media can increase stakeholder engagement (Hoffmann and Lutz, 2015) and potential job applicants represent an important organizational stakeholder group for human resource management (Kluemper et al., 2016). Organisations are increasingly often turning their attention to using the potential of social media for corporate marketing and branding activities (Gallaughier and Ransbotham, 2010). However, social media should not simply be regarded as another channel for recruitment, but also as a tool to interact with a potential applicant, managing branding and reputation activities simultaneously (Dutta, 2014). Communicating through social media brings many advantages as contact with the target group is personal, realistic, and interactive, and last but not least, it could be more cost-efficient. On the other hand, a possible drawback is that communication through social media cannot be controlled to such an extent as classic media channels (Kissel and Büttgen, 2015). Research should be conducted into how the advantages of this channel can be fully exploited and how social media can support marketing strategies and contribute to the marketing goal of organisations (Tsimonis and Dimitriadis, 2014). All the above-mentioned ideas are emphasized by our sample. Despite the fact that experts disagree about the exact years of birth to define the generation, for our purpose it is the 1981 – 2000 generation called Millennials or GenY. Their main characteristic is their enthusiasm for technology and proficiency. Y's use communication technology differently from any other generation (Smith and Galbraith, 2012). Moreover, the use of social networking sites by millennials far outpaces that by the older generations. On the other hand, there are research findings which suggest unpreparedness of graduates for modern online job market (Manroop and Richardson, 2013). Accentuation on a specific generation is important as generations prioritize employer's attributes in different ways (Reis and Braga, 2016).

In the following part, hypotheses, research model, procedures, participants and measures will be presented.

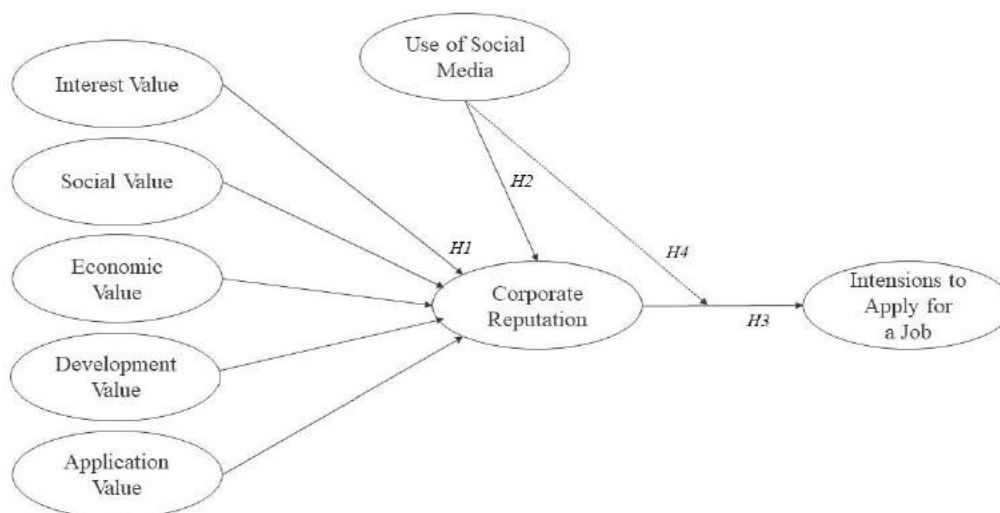
Method

This paper reacts to the call of Sivertzen, Nilsen and Olafsen (2013) to test their model. The research model shown in Figure 1 has been replicated from the original paper. The research was conducted on students of engineering from Norway as respondents, and the questions were related to three well-known Norwegian engineering companies. Our replication is testing this model under slightly different conditions, namely within a different industry and also in different geographical and cultural terms. Our replication was conducted on students of computer science in the Czech Republic as respondents, and the questions are related to three well-known Czech IT companies. This variation could have a substantial impact on the responses and relations of the model.

As Figure 1 shows, the research model consists of 4 parts and contains 4 hypotheses to test. Each part of the model is expressed by a scale consisting of indicators. Individual indicators represent individual questions for respondents. The research was conducted as a survey through a web-based questionnaire.



Figure 1 - Research model



Replicated according to original study Sivertzen et al, 2013

The questionnaire is composed of several parts. The first part contains control variables. These are gender, age, place of residence, nationality, and work experience in the IT sector. Since control variables do not enter the results of the original study, they were changed slightly and will be used for further research. Compared to the original study, our questionnaire did not contain the variable of academic results, as a common assessment element is not used in the Czech Republic and, therefore, the answers would not be comparable. Moreover, a variable nationality was added as the place of residence is not a clearly defined term, because it can be understood in two ways, temporary as well as permanent residence.

The second part measures *employer attractiveness* (EmpAt) in its general sense. In the original model, it was measured by a scale developed by Berthon et al. (2005), based on the question “How important are the following when considering potential employers?”. 25 indicators were measured using a seven-point Likert scale ranging from 1 (totally unimportant) to 7 (very important). The distribution of indicators into 5 dimensions was maintained. These are interest value, development value, social value, economic value and application value, which were applied on factors by exploratory factor analysis (Berthon et al., 2005). This scale was searched and has been fully replicated.

The following part of the questionnaire is related to specific companies. Firstly, the respondent is asked about his/her knowledge of these companies. Based on the answer, only the questions (identical for every company) related to the companies the respondent knows appear. Questions are organized into three blocks, namely corporate reputation related questions, social media related questions and questions related to intentions to apply for a job. Each block represents one part of the model. Questions were designed to respond to the scale. In this case only five-point Likert scale is used, ranging from 1 (I totally disagree) to 5 (I totally agree). The scale measuring *corporate reputation* was developed by Turban et al. (1998) and contains four indicators. The scale measuring *intentions to apply for a job* was created by Highhouse et al. (2003) and contains 5 indicators. The last group of indicators used for measuring *social media* was developed from the scale created by Collins and Stevens (2002). The original scale was intended for general use for employer branding and, for the purpose of this model, it has been modified and redesigned specially for social media. The final modified version consisted of 5 indicators. It is important to note that we have been working with one more indicator than the original model makers Sivertzen, Nilsen and Olafsen (2013). This follows from the fact that the modified scale was not traceable completely. The scales for measuring corporate reputation and intentions to apply for a job were found and fully replicated.



The questionnaire was technically processed by Lime Survey, an on-line survey application. It was through this website that the survey was developed and published, and responses were collected. Data were exported to csv format and processed in R statistical software. The survey was available in English language and was translated into the Czech language and checked by peers for spelling and content.

Hypotheses are derived from the literature review and are replicated from the original Sivertzen, Nilsen and Olafsen's (2013) paper.

H1: Potential employees' perception of the five dimensions of employer attractiveness has a positive relation with their perception of a good corporate reputation.

H2: Potential employees' perception of employers' use of social media has a positive relation with a good corporate reputation.

H3: High corporate reputation has a positive relation with the potential employees' intention to apply for a job.

H4: Potential employees' perception of employers' use of social media positively moderates the relationship between corporate reputation and potential employees' intention to apply for a job.

As this paper reacts to the call of the original study by Sivertzen, Nilsen and Olafsen (2013) to test their model, we asked students of computer science in the Czech Republic about three well-known Czech companies. Therefore, the model is replicated not only within a different industry (the original model works with engineering) but also in different geographical and cultural terms compared to the original paper (Norway).

The three companies the part of the questionnaire was related to were chosen from the list of the Czech Republic's most attractive employers surveyed by Universum (Czech Republic's Most Attractive Employers, 2017). These businesses were established in the Czech Republic and are ranked among the top positions of the list mentioned above. Avast Software is a cybersecurity software company that develops antivirus software and internet security services. Kiwi.com (formerly Skypicker) is one of the biggest European airline tickets sellers. The company uses a unique flight combination algorithm and the website provides a fare aggregator, metasearch engine and booking. These two companies are multinational. The third company used in the survey was Seznam.cz which is mainly a Czech search engine which also runs dozens of different web services and associated brands. The IT sector is a constantly evolving industry with a high added value, therefore, the right employees are necessary to maintain competitiveness.

Respondents in the present study were computer science students from the region of South Moravia, specifically from the city of Brno. The city is characterized by a network of universities and by concentration of developed multinational companies as well as start-ups, thanks to which the city has gained the attribute of the city of innovation. Primarily computer science students from three universities, Masaryk, Mendel and Brno University of technology were approached.

Findings

In total, 65 IT students, 45 males and 20 females, answered the survey questionnaire. There were 8 students under 21 years old, 48 students between 21 and 25, and 9 students were more than 25 years old (the oldest respondent was 29 years old). About one fifth of respondents (14) had no working experience, 19 respondents had less than one-year experience, and 32 respondents had more than one-year experience.

As some responses were not completed, we replaced the missing values with the most frequent answer in the category. Only responses with less than 4 missing values were treated this way, others were withdrawn from the sample.

We have included the results from all three organizations as one sample. This can be done because of closely related means and standard deviations from all three organizations. By using this procedure, we followed the original study by Sivertzen et al. (2013). In total, we have 177 answers with the following structure: 52 respondents



completed the survey for all three organizations, 8 respondents for two organizations, and 5 respondents answered the survey for one organization.

The proposed model and overall analysis were performed in R software, the structural equation modelling was accomplished via *lavaan* package (Rosseel, 2012). Structural equation modeling is a multivariate statistical framework that is used to model complex relationships between directly and indirectly observed (latent) variables. The overall fit of the models was evaluated using the Chi-Square test (χ^2) that measures the deviance between the estimated and baseline model. We want to reject the null hypothesis of Chi-Square test. We also used alternative characteristics of fit: comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR). Hu and Bentler (1999) suggested the following rules of thumb: CFI/TLI > 0.95, RMSEA < 0.05 and SRMR < 0.06.

Firstly, we evaluated the fit of the EmpAt scale using confirmatory factor analysis (CFA). We used the DWLS (diagonally weighted least squares) estimator with polychoric correlations. The CFA model did not converge and no unique solution was found. Although we tried to find another factor using the exploratory factor analysis (EFA), the EFA revealed that the data does not contain any reasonable factor (we rejected the null hypothesis claiming that the number of factors is sufficient for less than 16 factors) and therefore we employed an alternative approach. We summed up all Likert items within each EmpAt category (Spector, 1992), the descriptive statistics are presented in

Table 1. We implied the original *EmpAt* scale published in Berthon et al. (2005). The article already set up which questions belongs to which factors and, based on this, we summed up items within each factor afterwards (verbal answers were coded to numerical values and summed together, e.g. Interest Value = Neutral {4} + Neutral {4} + Important {6} + Very important {7} + Rather important {5} = 26).

Table 1. Descriptive statistics of EmpAt categories

	M	SD	1	2	3	4	5
1. Interest Value	14.14	5.01	1.00				
2. Social Value	14.09	4.40	0.13	1.00			
3. Economic Value	17.36	4.55	0.27	0.26	1.00		
4. Development Value	16.43	5.58	0.11	0.26	0.39	1.00	
5. Application Value	18.11	5.11	0.35	0.50	0.35	0.44	1.00

Note: M is mean, SD is a standard deviation and columns 1 – 5 denote mutual correlations.

The estimated model shows fit for the model slightly off the recommended range: $\chi^2(106) = 181.964$ (p-value < 0.001), CFI = 0.908, TLI = 0.890, RMSEA = 0.064 (90 Percent Confidence Interval = 0.048 – 0.079), SRMR = 0.081. Results of the two regressions from the SEM model are presented in Table No. 2 and the measurement models are in Table.

Table No. 2. Regression

	Estimate	Std. Err.	P-value
<i>DV: Corporate Reputation</i>			
Use of Social Media	0.333	0.129	0.010
Interest Value	0.042	0.020	0.034
Social Value	0.011	0.024	0.663
Economic Value	-0.007	0.023	0.765
Development Value	0.001	0.019	0.975
Application Value	-0.023	0.024	0.324



DV: Intentions to Apply for a Job

Use of Social Media	0.212	0.101	0.037
Corporate Reputation	0.526	0.075	< 0.001

Note: DV means a dependent variable.

We found a significant positive relation between the Use of Social Media and Corporate Reputation, which supports the second hypothesis H2. On the other hand, only Interest Value category from EmpAt scale has a significant relation with Corporate Reputation. Other categories are insignificant. This finding partly supports the H1 hypothesis.

The second regression model shows a significant positive relation between both, Use of Social Media and Corporate Reputation, and Intentions to Apply for a Job. These findings support the third and fourth hypotheses respectively.

Table3. Measurement model

	Estimate	Std. Err.	P-value
<i>Corporate Reputation</i>			
Company with a good public image	1.000		
Company with a good reputation	0.998	0.051	< 0.001
I have heard a lot of good things about this firm	0.872	0.080	< 0.001
<i>Use of Social Media</i>			
I have seen advertising for jobs at this organization in social media.	1.000		
The organizations' profile in social media gave me detailed information about their job opportunities.	1.165	0.189	< 0.001
This organizations' profile in social media caught my attention.	1.193	0.193	< 0.001
Top officials from this organization (e.g., its CEO) are often quoted in social media.	0.935	0.166	< 0.001
I have seen news stories about this organization in social media (e.g., on Facebook or Twitter)	1.119	0.129	< 0.001
<i>Intentions to Apply for a Job</i>			
I would accept a job offer from this company.	1.000		
I would make this company one of my choices as an employer.	0.731	0.097	< 0.001
If this company invited me for a job interview, I would go.	0.911	0.108	< 0.001
I would recommend this company to a friend looking for a job.	0.931	0.137	< 0.001

Note: First variable in each latent variable were fixed to 1. We removed some questions for better fit.

In addition, we calculated the indirect effects in the final model. Results are available in Table 3. Results show that both Interest Value and Use of Social Media have a positive and significant relation with Intentions to Apply for a Job. Other indirect effects are insignificant.

Table 3. Indirect effects on the Intentions to Apply for a Job

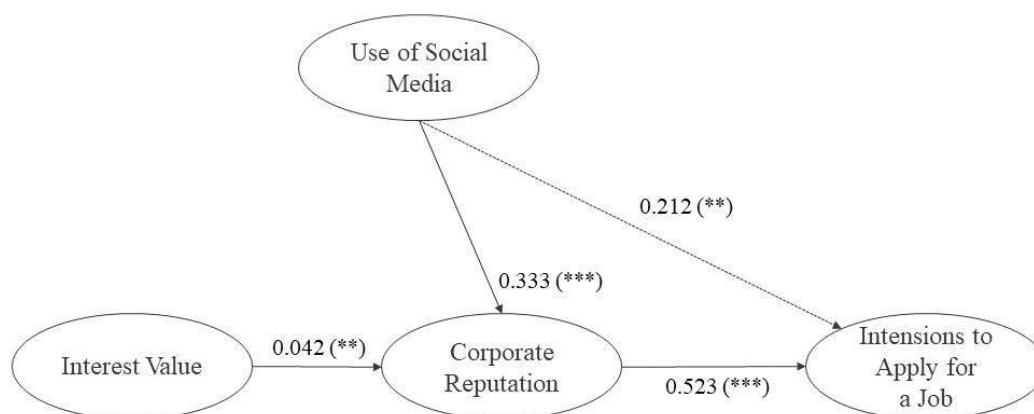
IV	MV	DV	Estimate	Std. Err.	P-value
Interest Value	Corporate Reputation	Application Intentions	0.022	0.011	0.040
Social Value	Corporate Reputation	Application Intentions	0.006	0.013	0.663



Economic Value	Corporate Reputation	Application Intentions	-0.004	0.012	0.765
Development Value	Corporate Reputation	Application Intentions	0.000	0.010	0.975
Application Value	Corporate Reputation	Application Intentions	-0.012	0.013	0.327
Use of Social Media*	Corporate Reputation	Application Intentions	0.508	0.198	0.010

Note: IV is independent variable, MV is mediator variable, DV is dependent variable. * Total effect (direct and indirect combined).

Figure 2 - Results from the analysis



Notes: *** $p < 0.01$; ** $0.01 < p < 0.05$; * $0.05 < p < 0.1$

Results, Conclusions and Recommendations

The study was conducted to verify the validity of the original model which investigated the relations between the dimensions in the EmpAt scale, corporate reputation, the use of social media and intentions to apply for a job. The original model had been validated in Norway in the engineering industry, while our research has verified its validity in the Czech Republic and its IT industry. It means that model was replicated within a different industry and also in different geographical and cultural terms compared to the original paper.

Whereas the original study confirmed hypothesis H1 partly (4 dimensions), and hypotheses H2 and H3 fully, our research confirmed all four hypotheses (H1 partly as well, but only 1 dimension). The differences in the resulting model are therefore in validation the EmpAt scale and the role of social media to intention to apply for a job.

It should be noted that firstly, as in Sivertzen et al. (2013), the confirmatory factor analysis (CFA) was conducted to evaluate the fit of the employer attractiveness scale by Berthon et al. (2005). In our case, the model did not converge, so we decided to use the exploratory factor analysis to find another distribution of the given items among factors. However, due to inconsistent data (mainly weak correlation between related items), this attempt was not successful either. This led us to employ an alternative approach of summed up items from within each factor. Therefore, the different result in confirmation of H1 hypotheses compared to the original paper can be influenced by this alternative approach of processing data of the employer attractiveness scale. Different dimensions can be also explained by cultural differences. Berthon's (2005) final scale (Australia) differed from Sivertzen's (2013) final scale (Norway) and they both differ from our final scale (Czech Republic). As Sivertzen et al. noted, there were also differences compared to other studies using the EmpAt scale (Roy, 2008) (Arachchige and Robertson, 2011), even though these studies added several new indicators.



Whereas the original study did not confirm H4 hypothesis, it means the interaction effect of social media on intentions to apply for a job, our data showed a positive relation. This could have been influenced by several factors as well. The original study was conducted in 2013 (4 years ago), so the difference between its and our findings could have been influenced by the fast development of use of internet and social media. In this case, it could also be influenced also by the industry of computing science which is closely connected to the information technologies. However, it is obvious that the use of social media connected to employer branding should be an important part of further research.

The present research suffers from several kinds of limitations. First, there are limitations resulting from the nature of replication research. Although cooperation with the original authors on replication study is encouraged, cooperation was not feasible at the time of working on this paper. Therefore, not all original materials were available. The model consists of four parts, three of which were, according to the original paper, taken from previous studies, and these were fully replicated by us. However, as mentioned above in the text, we were not able to choose 4 exact indicators of the Use of social media, therefore we used 5 indicators altogether. In addition, due to missing collaboration, we needed “to design and conduct the study under the assumption that original study was conducted in the best way possible” (Brandt et al., 2014).

The second factor which can influence our results negatively is limitations related to our own collecting and processing data and calculations. Primarily, we collected answers from a relatively small sample (65 IT students and 177 observations) compared with the study by Sivertzen et al. (2013), who had collected a sample containing 184 engineering students and 366 observations. Therefore, we were not able to perform the factory analysis on the EmpAt scale with satisfactory results and we have had to choose an alternative approach – sum up all Likert items within each EmpAt category (Spector, 1992). Also, the fit measures were influenced by a small sample and we got fit characteristics slightly off the recommended range. Another similar limitation which should be mentioned is that all relations are based on correlation, not on causality. Therefore, the direction of the effects is unknown and it could be the opposite. We present results with directions, following the example of the original paper, only for illustration.

Other limitations may have arisen from conducting the survey online, which was chosen especially for the unique access to the population. Internet as a medium provided us with the opportunity to contact groups and individuals who would be very difficult or almost impossible to reach in another way (Garton et al., 1999), as the targeted audience were computer science students and the survey was launched after the end of the semester. However, conducting an online survey research has brought several disadvantages over traditional surveys. One of the main disadvantages threatening the reliability and validity is nonresponse of those who were asked by us to fill in the survey and self-selection of those who were offered the possibility to take part in our research. These facts limit the possibility to generalize the results.

In conclusion, a valid replication resulted in outputs similar to the outputs of the original paper (Brandt et al., 2014). We need to label our replication as unsuccessful or invalid. However, this does not necessarily mean that the original finding is incorrect (Brandt et al., 2014), as the world is complex. Despite this, our research will go on collecting data and reevaluating current results.

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References

- ALNıAçıK, Esra a Ümit ALNıAçıK, 2012. Identifying Dimensions of Attractiveness in Employer Branding: Effects of Age, Gender, and Current Employment Status. *Procedia - Social and Behavioral Sciences* [online]. 58, 1336-1343 [cit. 2017-07-19]. DOI: 10.1016/j.sbspro.2012.09.1117. ISSN 18770428. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S187704281204579X>
- AMBLER, Tim a Simon BARROW, 1996. The employer brand. *Journal of Brand Management* [online]. 4(3), 185-206 [cit. 2017-07-16]. DOI: 10.1057/bm.1996.42. ISSN 1350231x. Available from: <http://link.springer.com/10.1057/bm.1996.42>
- ARMSTRONG, Michael a Stephen TAYLOR, 2015. *Řízení lidských zdrojů: moderní pojetí a postupy : 13. vydání*. Přeložil Martin ŠIKÝŘ. Praha: Grada Publishing. ISBN 9788024752587.
- AUGER, P., T. DEVINNEY, G. DOWLING, C. ECKERT a N. PERM-AJCHARIYAWONG, 2011. The Value of a Corporate, Workplace and Social Reputation to potential Executive Employees. *Academy of Management Proceedings* [online]. 2011(1), 1-5 [cit. 2017-07-20]. DOI: 10.5465/AMBPP.2011.65869497. ISSN 00650668. Available from: <http://proceedings.aom.org/cgi/doi/10.5465/AMBPP.2011.65869497>
- BACKHAUS, Kristin, 2016a. Employer Branding Revisited. *Organization Management Journal* [online]. 13(4), 193-201 [cit. 2017-07-15]. DOI: 10.1080/15416518.2016.1245128. ISSN 15416518. Available from: <https://www.tandfonline.com/doi/full/10.1080/15416518.2016.1245128>
- BACKHAUS, Kristin, 2016c. Employer Branding Revisited. *Organization Management Journal* [online]. 13(4), 193-201 [cit. 2017-07-19]. DOI: 10.1080/15416518.2016.1245128. ISSN 15416518. Available from: <https://www.tandfonline.com/doi/full/10.1080/15416518.2016.1245128>
- BARNEY, J., 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management* [online]. 17(1), 99-120 [cit. 2017-07-03]. DOI: 10.1177/014920639101700108. ISSN 01492063. Available from: <http://jom.sagepub.com/cgi/doi/10.1177/014920639101700108>
- BERGERON, Carol, 2004. Build a talent strategy to achieve your desired business results. *Handbook of Business Strategy* [online]. 5(1), 133-140 [cit. 2017-07-03]. DOI: 10.1108/10775730410494206. ISSN 10775730. Available from: <http://www.emeraldinsight.com/doi/10.1108/10775730410494206>
- BERTHON, Pierre, Michael EWING a Li HAH, 2005. Captivating company: dimensions of attractiveness in employer branding. *International Journal of Advertising* [online]. 24(2), 151-172 [cit. 2017-06-28]. DOI: 10.1080/02650487.2005.11072912. ISSN 02650487. Available from: <https://www.tandfonline.com/doi/full/10.1080/02650487.2005.11072912>
- BOTHA, Annelize, Mark BUSSIN a Lukas DE SWARDT, 2011. An employer brand predictive model for talent attraction and retention. *SA Journal of Human Resource Management* [online]. 9(1), - [cit. 2017-07-19]. DOI: 10.4102/sajhrm.v9i1.388. ISSN 2071078x. Available from: <http://www.sajhrm.co.za/index.php/sajhrm/article/view/388>
- BOXALL, Peter, 1996. The Strategic Hrm Debate and the Resource-Based View of the Firm. *Human Resource Management Journal* [online]. 6(3), 59-75 [cit. 2017-07-03]. DOI: 10.1111/j.1748-8583.1996.tb00412.x. ISSN 09545395. Available from: <http://doi.wiley.com/10.1111/j.1748-8583.1996.tb00412.x>
- BRANCO, Manuel a Lúcia RODRIGUES, 2006. Corporate Social Responsibility and Resource-Based Perspectives. *Journal of Business Ethics* [online]. 69(2), 111-132 [cit. 2017-07-20]. DOI: 10.1007/s10551-006-9071-z. ISSN 01674544. Available from: <http://link.springer.com/10.1007/s10551-006-9071-z>
- BRANDT, Mark J., Hans IJZERMAN, Ap DIJKSTERHUIS et al., 2014. The Replication Recipe: What makes for a convincing replication?. *Journal of Experimental Social Psychology* [online]. 50, 217-224 [cit. 2017-08-03]. DOI: 10.1016/j.jesp.2013.10.005. ISSN 00221031. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0022103113001819>
- CABLE, Daniel a Daniel TURBAN, 2003. The Value of Organizational Reputation in the Recruitment Context: A Brand-Equity Perspective. *Journal of Applied Social Psychology* [online]. 33(11), 2244-2266 [cit.



- 2017-07-20]. DOI: 10.1111/j.1559-1816.2003.tb01883.x. ISSN 00219029. Available from: <http://doi.wiley.com/10.1111/j.1559-1816.2003.tb01883.x>
- COLLINS, Christopher a Cynthia STEVENS, 2002. *The Relationship Between Early RecruitmentRelated Activities and the Application Decisions of New Labor-Market Entrants: A Brand Equity Approach to Recruitment* [online]. School of Industrial and Labor Relations [cit. 2017-06-29]. Available from: <http://digitalcommons.ilr.cornell.edu/articles/43>. Cornell University.
- Czech Republic's Most Attractive Employers, 2017. *Universum* [online]. Prague [cit. 2017-06-29]. Available from: <http://www.universumczech.com/pruzkum/>
- DUTTA, Debolina, 2014. Tweet Your Tune — Social Media, the New Pied Piper in Talent Acquisition. *Vikalpa* [online]. 39(3), 93-104 [cit. 2017-07-21]. DOI: 10.1177/0256090920140307. ISSN 02560909. Available from: <http://journals.sagepub.com/doi/10.1177/0256090920140307>
- EWING, Michael, Leyland PITT, Nigel DE BUSSY a Pierre BERTHON, 2015. Employment branding in the knowledge economy. *International Journal of Advertising* [online]. 21(1), 3-22 [cit. 2017-07-16]. DOI: 10.1080/02650487.2002.11104914. ISSN 02650487. Available from: <http://www.tandfonline.com/doi/full/10.1080/02650487.2002.11104914>
- GALLAUGHER, John a Sam RANSBOTHAM, 2010. Social media nad customer dialog management at Starbucks. *MIS Quarterly Executive* [online]. 9(4), 197-212 [cit. 2017-07-21]. ISSN 15401960. Available from: <https://goo.gl/afNS52>
- GARTON, Laura, Caroline HAYTHORNTHWAITE a Barry WELLMAN, 1999. Studying On-Line Social Networks. *Doing Internet Research: Critical Issues and Methods for Examining the Net* [online]. 2455 Teller Road, Thousand Oaks California 91320 United States : SAGE Publications, Inc, s. 75 [cit. 2017-08-01]. DOI: 10.4135/9781452231471.n4. ISBN 9780761915942. Available from: <http://sk.sagepub.com/books/doing-internet-research/n4.xml>
- GOTSI, Manto a Alan WILSON, 2001. Corporate reputation: seeking a definition. *Corporate Communications: An International Journal* [online]. 6(1), 24-30 [cit. 2017-07-20]. DOI: 10.1108/13563280110381189. ISSN 13563289. Available from: <http://www.emeraldinsight.com/doi/10.1108/13563280110381189>
- GRAVILI, Ginevra a Monica FAIT, 2017. *Social recruitment in HRM: a theoretical approach and empirical analysis* [online]. First edition. [cit. 2017-08-03]. ISBN 9781786356956.
- HIGHHOUSE, Scott, Filip LIEVENS a Evan SINAR, 2003. Measuring Attraction to Organizations. *Educational and Psychological Measurement* [online]. 63(6), 986-1001 [cit. 2017-06-29]. DOI: 10.1177/0013164403258403. ISSN 00131644. Available from: <http://journals.sagepub.com/doi/10.1177/0013164403258403>
- HOFFMANN, Christian Pieter a Christoph LUTZ, 2015. The impact of online media on stakeholder engagement and the governance of corporations. *Journal of Public Affairs* [online]. 15(2), 163-174 [cit. 2017-07-21]. DOI: 10.1002/pa.1535. ISSN 14723891. Available from: <http://doi.wiley.com/10.1002/pa.1535>
- HOSKISSON, Robert, Michael HITT, William WAN a Daphne YIU, 2016. Theory and research in strategic management: Swings of a pendulum. *Journal of Management* [online]. 25(3), 417-456 [cit. 2017-07-10]. DOI: 10.1177/014920639902500307. ISSN 01492063. Available from: <http://journals.sagepub.com/doi/10.1177/014920639902500307>
- HU, Li-tze a Peter M. BENTLER, 1999. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal* [online]. 6(1), 1-55 [cit. 2017-07-27]. DOI: 10.1080/10705519909540118. ISSN 10705511. Available from: <http://www.tandfonline.com/doi/abs/10.1080/10705519909540118>
- KISSEL, Patrick a Marion BÜTTGEN, 2015. Using social media to communicate employer brand identity: The impact on corporate image and employer attractiveness. *Journal of Brand Management* [online]. 22(9), 755-777 [cit. 2017-07-21]. DOI: 10.1057/bm.2015.42. ISSN 1350231x. Available from: <http://link.springer.com/10.1057/bm.2015.42>



- KLUEMPER, Donald H., Arjun MITRA a Siting WANG, 2016. Social Media use in HRM. *Research in Personnel and Human Resources Management* [online]. 153-207 [cit. 2017-07-21]. DOI: 10.1108/S0742-730120160000034011. Available from: <http://www.emeraldinsight.com/doi/10.1108/S0742-730120160000034011>
- LIEVENS, Filip a Scott HIGHHOUSE, 2003. The Relation of Instrumental and Symbolic Attributes to a Company's Attractiveness as an Employer. *Personnel Psychology* [online]. 56(1), 75-102 [cit. 2017-07-19]. DOI: 10.1111/j.1744-6570.2003.tb00144.x. ISSN 00315826. Available from: <http://doi.wiley.com/10.1111/j.1744-6570.2003.tb00144.x>
- MADHANI, Pankaj, 2010. *Resource Based View (RBV) of Competitive Advantage: An Overview Article* [online]. [cit. 2017-07-10]. Available from: <https://goo.gl/eiJq6V>
- MANROOP, Laxmikant a Julia RICHARDSON, 2013. Using Social Media for Job Search: Evidence from Generation Y Job Seekers. *Social Media in Human Resources Management* [online]. 12. s. 167 [cit. 2017-08-03]. DOI: 10.1108/S1877-6361(2013)0000012012. ISBN 978-1-78190-901-0. Available from: <http://www.emeraldinsight.com/doi/10.1108/S1877-6361%282013%290000012012>
- MILKOVICH, George, Jerry NEWMAN a Carolyn. MILKOVICH, 2008. *Compensation*. 9th ed. Boston: McGraw-Hill/Irwin. ISBN 9780072969412.
- REIS, Germano Glufke a Beatriz Maria BRAGA, 2016. Employer attractiveness from a generation perspective: Implications for employer branding. *Revista de Administração* [online]. 51(1), 103-116 [cit. 2017-08-04]. DOI: 10.5700/rausp1226. ISSN 19846142. Available from: http://200.232.30.99/busca/artigo.asp?num_artigo=1678
- ROSSEEL, Yves, 2012. Lavaan: An R Package for Structural Equation Modeling. In: *Journal of Statistical Software* [online]. 48(2), s. 1-36 [cit. 2017-07-27]. DOI: 10.18637/jss.v048.i02. ISSN 1548-7660. Available from: <http://www.jstatsoft.org/v48/i02/>
- SIVERTZEN, Anne-Mette, Eddy NILSEN a Anja OLAFSEN, 2013. Employer branding: employer attractiveness and the use of social media. *Journal of Product & Brand Management* [online]. 22(7), 473-483 [cit. 2017-06-29]. DOI: 10.1108/JPBM-09-2013-0393. ISSN 10610421. Available from: <http://www.emeraldinsight.com/doi/10.1108/JPBM-09-2013-0393>
- SMITH, Sara D. a Quinn GALBRAITH, 2012. Motivating Millennials: Improving Practices in Recruiting, Retaining, and Motivating Younger Library Staff. *The Journal of Academic Librarianship* [online]. 38(3), 135-144 [cit. 2017-08-03]. DOI: 10.1016/j.acalib.2012.02.008. ISSN 00991333. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0099133312000274>
- SPECTOR, Paul E., 1992. *Summated rating scale construction: an introduction*. Newbury Park, Calif.: Sage Publications. ISBN 9780803943414.
- TSIMONIS, Georgios a Sergios DIMITRIADIS, 2014. Brand strategies in social media. *Marketing Intelligence & Planning* [online]. 32(3), 328-344 [cit. 2017-07-21]. DOI: 10.1108/MIP-04-2013-0056. ISSN 02634503. Available from: <http://www.emeraldinsight.com/doi/10.1108/MIP-04-2013-0056>
- TURBAN, Daniel, Monica FORRET a Cheryl HENDRICKSON, 1998. Applicant Attraction to Firms: Influences of Organization Reputation, Job and Organizational Attributes, and Recruiter Behaviors. *Journal of Vocational Behavior* [online]. 52(1), 24-44 [cit. 2017-06-29]. DOI: 10.1006/jvbe.1996.1555. ISSN 00018791. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0001879196915559>
- WAZED, Shahid a Eddy S.W. NG, 2015. College recruiting using social media: how to increase applicant reach and reduce recruiting costs. *Strategic HR Review* [online]. 14(4), 135-141 [cit. 2017-08-03]. DOI: 10.1108/SHR-02-2015-0017. ISSN 14754398. Available from: <http://www.emeraldinsight.com/doi/10.1108/SHR-02-2015-0017>
- WERNERFELT, Birger, 1984. A resource-based view of the firm. *Strategic Management Journal* [online]. 5(2), 171-180 [cit. 2017-07-03]. DOI: 10.1002/smj.4250050207. ISSN 01432095. Available from: <http://doi.wiley.com/10.1002/smj.4250050207>
- WRIGHT, Patrick, Benjamin DUNFORD a Scott SNELL, 2001. Human resources and the resource based view of the firm. *Journal of Management* [online]. 27(6), 701-721 [cit. 2017-07-03]. DOI:



10.1177/014920630102700607. ISSN 01492063. Available from:
<http://journals.sagepub.com/doi/10.1177/014920630102700607>



Adult Education and Women in Portugal: a Review of the Literature 2012-2016 of Elisabete Correia Brito, Marta Abelha, Manuela Barreto Nunes Appears After the Title of The Factor of Social Affiliation of Youth in Promoting Citizenship of Pāvels Jurs and Alīda Samuseviča

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Abstract

Between 1999 and 2011 a national program of adult's education and training was developed in Portugal. This program was the subject of around 200 scientific publications, 20 of them centered on the impact of the courses in women and specifically regarding the promotion of information literacy competencies. The present paper intends to analyze those publications, aiming to characterize them and identify the results that were achieved regarding the assessment and impact of the courses in the students' lives. The methods applied coincide with the ones of a literature review, including bibliographic search and retrieval and content and bibliometric analysis. Results show that although little attention is given by the scientific community to this subject, the impact on the lives of the women that attended the courses is significant and worthy of further investment and development.

Keywords: Adult education, Women, EFA courses - Portugal

Introduction

In the beginning of the last decade of the 18th century, the French philosopher Condorcet defended in his *Cinq mémoires sur l'instruction publique* (1994), as well in the *Rapport et Projet de décret sur l'instruction publique* (1989) the idea of lifelong learning, and therefore adult education which, in the context of universal education, he considers fundamental conditions of democracy: a way of ensuring that every citizen can participate in the civil life, perform at his best in his profession, in rural economies as well as in urban, and finally take enlightened part in politics and public decision making. Condorcet gives particular importance to the learning of women, whom he thinks should have the same civil rights as men, and that the inclusion of the equality of rights in the nation's Constitution is a condition for its development and a genuinely inclusive democracy (1847): thus being one of the pioneers of the fight for women's civil rights and one of the founding fathers of democracy as we now understand it.

Nonetheless, it took more than a century since Condorcet's statements to see adult education regarded as a serious question by governments and politicians: right after the 1st, but mainly after the 2nd world war it started to be considered as an essential part of the welfare state and therefore laws, regulations and programs began to be promulgated and developed all over the world, regarding two different points of view: one humanist, which prevailed during the 1960 and 1970 decades, and the other economicist, which appears to have gained strength in our present society (Field, 2001).



Portugal, a country marked by a fascist dictatorship during most of the 20th century, arrived at the last quarter of the century with a substantial rate of illiteracy (around 25%), having the mandatory and free education for eight years been only introduced in 1973, one year before the carnations revolution. Since the revolution, the public policies of adult education were marked by discontinuity, though the first years assisted to cultural and educational campaigns developed mainly in the rural and hinterland areas by the General Direction of Continuing Education, following, not the perspective of literacy in itself, but particularly the one of promoting popular culture and, through the valorization of the population's own knowledge, place culture and education at their service (Melo & Benavente, 1976).

After several years of intermittent policies, in 1998 a government of the Socialist Party formed a task force for the development of adult education and training, through which a national program of adult education was developed aiming to cross certified education with lifelong learning, especially professional training (ANEFA. GMEFA, 2001). As a result of this policy, educational centers were created all over the country to develop courses of adults' education and training, the so called EFA courses; the program endured between 1999 and 2011, when it was suddenly closed by the new government of the coalition between the Social-Democratic Party and the People's Party, which implemented rigorous austerity policies in all domains. In 2016, with the Socialist Party again in the government, the adult education policy was resumed and a new program (*Qualifica*) for adults' qualification was applied with the goals of promoting the productivity, innovation and growth of the country through the development of learning and professional competencies in people who couldn't conclude the mandatory formal education or need to develop new skills (ANQEP, 2016).

The adult education and training policy and the consequential programs applied during the last 18 years were based on theoretical principals, and their results studied and evaluated by professionals and researchers, resulting in scientific publications. In special, the EFA courses developed through the late *New Opportunities* program resulted in around 200 publications, according to the Scientific Open Access Repositories of Portugal portal (RCAAP) and a search in Google Scholar using the descriptor "Cursos EFA" (EFA courses). Namely, information literacy questions and the impact of the courses in women with low incomes who didn't succeed in the mandatory formal education were also subject to several studies. Between 2012, the first year of the closing of the New Opportunities program, and 2016, how many documents considering the EFA courses and their impact on women and the promotion of information literacy were published? Who studied them, what were the results?

Departing from a research conducted on the subject and concluded in 2011 by Brito (2012), and with the primary goal of providing useful information for the development of the new *Qualifica* programs, the present paper intends to analyze those publications, aiming to identify the results that were achieved in terms of assessment and impact of the courses in the women's lives; other goals deal with the identification of the academic institutions where those works were developed, the type of publications and the research fields that led to the particular researches, the most influential authors and the network of citations and collaboration between authors and institutions, if they exist.

Method

Literature review was used as a method for this study. A systematic research was conducted in RCAAP, a complete portal to access Portuguese academic publications and, as RCAAP doesn't yet cover all the scientific journals



published in the country, also in Google Scholar. Although the Portuguese scientific literature, mainly in the Social Sciences fields, is not very well represented in the most important international indexing databases, a search was also conducted in Web of Science, looking for papers published in highly recognized journals. The search was chronologically limited between the years of 2012 and 2016 and the following keywords were used: “Educação de adultos” (Adult education), to define the field, and then, adding the boolean expression “AND”, the terms “Cursos EFA” (EFA courses), “Mulheres” (Women) and “Literacia” (Information literacy). The term “Feminino” (Feminine) was also used with the Boolean expression OR to achieve more significant results. Compliance with the terms used for the search and the effective correspondence to the content of the documents retrieved was analyzed. Subsequently the documents were subject to a bibliometric analysis, and finally, a content analysis allowed a comparative review of the selected documents. The focus was a constructivist analysis in the natural context of a qualitative approach. Accordingly, the primary concern of the present study is related to the deepening of the comprehension of the social context and the impacts of adults’ education and training in the individuals, understanding the socializing practices acquired over the courses, more than looking for a representation of practices. It is therefore intended to comprehend, represent and explain this social phenomenon.

The combined results gathered from the diverse sources were subject to a triangulation analysis, though we’re referring to different types of documents, such as grey literature (master and doctoral thesis), journal articles and conference papers. It is important to mention that this research theme has been gaining importance over the years, due to the crescent accessibility of the documents, issued from different theoretical principles and developed in distinct academic institutions and research centers. The referred triangulation consists, therefore, in the combination of different points of view, subject approaches and technics of data gathering and analysis, and it is such diversity that allows the presentation, as a final result, of a more faithful portrait of the educational contexts in the study.

This literature review around the subject of adult education in Portugal takes into consideration two sub-subjects present in several studies: information literacy and the women’s universe, hence being also natural to integrate the analysis in the field of women’s studies, approaching the constructivist vision to the transformativist paradigm, as defined by Mertens (2005) . The publications that were subject to the present analysis result mostly of qualitative researches with similar data gathering technics and, upon that link, connection points with the interpretative study that forms the basis of this comparative analysis were built. The findings are therefore the consequence of the considerations of some of the authors, but also of the discourses in the first person of the actors that were the subjects of the compared studies.

Findings

A first search of the Web of Science (WoS) using the expression “adult education”, limited to the years 2012 to 2016 and refined according to the WoS categories Education - Educational Research, Education - Scientific Disciplines and Information Science - Library Science led to the retrieval of 676 resources that present the term either on the title, the abstract or the keywords, showing that adult education is not a trendy subject in the area of Education and Library Science. The H index of these publications is also small (H7), attending the most cited work only 26 citations. In fact, 482 (71%) of the retrieved resources have 0 quotes within the universe of Web of Science, and merely 151 were cited more than once. In the studied set of four years, 2015 was the most productive one, with 203 publications, followed by 2016 (168); 2012 and 2013 reveal an apparent period of little concern with the subject, presenting in total 167 publications. The document types are mainly journal articles (337) followed closely by



conference papers (294). However, the source that shows a bigger impact of adult education as a content is a series of conference proceedings (Procedia Social and Behavioral Sciences, with 90 resources), followed by two journals specialized in adult education (Adult Education Quarterly and Adult Education in Universities: Local and Regional Perspectives, respectively with 53 and 40 resources).

Regarding the Portuguese language, two Brazilian journals appear on the set of the 25 strongest publications on adult education: Olhares (13) and Laplage em Revista (7). The country where the subject is mostly object of scientific studies, in the context of sources indexed by WoS, is the USA (97), followed by Romania (61) and Canada (60). Portugal appears in 14th place in this ranking, with 18 resources published between 2012 and 2016. The type of documents is shared in almost equal percentage by journal articles (9) and conference papers (8), with only one editorial, this one referring to a monographic number of the Brazilian journal Laplage em Revista, from where most of the retrieved resources were indexed – in fact, 7 of the 9 journal articles on the theme were published by the same number of the same journal; as for the conference proceedings, only two stand slightly out: EDULEARN and ICEEPSY published two papers each in different years. Eight of the resources were published in Portuguese and 10 in the English language: only the English written articles have an impact within Web of Science, which is natural for most Education journals written in Portuguese are not indexed in this bibliographical database, and so only alternative metrics could show their real impact. Attending to the academic institutions that lead the indexed publications on adult education, bibliometric data shows that University of Lisboa (UL) leads with six resources, followed by University of Porto (UP), with four and Univ. of Trás-os-Montes e Alto Douro (UTAD), with three. The most published authors are Barros, from the Institute Piaget of Porto, Ferreira-Loureiro, from UTAD and Cavaco and Guimarães, from the Univ. of Lisbon, these last two working in collaboration – results show that the collaboration between Portuguese academic institutions scarcely exists, being the prevailing collaboration between faculties within the same institution or even endogenous to the same faculty or research center.

As for the particular subjects of this study, three of the results that approach the Portuguese context of adult education address the themes of literacy and only one have women as a subject, with no cross-linking data, and none of them regarding the EFA courses, which are the topics of the primary research the present paper intends to compare with similar studies.

In fact, for the purpose of the present study, Web of Science is of no use, as the above description clearly reveals: the problem of bibliographical databases such as this one is that they are mostly focused on exact sciences and technology or international journals when it comes to the social sciences, which are very much devoted to national realities, where scientific research is meant to have real effect. Thus, if a researcher looks for a mirror of national scientific publications outside the USA and the UK, the best strategy is to recur to national academic repositories or portals or even Google Scholar.

The reflection of Portuguese research regarding the theme of adult education as developed by the EFA courses in the context of women learning and literacy is best given by Google Scholar, where a search with these descriptors linked by the AND Boolean expression and limited by the years 2012 to 2016 retrieved 94 resources. Nevertheless, Google Scholar is not a scientific search engine, and its results report to the full text of the resources, being the information retrieved rather noisy, e.g., not entirely reliable, once it gives back information that doesn't truly study the subjects that we are looking for. A closer look at the abstracts and keywords of each of the resources was then necessary, and 20 resources were finally selected. The search led through RCAAP didn't provide any answers regarding the combination of the three descriptors, which obliged to a more general search using only the expression "Cursos



EFA” (EFA courses), being then retrieved 12 resources. In this case, the need of looking for more results led to a subsequent search using the term “educação de adultos” (adult education), until the final number of 14 results was reached, six less than the ones found in Google Scholar. Finally, 17 documents were selected for the present literature review and bibliometric analysis, which corresponded to the stated criteria: studies centered on the EFA courses from the perspective of women studies and with a particular emphasis on information literacy achievements, published between 2012 and 2016, and based on qualitative methods – mostly case studies with an in-depth analysis.

From those, and as for the document types, most are master (11) or doctoral (3) dissertations; two are articles published in peer-reviewed journals, one is a conference paper and also only one book chapter. The publications correspond to 19 authors, of which 17 are women and only two men, showing that women’s studies still are a matter for women’s researches. As for the author’s affiliations, IPL (Polytechnic Institute of Leiria) and ISCTE-IUL (Lisbon University Institute) are represented by four authors each, followed by the University of Trás-os-Montes) and the University of Minho, both with three authors. The Open University, with two authors and the Universities of Coimbra, Porto and Nova de Lisboa are also represented, the latest with one author each. This lack of visible collaboration is clearly in accordance with the type of publications: mostly academic works that are not divulged through scientific journals or conferences, showing that these are not considered important themes by the academic community. In fact, the citation data provided by Google Scholar reveals that the impact of such texts scarcely exists, for only four of the 19 resources have online registered citations, in a total of five citations, being two of them self-citations, which shows something else: as the works stay mostly as grey literature, there’s no dissemination of the knowledge acquired and researchers seem to search with their backs turned to each other, not acknowledging what their colleagues have studied and discovered before them.

Regarding the years of publication, 2014 was the most productive one (6), followed by 2015 (5), having our findings shown that only one work appeared in 2012. Given that these works are mostly the result of master and doctoral thesis, and attending to the fact that those types of publications take from 2 to 4 or 5 years to develop, it is likely to conclude that the first researches began around 8 or 9 years after the New Opportunities program started, when the project had already reached its maturity.

In the next chapter, a compared review of the literature which has been the subject of the above bibliometric analysis will be presented, through a content analysis and discussion of the selected works. Through the exposure of the results, conclusions will be reached and some final recommendations set.

Results, Conclusions, and Recommendations

In order to better understand the role of different scenarios of Adult Education and Training in the lives of Portugal citizens, we have used a comparative analysis of secondary sources obtained through the RCAAP and Google Scholar, in order to identify the research questions, the main issues addressed and the results achieved in terms of assessing the impact of the same on individuals, not on their individuality, but on the intersection of issues between them. It should be noted, first and foremost, that these contexts of schooling and their entire context are spaces of socialization in which each adult individual is the leading actor of his or her learning process.

As such, we focus on those who place particular emphasis on women's studies or where they have a higher incidence in the groups (Brito, 2012; Costa, 2014; Fonseca, 2014, 2016; Raimundo & Caetano, 2015) and on literacy (Brito, 2012; Oliveira, 2014; Paias, 2013; Raimundo, 2015; Silva, 2015; Vargues, 2013). Our starting point is precisely a



study, within the framework of a doctoral thesis in Sociology, on “Reading literacy in adults - diachronic analysis of (re) socialization processes in a group of Adult Education and Training, built on the feminine” (Brito, 2012).

This study involves a group of women with unique pathways, but that fit together through some regularities. There is, from the outset, an early drop out of the school (by their own decision), with a family economic dimension underlying, devaluing the school capital to the detriment of the economic one – “I did the 6th year and I know that at the age of 14 I started to work (...) because I saw the others had everything and I did not have the things that I’d like to have” (Brito, 2012, p. 315; Silva, 2015). Paias, in her dissertation on Education, also points out both “personal and family reasons” for this early departure (2013, p. 48). However, in Silva’s research we can also see the existence of precarious financial relationships that, coupled with little parental qualifications, create tensions and it’s the parents themselves that promote this early abandonment (2015).

However, once we have taken up our starting point, low qualifications make access to employment more difficult at one point, which leads to unemployment or even lack of professional progression. The arrival of the EFA course is a turning point in their trajectory, leading them to reflect on the need to obtain more qualifications. Having paid training enabled them to lighten economic needs, to get the 9th-grade school certification and even professional certification: “I got to the point where I saw what I needed. Both at the professional level, but also for me” (2012, p. 335). The same statements appear in Raimundo’s thesis, where the subjects state that the primary motivations for attendance are “increasing school attainment and insertion into the labor market” (2015, p. 686). Fonseca also mentions that women studied “wish to have better jobs in the future” (2014, p. 64). Rodrigues emphasizes the fact that they are beneficiaries of a scholarship and Paias stresses that these adults feel “the desire to improve skills and to increase school qualifications”, giving “personal and social importance to the school diploma” (2016; 2013, p.48). Rocha and Silva add that the reasons presented by the women they studied relate to questions of “personal fulfillment and because they felt due to their lack of qualifications. Only one person stated that she wanted to enter the labor market through training” (2015, p.103), and one of Silva’s study respondents states that “many doors closed for only having the 6th grade. (...) So much that I do not have life goals at this moment” (2015, p. 37).

The image they create around the EFA courses is represented by the school in the past, a schooling learning rooted in theoretical knowledge - “a school like ... the C+S (...). I thought that I would give what I learned in the 7th and 8th grades” or “come back ... to be a child” (Brito, 2012, p. 329; Oliveira, 2014, p.295). In Henriques’s research, there are also some fears of a return to learning - “some fear because I had left school many years ago and I was not sure if my head could still learn something, but I tried and had a lot of willpower” (2014, p.85).

At the beginning of the EFA course, there was a “factor that was transversal to all, which was the lack of self-esteem. They had very low self-esteem (...) what was more noticeable was, basically, the attitudes, the know-how in the room, the knowledge to interact with their colleagues, their organization at work level, their autonomy at the degree of study and also to know how to manage” (Brito, 2012, p.352). Nonetheless, different researches mention an increase in confidence, self-esteem, personal valuation and security, but also a greater capacity for interpretation of information, these courses being the primary drivers of the individual and social growth of these adults (Brito, 2012; Graça, 2015; Henriques, 2014; Oliveira, 2014; Raimundo, 2015; Rocha & Silva, 2015). This is an important milestone in the lives of these adults, mainly because of their discoveries and experiences in acquiring skills - “For having played a little longer, ... having done things I never thought to do. (...) I learned to read stories better to my children, which I did not do” or even because “I can give some help to my children in their homework” (Brito, 2012,



p. 319; Henriques, 2014). It is also evident that these courses allow them to gain a different position within the household (Brito, 2012; Raimundo & Caetano, 2015).

During the course, they create other expectations, especially professional ones, taking into account the very development of the training - "to feel that they are important for their lives, placing many expectations on the professional stage after the course is completed" (Fonseca, 2014, pp. 64-65; Sanches, 2015). In reality, "the goal should be to consolidate this kind of skills, but I found that the trainees felt, and I observed myself, that there was no such social or institutional recognition because these opportunities were not given" (Brito, 2012, p. 353). In this sense there are situations of materialization of these expectations and representations with changes in their daily professional lives in institutional families - "I left the course and the next day I started to work" (Idem, p. 341; Henriques, 2014). When in areas other than certification there are elements that go from a situation of the previous inactivity to a situation of work activity (Brito, 2012). Nevertheless, there are also situations where, although there is awareness of a not very favorable scenario, the deception is very evident: "a person already starts to wonder ... it seems that it is not contributing, both financially and ... and then we are at home, ready, but we're not being productive. (...) I already look like an old woman" (Brito, 2012, p.338). The fact that they have more qualifications does not mean that precariousness has been completely eradicated. However, Raimundo speaks of the existence of greater pro-activity in job search after the course (2015).

Within an information society, literacy plays a preponderant role as a key competence for the performance of individuals in different aspects, hence it is essential to understand the importance of the way it works in adult education. As far as literacy is concerned, Brito considers that although these women showed the same level of schooling, they started with unequal levels of literacy, which already happened before the course and this did not allow to establish equity in this sense due to their singularities, based on a close relationship between these difficulties, the feminine gender, their social environment of origin and life stories: "if you read anything you do not understand I already have that ... that perception that I do not understand anything that I'm reading. But at the time I didn't feel that way" (2012, p. 346).

However, with regard to the above-mentioned research, we can see that there are some proficiencies that the EFA course has highlighted, given that these are adults who have long been away from contact with books and, therefore, the notion of reading that still preponderated in their mind was that of a mere mechanical deciphering of the graphic symbols - "I remember reading on a rush ... I was going to catch the train. I could not even breathe" (Brito, 2012, p. 330). Pre-training reading habits in the majority of the group were associated only with daily routines and sporadic readings. Nevertheless, in the adult education scenarios they can break this idea, thus associating themselves with literacy conducts through interactions, sharing, dialogues, senses: "It must have been the only courses, if it was not the only course, where I heard comments about books. I think there was a taste for reading in some of the trainees. (...) I am still to meet the first group that comes to great reading habits because they are people who are adults. At the beginning they do not even have time in their daily life for this or think that they do not" (Idem, p. 350, 354). However, if these skills are not applied day-to-day, especially in the professional context, they become "vulnerable to regression", that is, if individuals do not use them in their daily lives and during their life course, they are blurring and even regressing (Ávila, 2008, p.87).

Regarding these issues, Brito (2012) and Paias (2013) mention the involvement of children in reading activities, which contributes to the consubstantiation of social relations also in the domestic space. The children thus allow them to establish a relationship between the theory acquired and the daily life and that takes them to redeem skills in



the area of family literacy, at the level of new representations and reading practices, allowing a greater rapprochement between parents and children: "I learned to read the stories better to my children, which I did not do before" (Brito, 2012, p.319; Oliveira, 2014). There are also influences that are reflected in the family as it allows them to provide more support to their children also concerning school. The school context is transposed into the domestic space, and the family environment is one of the main drivers: "it is usual for children to help their parents feel proud" (Paías, 2013, p.50). Rocha and Silva consider that, for its uniqueness, EFA courses entail changes in the family, being noticeable in personal growth how these experiences are reflected in the "construction and reconstruction of learners identities" (2015, p. 102).

The building of multiple responses to different audiences is considered as basilar. As such, it is essential to address the teacher's role in these courses and the fact that it cannot be confined to a mere repetition of content regardless the public; teachers must always think about the individuals, not forgetting their sociocultural environment for, after all, they are the basis of all this work, and even because these adults "need to be self-directed; so that the profile of the trainer should be built on the basis of a process of mutual investigation with the trainees and not only with the function of transmission and evaluation of knowledge" (Oliveira, 2014, p.49). It is fundamental to understand non-school contexts as a "laboratory of new practices" (Santos, 2014, pp. 102-103). Nevertheless, it is clear the need for a symbiosis between the trainer and the trainees: "[they] went all away richer, not only in skills that they were bound to acquire to have the B3, but left much richer because there was an entire job done which they also allowed to be done" (Brito, 2012, p.353; Costa, 2014; Santos, 2013). However, we do not always come across these symbiotic relationships (Mesquita, 2012). In fact, the presence of information sharing and cooperative work is central. All this work involves many fractions of availability, "appreciation of multiculturalism", commitment and creativity, primary components to develop in these individuals new durable dispositions that promote literacy levels (Brito, 2012; Fonseca, 2014, p.65).

The studies here analyzed thus reveal that these adult education scenarios play a major role in the lives of these individuals, promoting new opportunities as well as changing values and attitudes and, in general, the acquisition not only of intellectual capital but also of social capital, an indispensable contribution to diminish social inequalities. We cannot overlook that, being mainly composed of a female audience, these non-school contexts give voice to these women and present them challenges that impel them to get involved in a whole range of daily changes and allow an understanding of the world that in many cases they weren't aware of.

In general, these conclusions, all gathered through qualitative studies, are confirmed by a small survey led by Rocha and Cardoso (2016) and presented in a chapter of a book dedicated to adult education in Europe from a gender perspective, edited by Maksimović, Ostrouch-Kamińska, Popović, and Bulajić (2016).

It is also evident through the bibliometric findings that, if adult education is not a popular subject in international scientific research, much less are the women studies applied to the subject or the approach through information literacy. The research in Portugal is incipient and with little impact. It is, therefore, a significant field of study for the development of societies, which the authors recommend should be the object of research projects, preferably with public funding, and also of bigger efforts of communication through publication in journals, conferences or books. Collaboration between academic institutions and research centers, looking for international partnerships could be a way of expanding the study field and obtain more consistent results.



As final recommendations, it would be important to try to follow the trajectories of the women that were subject to the compared studies after the end of training, looking for permanent changes in their lives and assessing the long term effects of the courses they attended. In what refers to the new *Qualifica* programs, these results show beyond any doubt the relevance of adult women's education in what refers not only to learning and the acquisition of professional competencies, but also to the gaining of individual, social and information literacy competencies that lead to the conquest of social capital, empowerment in the private and family life and self-esteem – meaning that the new programs to develop should insist in the particular work with women, according to their needs and to the gender gap that unfortunately still exists in our society.

References

- ANEFA - Agência Nacional de Educação e Formação de Adultos. Grupo de Missão para o Desenvolvimento da Educação e Formação de Adultos. (2001). *S@ber +: Programa para o desenvolvimento e expansão da educação e da formação de adultos, 1999-2006*. (A. Melo, coord, L. de Matos, & O. S. Silva, Eds.). Lisboa: author. Retrieved from <http://opac.iefp.pt:8080/images/winlibimg.aspx?skey=&doc=6784&img=221>
- ANQEP - Agência Nacional para a Qualificação e o Ensino Profissional. (2016). *Qualifica*. Retrieved from <https://www.qualifica.gov.pt/#/>
- Ávila, P. (2008). *A literacia dos adultos: competências-chave na sociedade do conhecimento*. Lisboa: CIES-ISCTE/ Celta Editora
- Brito, E. C. (2012). *A literacia da leitura em adultos: análise diacrónica de processos de (re)socialização num grupo de educação e formação de adultos, construído no feminino*. (Doctoral dissertation, UP). Retrieved from <http://hdl.handle.net/10216/67301>
- Condorcet, M. de. (1847). *Sur l'admission des femmes au droit de cité* (1790). (J.-M. Simonet, Ed.). Paris: Firmin Didot Frères. <http://doi.org/10.1522/030167474>
- Condorcet, M. de. (1989). *Rapport et Projet de décret sur l'instruction publique (1792-93)* (Edilig). Paris. Retrieved from http://www.toupie.org/Textes/Condorcet_instruction_publique.htm
- Condorcet, M. de. (1994). *Cinq mémoires sur l'instruction publique* (1791). (C. Coutel & C. Kintzler, Eds.). Paris: Garnier-Flammarion. Retrieved from http://laicite-aujourd'hui.fr/IMG/pdf/Cinq_memoires_instr_pub.pdf
- Costa, A. F. T. S. da (2014). *Educação de adultos: motivação face à aprendizagem ao longo da vida: um estudo de caso*. (Master's thesis, ISCTE-IUL). Retrieved from <http://hdl.handle.net/10071/8838>
- Field, J. (2001). Lifelong education. *International Journal of Lifelong Education*, 20(1–2), 3–15. <http://doi.org/10.1080/09638280010008291>
- Fonseca, L. F. da C. (2016). *Um Olhar Sobre as Experiências de Mulheres Imigrantes em Cursos EFA – Histórias de Vida*. *Forum Sociológico*, II série, 28. Retrieved from <http://sociologico.revues.org/1426>
- Fonseca, L. F. da C. da (2014). *Um Olhar Sobre as Experiências de Mulheres Imigrantes em Cursos EFA – Histórias de Vida*. (Master's thesis, University Nova of Lisbon). Retrieved from <http://hdl.handle.net/10362/13949>
- Graça, A. M. N. da (2015). *Contributos dos Cursos EFA no desenvolvimento pessoal, profissional e comunitário*. (Master's thesis, IPL). Retrieved from <http://hdl.handle.net/10400.8/1856>
- Henriques, M. D. de S. (2014). *Educação e Formação de Adultos: a visão das formandas do curso de formação de calceteiros*. (Master's thesis, IPL). Retrieved from <http://hdl.handle.net/10400.8/1768>
- Melo, A., & Benavente, A. (1976). *A educação popular em Portugal*. Lisboa: Livros Horizonte.
- Mertens, D. M. (2003). *Research and Evaluation in Education and Psychology*. Thousand Oaks, CA: Corwin Press.
- Mesquita, C. I. F. (2012). *Mediadores dos cursos EFA de nível secundário enquanto atores de supervisão pedagógica: estudo exploratório*. (Master's thesis, UTAD). Retrieved from <http://hdl.handle.net/10348/3088>
- Oliveira, M. C. M. (2014). *Educação e literacia: conceções, orientações e práticas em contextos de educação de adultos*. (Doctoral dissertation, University of Minho). Retrieved from <http://hdl.handle.net/1822/35788>
- Paias, C. F. M. (2013). *Regressar à escola, com os filhos: literacia familiar e educação de adultos*. (Master 's thesis, ISCTE-IUL). Retrieved from <http://hdl.handle.net/10071/7617>



- Raimundo, A. & Caetano, M. (2015). A Aprendizagem ao Longo da Vida, a Educação de Adultos em Portugal e a Iniciativa Novas Oportunidades no feminino. In H. G. Pinto, M. I. P. Simões & R. G. Muñoz (orgs). *Atas do IV Conferência Internacional Investigação, Práticas e Contextos em Educação* (pp. 298-303). Retrieved from <https://www.researchgate.net/publication/276303342>
- Raimundo, A.C. F. de J. (2015). *Estudo e análise das competências específicas de Linguagem e Comunicação dos formandos dos cursos de Educação e Formação de Adultos (EFA), de nível B3, no CENCAL, no concelho de Caldas da Rainha (Portugal)*. (Doctoral dissertation, IPL). Retrieved from <http://hdl.handle.net/10400.8/1379>
- Rocha, A., & Cardoso, Teresa (2016). The adult education and training courses in the Portuguese society: a look at the female presence. In M. Maksimović, J. Ostrouch-Kamińska, K. Popović, & A. Bulajić (Eds.), *Contemporary Issues and Perspectives on Gender Research in Adult Education* (pp. 259-281). Belgrade: Institute for Pedagogy and Andragogy, Faculty of Philosophy, University of Belgrade; ESREA - European Society for Research on the Education of Adults. Retrieved from http://www.esrea.org/gender_network/1.718865/Appendix4ESREAbookMaksimovicetal2016.pdf
- Rocha, M. C., & Silva, M. S. (2015). Formação de Pessoas Adultas: Uma Análise em torno da Construção de Identidades Aprendentes em Contexto de Crise. *Investigar em Educação - II Série*, 3. Retrieved from <http://pages.ie.uminho.pt/inved/index.php/ie/article/view/90/89>
- Rodrigues, M. de S. M. R. (2016). *As aulas de TIC no contexto de um curso EFA: relato de uma experiência*. (Master's thesis, UTAD). Retrieved from <https://repositorio.utad.pt/handle/10348/7608>
- Sanches, S.V. (2015). *(Re) inserção profissional de ex-formandos de cursos EFA: o caso da EIPDA*. (Master's thesis, ISCTE-IUL). Retrieved from <http://hdl.handle.net/10071/10868>
- Santos, M. D. M. (2014). *A inserção numa "nova" atividade como espaço/momento marcante de educação permanente: o caso dos professores do ensino regular que começam a trabalhar como formadores de adultos dos cursos EFA*. (Master's thesis, UTAD). Retrieved from <http://hdl.handle.net/10348/3039>
- Silva, V. P. C. (2015). *As disposições dos adultos com baixos níveis de escolaridade face à aprendizagem ao longo da vida. O caso dos adultos que não retomaram processos de educação formal*. (Master's thesis, ISCTE-IUL). Retrieved from <http://hdl.handle.net/10071/10984>
- Vargues, P. J. P. (2013). *A formação profissional como elemento fundamental de literacia nas sociedades semiperiféricas: o caso da região do Minho*. (Master's thesis, University of Coimbra). Retrieved from <http://hdl.handle.net/10316/24687>



The Factor if Social Affiliation of Youth in Promoting Citizenship

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Abstract

The factor of social affiliation of young people plays an important role in strengthening civil society and national identity. An individual's sense of belonging can promote civic responsibility and serve as a self-regulating component for civic engagement. The aim of the research is: on the bases of theoretical research and the analysis of the results of the carried out survey, to identify sense of belonging of young people (from 9 to 12 grade students) in Liepaja (Latvia) focusing on different categories: (I) self-esteem of young people's loyalty and patriotism; (II) the respect of young people towards their school, city, state, European Union; (III) the sense of belonging of young people to their school, city, state, European Union; (IV) the personal identification of young people with Europe and Europeans; (V) the self-feeling of the needs of young people for their school, city, state; (VI) consciousness of pride; (VII) comprehension of values. As the research methods were used: data mining methods: (surveys, using M. Rozenberg self-esteem scale, unfinished sentence method); data processing and analysis methods (quantitative data processing with data mathematical statistical analysis and predictive analytics methods implemented through processing program); graphical representation of data; qualitative data processing (content analysis, data coding, grouping and processing); quantitative and qualitative data interpretation. The research sample consists of 825 respondents, 9th – 12th grade students that is 38.35% of the total number of students in Liepaja (total number of students in the 9th – 12th grade group: 2151 students), which ensures the reliability and validity of the study.

Keywords: citizenship, sense of belonging, social affiliation, students, values.

Introduction

The promotion of civic society as one of the challenges of the 21st century has been formulated by the World Economic Forum in order to lead the country to the successful development. The importance of the civic society in the process of the improvement of the quality of life of the population has also been highlighted by the World Health Organization (World Health Organization, 2002). Civic engagement of citizens including the youth is one of the conditions for the development of civic society (World Economic Forum, 2013). In the context of globalization, civic engagement and the civic behavior of humans has a profound effect on democracy and the preservation of democratic values (John, 2003), moreover, civic engagement is a way of collectively overcoming the existing global challenges (Koritz, 2009) such as, solving the issue of protecting the environment (Smith, Pangsapa, 2008). Civic engagement is an important component in the development of youth as it promotes the personal growth of an individual, helps in the process of the formation of a social capital and allows adolescents to unwrap their potential and to invest in the development of the local society (UNESCO, 2014). Moreover, it is very crucial to provide the adolescents with a diversity of support: emotional support, respect and advice (Dolan, 2012). Through civic engagement, the needs of the adolescents are satisfied as well (Brennan, 2008) by promoting the social and economic well-being of adolescents (Douglas, Alessi, 2006) and by promoting the well-being of the community (Chaskin et al, 2001). By understanding the topically of civic engagement and its importance for the development of the state, it is necessary to encourage young people's social affiliation. To understand the potential of youth civic engagement as a long-term contribution of civic society, it must identify young people's sense of belonging and understanding of values. Therefore, this article will be reflected the indicators of youth sense of belonging and understanding of values by student survey data analysis.



The base and methods of research

In order to achieve the aim of the publication, the study was used the following research methods:

1. theoretical research methods – the diverse analysis of scientific and methodological literature of the sense of belonging, youth citizenship and values preconditions;
2. empirical research methods – data mining methods: (surveys, using M. Rozenberg self-esteem scale (Rosenberg, 1965), unfinished sentence method); data processing and analysis methods (quantitative data processing with data mathematical statistical analysis and predictive analytics methods implemented through processing program); graphical representation of data; qualitative data processing (content analysis, data coding, grouping and processing); quantitative and qualitative data interpretation.

The research sample consists of 825 respondents, 9th – 12th grade students that is 38.35% of the total number of students in Liepaja (total number of students in the 9th – 12th grade group: 2151 students), which ensures the reliability and validity of the study. Research data gain confirmation ability (Lincoln, Guba, 1985) and the results of the study are valid because it demonstrates accuracy. The survey was carried out between November 2016 and February 2017 in all comprehensive schools of Liepaja.

The average age of respondents is 16 years, including 18 students (2.18%) at the age of 14; 258 students (31.27%) at the age of 15; 206 students (24.97%) at the age of 16, 179 students (21.70%) at the age of 17; 124 students (15.03%) at the age of 18 years; 13 students (1.58%) at the age of 19 and 27 students (3.27%) at the age of 20. The characteristics of respondents' age and gender are described in Figure No.1.

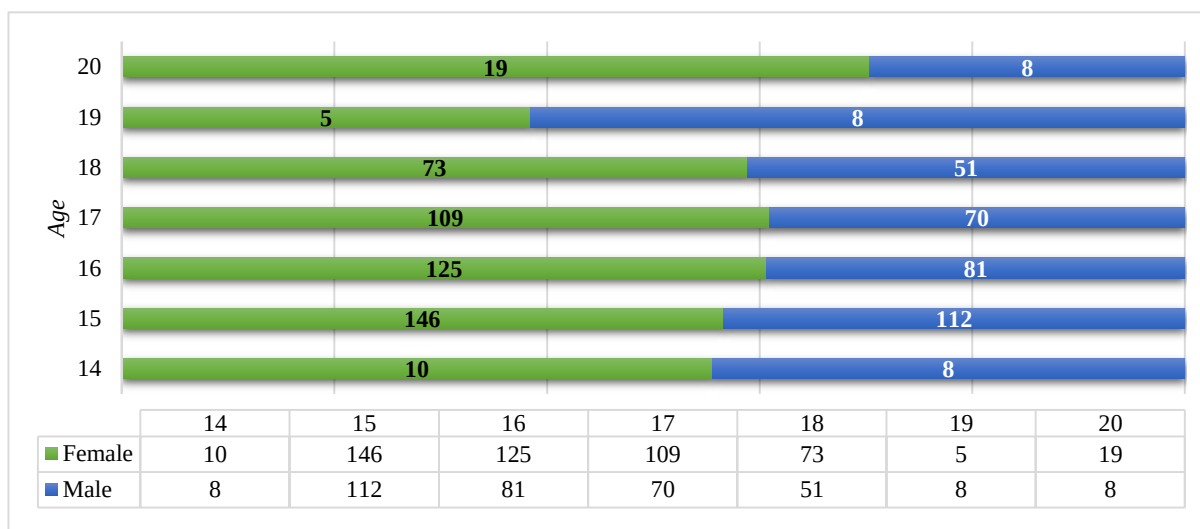


Figure 1. Respondents' characteristics: gender and age (n=825)

1. Theoretical research regularities of the sense of belonging and youth citizenship through values dimension

1.1. The impact of social affiliation factor of young people in the civic responsibility formation process

Sense of belonging and identity are essential factors for every person to answer to the question: who am I? These factors begin to be shaped in early childhood and developed in the process of socialization, when an individual is in interaction with the norms and values adopted by society (Тощенко, 2003). The concept of identity includes two benchmarking criteria: the similarity (common identity) and the difference, which are the dynamic principles of identification (Jenkins, 2008).

Psychologist J. Piaget divides the process of ethnic identity development into three stages:

- 1) at the age of 6 – 7, the child acquires the first fragmentary knowledge about his or her ethnicity and the family has a key role at this stage;



- 2) at age of 8 – 9, the child can already clearly identify himself /herself with his or her ethnic group; he/she is aware of the basic principles of identification: the parents' nationality, residence and mother tongue, thus forming national feelings;
- 3) in the period of the youngest adolescence (from 10 to 11 years) ethnic identity is formed in full measure, perceiving the peculiarities of different people. The child notes the uniqueness of history and the specifics of the traditional everyday culture (Пиаже, 2008).

National identity and belonging to one particular country or nation develops over time in the context of the cultural and historical environment in which the individual lives. The sense of belonging to country is a matter of national identity, which can manifest itself both as patriotism and as a radical chauvinism. The sense of belonging shapes person's national self-awareness. Ethno-psychologist Dr. I. Apine highlights: "If an individual has lost his/her national self-confidence, he/she already belongs to another ethnic group. If the sense of belonging disappears because of the majority of ethnos, then the ethnic group itself ceases to exist. The seemingly volatile, seemingly inexhaustible national self-confidence, which is an ideal substance, keeps together the people of one nation. The central element of national (ethnic) self-confidence is the core of ethnic identity, awareness of one's belongings" (Apine, 2001, 36).

National identity is an important component in the person formation process and sense of belonging is one of the primary needs of person (Kelman, 1997) and an integral part of the social identity of a person. The sense of belonging manifests itself as an individual's patriotism, loyalty, respect and affiliation with his/her city and state, as a pride of his/her city and country, as well as the necessity to be part of his city and state.

The individual's affiliation with the country contributes to the preservation of the national cultural space, which is one of the goals of the Republic of Latvia. The sustainable development strategy of the Republic of Latvia highlights the importance: "... to preserve and develop the cultural capital of Latvia and to promote the sense of belonging to the cultural space of the country by developing a competitive national identity based on a society's creativity through creating a quality cultural environment in Latvia" (Saeima of the Republic of Latvia, 2010, 12). In the perspective of personality identity, the system of values of individuals is clearly reflected; therefore, through promoting the sense of belonging of young people to their country, a personally responsible and patriotic state of the individual is formed.

A stronger sense of identity and belonging of youth can contribute to higher responsibility not only towards themselves and others, but also towards their community, the state and a common European space – responsibility is a special human attitude that includes attitude towards oneself, their actions, people around and the world. To some extent the responsibility as a social phenomenon can be divided into two aspects: the human legal responsibility before the law, in turn another aspect of the responsibility is a moral responsibility or obligation that manifests in the form of civically responsible behaviour, thinking not only of own interests, but also about the interests and needs of others. (Jurs, Samuseviča, Līdaka, 2017). Responsibility arises from the rational human nature, the individual's understanding and the individual position of societal norms, morals, laws, as well as from communicative nature of social reality, while the condition of responsibility is the understanding of causality of actions.

1.2. The role of youth social affiliation in promoting citizenship

Young people's civically responsible behaviour, which contributes to the future existence of civil society, stems from the social affiliation of young people. This factor serves as a self-regulating act for the individual: if young people feel socially belonging to a group, community or state, this can serve as a stimulus to promote the quality of life of himself/herself and the others. The World Health Organization points out: "The concept of quality of life is very broad, mainly involving the perception of the public of the position of one's life in the context of the



culture and values system in which he lives and bonds himself/herself and his/her life” (World Health Organization, 1997, 1)

Therefore, it can be concluded that the feeling of social belonging of young people as a conditional attitude directly influences the civic position of young people, which is an individual's relations with the society manifesting the fulfilment of the citizen's duties towards the state, a conscious and responsible attitude towards people and country. In the context of the formation of a civic position, it should be noted that firstly, the awareness of young people about the need for active civic action and the development of qualities should be promoted. Subsequently, the individual self-analysis, self-assessment and determination of goals follow. In order to achieve the goals, e.g., to be a civically active member of society and to be able to contribute to the solution of existing problems, a person through various methods and patterns, drives his/her behaviour in a way that is to improve himself/herself. In the result, the element of self-education becomes an essential precondition in the context of the formation of an active civic position, when young people understand their individual needs and desires.

2. Student survey data analysis (summary) – the sense of belonging and youth values preconditions

The analysis of data on the criterion of respect has been summarized in Figure No.2. The data confirm that the majority of young people involved in the study feel respect towards their school, city, state and the European Union:

- 596 respondents (72.24%) feel respect towards their school, including 369 (75.77%) girls and 227 (67.16%) boys. However, 174 respondents (21.09%) cannot formulate a respect towards their school, 94 of them (19.3%) girls and 80 (23.67%) boys;

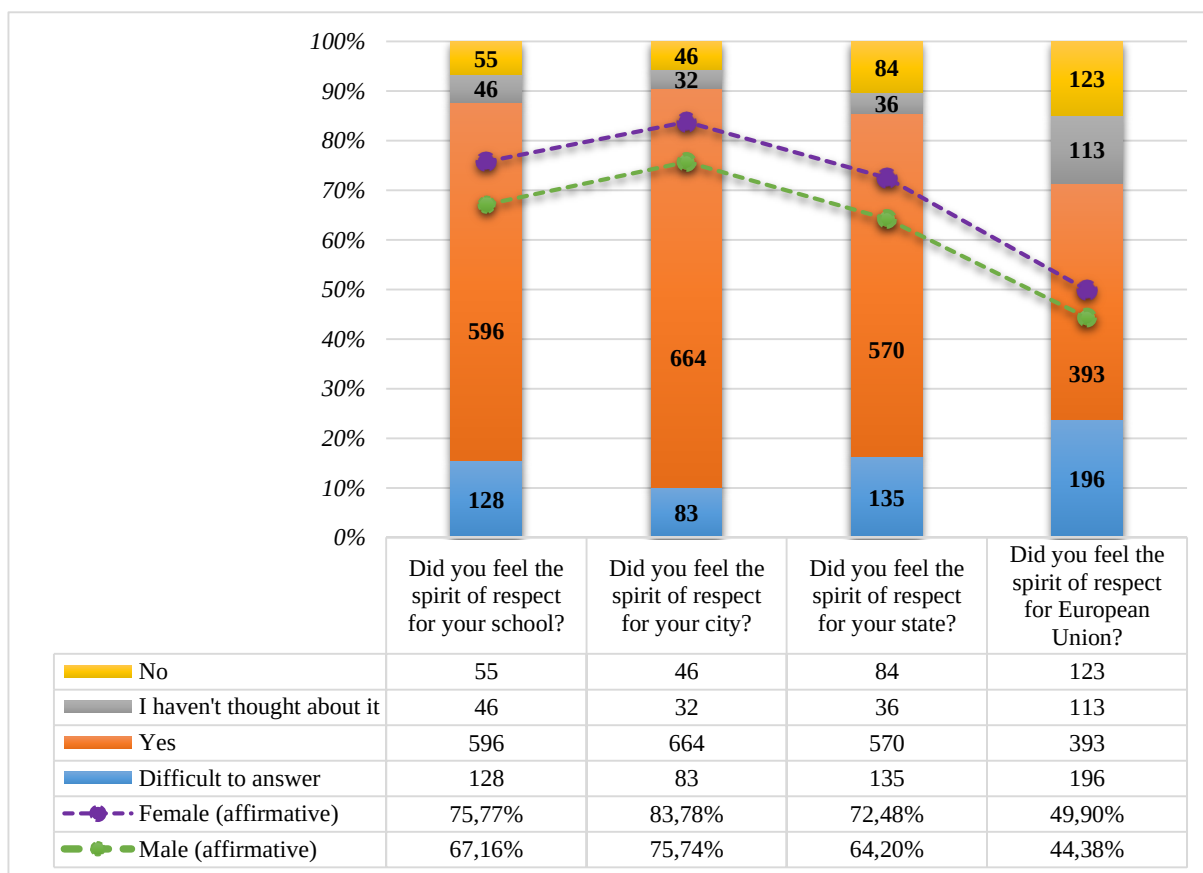


- 664 respondents (80.48%) feel respect towards their city, including 408 (83.78%) girls and 256 (75.74%) boys, while 115 (13.94%) respondents cannot formulate a respect towards their city, 59 of them (12.11%) girls and 56 (16.57%) boys; 570 respondents (69.09%) feel respect towards Latvia, including 353 (72.48%) girls and 217 (64.2%) boys. Nevertheless, 171 (20.73%) respondents cannot formulate a respect towards their country, 91 of them (18.69%) girls and 80 (23.67%) boys; 393 respondents (47.64%) feel respect towards the European Union, including 243 (49.9%) girls and 150 (44.38%) boys. However, 309 respondents (37.45%) cannot formulate respect towards the European Union, 190 of them (39.01%) girls and 119 (35.21%) boys.

Figure 2. Dignity affirmation to the school, city, state, European Union (n=825)

Figure No.3 highlights self-esteem of the affiliation of Liepaja comprehensive schools students:

- 534 respondents (64.73%) feel belonging to their school, including 324 (66.53%) girls and 210 (62.13%) boys, while 103 respondents (12.48%) do not feel belonging to their school, 55 (11.29%) of them are girls and 48 (14.2%) boys;
- 554 respondents (67.15%) feel belonging to their city, including 342 (70.23%) girls and 212 (62.72%) boys, while 104 respondents (12.61%) do not feel belonging to their city, 55 (11.29%) of them are girls and 49 (14.5%) boys;
- 523 respondents (63.39%) feel their belonging to Latvia, including 325 (66.74%) girls and 198 (58.58%) boys, while 104 respondents (12.61%) do not feel their belonging to Latvia, 69 (14.17%) of them are girls and 35 (10.36 %) boys;





- 351 respondents (42.55%) feel belong to the European Union, including 216 (44.35%) girls and 135 (39.94%) boys, while 173 respondents (20.97%) do not feel belonging to the European Union, 85 (17.45%) of them are girls and 88 (26.04%) boys.

Figure 3. Students' sense of belonging to the school, city, state and European Union (n=825)

According to the research it can be concluded (see figure No.4) that in the comparative perspective, young people more consider themselves as Europeans and less feel themselves as part of the European Union: 682 respondents (76.12%) feel themselves as Europeans, while 569 (68.97%) feel themselves as a part of the European Union.

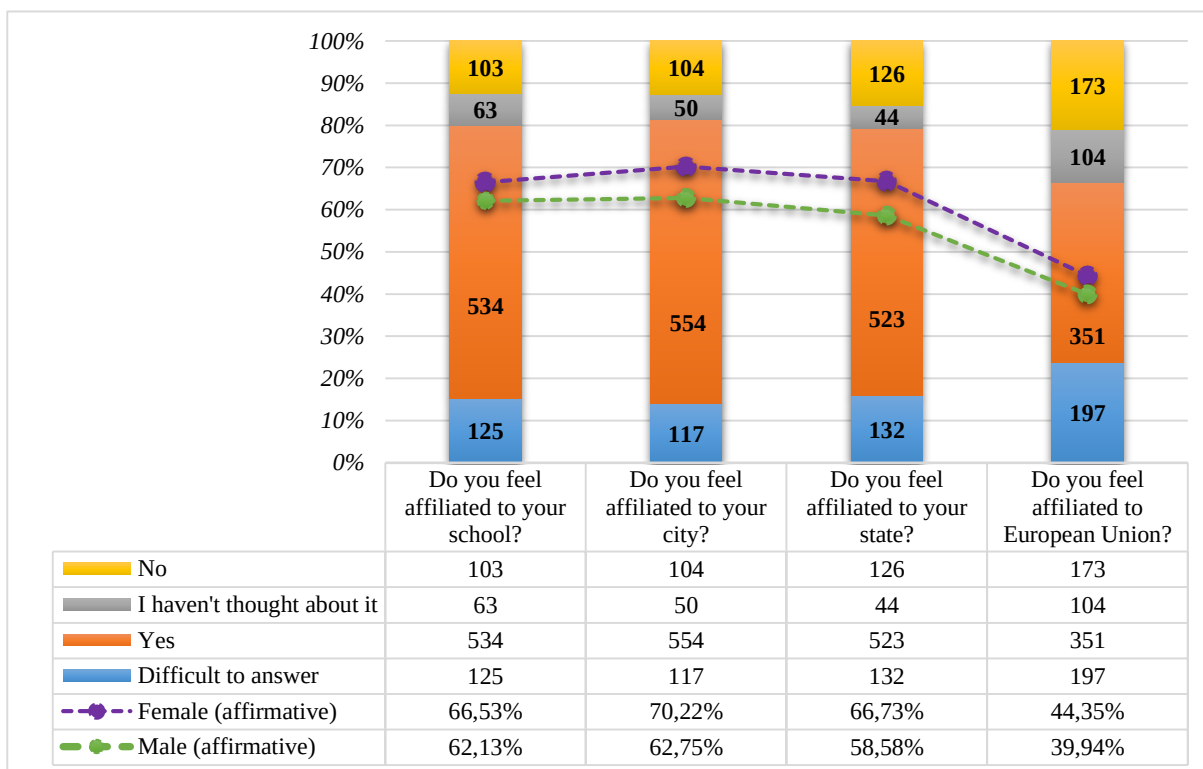
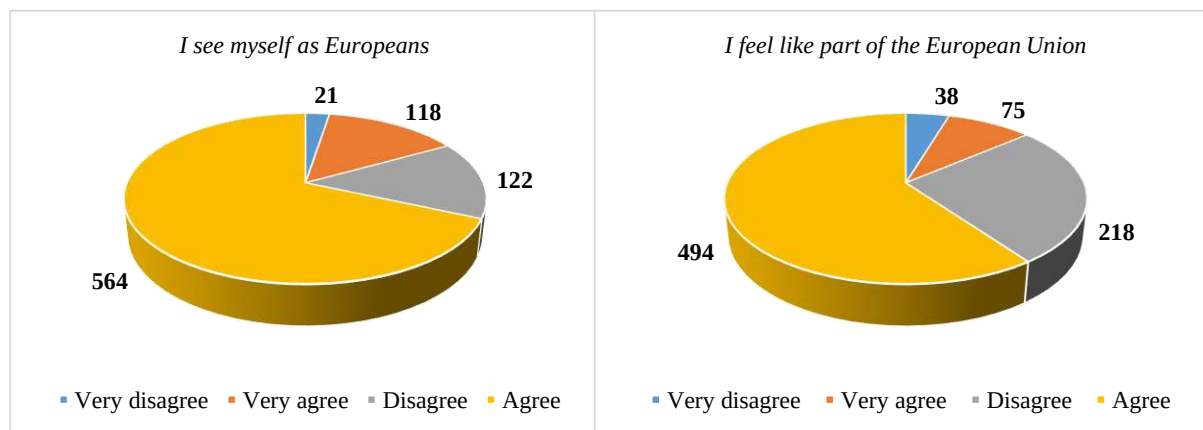


Figure 4. Students' personal identification with Europe and the Europeans (n=825)

The data summarized in Figure No.5 shows that young people feel necessary for their school, city and state:

- 503 respondents (60.97%) feel necessary for their, including 320 (65.71%) girls and 183 (54.14%) boys. However 322 respondents (39.03%) feel unnecessary for their school, 167 of them (34.29%) girls and 155 (45.86%) boys;





- 455 respondents (55.15%) feel necessary for their city, including 289 (59.34%) girls and 166 (49.11%) boys, while 370 respondents (44.85%) feel unnecessary for their city-Liepaja, 198 of them (40.66%) girls and 172 (50.89%) boys;
- 442 respondents (53.58%) feel necessary for their country (Latvia), including 276 (56.67%) girls and 166 (49.11%) boys. Nevertheless, 383 respondents (46.42%) feel unnecessary for Latvia, 211 of them (43.33%) girls and 172 (50.89%) boys.

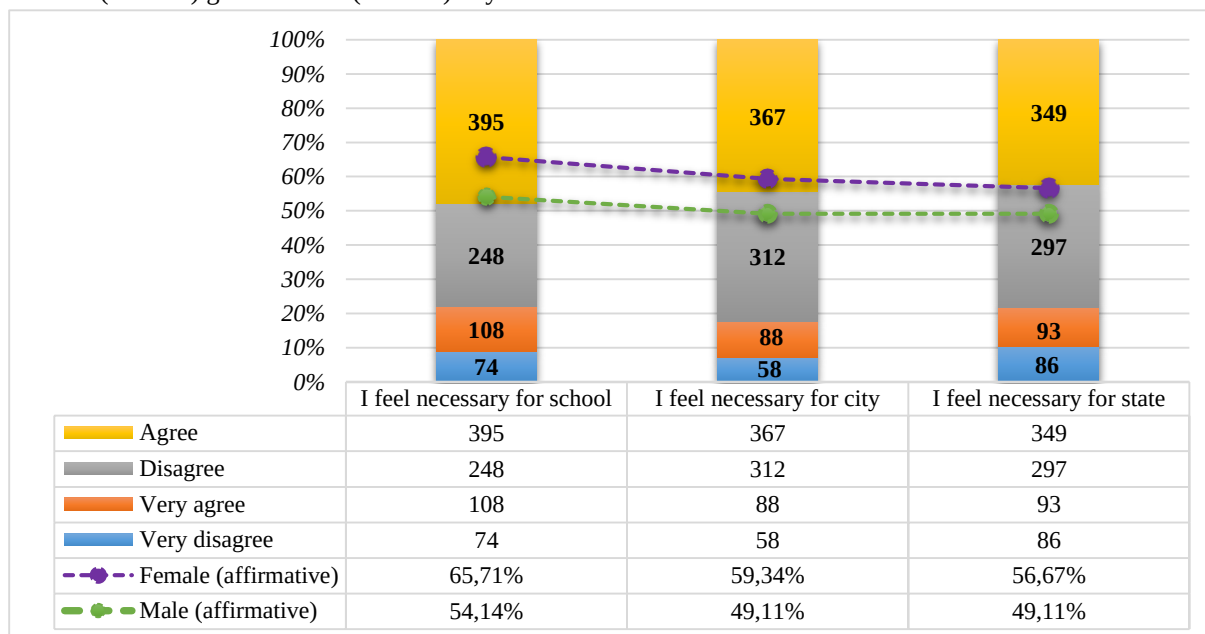


Figure 5. Students' feeling of necessary for school, city and country (n=825)

Within the survey respondents were able to determine and define their values of life (see Table No.1). They mentioned following values:

1. the largest number of respondents: 506 respondents (61.33%) – 314 (64.48%) girls and 192 (56.8%) boys) have admitted that the family is a significant value for them;
2. the 2nd most popular value amongst respondents is education, which has been highlighted by 210 respondents (25.45%) – 167 (34.29%) of them are girls and 43 (12.72%) boys;
3. the 3rd most significant value for the respondents is friends. This value has been emphasized by 177 respondents (21.45%) – 110 (22.59%) girls and 67 (19.82%) boys). The summary of the mentioned values and the number of choices made is highlighted in Table No.1.

Table 1. Students' mention values

<i>Named values</i>	<i>Number of choices</i>	<i>Percent's</i>
Family	506	61.33%
Education	210	25.45%
Friends	177	21.45%
Health	159	19.27%
Love	111	13.45%
Money	71	8.6%
Respect	42	5.09%
Work	33	4%
Freedom	20	2.42%
Cannot answer to the question	26	3.15%



Conclusions

1. Responsibility as the regulator of behaviour and individual's attitude are the individual's ability and willingness to be responsible for consequences of his/her actions, thinking about own needs and the needs of others to reach the common good. Responsibility arises from the position of individual, individual awareness, dominant individual values, social environment, a sense of duty to his/her family, society and the country as a whole. Responsibility, as a major component of upbringing, is an individual's rational behaviour, when the person has the readiness and the ability to explain the keynotes of his/her behaviour. Civic education within the education shapes and promotes individual's moral and civic responsibility as a model for civic behaviour and youth civic participation, which can contribute to the development of civic society. Youth civic responsibility can be contributed by enriched in content methodically improved civic education at schools as well as teachers' personal model. As a result, creating a responsible civic position within the education process, providing young people with diverse support, through using of available resources, guidance and motivation, sustainable development of civic society is ensured.
2. Involvement in the community has a positive impact on young people's civic awareness, civic pride. It reduces the chances of asocial behaviour (contrary to the public interest) of young people. The engagement in civic participation activities has promoted young people's sense of social responsibility, thus strengthening civic society.
3. The experience that is acquired during the lifetime of an individual that, through self-regulated attitude, the objectification of behavior and the processes of will transforms into a specific model of behavior, which defines the readiness of an individual to express his/her civic position by using the existing opportunities of sense of social belonging.
4. It is possible and most definitely necessary to promote the sense of social belonging by providing them with an opportunity to set and fulfill socially crucial goals, by guaranteeing a variety of support, by providing the necessary resources, by helping to see the motivations of civic behavior, as well as promoting the formation of the civic attitude and values within the adolescence through the process of upbringing and the professionally oriented educational process.
5. The teacher has to be able to provide the confidence in their abilities and their potential for the development of abilities and skills. In fact the whole content of education has to be based on the basic principles of civic education by using the variety of pedagogic approaches and forms in order for the formation of civic responsibility to be as an integrating holistic developmental process of the characteristics, skills and abilities throughout the whole pedagogical process. A teacher can be (or can fail to be) a source of inspiration, motivation and practical support for the civic engagement of the student. Thus, the interest, civic position and pedagogical competence of a teacher are crucial components of the development of civic competence of youth.
6. The dominant civic attitude in the family, the individual and positive experience of cooperation with the peers at school and the professional skill of the teacher all have a crucial importance in the formation of sense of belonging. The formation of sense of social belonging takes place in a direct cooperation with the opportunities of civic engagement carried out by the student due to the fact that it helps the students to see the reason for their actions. In result, the positive experience acquired by the student during the process of self-realization serves as a basis for the promotion of civic attitude and the future improvement of civic position and civic activity.



Recommendations

1. Increasing the involvement of youth, e.g. through direct conversation with peers, in joint actions with youth organizations, youth centres (houses) in order to encourage youngsters by own example to volunteer, participate in a variety of projects, non-formal educational activities, social actions and other practical activities to promote civic engagement. Enhanced cooperation between youth non-governmental organizations, youth centres and schools can raise the organizations capacity to promote youth civic engagement and strengthen local community.
2. For the implementation of the long-term development and promotion the sense of belonging, it is very important and, therefore, it is recommended to update the civic co-responsibility and civic engagement issues in the family. Family is the environment where parents help children to develop their individual civic position with respect and responsibility towards themselves, people around them, neighbourhood, city, country, Europe, cultural heritage, history and traditions. It is parents' responsibility to educate their children not to be indifferent and passive observers, but rather to become responsible citizens of the country.
3. Parents are role models for their children and observed civic attitude in the family can become a leitmotiv for youth civic action in future, therefore the model of parents should contribute to the development of civic attitudes.
4. Opportunities for young people to spend their leisure time in a meaningful and purposeful way are essential in the process of the development of civic attitudes. Thus, it is very important for parents to encourage youngsters to fill their leisure time with worthwhile activities in order to facilitate the formation of civic attitudes.
5. It is significant to ensure openness and good governance in state and local level, providing all kinds of necessary support for people, including young people in their civic initiatives.
6. It is important to be aware of the specific prospects for the promotion of youth civic attitude in the future in both: the municipal and national levels, which marks the future development directions of youth civic position.

References

- Apine, I. (2001). *Politoloģija. Ievads etnopsiholoģijā*. Rīga: Zvaigzne ABC.
- Chaskin, R., Brown, P., Venkatesh, S., Vidal, A. (2001). *Building community capacity*. New York: Aldine de Gruyter.
- Dolan, P. (2012). *Travelling through social support and youth civic action on a journey towards resilience*. In: The social ecology of resilience: A handbook of theory and practice. New York: Springer, 357-366.
- Douglas, A., Alessi, B. (2006). *Service as a Strategy to Combat Youth Unemployment*. Innovations in Civic Participation. Retrieved from: http://www.issuelab.org/resource/service_as_a_strategy_combating_youth_unemployment
- Jenkins, R. (2008). *Social Identity*, 3rd ed., London and New York: Routledge.
- John, C. (2003). *Globalizing Civic Engagement: Civil Society and Transnational Action*. London: Routledge.
- Jurs, P., Samuseviča, A., Līdaka, A. (2017). *The perspective of responsibility formation: challenges and opportunities*. (pp. 5761–5767) In: INTED2017 Proceedings. 11th International Technology, Education and Development Conference.
- Kelman, H. (1997). *Nationalism, patriotism, and national identity: Social-psychological dimensions*. (pp. 165-189). In: *Patriotism in the life of individuals and nations*. Chicago: Nelson-Hall.



- Koritz, A. (2009). *Coping with Disaster*. In: Civic Engagement in the Wake of Katrina. (pp. 19–23). Michigan: University of Michigan Press and the Scholarly Publishing Office of the University of Michigan Library.
- Latvijas Republikas Saeima. (2010). *Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam*. Rīga.
- Lincoln, Y., Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Smith, M., Pangsapa, P. (2008). *Environment and citizenship: integrating justice, responsibility and civic engagement*. New York: Zed Books.
- UNESCO. (2014). *Expert Group Meeting “Youth Civic Engagement: Enabling Youth Participation in Political, Social and Economic Life”*. Paris. Retrieved from: <http://www.un.org/esa/socdev/egms/docs/2013/YouthDevelopmentRights/FinalConceptNoteEGMYouthCivicEngagement.pdf>
- World Economic Forum. (2013). *The Future Role of Civil Society*. Geneva. Retrieved from: http://www3.weforum.org/docs/WEF_FutureRoleCivilSociety_Report_2013.pdf
- World Health Organization. (2002). *WHO and Civil Society: Linking for better health*. Geneva.
- World Health Organization. (1997). *Programme on mental health. Measuring quality of life*. Geneva.
- Пиаже, Ж. (2008). *Речь и мышление ребёнка*. Москва: Римис.
- Тощенко, Ж.Т. (2003). *Социология. Общий курс*. 2-е изд. Москва: Прометей.



Some Notes on Second Languages in Primary Schools

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Abstract

The Portuguese education system has undergone great changes in recent decades. Originally, changes are felt within society, either due to migratory movements and, consequently, to new social, linguistic and cultural paradigms; or due to new technological, cultural and world realities. At a later stage, the need to adapt the education system to new realities is felt: in these periods, new legislation is produced and schools and their communities are faced with the obligation to implement some new laws. In Portugal, a few decades ago, there was a social period characterized by the arrival of several migrants from different communities and countries. If, on the one hand, migrants were from background families from Portuguese-speaking countries, it is equally true that some other families of migrants from countries (such as eastern Europe) who do not share the same language arrived in Portugal. The children of these families were welcomed in the schools, but in many cases a long adaptation to a culture and a language which deeply differed from their mother tongue was necessary. However, inclusion was and is indispensable for the school and social success of these students. The English language has been establishing itself as a lingua franca of culture and even of the economy. In Europe, English is considered the language of communication, social networks, and youth culture. Gradually, the need to have good communicative and linguistic competence in English has been felt. In the past, there have been some punctual and local experiences to bring language teaching / learning to primary schools. Legislation was introduced a few years ago to introduce the language in the curricula of primary schools (1st CEB). With this work, we intend to make a historical review of Portuguese as a Non-mother tongue and English as a Foreign Language in primary schools in Portugal and show what has been done in this field.

Keywords: English, Portuguese, Second Language

Introduction

The recent social, economic and political changes that have taken place in recent decades, both nationally and on a broader scale, have led to several movements of a migratory nature. These movements have caused consequent changes in the societies of the different host countries as well as in those countries of origin. From the cultural and social point of view (and necessarily educational and administrative) we have witnessed the emergence of new realities, in the sphere of entertainment but also in the school sphere. Particularly, there are three major changes in the social and, therefore, pedagogical paradigm (since the School reflects the changes of society understood in a broader way). The phenomenon of migration in Portugal and the consequent multiculturalism in schools, the use of the Internet on a large scale, especially using English as a universal language, and the inclusion of the English language in the 1st Cycle of Basic Education constitute the three constraints that we must consider in the paradigm shift of the school in Portugal in recent years.

Method

We have analyzed the Portuguese social reality and studied some legislation that has recently been produced to adapt the school system to new realities. Furthermore, we have compared the latest studies in pedagogy and language acquisition and learning in order to assess the legislation change. We are now presenting some of the conclusions and findings from that analysis.

Findings

In a first line of thought, we refer to the recent emergence of new movements of migrants which, in the last decades, have brought to Portugal many families from various origins and diverse cultural and linguistic practices. According to data collected in 2002 divulged by the Ministry of Education, the cultural origin of



students not born in Portugal was, at that time, mostly Cape Verde (about 5000 students) followed by Angola and Guinea. This migratory flow, originating from ex-colonies, is due to the fact that Portugal, a country with which there had already been some historical relations of affinity, had an increase in the level of quality of life in the 80's, after the integration of our country in the European Community. This was an attractive situation for many migrants who, with their families, settled here. This has resulted in a new reality and - until then - unknown in the country's schools: multiculturalism. Leiria (2005: 2-3) states that the composition of the school population in Portugal went from an almost absolute homogeneity to a great linguistic and cultural heterogeneity. Thus, Portugal, which until the 1970s was a country with few immigrants, began to receive students attending public schools from approximately a hundred nationalities.

From the cultural and social point of view, it is well known that integration was not easy to consolidate. Faced with the need for school integration of these new students, several challenges have arisen. It is true that these communities had relations with Portuguese language, although the linguistic competence was not enough to assure school achievement. Thus, the level of competences in Portuguese of these children inserted in our system of education has not always proved sufficient to achieve the desired goals of school success.

Some years later, the arrival of members of another community - the Brazilian one - has been noticed. This community does not seem to be the one that causes the most linguistic problems at school since the mother tongue is shared (Portuguese). With the Brazilians came some other migrants: the Chinese and the Indians. The problem of school insertion was felt mainly by the communities of Chinese and Indian origin, often engaged in commerce, but who, unlike the former, had no relation to the language or even to Portuguese culture. The challenge of integrating children to whom the very characters of the Portuguese alphabet constitute a set of completely unfamiliar symbols was much greater.

Countless questions arose within the schools and teachers were facing a task that seemed unthinkable before: teaching concepts in Portuguese to children who did not speak the same language. And this is still the case today in heterogeneous classes, where there are children whose mother tongue is Portuguese and children speaking very different mother tongues. New methodologies and practices prevailed, even before they had been legislated.

Portuguese legislation has been adapting somewhat slowly to this new reality.

In 2001 the National Curriculum of Basic Education (*Curriculum Nacional da Educação Básica*) explicitly referred to the existence of children in schools whose mother tongue is not Portuguese. In July 2005, the Ministry of Education issued a document aimed at guiding the integration of children who do not have Portuguese as their mother tongue in our national curriculum: Portuguese Non-Mother Language in the National Curriculum - Guidance Document (*Português Língua Não Materna no Currículo Nacional – Documento Orientador*). This document regulates compulsory inclusion of students whose mother tongue is not Portuguese and clearly demonstrates the importance of cultural diversity and enrichment within the cultural plurality: "The socio-cultural heterogeneity and the linguistic diversity of students represent a wealth that needs pedagogical and didactic conditions that are innovative and adequate for the learning of the Portuguese language ... " The measures include the creation of the Individual Student Process and the application of diagnostic tests of Portuguese language with the objective of adopting methodologies appropriate to the profile of each student. After this first diagnosis, students are placed in groups of similar proficiencies, with three levels based on the Common European Framework of Reference. Students will progress to the next level as they reach higher proficiency levels. More recently, in 2006, the Normative Order of 7/2006 frames the teaching of Portuguese as a non-native language in the legislative landscape. Portuguese, thus envisaged, is defined as integrating students who do not have Portuguese as their mother tongue.

In the National Curriculum of Basic Education, the essential competences of the Portuguese language are described as the official language, language of instruction and mother tongue of the majority of the population



and language of reception of linguistic minorities from other countries. In general, it is essential that the fluency of the Portuguese language gives young people the ability to understand and produce oral discourses and to interact correctly in different situations of life in society. In the domain of writing, young people should be able to produce different types of text with linguistic correction. The Portuguese language is, in Portugal, a factor of national and cultural identity and, at school level, it plays a fundamental role in the construction of competences from the different disciplinary areas. Cameron (2016: 241) states “At the root of learning is the process of making meaning out of participation in the social world.”

In our universe of studies, we recognize that children and school-aged pre-adolescents have access to countless contents of their interest using, for that, the lingua franca of computers: the English language. This language is the first to be used on the Internet since the second half of the 20th century and has been in place since then. People who use the Internet through the English language are not just native speakers from the United States, the United Kingdom or Australia but English non-native speakers from many other countries making up a total of more than 500 million users in English. This is extremely important in the motivation for informal learning of a foreign language.

This is how we came to a major change of language learning paradigm: the recognition of the importance of the English language in the European community and its inclusion in the Portuguese education system since the first cycle of basic education. English has now been officially integrated into the entire teaching / learning process at this level of education. Orlando Strecht-Ribeiro (1998: 43) summarizes this inclusion as follows (our translation):

The teaching of L.E. Should always be guided by principles that foster inter and transdisciplinarity, with a view to curricular integration that consecrates a simultaneously humanistic and holistic view of the child's education, and can therefore serve to contextualize the activities of other curricular areas or, creating context for LE activities.

We agree with this perspective of the foreign language within the general competences to be developed in the 1st Cycle of schooling as well as with the humanizing function that the teaching of the languages entails, in order to meet the purpose of describing the language competences as communication tools as described by the European Community. The political objectives set out by the European Commission in the Common European Framework of Languages direct the action to be taken in the field of living languages to the great objective of preparing the European peoples for mobility at all levels. The same document highlights the richness and cultural diversity of Europe expressed in linguistic differences and the danger of marginalization of those who do not have the skills to communicate in an interactive Europe.

English has been officially and gradually included in the 1st Cycle in recent years. Firstly, it was a non-compulsory study area but, although its frequency was not compulsory, the teaching of English was offered in all public schools, free of charge. The history that follows is brief. There were four years of experimentation and successive changes for a more comprehensive offer. Initially, the law 14 753/2005 approved the Program for the Generalization of English Teaching in the 3rd and 4th Years of the 1st cycle of Basic Education. English language learning was considered an essential process for the construction of a multilingual and multicultural awareness. This philosophy is imparted by the Common European Framework of Reference.

The official school offered children who attended the 3rd and 4th years of school the opportunity to learn English, based on the assumption that this extracurricular educational offer should increase and foster interest in learning this foreign language throughout life. In the long run, this linguistic competence should increase the economic competitiveness of Portuguese workers on a European scale. Thus, in this first period, the teaching of English was affirmed as a free educational complement, whose practical operationalization was defined by the law that created it. However, not all public schools were able to take advantage of this offer at the time.



The year 2005 was pioneer in terms of integration of the Program of Generalization of Teaching of English (Programa de Generalização do Ensino do Inglês) in public establishments. When we talk about a first period, we want to refer to the official instruction itself since, long before this offer by the Ministry of Education, there had been numerous autonomous and private projects in English Language Teaching that had been implemented in several schools in the country. These projects had been led and implemented by English teachers of other years of education other than 1st Cycle, by individuals and supported by parents, associations or even offered. Regrettably, there is no reliable record or survey of the number and scope of these projects, nor of its importance in preparing a more official action and in motivating. We believe that the study of these projects and their implementation would bring useful knowledge.

The following summer, Law 12 591/2006, which revoked the previous dated from 2005, changed the framework of the Program of Generalization of English Teaching in the 3rd and 4th years of the 1st Cycle of Basic Education. In this context, the framework became an activity of curricular enrichment, mandatory as an offer by all public schools for all 3rd and 4th years of schooling. However, it was still a curricular activity whose frequency was free and not compulsory. This situation raised some serious questions concerning the different linguistic competences of the children who reach the fifth year of schooling. Some children had already some competences in English whereas other children had none. Consequently, in the 6th grade around 2006, the English classes were heterogeneous as far as different knowledge and skills students had. At a later stage, the teaching was extended to the four years of the 1st Cycle of primary school, maintaining the nature of optional and being taught classes after the school hours, inserted in the projects of Curricular Enrichment Activities. In the year of 2016/2017 there was a big change in schools. English language Teaching became an official subject in primary schools. Currently, all schools offer English as a compulsory class and all children must attend these classes. Previously, a new group of teachers was legally formed: teachers who were pedagogically and scientifically prepared to teach a language to children. The formation of this new group of teachers and the adaptation of the school routine to include this subject led to the restructuring of all the objectives of English Teaching in all school cycles. Theoretically, it is now supposed that students who finish compulsory school have a good fluency in English.

The National Curriculum of Basic Education describes in its own chapter the main competences of foreign languages. As in the description of the competences of the Portuguese language, these capacities are organized in different competences according to the different cycles of official education. We focus on skills in the 1st Cycle of Basic Education. Competence in languages is defined as the appropriation of organized knowledge, which includes a culture and an identity of a people and the ability to strategically use the linguistic resources in real communication situation. Competence in a language also implies the metacognitive ability and recognition that knowledge in languages is constantly evolving and in constant interaction with the way of being, being and living of individuals. On the other hand, in the document underlies the concern of the articulated management of foreign languages and their integration in the other areas of Basic Education due to the similarities found in the general competences and the specific competences of the foreign languages. Stimulation and trust are key words in the official documents on foreign language learning which aim to "focus the teaching process on the promotion of an affective relationship with the foreign language" and that "learners are given opportunities to become involved in tasks and communicative acts that give them stimulating experiences" (*Curriculo Nacional do Ensino Básico – Competências Essenciais: 41*). The fact that awareness and affective involvement with language is emphasized is, in our point of view, extremely important and meaningful. However, it is important to seek to ascertain the extent to which these tasks are implemented and feasible in schools and to acknowledge the obstacles to their actual put in practice. The competence of lifelong language learning involves the development of communicative projects for the real use of living languages, for a subsequent awareness and reflection of the language (which can only be achieved in most cases by children aged over 10) and the ability to use strategies that allow the use of the language according to their skills in communicational situations.



The introductory paragraph to the guiding principles of the specific competences of foreign languages summarizes the necessary opening of the school to different ways of being, living and living that communicate through the languages of each culture. This introduction, which we could not ignore in this work, shows the recognition of children from different cultures and the need to prepare ourselves for the linguistic and cultural diversity that constitutes the Europe of our century as responses to social and economic turbulence. The new paradigm of the labor market. In the following section of the document, foreign language learning, particularly English, is embedded in the broader competence of the communication of various languages - verbal, visual, auditory and body language - and of individual cognitive, socio-affective and psychomotor skills.

In the early stages of English learning process, it is preferable to use oral language through the reception of stories, tongue twisters, rhymes and songs and simple instructions in English, the visualization of posters and advertisements or small written messages and participation in dialogues or dramatic expression games. The emphasis is placed on the oral and playful activity that mobilizes the interest and motivation of the students always in articulation with the activities developed in the curricular areas. In addition to the essential motivation and awareness of the foreign language, it is intended that children can become familiar with the sounds and intonations of English and memorize and recognize them through the reproduction of small statements of their own day-to-day communication situations.

According to Herschensohn (2013: 233) "...social contexts and discourse in the constitution of learner identity, identity researchers foreground L2 learning as a sociocultural process and not solely cognitive." The framework of the specific competences of foreign languages within the general competences is a framework comparable to a whole for a part: the linguistic resources of the languages are inserted in the understanding and the approach of the problems of daily life; the communicative acts of the English language complement other languages of visual, auditory and even paratextual nature. If a mother tongue serves to communicate properly, the real use that foreign languages must have will be the same: to transmit something in communication situations.

Results, Conclusions and Recommendations

The basic idea is that language is a unique tool of cultural and social values. These values can never be forgotten when we teach a language, whether it is the majority language of a population or a minority language, as well as its social use. On the other hand, we rejoice to realize that language is theoretically treated through a cross-cultural and multicultural relationship within the general context of all school subjects. The school is the foundation of formal (and sometimes informal) language teaching and this function carries other functions and responsibilities of extraordinary value. Whether Portuguese as the lingua franca for all school subjects, whether English as a lingua franca of an economic and social Europe, both approach the human value they possess. In Portuguese official documents produced in the light of the Common European Framework of Reference, languages are a passport of tolerance because they provide access to all knowledge and for transmitting the human, social and economic values of Europe and the world.

References

- Cameron, Lynne (2016). *Teaching Languages to Young Learners*. Cambridge: Cambridge University Press.
- Conselho da Europa (2001). *Quadro Europeu Comum de Referência para as Línguas*. Porto: edições Asa.
- Curriculum Nacional do Ensino Básico Competências Gerais. Ministério da Educação.
- Fischer, Glória. "Políticas Linguísticas numa Europa Multilíngue e Multicultural". Ministério da Educação, Direcção Geral de Inovação e Desenvolvimento Curricular, Lisboa, 26 de Setembro 2004.



- Herschensohn, Julia (ed). (2013). *The Cambridge Handbook of Second Language Acquisition*. Cambridge: Cambridge University press.
- Ribeiro, Orlando Strech (1998). *Línguas Estrangeiras no 1º Ciclo - Razões, finalidades, estratégias*. Livros Horizonte.
- Português Língua Não Materna no Currículo Nacional – Documento Orientador. (Julho 2005) Ministério da Educação.



Homework's in Primary School: the Case of Curricular Area of “Environmental Study”

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Abstract

This research seeks to develop a critical reflection that frames, characterizes and evaluates the homework as a teaching strategy in the curricular area of “Environmental Study” in the Portuguese primary education. For that, we considered three dimensions: the type of methodology used; the number of homework assignments; the duration of the assignment by the student according to the time provided by the teacher. For methodologic purposes, we follow the case study method as we wanted to investigate the homework during a definite period in a narrative and profound way. An original instrument, called *Homework Data Collection*, was created to answer the research questions. The results show that there isn't preferred homework methodology, which is reflected in a lack of proportionality between working time and study hours of “Environmental Study” and in a marked discrepancy between the time determined by the teacher and the effective time that the student took.

Keywords: Homework, Primary school, Environmental Study

Introduction

Education is seen in every age in a very different way, fulfilling the aspirations that shape each generation. As such, Education is an organic process, which, cyclically, is recycled / renewed by the concern to maintain quality standards and by the intellectual goals of education, without ever abandoning the premise on which education serve as a means to prepare balanced citizens for democracy. (Bruner, 1977).

As such, the educational process in exercising a very great influence in society should be the subject of deep reflection. This reflexive spirit must not fail to scrutinize everyone in the process, trying to answer questions such as: What should we teach? With what ends? And what strategies to develop? Where the school constitutes the center of the school and the family and the teachers as conditioning agents / facilitators of the educational process.

The Portuguese educational system LBSE (Law nº 46/86 of October 14, art. 7: 3069), legitimizes the compulsory and free universal character of basic education, in which primary education is integrated.

(...) basic education is the stage of schooling in which the democratic principle that informs the entire educational system is made more widely, and in turn contributes decisively to deepening the democratization of society in a perspective Development and progress, by promoting the individual realization of all citizens, in harmony with the values of social solidarity, and by preparing them for a useful and responsible intervention in the community (ME, 2004: 11).

This level of schooling comprises four years of schooling, with an average frequency of 6 to 9 years, providing a globalizing teaching of the responsibility of a single teacher, with competences being developed in the following curricular areas: Portuguese, mathematics, study of the environment and artistic and physical-motor expressions. Primary education is governed by a formal curriculum of its own and each area has a curriculum as well as targets to be met. It should be noted that the curricular plan of this basic cycle also supports the integration of experimental and research activities in the work to be developed by the students, appropriate to the nature of the different areas, namely in science teaching. But, the School is also



an institution for the promotion of social values, never ceasing to be inclusive, and instrument used by the citizen for social ascension.

It is in this context that the School should develop a set of educational strategies inside and outside the classroom. One of those that has divided the school and scientific community is the achievement or not, by the students, of works outside the context of the classroom, commonly known as "homework".

The terminology "homework" (TPC) is widely known by some authors as the most timeless teaching strategy used throughout the world. The literature defines TPC as the academic work prescribed by the teacher in the school, and which must be completed by the students outside the school, overtime, usually at home and, therefore, without the direct guidance of the teacher during their performance (Rosário, P., et al., 2005, Cooper, 2001). This concept is further exaggerated by excluding school-based study, home-based correspondence courses on television, audio or video, or on the internet, and extracurricular activities such as group sports and clubs (Cooper, 2001). Already for Corno (2000), TPC is not limited to classrooms, where the teacher and the student occupy the main role, extending to third parties (parents, explainers and other members involved in the educational process) and whose role may be Essential for the final quality of the work done.

Marzano and Pickering (2007) state that teachers should not abandon TPC. Instead, they argue that their instructional quality should be improved, challenging a reflection on the role of CPT as a strategy for student success. As part of a range of strategies that have been maintained over time, along with the expository method, homework was seen for many years in our educational system as an important pedagogical resource for the consolidation of knowledge, yet in the Recent years a part of the scientific community has looked critically at these tasks, not recognizing pedagogical value. This line of thought has created a sharp divide between researchers who recognize the value of homework and those who view these tasks as a hindrance, resulting in relatively dense scientific output with well-defined positions.

Being a controversial subject in the universe of Education, the TPC are well studied, with a vast literature that gave rise to more traditional models and, more recently, to other models of self-regulatory matrix. In the more traditional TPC models the focus is directed to the analysis of the degree of involvement of students with homework vary according to the support provided by the teacher (s) and the parents or caregivers (Bembenutty, 2005). In this universe of models, one of the first to emerge was Cooper's procedural model (2001), first presented in 1989 (Cooper, 1989a). The Cooper model defines as exogenous factors that can influence the effect of the TPC on the individual characteristics of the students, with emphasis on competence, motivation and study habits, curricular discipline with respect to TPC, student's year of schooling, as well as Individual differences, which include, for example, gender and socio-economic conditions. As for endogenous factors, the model presents them by dividing them between the characteristics of the task and the home-community phase, where potential influences are defined to the effects of CPT. Finally, the model presents the possible consequences of the TPC process in terms of its final results (Cooper et al., 2006).

The originality of the Cooper model from the previous ones is in the introduction of the characteristics of the TPC tasks as potential mediators of this process. It considers that the following should be taken into account: load, objective, area of competence used (eg, reading, writing), degree of individualization, degree of student choice, completion period and social context. It should also be pointed out that in this model the emphasis is placed on parental factors associated with CPT, in detriment of self-regulating factors regarding students. This selection puts aside the specific processes used by the students during the realization of the TPC, where they are inserted, goal setting, planning, self-monitoring, self-assessment, self-instruction or self-reaction, characteristic of a more specificity of the task.



This research that focuses on CPT in primary education, at this stage of the study, is focused on the curriculum area of the Study of the Environment. According to (Roldão, 2004) this area seeks the understanding of the world. It seeks to bring the child closer to the natural-environmental, physical and social reality.

Children of this age level perceive reality as a globalized whole. For this reason, the Study of the Environment is presented as an area for which concepts and methods from various scientific disciplines such as History, Geography, Nature Sciences, Ethnography, and others compete, thus contributing to the progressive understanding of the interrelationships between Nature and Society. (M.E., 2004: 101)

Method

As stated before the followed methodology is the case study method as we wanted to investigate the homework during a definite period in a narrative and profound way. But, before presenting the methodological instrument we must go through the research questions.

According to the existing literature and some exploratory studies developed previously (Corno, 2001; Xu, 2005; Xu & Yuan, 2003), this work seeks to answer the following questions:

Research question 1: Which is the homework's methodology preferred by teachers?

Research question 2: The number of Environmental Study's homework per week is proportional to the number of hours per week of this subject?

Research question 3: Is the time predicted by the teachers in the accomplishment of the homework similar to the time needed by the children in the accomplishment of that homework?

Instrument

In order to answer the research questions, an original instrument was created called Homework Data Collection. This instrument was validated by conducting a pilot test, in which teachers from the Primary School participated. After the corrections, the instrument was delivered to the 8 teachers who began collecting data on Homework in the subject of Environmental Studies.

This instrument seeks to analyze the teacher and children's perspective on Homework. For this purposes, it was collected, at the teacher level, the methodology used and the time provided for the accomplishment of this task. In students' side, it was registered the accomplishment/not accomplishment of this task and the effective time for its accomplishment.



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RECOLHA DE DADOS DOS TRABALHOS DE CASA

1. Caracterização	
Professor:	
Turma:	
Semana:	
2. Marcação do TPC (responder sim/não)	

Dia da Semana	2ª feira				3ª feira				4ª feira				5ª feira				6ª feira			
Disciplina/Área	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o***	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o***	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o***	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o***	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o***
Matemática																				
Português																				
Estudo do Meio																				

* 1- Do manual/Caderno de atividades/Caderno de Fichas. (Colocar a respetiva(s) página(s)); 2 - Autoria do Docente

** 1 - Ortografia; 2 - Caligrafia; 3 - Gramaticais.

*** 1 - Memorização; 2 - Escrita Criativa; 3 - Preparação para Fichas de Avaliação/Provas Nacionais

3. Tempo previsto do TPC (responder em minutos)	

Dia da Semana	2ª feira				3ª feira				4ª feira				5ª feira				6ª feira			
Disciplina/Área	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o
Matemática																				
Português																				
Estudo do Meio																				

1 - de 0 a 5 min.; 2 - 5 a 10 min.; 3 - de 10 a 15 min.; 4 - de 15 a 20 min. 5 - mais de 20 min.

Realização do TPC (responder com nº alunos que não realizaram)	

Dia da Semana	2ª feira				3ª feira				4ª feira				5ª feira				6ª feira			
Disciplina/Área	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o
Matemática																				
Português																				
Estudo do Meio																				

5. Onde realiza o TPC (Assinalar com um (X) o local onde realizam o TPC)	

Dia da Semana	2ª feira			3ª feira			4ª feira			5ª feira			6ª feira		
Disciplina/Área	Apoio ao estudo (Escola)	Centro de Estudos	Casa	Apoio ao estudo (Escola)	Centro de Estudos	Casa	Apoio ao estudo (Escola)	Centro de Estudos	Casa	Apoio ao estudo (Escola)	Centro de Estudos	Casa	Apoio ao estudo (Escola)	Centro de Estudos	Casa
Matemática															
Português															
Estudo do Meio															

6. Tempo efetivo na realização dos TPC (Apenas para os alunos que realizam os TPC no Apoio ao Estudo)	

Dia da Semana	2ª feira				3ª feira				4ª feira				5ª feira				6ª feira			
disciplina/área	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o	Ficha de Trabalho	Resolução de Problemas	Exercício s de: **	Outr o
Matemática																				
Português																				
Estudo do Meio																				

1 - de 0 a 5 min.; 2 - 5 a 10 min.; 3 - de 10 a 15 min.; 4 - de 15 a 20 min. 5 - mais de 20 min.

7. Com quem realizo os trabalhos de casa. (Assinalar com um (X))	

Dia da Semana	2ª feira				3ª feira				4ª feira				5ª feira				6ª feira			
Disciplina/Área	Professor do apoio	Pais	Irmãos	Outr o*	Professor do apoio	Pais	Irmãos	Outr o*	Professor do apoio	Pais	Irmãos	Outr o*	Professor do apoio	Pais	Irmãos	Outr o*	Professor do apoio	Pais	Irmãos	Outr o*
Matemática																				
Português																				
Estudo do Meio																				

* 1- Professor do Centro de Estudos; 2 - Familiar Próximo (tio, primo, ...); 3 - Outro



Research sample

Teachers characterization: in this study participated 8 teachers (87.5% are female and 12.5% male) with an average age of 36,6 years old. Also; it is a group of relatively young teachers with an average of 10,5 years of teaching experience, almost all the time (average 9,8 years) in primary school level.

Students characterization: 163 children between 6 and 10 years old (55% are male, and 45% female) of a primary school located in Portugal's inland region. The children are spread over 8 classes, 2 for each one of the 4 levels. So, each class presents an average of 20,3 children.

Findings

With the data collected so far, we have about 25 complete weeks of data available in all the subjects. This gives us an average of 2,64 homework assignments per week, but only 17% of that value corresponds to homework related to Environmental Studies. The associated variance is very small, typically a standard deviation distance away.

We also registered the week days of assignments (see Table 1 for an example).

Table 1: Week day versus number of assignments

Week day	Number of assignments (%)
Monday	34%
Tuesday	0%
Wednesday	38%
Thursday	28%
Friday	0%

Clearly the assignment day has to do with the school structure and thinking about homework. The three days where we can find homework assignment are the three days that the school offers extra after school support from the teacher.

About the distribution of the type of homework within the disciplinary area of Environmental Studies we got 33% for Work Sheet, 42% for Exercice types, 17% for Other type and only 8% for Problem Resolution.

The total time for all classes to carry out the homework was 964,26 minutes, that means 14,61 minutes/week/class. So, considering an average class teaching time of 3,5 hours, homework takes around 7% of class time.

Only in 6% of the times, we found differences between the teacher's perception and the real time that takes to accomplish the task by the children. In these 6%, most of the perception errors are less than 5 minutes per defect, that is, teachers tend to consider that it takes less time to perform the task than what actually happens. We can, then, estimate a global perception mislead of 3%.

Results, Conclusions and Recommendations

During this investigation, we found the following:

- First, and answering the first research question, about the preferred methodology, we can say that neither the Work Sheet neither the Exercises are the preferred homework by the teachers;
- Second, and answering the second research question, about the proportionality between homework time and a number of teaching hours of Environmental Studies, we can say that, in average, there is a proportionality of 7%, but there are so many differences between the classes. Just as an example, one of the classes did not have any homework in this four week period, while other class reached a maximum of nine homework's in the same period.
- And third, and answering the third research question, about the teacher's perception of the time necessary to accomplish the homework on Environmental Study, we can say that most of the times teachers have a good perception of the time needed to perform the homework. So, the existing erroneous perception is very small.



According to the results, we can conclude that, for the curricular area of Environment Study, there isn't preferred homework's methodology, which is reflected in a lack of proportionality between working time and study hours of Environmental Studies and in a not so marked discrepancy between the time determined by the teacher in the performance of the homework and the effective time that the student took to perform the tasks.

As a recommendation for the next steps, we will follow this study through the two other areas, Mathematics and Maternal Language and try to compare the relative importance teachers attribute to each one. As a second idea we will try to find international studies, at least for the Mathematics case, to gain comparative strength.

References

- Araújo, M., J. (2006). *Crianças Sentadas! Os “trabalhos de casa” no ATL*. Porto: Livpsic.
- Bembenutty, H. (2005). Predicting homework completion and academic achievement: The role of motivational beliefs and self-regulatory processes (Doctoral dissertation). City University of New York, ProQuest Dissertations Publishing (UMI Number: 3159198)
- Bruner, Jerome S. (1977). *The process of education*. Harvard University Press.
- Calleja, J. (2008). Os professores deste século. Algumas reflexões. *Revista Institucional Universidad Tecnológica Del Chocó: Investigación, Biodiversidad Y Desarrollo*, 27(1), 109–117.
- Corno, L. (2001). Volitional Aspects of Self-regulated Learning. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical Perspectives* (2nd ed.) (pp. 191-225). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Cooper, H. (2001). *The battle over homework: Common ground for administrators, teachers, and parents*. Thousand Oaks: Sage.
- Hoover-Dempsey, K. V, Battiato, A. C., Walker, J. M. T., Richard, P., Dejong, J. M., Jones, K. P., & Reed, R. P. (2001). Parental Involvement in Homework Parental Involvement in Homework. *Educational Psychologist*, 36(3)(April 2001), 195–209. <http://doi.org/10.1207/S15326985EP3603>.
- Marzano, R. J. and Pickering, D. J. (2007). *The case for and against homework*. Educational Leadership.
- MINISTÉRIO DA EDUCAÇÃO (2004). *Organização Curricular e Programas: Ensino Básico – 1º Ciclo* (4ª ed.). Lisboa: ME:DEB.
- ROLDÃO, M. C. (2004). *Estudo do meio no 1º ciclo – Fundamentos e estratégias*. (2ªed.) Lisboa: texto editores, Lda.
- Rosário, P., Mourão, R., Soares, S., Chaleta, E., Grácio, L., et al. (2005). Trabalho de casa, tarefas escolares, auto-regulação e envolvimento parental. *Psicologia em Estudo*, 10(3), 343-351.
- Takaya, K. (2008). Jerome Bruner's Theory of Education: From Early Bruner to Later Bruner. *Interchange*, 39(1), 1–19. <http://doi.org/10.1007/s10780-008-9039-2>
- Xu, J. (2005). Purposes for doing homework reported by middle and high school students. *Journal of Educational Research*, 99, 46-55.
- Xu, J., & Yuan, (2003). Doing homework: Listening to students', parents', and teachers' voices in one urban middle school community. *School Community Journal*, 13(2), 23-44.



Development of Informatics Curriculum in Czech Schools; Possible Implications For Teacher Education

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Abstract

The article focuses on the current concept of Computer Science education from the perspective of Czech Computer Science teachers and their opinions on and attitudes to the present situation in ICT education, and deals with the degree to which those teachers are or are not prepared for the upcoming changes. This should form the basis of changes in the training of the existing students of teaching as well as already practising teachers. A fundamental area for our paper is the mutual link between mathematics and Computer Science education, the use of one field in the other, and the possibilities and degree of implementation of these (to us logical) inter-subject links in the present-day education reality. The tool for our survey is a questionnaire distributed among more than a hundred Czech teachers. The outcome is the presentation of selected results of our survey.

Keywords: Lifelong education, Information technology, Curriculum of Computer Science education

Introduction

The present concept of Computer Science education from the perspective of Czech informatics teachers At present, the Czech school system, as the school systems in many other countries (Webb, Davis et al., 2016; Yadav et al., 2016; Bučková & Dostál, 2017), is intensively addressing the reform of Computer Science education & the related definition of informatics didactics as such. The teaching trend, to a considerable degree maintained at most Czech schools, i.e. in most Computer Science subjects, consisted in building pupils' skills in working with ICT devices. Teaching was thus focused primarily on managing the technology and understanding how it works in terms of hardware; it was considerably less oriented at software and the development of computational thinking, algorithmicising, problem solving and programming. The experience in our neighbouring country – Slovakia – is similar, nevertheless as Bučková & Dostál (2017, p. 201) observed, *the Slovak curriculum presents the requirements for this teaching subject significantly more clearly* and according to Blaho (2012) the common main problem remains; *at present it's probably the misunderstanding of the real goals of informatics, neglecting some key areas, the very laic view of what informatics is and how it differs from the work with ICT*. In the light of the above, we will use the term *Computer Science* or *Informatics education* to describe the discipline.

The real objectives at which the reform of Computer Science education is aiming are (Strategy for Education Policy of the Czech Republic until 2020, (2014); Strategy for Digital Education, (2013); Framework Education Programme for Basic Education; Brdička et al., 2015):

- ☐ new ways of education using digital technologies,
- ☐ creating and using open educational resources,
- ☐ development of digital skills and computational thinking of pupils,
- ☐ algorithmicising,
- ☐ programming,
- ☐ emphasising the generally applicable principles and mechanisms “resistant” to changes in hardware or software,
- ☐ development of digital skills and computational thinking of teachers,
- ☐ etc.



We believe that informatics as a field closely related to mathematics is supposed to develop thinking, just like mathematics. The basic factors of thinking developed by mathematics and informatics are combined, and the effects of such education on the development of thinking in pupils are amplified. Computer science classes may help reinforce some mathematical skills and processes (NCTM, 2016; Cheng, 2016) and conversely, mathematics is a fundamental discipline for computer sciences, because the main benefit we got from the mathematics we *learned in school and at university was the experience of rigorous reasoning with purely abstract objects and structures* (Devlin, 2001). That is why we consider it beneficial to suitably interconnect and integrate knowledge gained in both these fields (i.e. both these school subjects), and address problems using the methods and tools of both the disciplines in parallel. One of the key concepts is becoming computational thinking and its development. As Vaníček & Černochová (2015) explains, *computational thinking is a method generally applicable to solve problems, in particular using the computer*. In available Czech sources is the concept of computational thinking described in detail by Lessner (2014).

The creation of tools to solve mathematical problems at a general level of difficulty defined in education programmes for primary and secondary schools using computers is then possible with minimum software equipment. Such problems can also be solved, subject to a good user knowledge of the program, using table calculators by means of pre-set tools and functions, or it is possible to create comprehensive applications with the necessary prerequisite of programming knowledge (e.g. in Visual Basic for Application).

Method

In order to find out the opinions of teachers on the current state of Computer Science education in the Czech Republic and attitudes to possible changes in the current curriculum of informatics, we have worked out a questionnaire, whose selected problems and results will be dealt with in the following text.

The survey was attended by 123 primary and secondary school teachers in the Olomouc region, who teach informatics disciplines at schools. The examined sample consisted of 57 men and 66 women, teachers with less than 10 years of experience constituting 17% of the sample, and 83% teachers with a practice of more than 10 years. Mathematics as the second discipline was taught by 65 teachers from the sample surveyed. This group includes primary school teachers, as they teach most subjects in the vast majority of cases.

As a research tool, we chose a questionnaire, distributed to teachers in electronic form, using Google Docs. The partial part of the questionnaire contained 32, mostly closed items.

Selected partial findings and results

We have tried to find out the opinion of teachers about the need to change the curriculum of others, teaching Computer Science directly or indirectly unrelated subjects (see tab. 1).

Do you think that, together with the innovation of the content of Computer Science, it is necessary to inovate content and related subjects?

Table 1. Problem: Educational content inovation of related disciplines

	Absolute	Relative frequency	Agree vs Disagree
I agree	15	12%	61%
I rather agree	60	49%	
I rather disagree	36	29%	
I disagree	12	10%	39%
Total	123	100%	100%

From the data obtained, it is clear that changes in the content and other subjects in the context of the change in the curriculum of computer-aided subjects are seen by more than half (in the sum of the frequencies of "I agree" and "I rather agree" categories 61%) of ICT teachers as necessary. In a further logical question, teachers were



asked to specify the subject or objects to which content innovations should relate. *"Do you think it would be appropriate to innovate, with regard to the innovation of the content of Informatics, the content of any of these subjects?"* Teachers selected from the choices they offered, but also answered in the form of a free answer. Mathematics was the most common answer (60 in total, but 35 of the respondents were maths and 25 were subjects of mathematics). It is a slight surprise that among teachers teaching both Computer Science and mathematics, the numbers of those who feel the need to change the curriculum of mathematics in relation to Computer Science are roughly the same as those who do not feel this need.

Another chosen question tried to find out the specific, useful application for teaching: *"In your opinion, which application would be the most appropriate if emphasis was placed on greater use of information topics in mathematics?"* Teachers selected from the options available, overwhelming majority 99 respondents (80%) voted the MS Excel spreadsheet or the like, very often they also featured dynamic geometry tools – Cabri Geometrie (62 teachers) and less Geogebra or AutoCAD.

The following question was used to find out the appropriate topics of interconnection between Computer Science and mathematics: *"Which topics could you think about using Mathematics in Informatics?"*

Teachers once again chose the options offered, but they also responded in the form of a free answer, choosing more than one answer. The most frequently mentioned option, in 109 cases, was the use of graphical capabilities of programs to generate graphs and geometry and drawing (72). Another often mentioned option was solving equations (61). Teachers also often mentioned the option *Calculating Percentage* – 54 respondents. Rarely in the number of frequency units, the topics of *work in numerical systems - binary, hexadecimal etc., databases, basics of statistics*, etc.

Question *"Do you think that using the themes solved and taught in your Informatics lesson can help your pupils in mathematics teaching or self-study of mathematics – visualize mathematical concepts?"* 71% of teachers answered positively (*I agree* or *I rather agree*), see tab. 2.

Table 2. Problem: Visualization mathematical concepts

	Absolute	Relative frequency	Agree vs Disagree
I agree	48	39%	71%
I rather agree	39	32%	
I rather disagree	30	24%	
I disagree	6	5%	29%
Total	123	100%	100%

Question *"Do you think that using the themes dealt with and taught in your Informatics lesson can help your pupils in teaching or self-study of mathematics learn at their own pace?"* 68% of teachers responded positively (*I agree* or *I rather agree*).

Table 3. Problem: ICT as a selfstudy support in mathematics

	Absolute	Relative frequency	Agree vs Disagree
I agree	24	19%	68%
I rather agree	60	49%	
I rather disagree	27	22%	
I disagree	12	10%	32%
Total	123	100%	100%

In next question, we have further investigated the views of teachers on the appropriateness of some selected mathematical themes: *"Do you think that it is appropriate to use the mathematical themes such as linear*



Calculus (eg MS Excel, OpenOffice Calc, etc.) $y = 2x + 3$ – calculating functional values, plotting a function graph, etc.?" In this question the share of positive responses was again lower, a total of 61%.

Table 4. Problem: Appropriateness of ICT support in selected mathematical themes.

	Absolute	Relative frequency	Agree vs Disagree
I agree	30	24%	61%
I rather agree	45	37%	
I rather disagree	36	29%	
I disagree	12	10%	39%
Total	123	100%	

Conclusions and Recommendations

The professional support of teachers of informatics and the system of further education of Computer Science teachers is similarly fragmented as did its didactics: there is no elaboration and no system of training or conference of teachers focused on the teaching of ICT, there is no guarantor (the professional association *Jednota školských informatiků* does not have a massive contact with teachers from practice). The possible causes of isolation of Computer Science teachers are also seen in the low endorsement of teachers who often do not feel like ICT and do not tend to be professionally educated, grouped and communicated (Vaniček, & Černochová, 2015, p. 184).

These results indicate one of the direction in which teachers education should be prepared in relation to the changes underway, including in their lifelong learning. But this is only a part of problem – it is problem *what to teach using IT*. The field is much more complex, known as Technological Pedagogical Content Knowledge – TPACK (Niess, 2015).

In order for changes to be feasible to the requirements of the socio-economic and technological level of society, they must primarily be reflected in the education and support of current teachers. It is a positive finding that addressing teachers strongly perceives the need not only for informational education reforms, which are in line with planned innovations, but we have found them in another part of the research. However, they also perceive the need to respond to planned changes in the curriculum of other subjects.

In relation to the curriculum of mathematics we see consistently with the addressed teachers appropriate interconnection in the presentation and solution of complex mathematical problems to pupils in the general level of solutions using technological means and development of generally valid, common skills and procedures for mathematics and Computer Science, such as topics of algorithmicising, problem solving and the basics of logic. As a suitable topic, general solutions of linear and quadratic functions, functional value calculations, plotting of graphs, solutions of linear and quadratic equations and their systems, using different mathematical approaches (algebraic, geometric, etc.), and the development of appropriate solutions, or creating custom programs.

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References

- B. Brdička a kol., (2015). Standardy pro základní vzdělávání – Informační a komunikační technologie", Metodický portál RVP.
- Bučková, H., Dostál, J. (2017). Comparative research of the content of informatics as a teaching subject at basic schools in the Czech republic and Slovakia. EDULEARN2017. DOI: 10.21125/edulearn.2017.1046



- Blaho, A. (2012). Informatika v štátnom vzdelávacom programe. In I. Kalaš (Ed.), *Sborník DidInfo 2012* (p. 7–14). Banská Bystrica: Univerzita Mateja Bela. Available from: <http://didinfo.umb.sk/sk/138/zbornik.html>
- Cheng, H. Teaching math with computer programming can help narrow achievement gap. Available from: <https://edsources.org/2016/teaching-math-with-computer-programming-can-help-narrow-achievement-gap/563371>
- Devlin, K. (2001). The real reason why software engineers need math. *Communications of the Association for Computing Machinery*. 44(10). 21-22. DOI: 10.1145/383845.383851
- Framework Education Programme for Basic Education. Available from: <http://www.msmt.cz/vzdelavani/zakladni-vzdelavani/framework-education-programme-for-basic-education?highlightWords=Framework+Education+Programme+for+Basic+Education>
- Lessner, D. (2014). Analysis of term meaning „computational thinking“. *Journal of Technology and Information Education*. 6(1). 71-88.
- Národní ústav pro vzdělávání, (2016). Informační a komunikační technologie, Rámcový vzdělávací program pro základní vzdělávání. Available from: http://www.nuv.cz/uploads/RVP_ZV_2016.pdf
- NCTM, 2016. Computer Science and Mathematics Education — NCTM position statement. Available from: http://www.nctm.org/uploadedFiles/Standards_and_Positions/Position_Statements/Computer%20science%20and%20math%20ed%20022416.pdf
- Niess, M., L. (2015). Transforming Teachers' Technological Pedagogical Content Knowledge for Teaching Mathematics with Technology Through Online Professional Development. Available from: <https://www.researchgate.net/publication/288832884>
- Strategy for Digital Education, (2013). Available from: <http://www.msmt.cz/uploads/DigiStrategie.pdf>
- Strategy for Education Policy of the Czech Republic until 2020, (2014). Available from: http://www.vzdelavani2020.cz/images_obsah/dokumenty/strategy_web_en.pdf
- Vaniček, J. & Černochová, M. (2015). Didaktika informatiky na startu. In: Stuchlíková, I. & Janík, T. et al. *Oborové didaktiky: vývoj – stav – perspektivy*. Brno, 2015. ISBN 978-80-210-7884-0. DOI: 10.5817/CZ.MUNI.M210-7884-2015
- Webb, M., Davis, N., Bell, T., Katz, Y. J., Reynolds, N. Chambers D., P., & Sysło, M., M. (2016). Computer science in K-12 school curricula of the 21st century: Why, what and when? *Educ. & Inf. Tech.* 22(2). DOI 10.1007/s10639-016-9493-x
- Yadav, A., Gretter, S., Hambrusch, S. & Sands, P. (2016). Expanding computer science education in schools: understanding teacher experiences and challenges. *Computer Science Education*, DOI: 10.1080/08993408.2016.1257418



Corpus of Crisis Management: Security versus Safety

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Abstract

Such a complex process like crisis management can only be discussed and understood with success if there is agreement on the meanings of its essential terminology. Enhancing and harmonizing the application of existing crisis management terminology goes hand in hand with the need for establishing and coordinating risk management guidelines and practices. Significant changes have also been taking place in the theory and practice of lexicology, as a result of new technology for data-processing and text-based research. Dictionaries are founded on authentic usages of words, their collocations and semantic domains they are associated with. However, large, complex units of meaning are often absent from dictionaries and terminological glossaries. Therefore study of crisis management terminology would be beneficial for the needs of education and training of authorized personnel on individual levels of management. The paper deals with two key terms of crisis management terminology, security and safety. After a short introduction, the method of analysing the data collected in a crisis management corpus is described. The data on two crisis management terms have been collected in a computerized crisis management corpus and processed with the help of Sketch Engine, a web-based program. Then the concepts of security and safety are introduced together with the areas to which the terms are most frequently related. The summary of security/safety collocations includes the section of common patterns, with similarities as well as differences in their connotations. Finally, several conclusions, which are drawn after analysing the distribution and frequency of terms, reveal the fact that traditional concepts of security and safety have been broadened and reflect changes in society and science.

Keywords: Crisis Management, Security, Safety, Corpus

Introduction

Nowadays, societies face crisis challenges of a different nature. The concept of *crisis management* (CM) has gained new prominence on the political agenda both in domestic as well as international fields. The area of crisis management has gained a large potential for development. Organizations and all societies have begun to address non-traditional threats to *security*, including the challenges brought on by the consequences of political, economic and environmental stress. “*Security*” and “*safety*” are topics of continual change based on new scientific discoveries and analyses of incidents in the field, as well as on new technologies and concepts of social responsibility.

The author has carried out lexicological research in the corpus of crisis management and this paper is focused on presenting the analysis of two terms in particular, *security* and *safety*.

Method

The data on key terms have been collected in a computerized crisis management corpus while considering both qualitative and quantitative criteria. Topics of authentic materials written in English language scientific style cover the areas of waste, food, hazardous materials, accidents, infrastructure, environment, health and *safety*, terrorism, *security*, civil protection, and military. The corpus includes 1.5 million words in whole texts and sentences.

The distributions of lemmas and their combinations have been identified and the frequent collocations being used in a corpus have been compared with the help of Sketch Engine. Sketch Engine is a web-based program having a number of language-analysis functions, for example the Concordancer, the Word Sketch Program, etc.



The Concordancer displays all occurrences for a given query and the Word Sketch Program displays a corpus-based summary of a word's grammatical and collocational behaviour. (Sketch Engine Manual 2014)

Findings

The New Oxford Dictionary of English (Pearsall & Hanks (Eds.) 1998: 1635, 1681) defines the terms *security* and *safety* in the following ways:

“*Safety*: 1) The condition of being protected from or unlikely to cause danger, risk or injury.

Denoting something designed to prevent injury or damage, e.g. *safety* barrier.

Security:

1) The state of being free from danger or threat, e.g. ‘the system is designed to provide maximum *security* against toxic spills;’

The *safety* of a state or organizations against criminal activities such as terrorism, theft or espionage;

Procedures followed or measures taken to ensure such *safety*;

The state of feeling safe, stable and free from fear or anxiety;

From the Latin word ‘*securus*’; ‘*se*’-without, ‘*cara*’ – care, - ‘*securus*’ – free from care.”

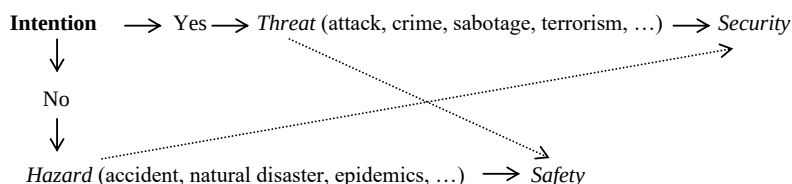
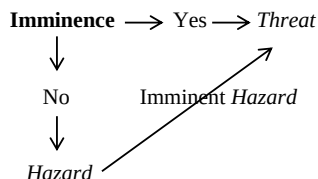
Safety deals mostly with *hazards*, while *security* deals mostly with *threats*. The above mentioned tendency is supported by the collocations *security threats* and *safety hazards* having been recorded 20 times and 14 times respectively in the crisis management corpus. The collocations with the key nouns being interchanged have not been recorded.

Although a detailed analysis of the terms *threat* and *hazard* is beyond the scope of this paper, it is worth mentioning some differences for the sake of clarity. When analysing the various definitions of *threats* and *hazards* the following distinction can be made: “*hazard* is defined as a potential source of harm,” (quoted in Blanchard 2008: 530; cf. ISO Guide 73 2009, definition 3.5.1.4) while “*threat* is either the presence of a *hazard* and an exposure pathway...,” or “the likelihood of a *hazard* occurring.” (quoted *ibid.*, 1181) The term *threat* may be distinguished from the term *hazard* by its intention (Trumble & Stevenson (Eds.) 2002: 3251) and/or imminence (presence or likelihood according to Blanchard) despite the fact that both collocations *imminent hazard* and *imminent threat* have been identified in the CM corpus. *Imminent hazard* may include a severe weather event, already occurring or imminent; or wild fire, an unplanned, unwanted wildland fire including fires caused by people. The following explanation of *imminent health hazard* has also been recorded in the CM corpus: “*imminent health hazard* is a significant *threat* or danger to health considered to exist when there is evidence sufficient to show that a product, practice, circumstance, or event creates a situation that requires immediate correction or cessation of operation to prevent injury.”

(“Definitions. Imminent Health Hazard” 2006: 1)

Shearer and Liotta (2011: 5) state that “threats are readily identifiable, immanent, and prompt an understandable response.” Within a *security-as-defence* framework, the sizing of military force and the acquisition of materiel are examples of typical threat response. The same authors point out that a focus on threats has been the traditional topic of *security* studies (*ibid.*, 5). The aspect of *intention* and/or *imminence* in case of *threat* is supported not only by the CM corpus collocations, e.g. *terrorist threat*, *insider* ~, *adversarial* ~, *malevolent* ~, but also by a few more examples in a wider context (e.g. ... to reduce immediate threats to life, property, and public health;... threat to life and property exists or is likely to exist in the *immediate* future; ...there are serious and *immediate threats* to human life and well-being; ... atmospheric condition that poses an *immediate* or delayed threat to life). The factor of intention has not been detected in “*hazard*” collocations. The collocation e.g. *imminent hazard* can certainly be encountered, but such a *hazard* becomes a *threat*.

The relations of imminence and intention to the terms *threat* and *hazard* is shown in the following graphs:



Safety science is mostly related to the health and well-being of people at work and in other activities. We have *safety* belts in cars, *safety* glass in refrigerators and hockey rinks, *safety* helmets in sport, etc. The longest traditions of *safety* research come from high-risk industries, including transportation, nuclear plants and shipping. (cf. Glendon 2006) The modelling of accidents may cover technological, human and organisational factors with a focus on **unintended** incidents.

The concept of *security* covers everything from personal to national *security*, including financial crime, information protection, burglary and espionage. Financial business, the market sector and national defence all deal with *security* issues. *Security* is defined in the NATO STANDARD AJP-3.14 as follows: “*Security*, in the context of force protection, encompasses those measures, tasks, and activities necessary to achieve protection against terrorism, espionage, subversion, sabotage, and organized crime (TESSOC), cyber intrusion, insider threats, and direct and indirect attacks on personnel, equipment, installations and lines of communication. **Security** covers physical and procedural measures...

The above mentioned concept of *security* is supported by the following frequent collocations: *national security*, *global* ~, *physical* ~, *economic* ~, *homeland* ~, *information* ~, *human* ~, *transportation* ~, *food* ~; *security strategy*, etc.

The analysis of CM corpus reveals the fact that both terms modify general nouns, such as program(me), policy, requirement, measure, professional, personnel, issue, concern, information, director, function, official, etc. The terms *public safety* (81x) and *human security* (33x) are more frequent than *public security* (5x) and *human safety* (7x) when comparing the *security/safety* common patterns in the CM corpus. The term *human security* reflects the growing recognition that concepts of *security* must include not only states, but also people. *Human security* may be perceived as a sufficient provision of humanism to people with regards to their rights to freedom, self-development, happiness and the employment of their capabilities. The term is the subject of changes reflecting the changing opinions. (cf. Annan 2001: 1; *Outline of the Report of the Commission on Human Security* 2003: 1; Ginkel & Newman 2000: 79; Hammerstad 2000: 395) The term *human security* has to be clearly defined and not confused with other terms, for example *national security*. Carafano and Smith (2006: 6) state that “*human security* focuses on the protection of individuals, rather than defending the physical and political integrity of states from external military threats – the traditional goal of *national security*”. The challenge for governments is that by taking measures in the area of *national security*, they may endanger their citizens and thus pose threats to *human security*. Thus the terms *national security* and *human security* must not be interchanged. The expressions “*national security*” and “*national sovereignty*” should be used in international statements, documents and treaties. The same authors (ibid., 14) argue that “the use of



the ‘*human security*’ should be discouraged in international deliberations unless it is defined within the boundaries of nation-states and sovereignty.”

Human safety is not a very frequent collocation. There is no definition of the term *human safety*. As stated above, *safety* is related to the health and well-being of people at work and in other activities. *Safety* can always be tracked down to humans (as in case of *security*) despite the fact that the human factor is not emphasized in the collocations, for example *truck and bus safety*; *traffic ~*, *pedestrian ~*, *motorist ~*, *highway ~*, *road ~*; *aviation ~*; *runway ~*; *harbour ~*; *rail ~*; *workplace ~*; *worker ~*; *worker health and ~*; *home ~*; *safety and occupational health (occupational health and ~)*; etc. As it has been mentioned above, *safety* is often related to the health and well-being of people at work. It is interesting though, that while the collocation *health security* has been recorded 10 times, the collocation *health safety* has not been recorded in the CM corpus. The *health/safety* relation has been recorded only as ... *health and safety* ...; ... *safety and health* ...; ... *safety and occupational health* ...; ... *health, safety* ...; etc. The collocation *health security* has occurred 7 x in the structure *public health security* (incl. *Public Health Security and Bioterrorism Preparedness and Response Act 6x*), which is more about the *health security* of nation and defines (protection) against threats of terrorist attacks rather than the health of people at work. As opposed to the term *human security*, the term *human safety* reflects the fact that a) soldiers wear full tactical gear, including Kevlar helmets, body armour, ballistic eye protection and individual weapons; b) construction workers wear helmets and follow other *safety* procedures on a building site; c) patients are informed about *safety* alerts for human medical products, etc. *Physical security* enhancements include alarm systems, bulletproof doors, or walk-through magnetometers. *Physical security* may also encompass actions taken in order to restrict unauthorized access to critical information in computer software and hardware. The *safety of personnel/people/person/employee/worker* structures has been identified in the CM corpus, but the same structures with the term *security* have not.

The same methodology may be followed when analysing the denotations of other similar patterns of *security/safety* collocations recorded in the CM corpus and highlighted in Table 2, namely *nuclear security/safety*, *environmental security/safety*, *food security/safety*, and *public security/safety*. Key terms may also be analysed through multi-head patterns (not only two-word collocations presented in Table 2) and in distant context.

Despite the above mentioned differences, it must be mentioned that there is not a clear-cut borderline between the areas of use of the terms *security* and *safety*. Thus the above mentioned statement, that the *safety* research has the longest tradition in e.g. nuclear plants, does not mean we cannot record the collocations *nuclear safety* as well as *nuclear security*. The same is true for the area of transportation. Despite the tradition of *safety* research in this area, an analysis of the CM corpus has revealed the occurrences of not only *traffic safety*, but also *transportation security* and *aviation security*. The difference in meaning is clear from the following example: *transportation security* can be explained on the categories of *security incidents* in the *security incident report* developed by the Australian Department of Infrastructure and Transport, which include aircraft breach and intrusion (i.e. laser lights, tampering with aircraft, sabotage, etc.), criminal activity, public behaviour, screening events, staff and procedural category, suspicious items and threats (“Aviation Incident Categories” 2014). *Traffic safety* is about *safety belts*, speed limits, airbags, etc. Some examples of *safety hazards* and *security threats* in the area of transportation are presented in Table 1.



Table 1 Examples of *Safety Hazards* and *Security Threats* in the Area of Transportation

Transportation safety hazards	Transportation security threats
Low flying	Sabotage
Reduced visibility	Criminal activity
Quality of fuel and fuel management	Terrorist activity
Transport of hazardous materials	Hijack alert
Errors	False documentation
Construction on rail / road, etc.	Unauthorized access
Inexperienced (unlicensed) drivers, pilots, etc.	Suspicious cargo, items, etc.
Low vehicle standards (poor crash protection)	Corruption of <i>security</i> procedures
Speeding	
Drinking and driving	
Fatigue	
Damaged roadways	
Lack of communication and warning	
Corruption of <i>safety</i> procedures	

The summary of *security/safety* collocations in the CM corpus is presented in Table 2. Similarities are highlighted. The *security/safety* only patterns in $N_{(security/safety)+N}$ collocations are written at the bottom part of Table 2 due to larger data sets in this category. The “only” patterns are recorded even when the collocation with the second key word has frequency below 5, e. g. *security act* 80 vs. *safety act* 4. Although minimum frequency for a collocation to be included in the list has been set to be 5, there is one exception, *environmental safety*, being recorded 4 times. The reasons for such an exception are two a) despite low frequencies the salience scores for *environmental safety/security* are similar and not insignificant; and b) the term *environmental security* is relatively new and deserves certain comparison with the term *environmental safety*. As it is stated in the executive summary report of the *NATO CCMS Pilot Study on Environment and Security in an International Context* (1999: 38), “the new and broader *security concept* – the Strategic Concept of 1991 – complements the emphasis on the defence dimension of *security* and recognizes that *security* and stability have political, economic, social and environmental elements.” (cf. *ibid.*, 35)¹

¹ (*ibid.*, 35) “Since the end of the Cold War, traditional *security* concepts based on national sovereignty and territorial *security* have increasingly been brought under scrutiny. Instead, a broader definition of *security* that would incorporate non-traditional threats to *security* and their underlying causes such as economic decline; social and political instability; ethnic rivalries and territorial disputes; international terrorism; money laundering and drug trafficking; and environmental stress is being advocated.”



Table 2 *Security/Safety* Collocations in the CM Corpus

A+N(<i>security</i>)		N+N(<i>security</i>)		N(<i>security</i>)+N		A+N(<i>safety</i>)		N+N(<i>safety</i>)		N(<i>safety</i>)+N	
national	178	homeland	995	~ program	73	<i>nuclear</i>	10	<i>public</i>	81	~ program	100
global	19	information	50	~ risk	74	relative	8	Army	26	~ risk	9
physical	18	maritime	40	~ policy	63	biological	5	<i>food</i>	28	~ policy	28
economic	15	<i>human</i>	33	~ requirement	33	<i>environmental</i>	4	system	17	~ requirement	35
European	15	transportation	19	~ measure	33			life	14	~ measure	7
internal	13	<i>food</i>	18	~ professional	32			materials	12	~ professional	10
international	11	health	10	~ management	21			explosive	10	~ management	18
corporate	10	border	8	~ agency	21			workplace	9	~ agency	9
<i>nuclear</i>	7	aviation	7	~ personnel	23			traffic	8	~ personnel	32
natural	7	operation	6	~ issue	20			fire	7	~ issue	8
societal	6	cyber	6	~ concern	19			<i>human</i>	7	~ concern	68
American	5	communications	6	~ committee	17			worker	5	~ committee	10
collective	5	<i>public</i>	5	~ information	16			home	5	~ information	14
<i>environmental</i>	5			~ organization	15					~ organization	12
domestic	5			~ director	9					~ director	20
				~ responsibility	8					~ responsibility	5
				~ assessment	7					~ assessment	6
				~ function	6					~ function	10
				~ official	6					~ official	11
				~ awareness	6					~ awareness	5

N(<i>security</i>)+N only patterns				N(<i>safety</i>)+N only patterns			
~ strategy	89	~ exercise	89	~ act	80	~ initiative	30
~ operation	28	~ event	22	~ effort	20	~ manager	20
~ survey	20	~ threat	20	~ admin.	19	~ resource	19
~ technique	19	~ advisor	18	~ division	18	~ force	17
~ challenge	17	~ consultant	16	~ review	14	~ partner	14
~ university	14	~ mission	14	~ community	13	~ guard	13
~ environment	12	~ profession	10	~ priority	10	~ research	10
~ coordination	10	~ affairs	10	~ preparedness	10	~ objective	9
~ activity	9	~ cooperation	9	~ domain	8	~ enhancement	8
~ partnership	8	~ control	8	~ capability	8	~ service	8
~ center	8	~ decision	7	~ protection	7	~ clearance	7
~ spending	7	~ goal	7	~ investment	6	~ awareness	6
~ need	6	~ arrangement	5	~ approach	5	~ advisor	5
~ consulting	5	~ posture	5	~ supervisor	5	~ forum	5
~ boundary	5	~ police	5	~ practice	5	~ role	5
~ situation	5						

Results, Conclusions and Recommendations

Corpus is useful for analysing the distributions and frequencies of terms. The corpus of crisis management, in which the terms *security* and *safety* have been analysed, includes 1.5 million words in whole texts and sentences and the topics of authentic materials written in English cover the areas of waste, food, dangerous substances, accidents, infrastructure, environment, health and *safety*, terrorism, *security*, civil protection, and military.

Several conclusions may be drawn about the terms *security* and *safety*. Firstly, the traditional concepts of *security* and *safety* have been broadened and reflect the changes in society and science. Thus *security* covers not only the area of national *security*, but also personal *security*. It is related not only to military, crime and the economy, but also to the whole environment. Similarly, the concept of *safety*, mostly related to the health and well-being of people at work and in other activities, has been broadened. Secondly, there is not a clear-cut borderline between the areas of use of the terms *security* and *safety*. However, there is difference in the frequency of terms, their collocations, as well as connotations generally considered as synonymous. New collocations create new conceptual models and, conversely, new conceptual models create new collocations.



The distribution of terms and specialization of their meanings depend on various contexts that restrict the interchangeability of such terms. The term *threat* is e.g. more typically combined with the term *security* rather than *safety*, while the term *hazard* is more typically combined with *safety* rather than *security*.

It is recommended to rely more on empirical evidence from corpus-based analysis of authentic language when working with terminology. Frequency analysis of terms and their collocations in various contexts as part of linguistic analysis may help CM experts to use the terms consistently and, in the case of no terms, be aware of prevailing tendencies of word combinations from the areas of their interest. It is also recommended to analyse selected terms in distant context, because we can see how terms in seemingly similar patterns are used in different ways and are appropriate in different contexts.

References

- Annan, K. (2001). Definitions of Human Security. Retrieved March 15, 2016, from <http://www.gdrc.org/sustdev/husec/Definitions.pdf>
- Aviation Incident Categories. (2014). Retrieved May 23, 2014, from Australian Government. Department of Infrastructure and Regional Development, http://www.infrastructure.gov.au/transport/security/aviation/categories_and_examples.aspx
- Blanchard, W. (2008). Guide to Emergency Management and Related Terms, Definitions, Concepts, Acronyms, Organizations, Programs, Guidance, Executive Orders and Legislation. Retrieved July 25, 2016, from <http://training.fema.gov/emiweb/edu/docs/terms%20and%20definitions/Terms%20and%20Definitions.pdf>
- Carafano, J. J., & Smith, J. A. (2006). The Muddled Notion of “Human Security” at the U.N. A guide for U.S. Policymakers. *Backgrounders*, 1966, 1-14. Retrieved September 21, 2016, from http://s3.amazonaws.com/thf_media/2006/pdf/bg1966.pdf
- Definitions. Imminent Health Hazard. (2006). Retrieved July 21, 2016, from Gamut online, <http://www.gamutonline.net/district/coast/displayPolicy/149659/6>
- Environment and Security in an International Context. (1999). *Environmental Change and Security Project Report. NATO CCMS Pilot Study*. Berlin: Federal Ministry for Environment, Nature Conservation, and Nuclear Safety. Retrieved January 4, 2017, from <http://www.wilsoncenter.org/sites/default/files/Report5-Sect2-a.pdf>
- Ginkel, H., & Newman, E. (2000). Definitions of Human Security. Retrieved July 12, 2016, from <http://www.gdrc.org/sustdev/husec/Definitions.pdf>
- Glendon, A. I. (2006). *Human Safety and Risk Management*. Boca Raton: CRC Press.
- Hammerstad, A. (2000). Whose Security? UNHCR, Refugee Protection and State Security after the Cold War. *Security Dialogue*, 31, 391-403.
- ISO Guide 73. *Risk Management - Vocabulary*. (2009). Geneva: ISO office.
- NATO Standard AJP-3.14 (A) (1). (2015). Brussels: NATO Standardization Agency.
- Pearsall, J., & Hanks, P. (Eds.). (1998). *The New Oxford Dictionary of English*. Oxford: OUP.
- Shearer, A. W., & Liotta, P. H. (2011). Environmental Security and Its Meaning for the State. In H. Alpas, S. M. Berkowicz & I. Ermakova (Eds.), *Environmental Security and Ecoterrorism* (pp. 1-13). Dordrecht: Springer.
- Sketch Engine Manual. (2014). Retrieved July 7, 2014, from <http://www.sketchengine.co.uk/documentation/wiki/SkE/GettingStarted#>
- Trumble, W. R., & Stevenson, A. (Eds.). (2002). *Shorter Oxford English Dictionary*. Oxford: OUP.



Possible Improvements in Government Debt Securities Model in Latvia

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Abstract

This research is aimed to improve the flow management of the government debt in Latvia, its connection to the current Latvian government debt model and to define future improvement directions of the current Latvian government debt model. During the research the structuring of the current model, that is the model with the main function of finance attraction and payment of the coupon and is the bases of government debt coverage, is made. The main weakness of the current model is connected to the main goal that all resources are attracted only for government budget deficit coverage and no other functions are fulfilled. As in the internal issues there is avoidance from too high interest rates, authors summon to avoid by using the external issues system and to create the system for external issues alike for internal issues. Consequently, the current system does not provide opportunities to reduce government expenditures, but the improvements summoned by the authors could reduce government expenditures. In parallel to the reduction of coupon payments authors make analyses on the government expenditures on intermediaries. At the end of the research the possible improvements are suggested from the goal of issues, from the process of issues, form coupon payment and intermediaries expenditure perspective.

Keywords: Debt, Government debt management, Government debt system

Introduction

Global experience that is accumulated in the field of government debt securities flow management gives opportunities to Latvia in accordance to national development of economic and political culture develop the most appropriate management model, that focuses on decrease of the government debt services payments and increase in the effectiveness of government debt flow management. The model is developed by taking into account the most important opportunities and threats of Latvian national economy in parallel by identifying external challenges, that is the level of development of the global economic system. During last years and its influence on the process of global development is under increased attention of politicians, non-government organisations, journalists and scientists. The majority of up till now research papers on issue and turnover of government debt securities and its connection to other ways of debt are mainly made from the perspective of issuer (effectiveness, amount outstanding, technical management, risk acknowledgment and like that) or from the perspective of investor (income, safety, liquidity). In some research papers are made in-depth analyses of risk management of the borrowed finances, mainly from the repayment perspective. As the basement of increase of effectiveness of government debt management from some scientist point of view is the necessity to implement warning system that would give better information on possible opportunities and threats, and how to increase the effectiveness of supervision (Reinhart, Rogoff, 2009). At the same time the increase of government debt flow effectiveness is too little analysed. Politicians and government officers are concerned about issues connected to liquidity and safety of investment, because in the 2008 in the case of Latvia the risk came true and there was no more possibilities to attract financial resources in international financial market with the interest rate that would be acceptable for the national economy. That leads to the fact that many authors have made analyses on the issue how money does effect on economy (Sarvaes, Tufono, 2006; Campello, Glambona, Graham, 2012). More detailed the risk of not covering government debt was analysed (Bijak, Thomas, 2012; Arora, Gandahi, Longstaff, 2012; Breuer, Jandecka, Menicia, Summer, 2012) and by connecting with the proportions of government debt with corporate debt (Maltritz, 2012). The potential investments of households in government financing was analysed (Nofsinger, 2012; Fairlie, 2012) where household income, expenditures and savings were assessed that makes the bases for the financial resources that can be invested in the government debt securities. Doing analyses from the investor structure perspective, too little demand on government debt can appear if the total debt is too big the risk of flow management can be for fill (Richardson, 2012). The problems with the government debt securities definitions were found by some scientists, the majority of definitions are only from one side – issuers or investors side, and do not



cover the economical essence. There are also different approaches in the classification (Brigman, 1992; Panizza, Presbitero, 2012). The relations between issuers and investors were analysed in to understand their correlation (Kerswell, 2012). The previously mentioned publications and other research were used to discover the specific characters of government debt flow management, government debt flow development and trends in the case of Latvia.

The goal of the research is to develop effective government debt flow management model, with the identification of its weaknesses and suggest the best improvements for the current situation in the case of Latvia. **Dynamics and structural changes of the Latvian government debt**

The total amount of money borrowed by the Latvian government exceeded EUR 9.7 billion at the end of 2016. In 2017 the Parliament approved the budget in deficit, thereby adding EUR 0.3 billion to the total national debt. The Latvian government had been financed from budgetary revenue by mid-1993. However, the amount of borrowings has grown substantially since then. During this period, the largest funding was necessary for the financing of effects of the financial crisis suffered in 2010, when the government was forced to make borrowings totalling EUR 3.7 billion from international financial institutions to finance their core functions in the years 2007 to 2011.

An increasing share of funding has been obtained by selling government bonds on external markets. The share of borrowings made on the internal market has been rising over the last years, which should be regarded as a positive trend.

Given developments of the government securities market, the goal of government debt flow management in Latvia is to provide necessary funding at the lowest possible cost, taking account of financial threats. In order to attain this goal and ensure that government debt flow management conforms to the internationally accepted practice, government debt management can be divided into government debt portfolio management and government debt management (The Treasury 2015: 10). According to public documents, the Latvian government has borrowed funds to obtain financing required for infrastructure development and create other pre-conditions for improving the quality of life of people. The growth of the government debt is closely linked with the maintenance and enhancement of the country's competitiveness.

Numerous studies have shown that debt incurred to cover current expenditure could lead to an economic crisis. The borrowing practice cannot be of a lasting nature because one day there will be no one who would be ready to lend if the country is led by people managing finance in a reckless and even populist manner. Many parts of the world have already seen such situations, which were solved in different ways, from national bankruptcy to the successful involvement of an intermediary, which took over the debt and gradually wrote off a certain portion of the debt. From the one of the last crises in Greece where up till 2001 interest rates for government debt securities were 20%, but in 2005 they were only 3% the amount of the debt increased dramatically (Hardouvelis, 2011a: 12), but when in the 2009 interest rate reached 27% the crises appeared (Hardouvelis, 2011b: 32). It is clear that, with rates growing, countries can no longer repay their previous borrowings by means of the issuance of a new borrowing. The provision of aid involving heads of government might not be effective in the short term. The heads of EU government agreement on help to Greece were too late (Kouretas, Vlamis, 2010: 391-398).

If Latvia adhered to the continuous borrowing model, it is doubtful that international organisations and countries with more developed economies would take part in lending transactions. This situation is likely to lead to the emergence of new debt securities at regional or global level, and Latvia would have their own bonds like Brady bonds (Trade Association for the Emerging Markets 2015), or, if there were other countries having similar problems, a new type of bonds would be introduced for a certain group of countries.

Structure of the Latvian government debt

The existing government debt management system of Latvia has been designed to obtain financing from commercial banks on the internal market and from global financial institutions on external markets. On the internal market, government debt is a beneficial option for commercial banks because they may take advantage of



refinancing transactions and receive a certain portion of investments in the form of debt, thereby enhancing the safety of their assets. Government debt can be viewed as high-level security in the event of temporary financial difficulties in situations when funds are insufficient (Bank of Latvia 2013: 3). The dependence of government debt on national tax revenues is mentioned as a substantial threat to government debt in crisis times. As a rule, tax revenues decrease during a crisis, while prices of securities (interest payments) grow, especially if the financial sector is the most significant lender, which may cease financing the government in view of the way the situation is developing (Hassen 2015: 148). To this end, the first steps towards the establishment of a household-oriented savings bonds market have already been made in Latvia.

Table 1. Codes of securities owner's and issuer's sectors (Bank of Latvia 2010: 5)

Name of the owner's and issuer's sector	Code
Non-financial corporations	S.11
Central banks	S.121
Credit institutions	S.1221
Money market funds (MMFs)	S.1222
Monetary financial institutions, except for central banks, credit institutions and MMFs	S.1223
Investment funds, except for MMFs	S.123
Other financial intermediaries and financial auxiliaries	S.124
Insurance companies and pension funds	S.125
Central governments	S.1311
Households	S.14
Public organisations	S.15

The analysis of each individual sector can give a clearer view of the sector's role on the securities market and the degree of sector's involvement. Table 2 below demonstrates the amount of securities acquired by each sector over a longer period and related dynamics on the Latvian securities market.

Table 2. Structure of internal government debt holders (residents) (Bank of Latvia 2017: special request)

Residence and sector	2010	Government debt balances (EUR million)					15/10 %
	2010	2011	2012	2013	2014	2015	%
Total residents, including:	777.5	695.3	654.5	926.4	981.7	1,036.3	33.3
S.11	0.9	61.7	20.8	29.0	29.7	28.4	3,055.6
S.121	0	0	0	0	0	70.9	-
S.1221	476.3	390.4	364.5	478.8	397.0	456.4	-4.2
S.1222	10.1	4.9	21.5	4.3	6.1	0	-100
S.124	81.0	67.5	72.6	88.5	77.8	26.5	-67.3
S.125	201.9	163.1	166.1	318.3	462.3	388.9	92.6
S.1311	0	0	0	0	0	55.0	-
S.14	3.4	3.2	3.5	4.4	4.0	3.5	2.9
S.15	3.9	4.5	5.5	3.1	4.8	6.7	71.8
Total non-residents	18.3	16.8	20.6	40.1	64.9	79.9	336.6
Total	795.8	712.1	675.1	966.6	1,046.5	1,116.2	40

The structure of government debt presented in Table 2 above corresponds to the names of structural elements (sectors) listed in Table 1. As Table 2 clearly demonstrates, at the end of 2015 households (S.14) and non-financial corporations (S.11) formed 3.1%, which is an insignificant portion of lenders. The ability of credit institutions (S.1221) to respond quickly to money supply is evident: they acquired 44%, which is the biggest share of debt securities issued by the government per sector out of the total debt amount.

In the conditions of sound economic growth, non-financial corporations usually invest most of their funds in government debt instruments because it is one of the safest and most liquid types of investments. Contrary to other



income, income earned from government debt is normally not subject to any profit or income taxes. At present, income tax is imposed on deposits in Latvia. On the one hand, this practice could lead to a decrease in bank deposits made by non-financial corporations, thereby directly encouraging the acquisition of government debt instruments; on the other hand, this could cause a decline of investments made by credit institutions in government debt securities. The authors believe that, lesser intermediation on the securities market and, accordingly, a smaller number of intermediaries will lead to larger benefits with respect to households' investments.

At present, credit institutions are the biggest investors in government debt instruments, which is, to a great extent, associated with the legislation encouraging their interest. Government debt securities are equal across the entire European Union, and it is hard to imagine that investors would compare debt securities issued by the Latvian government and the German government. These essential conclusions must be taken into consideration by parties responsible for government debt servicing, and the debt portfolio must be balanced from the viewpoint of both issuers and investors in order to facilitate more equal distribution of borrowed funds among investors' sectors. It is particularly important with respect to internal debt securities.

Money market funds have a certain position on the securities market as investors, but their response to market fluctuations and changes is relatively weak. Accordingly, the investor sector will always be striving to invest a certain share of funds in debt securities irrespective of the current financing needs of the government. In addition, funds may choose the currency of investments. Based on economic substance and the existing practice, undertakings expecting to incur costs in a certain currency tend to make investments in these funds. As a result, investments are made in a money market fund of the currency of expected costs. Average fund investments are dependent on multiple economic factors, but it is essential that they facilitate the development of a country.

Monetary financial institutions, except for central banks, credit institutions and money market funds, chiefly represent savings and loan agencies. This sector is extremely sensitive even to economic circumstances, and fluctuations may occur at any time. Based on an analysis of this sector's investments over a certain period, quite the opposite effect has been identified, i.e., the total amount of securities acquired by residents has grown, while the amount of securities held by this sector has declined. This is clear evidence that, under certain circumstances, participants of this sector will raise an alarm, which would undermine the stability of the country's economic system.

Insurance corporations and pension funds is the second biggest investor in government debt securities after credit institutions. It is connected to the Solvency II requirements and reserve requests to the insurance corporations, but this is not the only one reason. It is known that pension funds by default must give attracted resources back to the customers in quite a long time period after the resources have been attracted. That leads to understanding that much more effective is to invest in local securities, and if there will be crises or other unpredicted events, for the local customers it will be much more easier to understand the reason for the decrease in savings. If they will invest in a country far away from investor, the investors will much more often complain about the quality of the pension fund and its stuff.

Households and nonfinancial institutions are the basement of each economy. From the thoughts of authors the investments of these two sectors should be more than a half of all investments. The credit institutions are just an intermediaries with some function, but these two sectors are the basement of national economy. Financial sector is much more connected to global processes and due to that fact the geographical dislocation of the investment portfolio can be changed much easier. In case the government of Latvia would start to do the communication with the households and nonfinancial institutions by explaining the need for money and the reasons why these sectors should invest, these could be the main investors. Up till now the only attitude from the government was: "If households have money and do not know where to put it, they can give it to the government".



Table 3. Latvian external government debt (Bank of Latvia 2017: special request)

Year	Quantitative external government debt breakdown (mio.EUR)							Total
	Short term				Long term			
	Debt securities	Borrow	Other liabilities	Special drawing rights	Debt securities	Borrow	Other liabilities	
2010.	2,4	0,0	84,5	141,0	833,0	5 051,9	5,3	6 118,1
2011.	2,1	0,0	84,4	144,2	1 020,8	5 364,0	2,6	6 618,3
2012.	1,4	0,0	84,5	140,6	2 860,7	4 163,6	0,0	7 250,9
2013.	9,9	0,0	80,8	136,2	2 605,9	4 142,6	0,0	6 975,4
2014.	5,7	0,0	0,4	144,4	4 691,4	3 234,6	0,0	8 076,5
2015.	0,0	0,0	0,3	153,9	4 867,4	1 881,2	0,0	6 902,8
15./10.	x	x	-99,6	9,1	484,3	-62,8	x	12,8
%								

With the development of saving bond system, there were some evidence of intermediary support. That means, government have made a new special system for household investments but it is more effective for households to put the money in credit institutions and let credit institutions to bay government debt securities on their own.

Currently in the case of Latvia the one who is having account in the credit institution do not know where his financial resources are invested. It is possible that costumer of credit institution could put in his account more resources if he knew where they will be invested. Whit all the resources that are in the credit institution they are acting as they want. The rest of ways of money holding/investing is connected to commission fees, that makes all the other investments not so attractive.

By making analyses on external debt securities, it has grown dramatically. The firs issue of external debt securities took place in 1999 (see Table 3). If the attraction of external resources is analysed from the ways of attraction, the main resources were received from international and regional financial institutions during the crises, with the main goal to stabilize the global financial system. After the crises the debt is re-financed from international institution to government debt securities.

Table 3 represents that at the end of 2010 the biggest part of debt 82,5% was borrowed financial resources and only 13,1% was government debt securities. If there are special circumstances or special offer from international institutions, such proportion is acceptable. In contrast at the end of 2015 borrowed financial resources makes only 27,2% from the total government debt, and government debt securities reaches 70,1% with the trend to increase government debt by government debt securities. That confirms that there is need to make the analyses of government debt securities system and make improvements, because regular costs to intermediaries could be reduced and that can result also to a smaller government debt in total.

If this is analysed from the amount outstanding perspective, then the total amount from the end 2010 till end 2015 has grown for 484,3%. That is almost five times bigger during five years. There is also a connection between amount outstanding and the cost for its regular systemic expenditures to intermediaries and also percentage expenditures. The smaller is the amount outstanding, the smaller will be all expenditures regarding its maintenance.

Methodic

The methodic of the reserch is based on harmonious and compatible scientific research methods. The main part is connected to analyses and synthesis methods. They are widely used in the analyses of government debt flow management and incoming flow in the government financial accounts. During the reserch the current government debt flow management is analused from strength and weeknes point of view, with the goal to improve the effectiveness. Analyticas calculations and empirical reserch is widely based on the Bank of Latvia publicly availabl data and special requests on securities stock and flow. That leads to identification of improvements in the government debt securities flow management.



At the beginning the special data requests were sent to government institutions and specific (not published on regular bases) data were received. The data were combined with the publicly available quantitative data. The data were compared and proportions calculated with the main goal to summarise their proportions and what are tendencies. It is important to understand the current trends and as the trends are changing rarely, to suggest the best solution for the government securities flow management model in the future.

In general data analyses is based on quantitative research methods with the main focus on the data flow turnover the flow management model is highlighted with the 4 sub-parts of it. During the analyses of each sub-part of the model, the main attention is focused on its possible improvement and if the sub-part is not needed at all, its substitute. After in-depth analyses author suggests new – more appropriate model for the current situation for Latvia in the field of Latvian government debt flow management.

Findings

In the Chart 1 is represented current government debt flow management model, compiled by the authors to reflect current flow management system. The model is compiled to highlight main weaknesses of the current system and to make in-depth analyses of the possible improvements to decrease expenditures and to substantiate needed expenditures in all government debt flow management, meanwhile the following issues are substantiated not in appropriate way:

- 1) There is need for documental substantiate of the necessity of each issue with the detailed macro economical analyses of the situation in the world and region,
- 2) Documentation must include the country development progress analyses and the growth of European Union assessment, with the prognoses and its evidence.
- 3) Government debt securities possible interest rate analyses, forecast and forecast analyses with the future interest rate changes analyse.



The model consists of 4 sections:

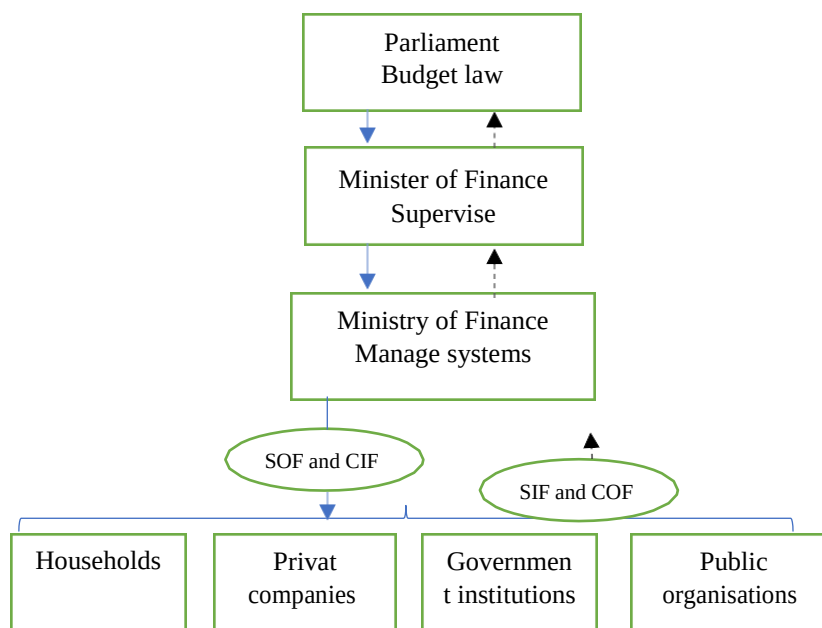
Section I: The parliament has approved annual law on budget that includes the budget deficit for the next year. The Minister of finance is responsible for the fulfilment of this law. The changes in the total deficit amount can be made only with changes in the budget law.

Section II: Minister of finances supervise, control and approve the process of debt, but the technical part of the debt is managed by the Treasury. At the same time, the Ministry of finance is the institution that is directly under subordination of the Minister of finance.

Section III: To start the process of attraction of financial resources, the Treasury must make the analyses of the possible attracted financial resource from geographical (internal or external market), possible amount attracted, the type of debt, the time of issue, interest rate. To do the technical part of issue, the Treasury attracts: i) Latvian Central depository, if the internal market is chosen for the issue and in that case Riga Stock exchange would provide the trade platform, ii) chief organizer of the issue process if the external market is chosen for the issue and external stock exchange would provide its trade platform.

Section IV: The financial resources are received from the holders of securities or intermediaries that provide holding service.

Chart 1 suggested model can be offered and supported only after analyses of external experience. In the Chart 2 are suggested improved model that would decrease expenditures on government debt flow management.



- CIF un COF – cash incoming flow and cash outgoing flow;
- SIF un SOF – securities incoming flow and securities outgoing flow.

1. Chart The improved government debt securities management model

From the analyses of the Chart 1 model it can be concluded that the Treasury is additional institution to the borrowing process. In the case if the Ministry of Finance would make the process of issue, then the Section II of the model would not be needed at all. As the Treasury is fulfilling the Treasury's regulation (The Treasury, 2015) then the reverse connection to the Parliament is not fulfilled.

In the case of Latvia till 2001 the securities settlements and payment services were provided by the Bank of Latvia, but from 2001 it is provided by private (non-residents controlled) company – Latvian Central depository. The Treasury is paying regular commission fees for this service.



As it was previously mentioned, borrowing and increase of government debt is more effective if it is done for the reason of long term investments, but it is not suggested to borrow to cover current day-to-day expenditures. But in the case of Latvia the growth of external debt is directly connected to day-to-day expenditures. That is the reason why it is important to increase internal sector of investors and in the long term to keep external debt as small as needed to continue the system of rating and keep ad hoc opportunities for the resources when there is such ad hoc need in the economy, but internal resources are not enough.

By analytical analyses of the publicly available data sources about government payments as a commission fees no individual data on each service provider is given. As it is seen in the Chart 1, there are 5 groups of service providers – Latvian Central depositary, external depositaries, Riga Stock exchange, external stock exchanges and chief organizer.

By seeing the model from flow management effectiveness point of view, the chief organizer can be replaced by current Treasury specialists, and the same is with depositary and stock exchange providers.

As of 2016 Latvian stat Treasury started to publish information on additional costs to government debt securities that are in parallel to percentage payment. The costs are payment to intermediaries that gives services to the Treasury and as it can be seen from the improved model – such costs would be reduced.

4. Table Government debt service expenditures (The Treasury 2015:12)

Type of expenditures	2015.	2016.	16./15. %
Percentage expenditures	384,9	261,0	-32,2
Regular expenditures	2,4	2,9	20,8

From the data included in the Table 4. there can be made a conclusion that from one point the percentage expenditures, that are connected to international financial markets, are decreasing. From other point the Regular expenditures, that are connected to payment to financial intermediaries that provide infrastructure for issue, maintenance and redemption of securities, are increasing. If the improved government debt securities management model would start to function, the regular expenditures would decrease and that would lead to lower government expenditures in the future.

Results, Conclusions and Recommendations

From the analyses of investors perspective of government debt securities, the main investors are Commercial banks. At the same time Households and non-finance institutions – the main sectors that government should work for- has invested relatively small part of total amount outstanding. That leads to conclusion that government institutions up till now have not made their attention to opportunity to attract financial resources from households and other participants of internal financial market.

After analyses of Latvian external debt structure it is shown that in the end of 2010, government debt securities from total amount outstanding were only 13,1% but in contrast in the end of 2015 government debt securities were 70,1%. That confirms that the government debt in step wise approach (step by step) is kept in government debt securities form. To make the turnover and management of Latvian government debt as cheap as possible, there is need to improve government debt flow management model.

After the analyses of current Government debt flow management rules it shows that in the current process there are intermediaries, to whom are paid intermediaries fee, that are not identified in the Treasury reports. These intermediary services can be taken over by the competent government institution. That would decrease regular expenditures on government debt management and would increase effectiveness of government debt securities flow management.

There is need for changes in the legal acts that structures responsible institution for government debt management from the Treasury to the Ministry of finance, and changes in rules of sale, settlement and maintenance system of government debt securities.



References:

- Arora Navneet, Gandhi Priyank, Longstaff Francis A., (2012) Counterparty credit risk and the credit default swap market, *Journal of financial economic*,s Vol. 103, No 2, pp. 20.
- Bank of Latvia, (2010) Rule of the compilation of securities holding statistics, pp. 5.
- Bank of Latvia (2013) About participation of organized monetary operations in the European Central bank system, 2013: 3
- Bijak Katarzyna , Lyn C Thomas, (2012) Does segmentation always improve model performance in credit scoring?, *Expert systems with applications*, Vol. 39 No 3, pp. 2434-2440.
- Breuer Thomas, Jandacka Martin, Mencia Javier, Summer Martin, (2012) A systematic approach to multi-period stress testing of portfolio credit risk, *Journal of Banking and Finance*, Volume 36, Issue 2, pp. 338
- Brigman Eugene, (1992) *Fundamentals of Financial Management*, 6th ed. The Druden Press, pp. 46
- Campello Murillo, Glambona Erasmo, Graham John, (2012) Access to liquidity and corporate investment in europe during the financial crisis (Review of finance), pp. 340
- Fairlie Robert, (2012) Liquidity constraints, household wealth, and entrepreneurship revisited (Review of income and wealth), pp. 287
- Hardouvelis, G.A., (2011a) The Greek and European crisis and the new architecture of the eurozone, *Economy and the Markets Bulletin*, EFG Eurobank., pp. 12.
- Hardouvelis, G. A., (2011b) The Greek crisis, its resolution and implications for the EU and beyond, *Joint Vienna Institute*, EFG Eurobank, pp.32.
- Hassen Chtourou, (2015) "Analysis of the European Government Bonds and Debt after the European Financial Crisis", *Journal of Centrum Cathedra: The Business and Economics Research Journal*, Vol. 8 Issue: 2, pp.146-164,
- Kerswell Timothy (2012), *Consuming Value: The Politics of Production and Consumption*. *Economic Affairs* ISSN : 0424-2513, pp. 343.
- Kouretas Georgios P., Vlamis Prodomos, (2010) The Greek Crisis: Causes and Implications, *Panoeconomicus*, Vol. 57, No. 4 pp. 391-398.
- Maltritz Dominik, (2012) Determinants of sovereign yield spreads in the Eurozone: A Bayesian approach, *Journal of International money and finance*, Vol31, Issue 3, pp. 662.
- Nofsinger John, (2012) Household behavior and boom/bust cycles, *Journal of financial stability* pp. 167
- Panizza Ugo, Presbitero Andrea F., (2012) Public debt and economic growth: Is there a causal effect?, *Institute of public Policy and Public Choice* , Working paper No 198, pp. 4.
- Reinhart Carmen, Rogoff Kenneth (2009), *This Time is Different*, Princeton University Press, pp. 54.
- Richardson David (2015), What does “too much government debt mean in a stock-flow consistent model? *Real-world economics review*, issue No. 73, pp.8.
- Sarvaes Henri, Tufano Peter, (2006) *The Theory and Practice of Corporate Liquidity Policy*, Deutche Bank publikācija, pp. 12
- Trade Association for the Emerging Markets (2015), The analyses of history, <http://www.emta.org/emarkets/emarketsmainframe.html> Accessed: July 26th, 2017
- The Treasury, (2015) Regulatin No. 38, Strategy of Latvian government debt managment, pp. 3-10.



Investigation of Effects of Football to Sole

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Abstract

Objective: The aim of this research is to investigate the effect of playing soccer for a long time in professional soccer players to sole contact area.

Study Plan: 15 football players ($22,65 \pm 2,6$ years, $174,2 \pm 5,6$ cm height, $71,2 \pm 4,8$ kg body weight, $23,21 \pm 1,4$ kg / m² BMI) who play in the Sports Betting Super League teams, the top league of the Turkish Football Federation, who has no problem on his foot and 15 male volunteers ($22,6 \pm 1,6$ years, $177,3 \pm 5,4$ cm height, $72,1 \pm 3,3$ kg body weight, $23,01 \pm 1,9$ kg / m² BMI) as control group was included in the survey. Professional footballers' age of starting football was determined as 9 years old. It has been determined that there is no anatomic disorder or discomfort in the foot, waist and knee areas which will affect the results of the foot contact area analysis in the study groups. EMED-SF (Germany) plantar pressure analysis system was used in the study. Statistically significant differences between the study groups were examined using the non-parametric Mann-Whitney U test.

Findings: According to the results of the research, there was no statistically difference between the experimental and control groups in terms of physical characteristics. However, Significant results were found at (0.01-0.05) level in the beginning and grand total of heel medial, heel lateral, 1.2.3.4.5 metatars in the maximal force comparisons applied to the right and left foot contact area and the floor. Furthermore, it was determined that the values of the control group were higher than the values of the experimental group.

Conclusion: As a result, it can be said that to make compulsive movements of the sole causes to reduce the foot contact areas and the force applied to the floor by the sole at long training and games from the time the players come from childhood to the professional football player. As a result of the training of the footballers, especially at the beginning of the metatars on sole, it has been observed that it causes changes in terms of contact and applied force to the floor and in consequence of this, they use the different zones in the sole more actively.

Key words: football, foot, sole, training

Introduction

The age of starting to sport is approximately 6 in the World (Coté, Horton, MacDonald, & Wilkes, 2009), while the age of starting to football is between 5-12 for elite and non-elite sportsmen.. (P. R. Ford, Ward, Hodges, & Williams, 2009). With the number of 265 million members, players that play football systematically, football is one of the most popular sport in the World. While 4,1% of the World population are playing football, approximately, only 0,03% of them, nearly 110000 sportsmen, are professional male football player. (Kunz, 2007). In addition to this taking to up level and to protect that level of the players', that reach to Professional level, tactical adaptation, technical truths, physical demands and speed conditions are important for their further Professional career. (Huijgen, 2013). For this, sportsmen have to part much more time to trainings and matches. It is estimated that elite young football players are making practice approximately for 6500 hours until their 18 ages. (Ward, Hodges, Starkes, & Williams, 2007). It is defined that, for the last 10 year, top level Professional football players are making particular practice for football, for 6328 hours, while national Professional football players are making particular practice for football for 5220 hours. (Ward, Hodges, Starkes, & Williams, 2007). It is also examined on the analyse that the average age of the Professional football players in the whole Europe is 25.8. (Besson, Poli, Ravenel, Poli, & Ravenel, 2010) Only 6% of them are under 20 years old, 11% of them are above 32 years old and 83% of them are between 20-31 years old. (P. R. Ford & Williams, 2011) The weight on footwell is a major factor for a sportman's performance, considering how much time this Professional sportsman spares for training, and load intensity in trainings.

The foot is the most exposed part of the body to force, since it carries all the weight. It has been seen that the foot pressure measurements started from the 1980s when the literature was examined, there also has been studies concerning foot biomechanics, diabetic foot, orthopedic surgery and orthosis shoe modifications. External loads has effect on foot pressure. (Özyürek, Demirbüken, Tosun, Okyay, & Angın, 2013) A healthy load distribution



depends on the ability of handling the stabilization and mobilization task together. (Sammarco & Hockenbury, 2001). It is known that the ankle plays a very important role in controlling postural stability and walking. In addition to the task of transporting body weight, the foot, which is the primary effect in ensuring balance, has undergone significant mechanical changes during walking. (Cote, Brunet, II, & Shultz, 2005)

With the developments of the current technology, it has been common that the research on muscle-skeleton system and the diagnosis in clinic practice, planning of the treatment and examine to treatments results and the using of the walking analyses to examine. (Simon, 2004). As a complementary of the walking analysis planter pressure measurement (pedobarography), during walking, ground reaction force can be measured pretty sensitively as pointal. It makes that possible to compare of the pressure and evaluate of the feet that touches the ground as dynamicly and in objective criterions With the frequency for the clinic, it is used to evaluate that the feet mechanic is beening corrupt and as a result of this the pathologies' coming up on the footwell. (Hurkmans, Bussmann, Benda, Verhaar, & Stam, 2003).

Besides clinical use of the walking analysis, however, many intraarticular biomechanical studies have been carried out by making kinetic and kinematic measurements and adding pressure measurements to them In particular, studies on walking mechanics of the lower extremity, knee, hip, ankle biomechanics and mechanics of reconstructions applied to these joints are increasingly being studied. Especially today pedobarography is widely used for researchig normal foot mechanics. (Kanatlı, Yetkin, Songür, Öztürk, & Bölükbaşı, 2006)

Pedabarographic measurement is an objective and functional technic which measures the plantar pressure and also can be used in foot analysing. In the static and pedabarographic estimation of foot, maximal pressure measurement of six parts (back feet, middle feet, inside-middle-side of the front feet and fingers), maximal pressure values on the hind paw and back feet(total pressure on the foot, percentages of pressure values on the hind paw and back foot are obtained by total contact area and percentage distribution values of total contact area for hind paw and back foot. The lenght of the part which is in a contact with ground during the movement, pressure changement in the position of varus and valgus, the factor like fingers functions are extracted in the dynamic measurements.(Tuna, 2005).

It is estimated that the contact to ground of the footwell is always in different loads and different types so that will make some changments on the footwell. Especially the performance of the player depends on even the type of the shoe. So that, it makes more important to makefirm of the effects of the football on the footwell, for comfort and healthy ways. The aim of this study is also to explore the effects of the football on footwell.

Material and Method

This study; the consent that T.C. Gazi University-Faculty of Medicine Local Ethics Commission's gave with the date of 25th February 2008 and with decision of 074 without drug for clinic studies has been done. All of attendants were informed with oral and written about purpose of study and evaluation methods to be applied. Approval forms were taken from all of attendants. Fifteen players ($22,65 \pm 2,6$ yaş, $174,2 \pm 5,6$ cm boy, $71,2 \pm 4,8$ kg body weight, $23,21 \pm 1,4$ kg/m² BMI) who play in Super League teams which is the highest league of Turkish Football Federation and fifteen volunteers($22,6 \pm 1,6$ age , $177,3 \pm 5,4$ cm height, $72,1 \pm 3,3$ kg body weight, $23,01 \pm 1,9$ kg/m² BMI) for control group counted in to the study. It has been specified that soccer players approximately start the football at the age of nine.

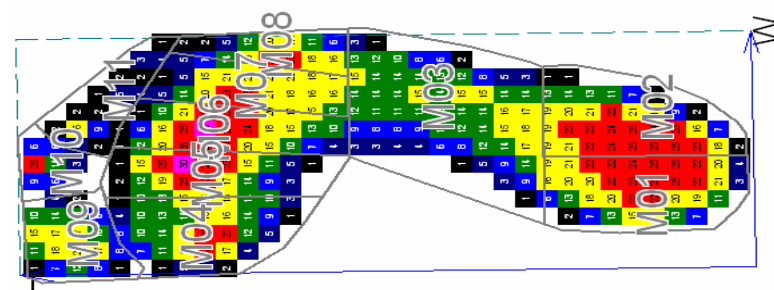
The participants who had lower extremity injury during last 6 months, supine hypotensive syndrome, gestational diabetes mellitus, rheumatoid arthritis, hypertension, foot impairment, foot or ankle operation and neurologic dysfunction are not included to research. The participants who had dizziness, nausea on the day of research are not included to research and participants are tested out pain. None of the participants have the symptom above. Right leg is dominant extremity for all participants. Right leg is dominant extremity for all participants. To specify



the dominant extremity all participants are wanted to hit the ball and the extremity they choose to hit to ball specified as their dominant extremity.

The pedobarographic measurements of the foot volunteers were performed using the plantar pressure analysis system EMED-SF (Novel GmbH, Munich, Germany) in the walking laboratory of GÜTF Orthopedics and Traumatology AD. This system is mounted on a 7x1 m wooden platform and includes a platform of 44.4x22.5 cm which is covered with thin skin and has a sampling rate of 71 Hz and two receivers in cm². Participants walked freely before pressing the foot pedobarogram in the 7-meter walking band, and the region where the measurement was made is not specified. Measurements are measured with bare feet collecting the measurements of dynamic and static for each foot.

Separating to 11 zones, it is evaluated in these ways that each zones' contact area (cm²) maximal power (N/cm²). Footwell, called mask, (image-1) Taking each foot apart and evaluated two datas' average.



Picture-1: The view of foot mask in pedobarography (M01: Medial Heel, M02: Lateral Heel, M03: Medial Foot, M04: 1st Metatarsal Head, M05: 2nd Metatarsal Head, M06: 3rd Metatarsal Head, M07: 4th Metatarsal Head, M08: 5th Metatarsal Head, M09: Thumb, M10: 2nd toe, M11: 3rd, 4th, 5th Toes)

Statistical Evaluation

The analysis of the data has been done in SPSS 18 package. Averaging two measurements of subject and control groups; if there is a statistically significant difference among the averages or not, the Mann Whitney U test. In the measurements 95% confidence interval and $P < 0.01 - 0.05$ relevance levels have been accepted. **Findings:**

Table 1. Physcial properties of the subjects of the study (1) and control group (2).

Variables	Group	Mean	S.D	X1 - X2	Min.	Maks.	t.	P	Mann-Whitney U	P
									y	
Age (year)	1	22,650	2,641	0,050	19,00	27,00	,072	0,29	199,00	-,978
	2	22,600	1,602		20,00	26,00				
Height (cm)	1	174,20	5,671	-3,100	169,00	187,00	-1,763	,725	110,00	,0150
	2	177,30	5,449		164,00	183,00				
Body Weight (kg)	1	71,200	4,829	-,900	68,00	75,00	-,682	,158	138,00	,0920
	2	72,100	3,385		64,00	76,00				
BMI (kg/m ²)	1	23,211	1,415	,201	21,00	26,20	,375	,264	186,00	,705
	2	23,010	1,935		19,11	26,39				

There are no meaningful differences between on the ages, heights, body weights and body indexes' avarages($0,01 > P$) that belongs to football players and control groups. (Table1). Being not meaningful of the differences between the groups shows that dispersion is homogeneous.



Table 2. Comprasion(cm2) of the male football players' (1) and control groups' left and right feet contact areas.(cm2)

Variables	Grou p	Right Foot (N/cm2)				Left Foot (N/cm2)			
		Mean	S.D	Mann- Whitney U	P	Mean	S.D	Mann- Whitney U	P
Foot - TOTAL	1	150,50	13,26	103,000	** ,009	149,72	11,85	102,500	* ,023
	2	164,35	16,85			160,35	16,73		
MO1: The medial part of heel	1	19,60	1,818	122,500	* ,035	19,80	2,044	112,000	* ,046
	2	21,10	2,204			21,10	1,895		
MO 2: The lateral part of heel	1	19,55	2,038	125,500	* ,042	19,66	1,571	101,000	* ,020
	2	20,92	2,369			21,17	2,312		
MO 3: Midfoot	1	30,12	5,263	157,000	,244	29,91	5,366	123,000	,095
	2	32,25	8,346			32,17	8,352		
MO 4: The 1st metatarsal head of foot	1	14,05	1,677	107,000	** ,012	14,11	1,967	105,000	* ,028
	2	15,77	2,478			15,65	1,828		
MO 5: The 2nd metatarsal head of foot	1	11,17	1,695	94,000	** ,004	10,77	1,457	102,000	* ,022
	2	12,95	1,700			12,17	1,914		
MO 6: The 3rd metatarsal head of foot	1	12,30	1,584	74,000	** ,001	11,97	1,398	71,000	** ,001
	2	14,12	1,467			13,67	1,515		
MO 7: The 4th metatarsal head of foot	1	10,35	1,193	75,500	** ,001	10,20	1,341	90,500	** ,008
	2	11,70	,879			11,35	,727		
MO 8: The 5th metatarsal head of foot	1	6,95	,998	69,500	** ,000	7,02	,962	99,000	* ,017
	2	8,12	,723			7,87	,958		
MO 9: Pollex	1	12,62	1,512	154,000	,221	12,69	1,912	130,500	,145
	2	13,57	2,838			13,45	2,181		
MO 10: The 2nd finger of foot	1	4,95	1,422	197,000	,935	4,63	1,348	164,500	,647
	2	4,75	1,261			4,32	,949		
MO 11: The 3.4.5. fingers of foot	1	8,90	2,648	180,000	,587	8,80	1,918	135,500	,192
	2	9,05	4,189			7,37	3,516		

**** P < 0.01 * P < 0.05**

The results which show a meaningful fixing(0.01-0.05 > P) that Left and right feet's totals that belong to football players and the avarege differences between the comprasions of the contact area's, left and right heels' medial and lateral, left and right feet 1.2.3.4. and 5. metatarsal's head. (Table2)



Table 3. Comprasion of Male football players (1) and control group's left and right feet maximal power.

Variables	Group	Right Foot (N/cm2)				Left Foot (N/cm2)			
		Mean	S.D	Mann-Whitney U	P	Mean	S.D	Mann-Whitney U	P
Foot - TOTAL	1	937,91	103,546	59,000	** , ,000	912,94	102,45	34,000	** , ,000
	2	1150,83	179,60			1170,05	176,28		
MO1: The medial part of heel	1	318,97	47,77	66,500	** , ,000	318,72	65,82	60,000	** , ,000
	2	428,90	97,55			431,86	120,27		
MO 2: The lateral part of heel	1	272,03	40,41	93,000	** , ,004	280,44	47,42	109,500	* , ,039
	2	336,77	77,50			328,80	71,72		
MO 3: Midfoot	1	164,82	74,84	163,000	,317	156,97	60,17	131,500	,156
	2	180,67	68,59			185,48	75,06		
MO 4: The 1st metatarsal head of foot	1	145,35	48,43	90,500	** , ,003	144,55	67,38	105,000	* , ,028
	2	213,23	84,63			194,73	69,48		
MO 5: The 2nd metatarsal head of foot	1	198,36	40,37	65,500	** , ,000	191,26	38,68	79,000	** , ,003
	2	259,96	54,69			252,66	64,21		
MO 6: The 3rd metatarsal head of foot	1	212,47	48,02	120,500	* , ,032	214,44	52,09	88,000	** , ,007
	2	251,36	57,72			270,46	64,14		
MO 7: The 4th metatarsal head of foot	1	139,07	42,46	154,000	,213	136,16	48,18	104,000	* , ,026
	2	157,65	40,41			166,91	47,33		
MO 8: The 5th metatarsal head of foot	1	78,16	44,52	156,500	,239	74,36	37,00	106,000	* , ,031
	2	84,90	27,96			105,07	48,30		
MO 9: Pollex	1	155,97	61,19	166,000	,358	154,90	53,83	136,500	,203
	2	185,81	91,35			197,21	85,40		
MO 10: The 2nd finger of foot	1	37,88	16,41	196,500	,925	32,26	15,67	160,500	,568
	2	39,01	21,93			29,50	13,05		
MO 11: The 3.4.5. fingers of foot	1	43,77	28,54	189,000	,766	33,29	17,86	144,000	,293
	2	49,40	36,48			28,20	22,55		

**** P < 0.01 * P < 0.05**



Totals of the left and right feet that belongs to football players and control groups. And the differences between the averages of the comparisons of the 11 contact area maximal power, totals of the left and right feet, medials and laterals of the left and right heels, right feet 1,2,3 left feet 4. and 5. the results belong to the metatars heads. $0.01 - 0.05 > P$) are meaningful.

Discussion

The human foot has a complex structure containing 26 bones and more than 30 joints There are 3 arches of foot and they show more structural change than any other part of the body(Standring,2008).Contact area and pressure distribution of foot are affected by many factors such as anatomical structure and VKI(Yılmaz,Erdeo,Tat,&Alp,2017). It is not seen as important statistically that the difference between age,height, weight and body mass index of the ones participated in research.This situation indicates that there is no physical property affecting sole of foot of sportsmen except football.

It's commonly known that increased force on foot may cause changes on stance, joint movement gaps and plantar walk patterns.(Henning, Staats, & Rosenbaum, 1994). And this research indicates the differences on walking characteristics between football players and the other people. It's been thought that football changes sportsmen's walk patterns because it's a branch which is chosen in pre-adulthood. Tuna's and his friend's(2004) research on 50 healthy adolescents shows that static measurements indicate high rates on heel, while dynamic measurements indicate high rates on toes.(Tuna, Yildiz, Celtik, & Kokino, 2006) Considering these results we can assume that during different activities, different parts of our foot gain priority. In a research which is done on 25 female football players aged averagely 18,80 +- 2,2, the effect of football to foot's contact points with ground is researched. It's found that it caused significant changes on left foot's 1st and 2nd metatars tops, and right foot's 2nd and 3rd metatars tops. .(Uzun, Kaya, Aydos; Kanatli, & Esen, 2012) But for the Professional football players in our research, total of right and left foot, heel medial, heel lateral, 1,2,3,4th metatars tops are all effecting the both feet. We can see that football players's findings on "contact with ground" points, are less than control group's findings.(Table2) This must be understood as football players have this difference because of their special trainings on specific moves and body parts. Especially when female football players's feet are observed, we can see that female players use the back of their heel more actively than male players. And the most important reason for that is male players do their trainings on turf while female players do it on synthetic grass. And again in another research, significant results were found between 17 male football players who were challenged with slalom on turf and synthetic grass, observing the changes of effect on their feet. It's found that playground affects the pressure dispersion on feet and the highest rate of relative load happens on synthetic grass, on medial foot's front parts. And most of the injuries happen at turfs. Stress fractures, Jones fractures which are results of repeating eversion movements usually happen in turfs.(K. R. Ford et al., 2006)

Researches focused on the relationship between shape of movements, kicking the ball, preferred shoes and injuries and disorders, showing there are considerable intersections.(2004) Eric and Eils did some research and found that specific trainings do change pressure dispersion on footwell but no relationship was found between playground and pressure dispersion on foot.(Eils et al., 2004).

In comparisons of players's contact points and their maximal forces, differences were seen on total of feet on both two footwells, heel medial, heel lateral, 1,2,3rd metatars tops's areas.(Table3). Football player Robin M. Queen (2007) and his friends did some research with speed tests observing pressure dispersion on footwell while barrier innerside pass, outer side pass, and accelerating trainings were performed. Research's results were, while barrier inner side pass, inner side of footwell is under more pressure, outer side pass, outer side of footwell is under more pressure, and while accelerating, middle part of footwell is under more pressure. (Queen, Haynes, Hardaker, & Garrett, 2007) In pedobarographic analyses on 23 rugby players and 17 healthy people, M. Rippani and his friends explained that pressure on rugby players's footwells were considerably higher.(Ripani, Ciccarelli, Morini, Riccardi, & Michielon, 2006) In the research which focused on the effect of female football players's contact to



ground points to their maximal forces, right foot 2, 3rd metatars tops and left foot total indicates a great deal of change on 3,4,5th toes, 2,3,4th metatars tops .(Uzun et al., 2012),

These researches demonstrates that changes in sole can be caused by several reasons. It is seen that in the force professional male footballers applied to in 11 areas both their contact area, and also in their maximal force values, while only the 2nd finger had values above the control group's values, in other all parameters they had lower values. This quirky situation can be thought as a reason of force application into the ground to use this area more properly or for greater speed development.

Result

As a result, athletes from childhood to professional footballer currently playing for time until the long-term training and matches the soles on their feet touch the ground moves, compelling, and the soles of the feet by the force is applied to the floor, consequently, it can be said that decreases the amount of time their feet touch the ground. Football players as a result of their training, especially at the beginning of the soles of the feet touch the ground and applied to the available force is caused by changes in terms of the different regions in the base of the feet with more active use. It was observed that this result. However, one of the sports that require explosive force branches is considered to be very repetitive and short distance traveled in football often composed in the soles to force running gathered since the metatarsal heads where the foot area reduces the duration of staying.

REFERENCES

- Besson, R., Poli, R., Ravenel, L., Poli, R., & Ravenel, L. (2010). *Demographic study of footballers in Europe*: Centre international d'étude du sport (CIES).
- Coté, J., Horton, S., MacDonald, D., & Wilkes, S. (2009). The benefits of sampling sports during childhood. *Physical & Health Education Journal*, 74(4), 6.
- Cote, K. P., Brunet, M. E., II, B. M. G., & Shultz, S. J. (2005). Effects of pronated and supinated foot postures on static and dynamic postural stability. *Journal of athletic training*, 40(1), 41.
- Eils, E., Streyl, M., Linnenbecker, S., Thorwesten, L., Völker, K., & Rosenbaum, D. (2004). Characteristic plantar pressure distribution patterns during soccer-specific movements. *The American Journal of Sports Medicine*, 32(1), 140-145.
- Ford, K. R., Manson, N. A., Evans, B. J., Myer, G. D., Gwin, R. C., Heidt, R. S., & Hewett, T. E. (2006). Comparison of in-shoe foot loading patterns on natural grass and synthetic turf. *Journal of Science and Medicine in Sport*, 9(6), 433-440.
- Ford, P. R., Ward, P., Hodges, N. J., & Williams, A. M. (2009). The role of deliberate practice and play in career progression in sport: the early engagement hypothesis. *High ability studies*, 20(1), 65-75.
- Ford, P. R., & Williams, A. M. (2008). The effect of participation in Gaelic football on the development of Irish professional soccer players. *Journal of Sport and Exercise Psychology*, 30(6), 709-722.
- Ford, P. R., & Williams, M. A. (2011). No relative age effect in the birth dates of award-winning athletes in male professional team sports. *Research quarterly for exercise and sport*, 82(3), 570-573.
- Hennig, E. M., Staats, A., & Rosenbaum, D. (1994). Plantar pressure distribution patterns of young school children in comparison to adults. *Foot & ankle international*, 15(1), 35-40.
- Huijgen, B. (2013). Technical skills, the key to succes? A study on talent development and selection of youth soccer players.
- Hurkmans, H., Bussmann, J., Benda, E., Verhaar, J., & Stam, H. (2003). Techniques for measuring weight bearing during standing and walking. *Clinical Biomechanics*, 18(7), 576-589.
- Kanath, U., Yetkin, H., Songür, M., Öztürk, A., & Bölükbaşı, S. (2006). Yürüme Analizinin Ortopedik Uygulamaları. *Türk Ortopedi ve Travmatoloji Birliği Derneği Dergisi*, 5(1-2), 53-59.
- Kunz, M. (2007). 265 million playing football. *FIFA magazine*, 7, 10-15.



- Özyürek, S., Demirbüken, İ., Tosun, Ö. Ç., Okyay, R. E., & Angın, S. (2013). Gebelik sürecinde zaman mesafe parametreleri ve plantar basınç dağılımı. *Fizyoterapi Rehabilitasyon*, 24(1), 71-79.
- Queen, R. M., Haynes, B. B., Hardaker, W. M., & Garrett, W. E. (2007). Forefoot loading during 3 athletic tasks. *The American Journal of Sports Medicine*, 35(4), 630-636.
- Ripani, M., Ciccarelli, A., Morini, S., Ricciardi, G., & Michielon, G. (2006). Evaluation of foot support in rugby players: a baropodometric analysis. *Sport Sciences for Health*, 1(3), 104-108.
- Sammarco, G. J., & Hockenbury, R. T. (2001). Treatment of stage II posterior tibial tendon dysfunction with flexor hallucis longus transfer and medial displacement calcaneal osteotomy. *Foot & ankle international*, 22(4), 305-312.
- Simon, S. R. (2004). Quantification of human motion: gait analysis—benefits and limitations to its application to clinical problems. *Journal of biomechanics*, 37(12), 1869-1880.
- Standring, S. (2008). Kidney and ureter. *Gray's anatomy the anatomical basis of clinical practice*. 40th ed. Spain: Churchill Livingstone, 1429-1462.
- Tuna, H. (2005). Ayak Hastalıklarında Pedobarografik Değerlendirme. *Turkish Journal of Physical Medicine and Rehabilitation*, 51(2).
- Tuna, H., Yıldız, M., Celtik, C., & Kokino, S. (2006). Ergenlik dönemindeki çocuklarda statik ve dinamik ayak basınç değerleri.
- Uzun, A., Kaya, M., Aydos, L., Kanatlı, U., & Esen, E. (2012). The effect of football on the sole contact areas and maximal forces of female football players. *Prime Research on Medicine Journal*, 2(4), 102-109.
- Ward, P., Hodges, N. J., Starkes, J. L., & Williams, M. A. (2007). The road to excellence: Deliberate practice and the development of expertise. *High ability studies*, 18(2), 119-153.
- Yılmaz, N. A., Erdeo, F., Tat, A. M., & Alp, H. (2017). Vücut kitle indeksinin ayak taban basınç dağılımına etkisi. *Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 1(2), 33-39.



The Role of Non-Governmental Organizations (NGOs) in Women's Education in Poland

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Abstract

The aim of the paper is to present the role of non-governmental organizations in women's education. Lifelong learning is widely regarded as playing a key role in enhancing the economic performance and prospects of individuals and, indeed, of whole economies. Women are a group for whom lifelong learning is particularly important, as they need to maintain and enhance their skills if they are to return to work. Lifelong learning is also a key to gain economic independence by women who faced many social problems such as poverty, domestic violence, social exclusion. Education is proven as the most effective way to empower women. Not only does education open the door to any employment and better employment opportunities, it also teaches a woman their rights, solving problems and making positive choices. Many non-governmental organizations help women in their daily struggles and support them when they face social problems such as poverty, violence, exclusion. Those institutions offer various range of trainings and psychological support to women.

Keywords: Non-governmental organizations, Women, Gender, Education, Lifelong learning

Introduction

In the modern world, education has become an integral part of everyone's life. Lifelong learning is no longer a voluntary educational activity undertaken by a privileged part of society, but rather the necessity and precondition for adequate functioning in the surrounding world. In the 21st century, knowledge has become a determinant of socio-economic development, and formal and informal (non-formal) education undoubtedly contributes to the realization of this goal. Lifelong learning is one of the priorities of education policy in EU countries. Implementation of continuing education programmes supports the transition of the EU to knowledge-based economies and societies that have to cope with constant socio-economic changes. Lifelong learning should last from pre-school to late-retirement.

Although the participation of women in paid employment has increased greatly in developed economies over the last fifty years there remains a sizeable gap between male and female participation rates. Responsibility for caring for children and other dependent family members continues to be borne mainly by women, and they frequently have spells out of paid employment as a consequence. Women are also more likely to experience various social problems such as domestic violence, stereotypical perception, labour market discrimination. Implementing gender equality measures (information, educational, or political ones) plays a key role in sustainable social development. Education of women (including adult women) is important, as it allows them to compete on the labor market, enhance their personal development and improve their quality of life. The key actors in adult women education are non-governmental organizations providing support to them.

The purpose of the article is to show the role of NGOs in the education of women. The article is largely based on the analysis of own research conducted with the aid of a qualitative method and an individual in-depth interview technique. The research was carried out among 30 representatives of non-governmental organizations in Poland working for women.

Lifelong Learning in Poland

Lifelong learning includes all forms of learning over the life course, including formal (learning that takes place in education and training institutions and leads to recognized credentials and diplomas), non-formal (learning that takes place in educational and training settings, but does not typically lead to a formalized credential), and informal (learning that takes place in everyday life and is not necessarily intentional and may not even be recognized by the



individuals themselves as contributing to their knowledge and skills). Lifelong learning was proposed in the context of reducing inequalities and poverty as a means to provide workers with skills necessary to remain in the labor force at older ages (Commission on European Communities, 2000). Lifelong learning includes ongoing skill development which relies on an integration between education, training, and work. Individuals with skills desired by employers are better able to take advantage of employment and social opportunities, resulting in increased productivity of both the employee and the employer (ILO, 2010).

According to data from a variety of studies conducted over the last few years in Poland, we are experiencing a significant increase in the educational aspirations of Poles, reflected directly in an overall increase in the level of education. At the same time, though, such attitudes are not reflected in growth in how widespread lifelong learning is. Data on average participation in training shows that, contrary to European trends and despite the growing range of courses and other training (available thanks to training projects co-financed by the EU) the level of participation in lifelong learning in Poland is not rising (Morysioska, 2015).

In comparison to other European Union countries, Poland has a very good performance in the education of young people (the results of skills tests and percentage of people with secondary and tertiary education). Nevertheless, in the area of adult education, the results are much lower in Poland than the European average. Low participation of adults in learning and their unsatisfactory results of basic skills tests should be noted. According to the 2016 Labor Force Survey (LFS) data, the share of people aged 25-64 in formal and non-formal learning was 3.7% in Poland and 10.8% in the EU. It should be pointed out that the share of women in these forms of education both in Poland (and on average in the EU) is slightly higher (4.0%) than men (3,4%) (Eurostat, 2016).

Table 1. Participation rate of people aged 25-64 in formal and non-formal learning.

Year	2013	2014	2015	2016	Goal – 2020
EU	10,7%	10,8%	10,7%	10,8%	Min. 15%
Poland	4,3%	4,0%	3,5%	3,7%	Min. 10%

Source: European Union Labour Force Survey (EU LFS).

Reasons behind lifelong learning not being very widespread in Poland can be puttogether in the two most important groups:

- 1) Individual factors - Lifelong learning is not favoured above all by a low level of formal education already acquired, advanced age, not being employed, or by living in rural areas. Paradoxically, lifelong learning is more appealing to and participated in more often by those currently holding jobs and with greater opportunities on the job market than the unemployed or those absent from the job market in the long term (occupationally passive). On the other hand, the reluctance to get involved in learning later in life is heightened by a number of stereotypes rooted deeply in social perception, as well as the lack of a well-developed culture in businesses for investing in their personnel.
- 2) Systemic factors – connected to the country's education policy, its legal system, and also the attitude displayed by lifelong learning establishments themselves (Morysioska, 2015).

The Role of Non-Governmental Organizations in Women Support

Non-governmental organizations pursuing societal objectives are one of the oldest existing forms of social organization, operating on non-profit basis but at the same time under market economy principles (Limanski, A., Drabikm I., 2007). Non-governmental organizations have gained increasing importance as actors in international relations and world politics. They are recognized as key third sector actors on pursuing development, human rights, humanitarian action, environment, and many other areas of public action. NGOs are best-known for two types of activity: 1) the delivery of services to people in need, 2) the organization of policy advocacy, and public campaigns in pursuit of social transformation (Lewis, 2010).



In Poland, there are tens of thousands of NGOs operating in many areas as sport, culture and the arts, education, social work and environmental protection. In 2015, 17 thousand foundations and 86 thousand associations were registered in Poland, and about 70 thousand of them were active. For 34% of registered non-governmental organizations, the core domain of activity was connected with sport, tourism, leisure and hobbies. Every sixth of the NGOs (15%) mentioned education and upbringing as the main area of activity, and every seventh of the NGOs pointed to culture and art. However, the description of Polish non-governmental sector on the basis of the main area of activity only would be incomplete, since NGOs often pursue a broad scope of activities, not limited to one area only. Hence, any activity related to sport, tourism, recreation and hobbies is carried out by more than half (55%) of Polish organizations. Slightly fewer organizations (53%) work in the field of education and upbringing, and 35% of them are involved in cultural activities. Most organizations (52%) operate locally (municipality, county, voivodship). Every tenth Polish NGOs operates internationally (Adamiak, Charycka, Gumkowska, 2016). NGOs have been influential in shaping the current global policy framework on women's empowerment and gender equality. The data show that organizations whose statutory activity concerns the development of human rights or the protection of equal rights for women and men represent 10% of all registered foundations and associations in Poland (Borkowska, 2012).

The activity of organizations working to promote equality between women and men is crucial because women are still more vulnerable to social exclusion. Women are experiencing difficulties both in the labour market, public space and family life. The main differences in the situation of women in the labour market - compared to men - are their lower participation in paid employment, more frequent and longer unemployment spells, difficulties in finding employment and reintegration into the labour market, for example after the periods devoted to bringing up children. Women's inequality in the labour market is also linked to the sphere of income and career advancement. Women generally earn less than men working in the same position and have limited career advancement opportunities (the glass ceiling phenomenon) (Tarkowska 2005).

Women are more likely to experience difficult life situations such as lone parenthood and the problems related to it. They are also the main victims of domestic violence.

Reconciliation of work, family and educational careers is challenging, particularly for women who are nowadays expected to be more involved in employment and work longer, while evidence shows that care provision at all stages of the life course is still more frequently provided by women (EU, 2006).

Opportunities in the labour market are important for women to achieve equality with men. Overcoming the challenges that confront women in gaining access to education and training and in using this training to secure better employment. This includes overcoming logistic, economic and cultural barriers and meeting the training needs of women re-entering the labour market and of older women who have not had equal access to opportunities for lifelong learning. (ILO, 2010). NGOs are significant providers of lifelong learning (particularly adult and community learning opportunities). The "third sector" is generally regarded as most successful at engaging in learning opportunities disadvantages members of society (O'Grady, 2013).

Non-Governmental Organizations in Poland and Women Education - Analysis and Interpretation of Own Research

The research was carried out at the end of 2015 using a qualitative methodology and the technique of individual in-depth interview (IDI). Qualitative interview has a fairly loose structure. Formulating individual questions, their precise verbalization or the order in which they are asked is less important than getting specific information, regardless of the question (Maison, 2010). The research was carried out among 30 representatives of NGOs supporting women from all over Poland. The surveyed individuals represented organizations based in large cities (metropolitan areas) as well as large, medium and small towns and rural areas. The study included both international, national and local organizations. The sampling selection was purposive, but it was attempted to



include in the study the diversity of non-governmental organizations on the basis of their seat and area of action. The key element connecting all the researched organizations was their focus on women's support and the inclusion of this objective in the organization's statutes.

Qualitative analysis of in-depth interviews allowed to highlight several roles /measures aimed at direct or indirect support for women's education. Among these, we can distinguish: 1) direct educational activities in the form of courses and trainings organized for women in order to improve their skills and knowledge, 2) programmes aimed at the reconciliation of professional and family roles, 3) information and dissemination programmes, 4) activation of unemployed women. A significant proportion of the surveyed organizations implemented more than one of the above-mentioned measures aimed at women in the scope of their statutory activities.

A sizeable proportion of the surveyed non-governmental organizations conducted trainings and vocational courses to enhance women's career opportunities on the labour market. On the one hand, these measures were to boost women's confidence in their own abilities and sense of competence, and on the other hand to increase professional attractiveness of women for employers. Some of the educational activities of the researched NGOs was aimed at developing specific skills required for a particular occupation or position, especially those that have recently developed, allowing women with career breaks for childcare reasons to have fully up-to-date qualifications, e.g. courses in computer skills. According to a representative of one of the surveyed organizations: *"We want to appeal to the women who are already educated but they choose more important matters such as childcare, thus putting aside some interesting training opportunities. They have already achieved some success, but there comes a moment when they want or need to supplement their knowledge, because the world is moving forward. We organize trainings on modern negotiation techniques, interpersonal communication, and financial issues"* (IDI 13, big city, provincial coverage). One of the researched organizations was involved in the education of female farmers and farmers' wives in the field of agricultural accounting so that they could keep their farm accounts in line with applicable laws.

Some non-governmental organizations have been undertaking actions to promote developing skills in information technology and foreign languages, regardless of the level of education, current status in the labor market or occupation. Measures in the field of modern technology were targeted by a significant proportion of the surveyed organizations to women aged 50+ who, according to the respondents, were particularly vulnerable to digital exclusion.

Some of the NGOs focused on educational activities aimed at encouraging women and preparing them to run their own businesses. They have provided practical trainings on how to start and run their own businesses. The courses curricula covered the basics of economics, management, bookkeeping, law, and accounting. According to a representative of one of these organizations: *"We started doing such trainings on how to set up your own business, as these women often have the opportunity to work at home or do some temporary jobs. We prepare legal training providing information on what to do, how to start a business and how to settle it, step by step. Coaching is also very helpful here because they often come and are lost, and at that point, a psychologist who supports and guides them is essential"* (IDI 1, big city, nationwide coverage).

Few researched non-governmental organizations have implemented training programmes for women in the scope of breaking down professional barriers. Such measures were aimed at adequate assessment of women's own skills, negotiating employment conditions, shaping their individual career path, and increasing their assertiveness and mobility. As one of the representatives of these organizations emphasizes: *"Our goal is to make women in touch with their own strengths so that they can begin to regain control of their own lives and acquire psychological and social competences that will enable them to live with dignity. We teach them how to manage themselves and how to set their paths in adult life"* (IDI 10, big city, provincial coverage).



Some organizations operate on the basis of self-help and support: *"We have the following slogan on our website: 'mutual motivation is the source of inspiration'. We see that the higher self-esteem of the girls, the bigger their causative power, and since each of us has various competences, we share them with those girls"* (IDI 21, small town, local coverage).

Some of the studied NGOs are taking action in the scope of reconciliation of professional and family roles. The actions were generally aimed at stimulating women's professional activity and popularizing information on the partnership of women and men in the family and at home through social campaigns, seminars, and trainings. Training in this area and various types of campaigns were mostly targeted at women, although some of the organizations addressed them to men and women alike. However, none of the studied non-governmental organizations has taken direct measures aiming at organizing care services for children and adults in need of care. Such measures could be extremely important in rural areas, where access to day nurseries and kindergartens and other forms of care of dependent persons is difficult. This inaccessibility of appropriate care institutions is often the main barrier for women wishing to undertake educational or professional activities.

According to a large proportion of the representatives of the researched NGOs working for women, a number of activities that women take up in social sphere (e.g. on the labour market) stem from inaccurate information about the rights they are entitled to. Some women do not know what they can do in a crisis situation, for example when experiencing domestic violence. Some non-governmental organizations are working to promote information about possible solutions to difficult situations and the rights women are entitled to. As one of the representatives points out: *"Our main goal is to support women who experience violence. We work to improve their knowledge and self-awareness of what relationships and situations they are in, when they can react and to what extent. We teach them appropriate reactions and assertive attitudes aimed at protecting themselves, their own physical and mental health. We would also like the people we work with to respond to the violence they see around them. We carry out a number of educational and awareness-raising campaigns both in lower and higher secondary schools, and in local communities. We also conduct various seminars and meetings focused on combating violence. We organize focused trainings for groups, e.g. one of such trainings was targeted at groups of journalists. Education is very important in the whole anti-violence discourse"* (IDI 4, large city, local coverage).

One of the studied non-governmental organizations was undertaking information activities on the role of women in history. It spread knowledge about important female figures in Polish history and cooperation with other non-governmental organizations in this area. This organization has released several volumes covering the so-called herstory and a guide to Poland, covering ten routes in various cities and towns in Poland, following the footsteps of women in Polish history.

A significant proportion of the NGOs carried out activities aimed at the vocational activation of the unemployed women. Some of these activities were targeted at people experiencing various social problems such as domestic violence or single motherhood. Professional activation and financial independence, according to the researched representatives, were the key factors in combating social exclusion and the factors of change in women's lives. A large part of the NGOs supporting long-term unemployed women implemented comprehensive measures ranging from increasing their motivation, providing appropriate professional qualifications, psychological support, job search skills, CV and cover letter writing abilities, or job interview techniques.

In the scope of vocational activation of women, some non-governmental organizations combined education (courses, vocational training) with professional internships, which allowed women returning to the labour market to obtain up-to-date work experience, highly appreciated by prospective employers. According to a representative of one of the studied organizations, the actions supporting vocational activation were adapted to the needs of different categories of women: *"If the women had computer skills but could not do electronic invoicing, we were teaching it. If they had no occupation at all, we provided vocational training for child minders, community support*



workers, kitchen help or home help. We have been training and looking for a job for such a person. We have also set up a Job Club where we teach the interview skills, do practical exercises on interviewing, cover letter and CV writing, but also how to dress, what makeup to do. These are the things that allow you to enter the market. If they have no job, then of course, as I said, we do the training and then help them to look for a job. If their experience is outdated, we offer internships which may help them to find a job" (IDI 2, big city, provincial coverage).

The representatives of NGOs active in the field of vocational activation of long-term unemployed women emphasized the need to combine various measures and, above all, to increase women's self-esteem, skills and sense of competence.

Conclusion

Ever increasing economic and social changes bring about the need to adapt competences and skills to the transformations not only in the professional but also in the social sphere. Lifelong learning covers many forms of formal, non-formal and informal training. Lifelong learning is also a tool that reduces social inequalities, minimizes exclusion, and encourages the acquisition of qualifications which help women to remain in the labour market. Women are still particularly vulnerable to poverty and exclusion from the labour market. Lifelong learning can thus be an instrument for increasing their professional opportunities and enabling them to return to the labour market and update their skills and qualifications. Non-governmental organizations play an important role in educational activities for women. According to the data, about 10% of Polish non-governmental organizations have statutory measures aimed at promoting equal opportunities for women and men and directly supporting women in various activities. The qualitative research carried out among 30 representatives of non-governmental organizations dealing with women's empowerment enables to highlight their main activities in this area.

A large proportion of the surveyed organizations undertake direct educational activities in the form of courses and trainings aimed at improving their skills and competences. The activities are targeted at working women, those who want to return to the labour market and the long-term unemployed ones. Non-governmental organizations offer trainings which develop specific competences required for a particular profession, information technology and language skills, and provide support in starting their own business. Some organizations focus on breaking professional barriers, boosting women's self-confidence and assertiveness and developing abilities to plan their career paths. Another organizations work towards promoting reconciliation of family and professional roles and partnership in relationships. They support a change in mentality and incentives for greater participation of men in domestic and childcare duties. A wide range of non-governmental organizations undertakes information and educational measures in the scope of problem-solving (e.g. in case of domestic violence), crisis support and public education on anti-discrimination policies.

References

- Borkowska, M. (2012). *Równość szans kobiet i mężczyzn w sektorze pozarządowym. Diagnoza i rekomendacje*. Warszawa: Instytut Spraw Publicznych.
- Commission on the European Communities. (2000). *A memorandum on lifelong learning*. Brussels SEC(2000) 1832.
- EU. (2006). *Reconciliation of professional and private life: exchange of good practices*, Luxembourg.
- EUROSTAT. (2016). *European Union Labour Force Survey (EU LFS)*:
<http://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>
- ILO. (2010). *A skilled workforce for strong, sustainable and balanced growth: A G20 training strategy*. Geneva.
- Lewis, D. (2010). *Nongovernmental Organizations, Definition and History*. In: H. K. Anheier, S. Toepler (Eds.). *International Encyclopedia of Civil Society* (pp 1056-1062). Springer US. Adamiak, P., Charycka, B., Gumkowska, M. (2016). *Kondycja sektora organizacji pozarządowych w Polsce 2015*. Warszawa: Stowarzyszenie Klon/Jawor.
- Limanski, A., Drabik I. (2007). *Marketing w organizacjach non-profit*. Warszawa: Wydaw. Difin.
- Maison, D. (2010). *Jakościowe metody badań marketingowych. Jak zrozumieć konsumenta*, Warszawa: Wydawnictwo Naukowe PWN.



- Morysiosa, A. (2015). Badania efektywności kształcenia ustawicznego i zapotrzebowania na kształcenie ustawiczne. Warszawa: Mazowieckie Obseratorium Rynku Pracy.
- O'Grady, A. (2013). Lifelong Learning in the UK: An Introductory Guide for Education Studies. London and New York: Routledge.
- Tarkowska, E. (2005). Bieda w Polsce w świetle badań jakościowych – próba podsumowania. In S. Golinowska, E. Tarkowska, I. Topińska (Eds.), *Ubóstwo i wykluczenie społeczne. Badania. Metody. Wyniki.* Warszawa: Instytut Pracy i Spraw Socjalnych.
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Pedagogical and Psychological Aspects of Parent Education Content in Children's Upbringing Context

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Abstract

The long-term conceptual document approved by the Saeima "The Growth Model of Latvia: the Human in the First Place" defines a human-centred model of Latvia development. The goal of growth is to raise various quality aspects of every person's life. This can be achieved by actively using the accumulated knowledge and experience of people. At the same time, the importance of the education system for creating a comprehensive world view and value orientation should be emphasized. Family policy guidelines for 2011-2017 indicate that in order to help parents, especially young people, to acquire the necessary knowledge and skills in order to take care of their children fully and to build a stable and happy family, it is necessary to implement educational and informative measures, which are intended to educate parents about their role and how it changes, about the child's rights and responsibilities arising from them, as well as their long-term rights.

Introduction

A strong, socially and economically independent family is one of the most important preconditions for the survival of every society. Families not only affect significantly well-being of the society and state, but also perform a number of important functions: maintain demographic stability, ensure socialization of children and young people and prepare them for life, family care and mutual support for family members. It is important for young people, potential family founders, to explain in a timely manner the necessity and importance of family stability and marriage. The child's waiting and getting into the family is one of the most important stages of family life, bringing with it happiness and joy. At the same time, it relates to the beginning of a completely new life, when the wife becomes a mother, but the husband is a father. However, despite the relatively long period between the creation of a child and his or her birth, where parents have the opportunity to obtain information on the development and upbringing of a child, some parents, especially young parents, lack the necessary knowledge and understanding of the child's development and upbringing, as well as the need to ensure the child a safe and healthy environment. As a result, there is a one-sided conception of the principles of child upbringing, which often does not promote positive emotional and physical development of children, weakens children's psychological relationships with their parents. Many families are confronted with difficulties in children's upbringing due to various social, economic and other factors.

The aim: assess the pedagogical and psychological aspects of the parent education process content in the children's upbringing context.

Method

Analysis of literature and documents, survey.



Findings

Parents' self-feeling and their children's upbringing methods in the family are determined by the society's social structure and culture, and as the family is a kind of the society's "psychological mediator" between the society and child then during the adaptation process the child establishes such emotional attitude with the family which later will become the base for their adaptation in the society. M. Bowen (Bowen,) has paid a special attention to the social emotional process. He believes that the family functioning can be reflected on a conditional differentiation scale, where the "regressive societies" are placed at the bottom, but the "progressive ones" are situated at the top. Some features of the "progressive" society are: social harmony in the attitude towards the surrounding environment, physical comfort and economic security, availability of food, living space and medical care, as well as all public members' long life expectancy. Some features of the "regressive" society are: destruction of the surrounding environment, unreasonable waste of natural resources, increase of such social problems as divorce, antisocial behaviour, violence, crime, alcoholism, drug addiction. All these negative factors in parents that live in the society create the sense of insecurity about their future, about the family's economic situation. This sense of insecurity can cause doubt, distrust, hostility, loss of human self-esteem. Lower adults' self-esteem and lack of self-respect in the society lead parents' behaviour from the self-realization sphere to the self-assurance sphere. Equality with the child as a personality has been banished because parents want to be superior, this allows the adult to feel stronger their significance and self-respect.

Also U. Bronfenbrenner (Bronfenbrenner, 1994) believes that the disorganizing forces do not emerge initially in the very family, but rather in the whole society's lifestyle and objective conditions which are encountered by families. If these conditions and this lifestyle are implemented badly for the sake of trust attitude and emotional security in the relationships among the family members, if these conditions impede the children's care to bring them up and give them pleasure, if the parents' duties do not find support and recognition in the surrounding world, and if the time spent in the family causes losses in the career, personal satisfaction and psychological sense of security, just then the child's psychological development suffers especially. The initial symptoms, which show it, are expressed in the emotional and motivation sphere- reluctance, indifference, irresponsibility. During the first years of life the family for the child is the main model of social relationships. There is reason to believe that the period up to the three year age determines formation of the "basal I." The child's need for love is not only the strongest, but also the most long-lasting one. The child starts feeling themselves first of all as lovable or undesirable, the cognitive self-awareness abilities and means appear in the child only later. Thus the sense "what I am like" is formed before "who I am."

Parents' attitude is a unified system of utterly diverse feelings in the attitude towards the child, actions, behavioural stereotypes which are applied in communication with the child, the child's character, peculiarities of their behaviour and understanding. The child's communication with close adults and peers is not only a factor for a full mental development, but also the base for relationship establishment with other people, themselves and with the subject world. The child, living in the family, gathers a huge experience of mutual relationships in themselves. The child is aware of what is right or wrong, how the parents treat them – avoid the child, are not satisfied with them, acknowledge the child's independence or oppress it, treat their child amicably – with patience, trust, sincerity, love or not. The child develops own attitude- the child loves their parents the way they are, or feels their emotional alienation and tries to decrease it. Awareness of the child and parents' mutual relationships is expressed in the child's expressions, behaviour and mood.

According to the findings of pre-school pedagogy and psychology theories on the significance of individualization of socializing process in childhood A. Samuseviča and B. Vikmane (Samuseviča, Vikmane, 2017) have set in practice the prevailing modern parents' difficulties in children's upbringing,



describing the essence of parents' pedagogical competence and its characteristic features. The data obtained during the research confirm that the child's upbringing and socialization are affected adversely due to the lack of parents' pedagogical competence in all family members' mutual relationships in which the child's permissiveness quite often prevails, but adults feel pedagogically helpless and give in to all child's wishes. The authoritative child tries to carry on with the role acquired in the family in communication with peers and teachers in the pre-school educational establishment in a form of a demonstratively loud behaviour without listening to adults, disregarding the internal order rules, humiliating other children, bullying them, trying to attract their attention and becoming the leader of the situation.

In order to create attraction between parents and children, first of all the adult's ability to feel and respond (empathy) to any child's signals is necessary – whether it would be the look, smile, crying or an aggressive behaviour. The child needs sincerity, tenderness, support. Pre-school teachers mention different child upbringing and socialization difficulties in families, e.g.: parents' differentiated attitude towards their children, physical impact, insufficient care, use of divorced parents in relationships, unarranged daily routine for the child, lack of parents' attention and/or father, child overindulgence, parents' uncoordinated action, etc. Alongside the already mentioned behavioural problems the teachers have noticed the child isolation from others, aggression towards their peers and adults, auto aggression harming themselves, delay of social skill development, etc. Parents need knowledge, abilities and skills to be good parents.

A.Karpova, (Karpova, 2006) carrying out the research of socializing processes in Latvian families, have come to a conclusion that the main psychological mechanism of includes the following:

- support and acknowledgment of a particular behaviour, rejection of another one;
- conscious and unconscious imitation of parents' behaviour, orientation towards the parental sample;
- observation of the child's subjective inner world (awareness, self-awareness and personality in general) in the upbringing process.

During the process of the child's positive self-feeling formation it is very important to feel that the parents love the child, that the child is important to the parents. Every child has got their own emotional needs. The way how – with love, understanding or punishments- these emotional needs are satisfied and whether they are satisfied in general determines:

- the child's self-feeling- the child is happy or depressed, kind or angry;
- the child's behaviour – the child is obedient or disobedient, stubborn, tearful, closed or cheerful and active.

How to establish and later not to lose the contact with the child, what are the positive disciplinary methods like and what does it mean to be good parents in general, are the most often asked questions which have been addressed to the psychologists of the foundation "Centrs Dardedze." The specialists of the centre have noticed that just the small children's parents, i.e. 2-3 year old children's parents, most often seek for help in problem solving. Mostly they are issues related to the child's development and discipline. Parents admit they lack the knowledge on how the child grows and develops, how to discipline the child in a positive way and how to bring up an emotionally healthy and happy child. Child's upbringing is one of the most responsible jobs one can even think of, therefore sometimes the first step towards the success is the arrangement of own adults' live and assessment of priorities.

In order to find out what causes difficulties in children's upbringing, a survey has been carried out. 55 families took part in it. The parents, who participated in the survey, can be divided in the following groups according to their age and number of children:

- 1) young parents (20-27 years old) with one child 1.5 - 7 years old;
- 2) young parents with 2 or 3 pre-school age children;



- 3) parents (30-40 years old) with one child at school and 1 or 2 children in pre-school age;
- 4) parents (30-40 years old) with 1 or 2 teenagers and 1 or 2 children in pre-school age.

Collating the respondents' replies, the following data was obtained:

Table 1. Main Difficulties in Children's Upbringing

Difficulties in upbringing	1 child family (18 families)	2 children family (24 families)	3 – 4 children family (13 families)
No difficulties	7	16	6
Child's answering back	4	1	3
Child's stubbornness, selflessness	12	9	4
Abundance of energy	6	8	3
Disobedience	9	13	6
Jealousy	-	12	2
Lack of time to deal with the child	5	7	4
Lack of finances	2	3	3
Child's overindulgence	3	6	4
School requirements	-	4	2

In the parents' assessments about the educational situation in families various parents' attitudes towards children have been crystalized. 28 families admit there are no difficulties in children's upbringing. Several parents- in 17 families think that their children's excessive mobility causes difficulties for them, in 32 families parents mention their children's disobedience, stubbornness, answering back, children's overindulgence, tantrums, whims.

The demand for consultations, number of complex situations and cases of unconscious violence confirm the fact that in the country the availability of training for the expectant or young parents is insufficient, also at schools proper attention has not been paid to the issues.

One of possible solutions to improve the situation is the set goal of the Family State Policy Guidelines for 2011-2017: promote foundation, stability, welfare of families and increase birth rate, as well as strengthen marriage institution and its value in the society, implementation, developing a training programme for the people who are getting ready for marriage registration, including in it also the points about the protection of children's rights and interests. To implement more successfully in the whole country the training programme for the people who are going to register their marriage in a Registry Office, the Ministry of Welfare of the Republic of Latvia planned to start the development of the programme in 2013 and its approbation would take place in 2014. The main action directions: foundation of family and marriage, planning of family life and child's entrance into the family; support for implementation of parents' responsibility; family's stability, out-of-family care. Within the national programme for the improvement of the child and family's condition a survey was carried out about the young people's attitude towards marriage. In total 3 155 young people aged 18-25 have been surveyed, out of whom 2 066 live in Latvia, but 1 089 are abroad.

In 2017 the Ministry of Justice of the Republic of Latvia in cooperation with several educational establishments have started a pilot project in a pre-marriage training course for the people who are willing to register their marriage in a registry office. The goal of the training programme is to promote the family's stability, as well as to strengthen the marriage institution and its values in the society. The pre-



marriage programme provides the prospective married couples with an opportunity to obtain knowledge and understanding about the essential issues of marriage life. The programme consists of four models- it has been planned that each of them will last for about six academic hours- 24 hours in total during which it is envisaged to acquire financial literacy, improving understanding about wise management of money and budget planning; the knowledge will be acquired and understanding developed about the legal aspects of marriage, psychological and ethical aspects of marriage, formation of spouses' family relationships, parents' responsibility and duties. This year 50 couples were provided with an opportunity to participate in the pilot project.

Results

Nowadays in order the young parents would be able to provide the child's socialization fully and solve the problems of the upbringing process in a constructive way, an appropriate pedagogical competence is necessary. It means that the young parents have to be familiar with the basic issues of the child's development and upbringing, they have to be aware of the constant and significant changes which take place in the child's development during every age stage. The child's activity together with adults, their communication and closeness with family members during the pre-school age are essential preconditions for development.

Assessing the content of the developed programme in the children's upbringing context, several important topics have been discovered which should be included in it. To deal successfully with children's upbringing, it is important to emphasize the great importance of values in the personality formation process. Stability of the value system affects the parents' purposeful upbringing activity. Values do not form by themselves, the person's individual, subjective peculiarities are expressed in them, which originate in upbringing, personality formation conditions, gifts and talents. L. Božoviča (Božoviča, 1975) points out that it is important to discover the values already in childhood, broadening the child's horizon, but A. Brilmeiers (Brilmeiers, 1998) pays attention to the specific impact of the mental authority on the child, which promotes and strengthens their mental life. Also Ā.Adlers is sure that the child needs a peer who is interested and feels them even when do not understand them; a parent is such a person for the child who promotes their positive self-feeling, strengthens confidence in them and their activity. A. Kopeloviča and L. Žukovs mention that the environment affects the child's value orientation in which the child is situated. Mostly the child's development depends on the relationships the child is with the environment, how the child feels, experiences it emotionally. The task of upbringing mastery is to achieve that the values already in the childhood would create an individual, personal world in the pupil, which is revealed in the expression and development of gifts, abilities, inclinations and appeals. Children's upbringing in families is quite often delegated to others: TV, video, computers have taken the most important part in children's personality formation, forgetting that only a spiritually rich personality can make a spiritually rich person. J. Kolominskis pays attention to the personality's internal content, considering that educators definitely have to find answers to the questions:

1) **What** does the person **want**? – It is a question about the person's progress, opinions and tendencies, needs, interests, ideals, values.

2) **What is** the person **able to do**? – It is a question about the person's abilities, giftedness, and talents.

3) **Who is** the person? – It is a question related to the person's character.

A human being is characterized not only by the goal which they are striving to achieve, but also the means which are chosen for its achievement.

Developing the promotion model for children's value formation it is essential to be aware of the terms which are significant in the value formation process:

- 1) parents' values;
- 2) observance of the child's natural development;



- 3) favourable psychological climate in the family;
- 4) formation of human communication;
- 5) social status suitable for the child.

During the upbringing process each its member tries to give some cognitive or moral information, provide a particular orientation. Due to perception some value conceptions are formed in the child's consciousness. They can be either primary or secondary which are based on previous preconceptions. Adults own initiative in the process. During the perception process the adult can include the child's sense spectrum as broad as possible, depending on the child's life experience teach to perceive the most important and promote development of their creative initiative. Perception grows into the understanding of value preconceptions. Conceptions are formed from preconceptions, the nature of things and phenomena and conformity to natural laws are revealed, actualization of the previous experience take place. The developed self-assessment enables us to express the positive or negative significance of the values to the particular child. A certain system of value preconceptions is formed whose elements can be situated in the most varied mutual coherence. Value orientations are formed on the base of value preconceptions which guarantee personality persistence, a certain type of behaviour and activity, set the direction of needs and interests. This is the main factor of personality formation. Parents' task is to create pedagogical situations for value self-expression. The value formation process is constant. Performing a conditional spiral movement in each stage it is based on the previously acquired experience creating permanent values in every human being.

The content of values comprises the main directions in value acquisition already in early childhood:

- 1) "I" as a value,
- 2) preciousness of life,
- 3) values of human life activity,
- 4) understanding and sense of natural value.

The mentioned values are important throughout the life course, therefore their purposeful formation is one of the most responsible tasks already in childhood. It is important to reveal the content of directions. Looking at each of them separately the main emphases for the value formation can be distinguished. The internal content of the human "I", personality emerges and forms during the communication process. A human being in their childhood not only reveals the other person, but also strives for it. The family, group of preschool educational establishment, class – it is wealth of individualities. The human's spiritual wealth, which they bring into a group, enriches others and what can be gained from them, strengthens in the child the desire to become better, develop oneself, but it can only be possible with noble, spiritual work. Mutual exchange of intellectual and spiritual wealth promotes the development of the child's personality. It makes them turn to self-cognition and development already in childhood. To promote "I" as value formation, four important questions are asked: Who am I? What am I like? What do I want? What am I able to do? Looking for answers to them, the child can obtain a broad insight into themselves, their personality, needs, desires, interests, abilities.

Developing themselves, the human being creates the base for awareness of their life preciousness. It is characterized not only by the goal to which they strive to, but also by the means which have been chosen for its achievement. This dynamics directs to an active action, to the search for the conditions of life activity. In it the human biological and social nature is revealed, which determines appropriate values. On the basis of the main types of activity the values can be distinguished which are important for children to pay attention to: knowledge which enables them to act, attitudes, requirements to other people-communication. Introducing a human with the material and spiritual values created by the life activity (art, literature, music, etc.), a harmonic individual's activity is promoted.

Child's discipline is an important aspect of upbringing. Discipline means teaching the child acceptable behaviour which will determine how the child feels and behaves today and how the child will feel and



behave tomorrow. Discipline helps the child to develop self-control and teaches the child to acquire the principles of self-discipline, which the child will need in the life course and will help to avoid problems when the child grows up. Any individual- either a child or adult- needs to understand the daily life rhythm and order of things in this world according to which we have to live, and it would be the parents' task to create for the child in good time an understandable family environment, introduce and explain rules, set strict borders to what can and cannot be done.

This way parents protect a very small child and provides them safety just in a physical way, but an older child is taught the rules which help them form relationships with their peers. One of the parents' most important tasks is to discipline the child in a loving, fair and acceptable way, though sufficiently strictly and persistently. The child's age, sex and family traditions have to be taken into account definitely. Discipline is not a one-day task, but rather a long-lasting process which requires lots of patience and knowledge from the adult, also it is important that the parents and other adults as well, who are involved in the child's care, are consequent in their demands – persistent, consecutive. One more important aspect in the child's upbringing process which has to be emphasized is prophylaxis of the child's speech and language impairment and its significance in the child's speech and language development process. During the development process the child acquires the skill to apply the language as a tool for communication, interaction, self-expression and self-regulation, also for cognition of the surrounding world. When the child is already two and a half or three years old, the feedback of the language development to the child's cognitive and social development can be noticed. The procedure of the child's oral speech and language acquisition process and the achieved development level in pre-school age is an essential factor in the further development context- it is an indicator of the intellectual development and readiness for school. Reading and writing skills are created on the base built developing the child's speech and language during the pre-school age. The quality of written language, especially the reading skill acquisition affects essentially not only the success at school, but it is also an important factor for personally and socially important goal achievement (Geske & Ozola, 2007; Strehlow, 2004; Suchodoletz, 2004, Tomele, 2013; Trinīte, 2015; Tūbele, 2015).

All over the world, also including Latvia, the number of children with speech and language development retention or impairment tends to increase. S.Tūbele (Tūbele, 2006) states that during the time period from 1999 to 2005 20%-25% primary school pupils need the speech therapist's help. In its turn in 2015 B. Trinīte points out that according to the provisional data from Latvia Speech Therapists' Association already 35% of primary school age pupils need speech therapy help. During the preschool age 50% of children aged 3-5 have speech, language and communication disorders, but at the age of 5-6 35%-40% children still have speech disorders (Trinīte, 2015). Also the general conclusion of the speech therapists' reports of Liepaja preschool educational establishments (PEE) in the Pedagogy Department of Liepaja City Municipal Education Department confirms that the average number of children with speech and language impairment during the time period from October 2011 till April 2017 fluctuates from 41.01% to 48.03 and it has got a tendency to increase (see Table 1). In the survey the children under 3 and the ones who do not attend PEE are not included.



Table 2. Survey of the number of children over three with speech and language impairment in Liepaja PEE during the time period from 2011/2012 till 2016/2017a.y.

School year	Month	Total number of children in Liepaja pre-school educational institutions	Total number of children with speech and language disorders	The average number of children with speech and language disorders during the school year
2011/2012	October	2922	1360 (46,54%)	41,58 %
	April	3034	1111 (36,61%)	
2012/2013	October	2744	1178 (42,93%)	41,01 %
	April	2824	1104 (39,09%)	
2013/2014	October	2752	1280 (46,51%)	42,23 %
	April	2704	1026 (37,94%)	
2014/2015	October	2609	1190 (45,61%)	42,23 %
	April	2695	1103 (40,92%)	
2015/2016	October	2660	1363 (51,24%)	48,03%
	April	2617	1173 (44,82%)	
2016/2017	October	2653	1271 (47,90%)	46,38%
	April	2606	1169 (44,85%)	

According to the data collection of Latvia Speech Therapists' Association and Liepaja PEE speech therapists' reports, as well as the international experience in the western Europe and the USA (Ruben, 2000; Strehlow, 2004; Suchodoletz, 2004), it can be concluded that the current situation regarding the children's speech and language development can cause essential consequences in future not only in the context of a particular individual, but also the whole society. Thus prophylaxis of speech and language impairment becomes more and more topical, which is one area of the speech therapist's professional competence. In speech therapy there are three types of prophylaxis:

- primary (informing the public on ontogenesis of speech and language development, pathogenesis of impairments and promotional opportunities of language development in the family and pedagogical process);
- secondary (timely diagnostics and early detection of the impairment);
- tertiary (timely and qualitative correction of speech and language and restriction of secondary impairment), prophylaxis.

Initially a set of systematic methods and activities was understood with the term "prophylaxis," which enables us to notice the possible development risks early and, applying appropriate pedagogical methods, eliminate or reduce them during the educational process. Now the term *prophylaxis of speech and language impairment* includes a much wider activity spectrum and nowadays an important aspect of prophylaxis is not only information, diagnostics and correction, but also cooperation among children's parents, preschool education teachers and speech therapists. Right now in Latvia good outcomes have been achieved in the secondary prophylaxis area and starting from the age of three regular speech and language check-ups are carried out for all children who attend a municipal PEE. The children who do not attend a PEE and are under three are under GPs' supervision. Unfortunately, in the speech therapy practice the cases with insufficient family doctor's awareness of language development in ontogenesis and pathogenesis issues are encountered. In its turn, implementation of the tertiary practice in Latvia is impeded, since the number of speech therapists working at educational establishments is insufficient in order to provide all learners who need it with a timely and efficient speech therapy help (Tomele, 2013; Trinīte, 2015).



Conclusions

Upbringing area is a complex work field in which different opinions will always meet about how the upbringing work should be performed, about the directions and their development, about criteria, how to assess the work outcomes, about the values, which have to be considered as priority. It is art of compromises to balance all these opinions and reach a consensus. Two tendencies have to be taken into account in upbringing which during the personality formation either weave together or collide, interact or oppose each other. On the one hand upbringing is a social necessity, on the other hand it is a phenomenon of an active, creative personality's freedom which is able to manage itself and be responsible for the activity.

In order to strengthen the family and establish a strong base for a positive upbringing system in any new family, it is important to promote the parents' interest in the development of the upbringing process, in consolidation of own and family's values. It is important to awaken everybody's creative energy and promote acquisition of universal values which are essential for human existence according to three cognitions:

- universal values teach to respect and honour anybody, thus welfare of every individual and the whole society is promoted;
- everybody has to take care of values, they are given opportunities to create and acquire different positive values;
- a human flourishes in a gentle and respectful environment, in an atmosphere based on values where they have a chance to learn to carry out a socially important selection.

The modern family's main tasks are:

- create a maximally efficient environment for the child's personality development;
- guarantee the child's psychological protection and safety;
- satisfy the child's material needs;
- find possibilities for the child to acquire various practical skills and develop the necessary self-service skills;
- promote formation of the child's self-awareness and self-respect.

In order to provide young families with opportunities to acquire the necessary knowledge on children's upbringing, in the content of the curriculum specific issues have to be included which would create the base for any parent's self-education in the issues.

Recommendations

- 1 Values are the base for human activities, they are related to mental behaviour. Most of the hopes, possibilities and choices originate from values. They can be important for only one person, but others can join in also in their assessment. Values are the matter of personal choice, they are lots of life ways – different values shape different lives. Values grow from human subjectivity, spontaneity. The moral problem is hidden in the human insignificant attitude towards oneself. A human being has turned themselves into a tool, instrument in order to achieve the goals, they treat themselves as things, losing their self-esteem and uniqueness. Feeling their powerlessness the human being starts despising themselves, stops believing in their own power, loses belief into people, themselves and their abilities. The human attitude towards force and power comes in the foreground, as well as the sense of loneliness and isolation. A human being is not able to be mentally healthy if they do not have the sense of own "I." Just the desire to acquire own "I" promotes strongly the human activity, therefore it is very important to find the opportunities to promote the process of value formation already in childhood.
- 2 Good parents are not born, but anybody can become like that through learning the whole life course. Performance of the parent's role is an interesting and at the same time also challenging



work and sometimes there are different situations when parents feel confused and ignorant and often even angry and impetuous. Most often such feelings take over parents when the child acts somehow in an unusual way, unacceptably for the parents or even in an embarrassing way. It happens, when encountering an untypical own child's behaviour, parents react inadequately and they themselves are not able to manage their emotions and admit that "I can't deal with them," because I feel confused and ignorant. Such situations most often appear when bringing up a three year old child or teenagers. However, certain difficulties can appear in any age of child's development. It has to be admitted that sometimes parents forget about a very essential aspect of upbringing- discipline. Both love, generosity, respect of the child's peculiarities and discipline provide the child with a safe and stable base for their personality's development.

- 3 An important factor in the promotion of the child's language acquisition and prevention of functional language development impairment is the parents' education on the language development preconditions, procedure and norms. In order to reduce the increase of the number of speech and language impairment among the preschool age children's population and their effect phenomena in the later age, the following measures have to be taken, which would guarantee an optimal primary, secondary as well as tertiary language impairment prophylaxis:
 - develop standardized diagnostics criteria for speech and language impairment;
 - carry out researches and inform the government and social institutions;
 - provide the educational establishments with speech therapists and support staff in compliance with the real number of children with development impairment;
 - improve the existing methods and introduce new ones in the preschool education and speech therapy correction work in order to promote the child's development holistically;
 - inform the society and children's parents on various language development issues;
 - encourage parents' involvement in children's language development and language impairment correction, for in the language development context the social environment or family is one of the most important exogenous factors;
 - speech therapists, PEE teachers and parents have to collaborate mutually.

References

- Ädler, A. *Psihologija un dzīve*. No angļu val. tulk. E.Turkina. Rīga : IDeA, 1992. 180 lpp.
- Bowen, M. *MD and The Nine Concepts in Family Systems Theory*. Retrieved from: <https://yourmindfulcompass.com/dr-bowen/>
- Božoviča, L. (1975). *Personība un tās veidošanās skolas gados*. Rīga: Zvaigzne. 303 lpp.
- Brīlmeiers, A. (1998). *Vara un autoritāte audzināšanā*. Rīga: LU. 39lpp.
- Brīlmeiers, A. (1998). *Veidot skolu ar prieku*. Rīga: LU.
- Bronfenbrenner, U. (1994). *Ecological models of - Psychology*. Retrieved from: <http://www.psy.cmu.edu/~sieglar/35bronfenbrenner94.pdf>
- Esmu mazs – saudzē mani! Centrs Dardedze. Retrieved from: www.paligsvecakiem.lv
- Geske, A. & Ozola, A. (2007). *Skolēnu sasniegumi lasītprasme Latvijā un pasaulē*. Rīga: LU Akadēmiskais apgāds.
- Ģimenes politikas pamatnostādnes 2011- 2017.gadam. Rīga, 2009. Retrieved from: http://www.lm.gov.lv/upload/aktualitates/gvp_pamat.pdf
- Karpova, Ā. (2006). *Ģimenes psiholoģija*. R.:RaKa. 445 lpp.
- Kolominskis, J. (1984). *Cilvēks cilvēku vidū*. R.: Zvaigzne. 56. - 98.lpp.
- Kopeloviča, A., Žukovs, L. (1995). In: *Pedagoģiskās vērtības studiju procesā augstskolā*. Rīga: LU. 41 lpp.
- Ruben, R.J. (2000). *Redefining the survival of the fittest: communications disorders in the 21 st century*. *Laryngoscope*, 110, 241 – 245. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/>



- Samuseviča, A., Vikmane, B. (2017). *Trends of Child's Upbringing Difficulties in Family and Pre-school*. In: Proceedings of the International Scientific Conference. Society. Integration. Education. Volume II, May 26th-27th, 2017. © Rēzeknes Tehnoloģiju akadēmija. 330-341 lpp.
- Strehlow, U. (2004). Langfristige Perspektiven von Kindern mit Lese-Rechtschreibstörungen. In W. Suchodoletz (Ed.), *Welche Chancen haben Kinder mit Entwicklungsstörungen?* (pp. 201 – 218). Göttingen: Hogrefe Verlag.
- Suchodoletz von, W. (2004). Zur Prognose von Kindern mit umschriebenen Sprachentwicklungsstörungen. In W. Suchodoletz (Ed.), *Welche Chancen haben Kinder mit Entwicklungsstörungen?* (pp. 155 – 200). Göttingen: Hogrefe Verlag.
- TM sākusi pirmslaulību apmācību kursus(2017). Retrieved from:
<http://www.delfi.lv/news/national/politics/tm-sakusi-pirmslaulibu-apmacibu-kursus.d?id=48853753>
- Tomele, G. (2013). *Rakstu valodas apguves un traucējumu korekcijas priekšnosacījumi Montessori pedagogijā*. In: Sabiedrība, integrācija, izglītība. Starptautiskās zinātniskās konferences materiāli 2013.gada 24.-25.maijs, II daļa (pp. 222-232). Rēzekne: RA Izdevniecība. Retrieved from:
<http://journals.ru.lv/index.php/SIE/article/viewFile/571/345>
- Tūbele, S. (2006). *Jaunāko klašu skolēnu runas un valodas traucējumu noteikšana un korekcijas iespējas*. Promocijas darbs. Rīga: LU.
Retrieved from: http://www3.acadlib.lv/greydoc/Tubeles_disertacija/Tubele_lat.pdf
- Tūbele, S. (2015). *Disleksijas riska faktori pirmsskolas vecuma bērniem*. In Sabiedrība, integrācija, izglītība. Starptautiskās zinātniskās konferences materiāli 2015.gada 22.-23.maijs, III daļa (pp. 238-247). Rēzekne: RA Izdevniecība. Retrieved from: <http://dx.doi.org/10.17770/sie2015vol3.396>
- Trinīte, B. (2015). *Skolas logopēdijas reformu priekšnojautās. Izglītība un kultūra, 13(479), 7.*
Vecākiem trūkst zināšanu, kā pareizi audzināt bērnus. Retrieved from:
<http://www.delfi.lv/calis/jaunumi/vecakiem-trukst-zinasanu-ka-pareizi-audzinat-bernu.d?id=42382976>
- Vecāku izglītība ir jāiekļauj Latvijas mūžizglītības koncepcijā*. Retrieved from: <https://www.e-klase.lv/lv/zina/zinas/aktualitates/vecaku-izglitiba-ir-jaiekļauj-latvijas-muzizglitibas-koncepcija/>
- Теория семейных систем Мюррея Боуэна. Основные понятия, методы и клиническая практика.*
Авторов коллектив (2008) - RuLit – Стр. 52. Retrieved from: <http://www.rulit.me/books/teoriya-semejnyh-sistem-myurreya-bouena-osnovnye-ponyatiya-metody-i-klinicheskaya-praktika-read-399522-52.html>



IMPORTANCE OF “CULTURAL HERITAGE AND CONSERVATION” CONCEPT IN THE ARCHITECTURAL EDUCATION

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Abstract

The concept of culture also includes the concept of “conservation” within itself. Conservation culture and education are two basic tools for the transfer of cultural heritage. Education is at the forefront of activities that will contribute to the formation of conservation consciousness. People who have a consciousness of conservation culture and cultural heritage can both protect today and the past. In today's conditions where the impact of globalization is rapidly affecting our cities, it is necessary to approach consciously cultural heritage and conservation culture. From this point of view, it is important to understand the conservation culture for the newly educated “architectural students”. In this context, architectural education and curriculum are important. Are architectural course programs sufficient for students to enjoy cultural heritage and to take responsibility for protecting it? In this article, the necessity of teaching conservation culture in architectural education will be discussed. At the same time, the adequacy of the courses about conservation and cultural heritage in the curriculum will be investigated.

Key words: Conservation Culture, Cultural Heritage, Architectural Education, Architectural Courses Programs

Importance of “Cultural Heritage and Conservation” Concept in the Architectural Education

1. Introduction

The impact of globalization quickly changes our cities. It is necessary to approach the cultural heritage and conservation culture consciously. In this respect, it is important to understand conservation cultures for the newly graduated “**Architecture Students**”. Architecture education differs from the education style of other disciplines. The education of the students in Turkey before the university are insufficient for architectural education. Many researchers say that coincidence plays a role in the choice of the profession. For this reason, the process of adaptation to the architectural profession is usually a long time. (Ayıran, 1995; Nalçakan& Polatoğlu).

Cultural Heritage and Conservation

Culture is defined as all of the factors that represent all the material and spiritual values created in the process of historical and social development. It is also all of the factors used to convey to the next generation, indicating the extent of the sovereignty of man's natural and social environment (<http://www.tdk.gov.tr/>). Culture is transmitted from generation to generation. Protecting and maintaining the cultures depends on this transfer. Transfer to generations to generation of culture defines it as heritage and makes it important (Çakır, 2010: 34).

Kuban (1975) states that in the lives of people, the transformation of concepts and goods into symbols for various reasons constitutes a phenomenon called culture. Cultural Heritage is a reflection of people's ever-changing values, beliefs, knowledge and traditions that have reached today. Cultural Heritage are all tangible and non-tangible assets. Cultural heritage includes all the features of the environment, stemming from the intermingling of people and places over time (Turkish Architectural Heritage Protection notification, 2013).

Architectural heritage is a cultural asset that is a common property of mankind and must be conveyed to the future with its unique qualities. It is a group of buildings and structures that must be protected according to conservation principles, with all values. The concept of Cultural Heritage has become today with developing in terms of definition and scope in the historical time. Cultural heritage is limited only to important monumental structures in the early days of the formation process of the conservation notion. In the later processes expanded



the scope of the conservation notion, it encompasses civilian structures as well as urban and rural areas. Scope of cultural heritage has also developed, including intangible work of branch of culture and art (Korumaz, 2015).

In the expansion of the concept of Cultural Heritage, important events that took place in history became decisive. The French Revolution of the 18th century was a time when both cultural heritage was important and there was debate and practices for protection and restoration. In the 19th century, the definition, scope, scale and conservation methods of cultural heritage have developed. For the first time, cultural heritage is being used by international organizations with the 1931 Athens Regulation. "Carta Del Restauro", prepared in 1931 by the Supreme Council of Antiquities and Fine Arts, is an important documentary in this area. The United Nations Educational, Scientific and Cultural Organization (UNESCO) was established in 1945 and the Council of Europe was established in 1954. In the same year, the preparation and acceptance of the "Convention on the Protection of Cultural Values in the Case of Armed Conflict" took place in La Haye, the capital of the Netherlands (Madran & Özgönül, 2005) .

After the Second World War, where significant reconstructions were made, the cultural legacy became even more important with the 1964 Venice Regulation. Historical and rural settlements have been included in the definition of cultural heritage in the 1970s. At the meetings of the Council of Europe (1985), ICOMOS (1987) and UNESCO (1989), intangible values were included the notion of cultural heritage. The ICOMOS declaration on the conservation of the architectural heritage of Turkey states that cultural heritage is the symbol of the identity. It is stated that tangible and intangible cultural heritage includes historical, documentary, aesthetic, artistic, social, economic and spiritual values. The architectural heritage is one of the most important components of cultural heritage. It is necessary to reveal aesthetic and cultural values without changing the originality and the qualities that constitute identity (ICOMOS 2013).

Cultural heritage can be dealt with in two main groups as tangible and intangible cultural heritage. In general, monuments, sites, movable artifacts are included in tangible cultural heritage (<http://whc.unesco.org/en/conventiontext/>). Intangible cultural heritage is not visible to the eye, such as language, tradition, custom, music, dance, etc. However, the concepts of tangible and intangible cultural heritage are interrelated. Socio-cultural, cultural heritage values have a connection to society, between present and past (Zancheti et al., 2009)

According to the World Cultural and Natural Heritage Agreement; the concept of conservation is to understand the cultural heritage which is consist of monumental and sites, natural, geological and physiographical formations and to protect its material. And all of the methods used to restore and to present (<http://whc.unesco.org/en/conventiontext/>). Within the history of thousands of years of civilization, the protection of values, which we call cultural and natural heritage, created directly or with nature, is the common problem of mankind in our day. The notion of conservation is all that humanity has created in the historical process and has provided for cultural continuity.

Cultural heritage is divided into sub-groups such as movable, immovable and intangible cultural heritage. However, from the year 2000, the views advocating the handling of cultural heritage as a whole have gained importance. Nevertheless, intangible values are of great importance in terms of constitution of the essence of cultural heritage. Sustainability and conservation concepts are similar in terms of general understanding and purpose. Brutland Report describes "Sustainability" the following. *"Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities (Bruthland Report 1987).* In this context, it is aimed to protect the natural ecosystem and cultural values. The destruction of



this cultural heritage not only destroys architecture and aesthetics, but also destroys cultural and historical values.

Sustainability and conservation concepts are similar in terms of general understanding and purpose. Sustainable development is defined as meeting present-day needs without compromising the ability of future generations to meet their needs. Within this scope, it is aimed to protect the natural ecosystem and cultural values. The destruction of this cultural heritage not only destroys architecture and aesthetics, but also destroys cultural and historical values.

2. Methods

Cultural heritage and conservation concept should be intensively involved in architectural education and curriculum. In the research, the following questions have been researched.

- Are there sufficient lessons on “*Cultural Heritage, Conservation History of Architecture*” in the Architecture department of curriculum?
- What are the lessons on the history of cultural heritage and conservation concept in 6 major universities architecture department of Turkey?

In this research, the curriculums will be examined which are architectural departments of 6 universities from Turkey. Compulsory and elective courses about the history of cultural heritage, conservation and architecture in the curriculum will be searched. We will try to determine the intensity of these courses in the programs of the architecture departments. With this comparison, it will be investigated where Turkey stands in architectural education for conservation concept understanding and what kind of developments and changes are needed.

3. Findings and Interpretation

3.1. Cultural Heritage and Conservation Courses in Architecture Departments

Turkey continues to work for progress in terms of education system. Studies on the reorganization of the period are underway to advance the education of architecture. Studies on the reorganization of the education process and curriculum are continuing for the development of architectural education. Today, graduates of architecture departments of universities in Turkey, in 4 years.

It is very important for the students graduated from architecture to understand the cultural heritage and conservation concept. The new generations of architects who will build our future, have enough conservation knowledge to protect our cultural heritage. The architectural departments of 6 universities in Turkey have been studied together with compulsory courses, elective courses and curriculum in terms of conservation and restoration topics.

Yıldız Technical University /Istanbul

Yıldız Technical University was founded as “Kondüktör Mekteb-i Âlisi” in 1911 and it were changed name to “Nafia Fen Mektebi” in 1922. University assumed the name “Istanbul Technical School” to provide education in the field of engineering within the premises of Yıldız Palace in 1937. In 1969, the Istanbul State Academy (IDMMA) of Engineering and Architecture was established. IDMMA passed university status and became “Yıldız University” in 1982. It was continued the name ‘Yıldız Technical University’ in 1992 (<http://www.yildiz.edu.tr>).



Picture 1. Yıldız Technical University, Faculty of Architecture (<http://www.yildiz.edu.tr>)

The compulsory courses related to the concept of "Cultural Heritage and Conservation" in Yıldız Technical University Department of Architecture are given below: Introduction to History of Art and Architecture (2 ECTS), History of Architecture 1, Structure Analysis (3 ECTS), History of Architecture 2 (2 ECTS), History of Architecture 3, (2 ECTS), History of Architecture 4 (2 ECTS), Conservation and Restoration (4 ECTS) , Architectural Thought History. Total ECTS credits of these compulsory courses are 19 ECTS credits.

The elective courses related to the concept of "Cultural Heritage and Conservation" in Yıldız Technical University Department of Architecture are given below : Structural Problems in the Transformation of Housing Structures, History of Construction, Turkish Art, Last Age of Architecture, Historical Sites and Analysis, World of Architecture after 1970, Architect Sinan and his period, History of Architecture Profession, Ratio in Design, Modernity Problems in Art and Design, Social Environment Effects in Design, Spatial and Morphological Analysis in Contemporary Islamic Architecture, Relation of Design and Environment Problems, Industrial Archeology, Architecture and Coastal Space, Typological Analysis in Architecture, Conservation and Tourism, Architectural Approaches in the Contemporary Environment, Housing and Cultural Sustainability, Relation of Traditional Architecture and Design, Istanbul in the Period of Westernization, Turkish House and Conservation, 19th Century Architects / Constructions in Istanbul, Architectural Photography, Visual Production of Historical Spaces.

Mimar Sinan Fine Arts University /Istanbul

Mimar Sinan Fine Arts University; was founded by art historian, archaeologist, museum artist, painter Osman Hamdi Bey in 1882 as "Sanayi-i Nefise Mektebi". The institution, which was the first school of art and architecture in Turkey/ İstanbul, was named as the Academy of Fine Arts in 1928. Since 1982, the name of the school has been "Mimar Sinan Fine Arts University".



Picture 2. Mimar Sinan Fine Arts University, Faculty of Architecture (<http://www.msgsu.edu.tr>)

The compulsory courses related to the concept of "Cultural Heritage and Conservation" in Mimar Sinan Fine Arts University, Department of Architecture are given below: Basic Concepts in Art and Architecture (2 ECTS), History of Civilizations (2 ECTS), Traditional Building Materials (2 ECTS), History of Art and Architecture (2 ECTS), 19th Century and Early Period 20th Century Architecture (2 ECTS) Survey and Evaluation 1 (3 ECTS), Architecture from 1920 to the day (2 ECTS), Conservation and Restoration (2 ECTS), Survey and Evaluation 2 (3 ECTS), History of Turkish Architecture (2 ECTS). Total ECTS credits of these compulsory courses are 22 ECTS credits.

The elective courses related to the concept of "Cultural Heritage and Conservation" in Mimar Sinan Fine Arts University Department of Architecture are given below: Environmental Design, Conservation and Tourism, General Characteristics of the Ottoman Complex Building (külliye) and Their Evaluation in Today's, Comparative History of Architecture and Literature in the 20th Century, Reuse of Architectural Heritage, Concept of Intermediate Space in Architecture, Sustainability in New Practices in Built Environment, Architectural Reflection of Socio-Cultural Data and Environment, Variety of Style in Religious Architecture, Traditional and Regional Features of Architecture and Preservation, Environmental Consciousness in Architectural Design, From the Middle Ages to today: An Imaginary space, castle, Undesigned Spaces, Conservation and Re-evaluation of Industrial Heritage, Restoration of Traditional Masonry Architecture, Concept of Place in Architectural Design, Changeability and Transformability in Architecture, Identity Problem in Architecture, Contemporary Design Principles in Historical Urban Texture, Architectural Theories in History, Mass Housing Planning After Modernization, Post-Modernist Examples In The Architectural Context Of Istanbul, Social and Cultural Factors in the Creation of Architectural Environment, Design Criteria of Worship Space, From the Beginning of the Exhibition Space, Contemporary Architectural Theories, Identity Interrogation in Turkish Architecture: Historical, Regional and Traditional Interpretations, Interpretation in Turkish Architecture and Overview of Designs Containing Traditional Turkish Houses, Learning Locally: Sustainable Environmental Principles, Contemporary Design Principles in Historical Urban Texture, Fine Arts-Photography-Architecture Photography, Comparison of Architecture with Painting, Sculpture and Music Arts, Fine Arts, Painting, Fresco and Mosaic, Contemporary Design in the Historical Urban Texture, Interior Design and Color in Local Architecture.

Istanbul Technical University /Istanbul

The history of Istanbul Technical University dates back to the Ottoman Empire period of reign of Sultan 3. Mustafa. "Mühendishane-i Bahr-i Hümayun" (Imperial Naval Engineering), established in 1773 to provide engineering education in the Western style for the first time in the Ottoman Empire, had trained personnel



specialized in ship building and marine mapping. The history of the Faculty of Architecture dates back to 1884, when it was founded as "Hendese-i Mülkiye Mektebi". At the beginning of the 1900s, architecture department was found to depend on "Nafia nezareti", in which education was divided into Roads, Railways, Water Works and Construction-Architecture. In 1944, the school was named Istanbul Technical University (<http://www.itu.edu.tr>).



Picture 3. İstanbul Technical University, Faculty of Architecture (<http://mim.itu.edu.tr/>)

The compulsory courses related to the concept of "Cultural Heritage and Conservation" in at İstanbul Technical University, Department of Architecture are given below: History of Ancient and Byzantine Architecture (3 ECTS), History of Turkish Architecture (3 ECTS), History of European Architecture (3 ECTS), Contemporary Architecture (3 ECTS), Historical Environment Protection and Restoration (3 ECTS), Survey and Restoration Studio (5 ECTS). Total ECTS credits of these compulsory courses are 20 ECTS credits.

The elective courses related to the concept of "Cultural Heritage and Conservation" in Istanbul Technical University, Department of Architecture are given below: Theory of Architecture and Modernism, Architect Sinan, Istanbul Conservation of a World Heritage Site, Istanbul, Infill Problems in Urban Historic Sites, Introduction to Conservation Science, Survey with Equipment, Rehabilitation of Old Buildings, Historical Settlements and Space Cultures, Contemporary Design in Historical Urban Texture, Architecture and Society in Antiquity, 20th Century Art, Restoration of Cultural Property, Modern Concepts of Architectural Conservation (3 ECTS).

Gazi University /Ankara

Gazi University, Department of Architecture was established in 1982. But it is based on historically Zafer Engineering (1966) and Architecture Collage and Yükseliş Collage (1967) these two private collage were united at 1971. It was named as the Ankara State Engineering and Architecture Academy (ADMMA) at 1973. The Faculty, which was taken into Gazi University in 1982, was named "Faculty of Engineering and Architecture"(<http://gazi-universitesi.gazi.edu.tr>).



Picture 4. Gazi University, Faculty of Architecture (<http://www.yapi.com.tr/>)

The compulsory courses related to the concept of "Cultural Heritage and Conservation" Gazi University Department of Architecture are given below: Introduction to History of Art and Architecture, History of Architecture 1, Architecture Culture, History of Architecture 2, History of Architecture 3, History of Architecture 4, Contemporary Architecture Theory 1, Contemporary Architecture Theory 2 and Survey and Restoration. Total ECTS credits of these compulsory courses are 21 ECTS credits.

The elective courses related to the concept of "Cultural Heritage and Conservation" in Gazi University Department of Architecture are given below. Space of Turkish Era Building, Culture and Identity, Development of Architectural Space Thought, Conservation Techniques in Historical Sites, Evaluation in Historical Environment, Pre-Islamic Turkish Architecture, Historical Building, Ottoman Architecture in the Period of Westernization, Construction Techniques in Traditional Houses, Participation of Turkish Buildings Architectural Elements to Contemporary Life, Restitution, Ottoman City Analysis, Restoration Critics, Turkey Architecture during the Republican Period, Housing in Historical Process (3 ECTS).

Middle East Technical University /Ankara

Middle East Technical University is founded under the name of "Middle East High Technology Institute" in 1956. The purpose of the university is to contribute to the development of Turkey, Middle East countries and to educate people. Department of Architecture was found in 1957 (<http://www.metu.edu.tr/>)



Picture 5. Middle East Technical University, Faculty of Architecture (<http://www.mimdap.org/>)

The compulsory courses related to the concept of "Cultural Heritage and Conservation" in Middle East Technical University (METU) Department of Architecture are given below: Architectural History 1, Architectural History 2, Architectural History 3, Principles of Cultural Heritage Conservation (4 ECTS). Total ECTS credits of these compulsory courses are 16 ECTS credits. In addition, in the architecture curriculum, there is a Summer Survey Internship.



The elective courses related to the concept of "Cultural Heritage and Conservation" in Middle East Technical University (METU) Department of Architecture are given below: History Of Art And Architecture 1 And History Of Art And Architecture 2, History Of Art And Architecture 3, The Cultural Context of Art and Architecture, Vernacular Architecture, Theory and History of Landscape Architecture I, Theory and History of Landscape Architecture II, Aesthetics and Criticism 1, Aesthetics and Criticism 2, Theory of Restoration and Conservation 1, Theory of Restoration and Conservation 2, Developments in Modern Art, Architecture in Situ, , City in Late Antiquity and Byzantium: Topography and Architecture, Perspectives in the Conservation and Valorization of Cultural Heritage, A Survey on Architectural Culture: From the Neolithic to the Modern Period, Survey of Early Christian and Byzantine Architecture, Pre-Classical Architecture of Ancient Anatolia, Architecture and Politics in 20th Century Italy, Architects and Architectural Practice in History, Classical Antiquity in Asia Minor, Domestic Architecture in Antiquity, The Cultural Context of Art and Architecture, House and Daily Life in History, Studies in Greek Architecture, Twentieth Century Architecture in Turkey, Seminar in Contemporary Architecture, Studies in Roman Architecture, Masterworks of Medieval Architecture in East and West, Environmental Aesthetics I, Environmental Aesthetics 2, Issues and Problems in 'Modernism, Nineteenth Century Architecture, Conservation of Archaeological Sites, Studying Architectural History, Aesthetics and Criticism I, Aesthetics and Criticism 2, Topics on Urban Form, Patterns and Architecture, Themes on Ancient Domestic Architecture, Special Topics in Byzantine Architecture: The Art and Architecture of Byzantine Cappadocia, History and Theory of Art and Architectural Styles, Ottoman Architecture in the Nineteenth Century, Approaches in Greek Architecture, Approaches in Roman Architecture, Cosmological Thought and Architecture in the Middle East, Assimilation of Western Modes in Eighteenth Century Ottoman Architecture, Anatolian Seljuk Architecture (11-14th Centuries), Architectural History Research Studio: The Modern Capital City, Ankara, Aesthetics and the Psyche, Sources and Methods of Research in Conservation, History of Architecture in the Eastern Mediterranean, History of Modern Structural Engineering, Problems of Traditional Building Materials, Introduction to Deterioration and Conservation, Conservation of Archaeological Sites, Structural Analysis of Historical Structures, Historical Structural Systems (4 ECTS).

Dokuz Eylul University/ Izmir

The education of the Department of Architecture started in 1971 with the establishment of "Ege University, Faculty of Engineering Sciences, Engineering and Architecture Academy" in İzmir . In 1975, it was named as the Faculty of Fine Arts. In addition to undergraduate education in Architecture, City and Regional Planning were started in 1979 at this university. This university was named as "Dokuz Eylul University Faculty of Architecture" in 1992 (<http://debis.deu.edu.tr/>).



Picture 6. Dokuz Eylul University, Faculty Of Architecture (<http://mimarlik.deu.edu.tr/tr/>)

The compulsory courses related to the concept of "Cultural Heritage and Conservation" in Dokuz Eylül University Department of Architecture are given below: Introduction to Architecture History, Architectural History from Antiquity to Industrial Revolution, Contemporary Architecture History, Conservation Project of



Historical Building, Turkish Architecture History, Architecture Theory and Criticism. Total ECTS credits of these compulsory courses are 19 ECTS credits. In addition, in the architecture curriculum, there is a Summer Survey Internship.

The elective courses related to the concept of "Cultural Heritage and Conservation" in Dokuz Eylul University Department of Architecture are given below: History of Art, Historical Constructions Conservation, Modernization and Development of Industrial Spaces, Spatial Structure of the Turkish House , Turkish Architecture in Republican Period , Modernization Process of İzmir and the Production of Modern Architecture , Visual Production Techniques in the Modern Age, Contemporary Debates in Architecture, Theoretical Analysis of Modernity, History and Theory of Architectural Drawing, Historical Constructions Conservation Project, Design Approaches of New Buildings in Historical Environment ,History of Civilizations, Historical Environment and Concept of Restoration, Historical Space Reading ,Inter culturality and Mediterranean Houses, Traditional Housing Culture of Anatolia, History of Anatolian Civilizations, Ancient Architecture in Aegean, Renaissance Architecture, Archeological Heritage and Preservation, History of Modern Architecture, History of Turkish Architecture Architectural Theory and Criticism , Architectural Developments in İzmir, Contemporary Approaches in Housing Design, Old Buildings, New Uses, Hostelry Buildings, Principles for Conservation, Traditional – Regional Architecture, Research of Historical Environment Fabric in İzmir, Contemporary Approaches on the Renovation Phenomenon (3 ECTS).

3.2. Interpretation

In the research, compulsory and elective courses of 6 universities which are studying architecture in Turkey were examined. Projects which is relation to Conservation in architectural studio courses are not included in the research.

When compulsory courses are taken into consideration, according to the number of courses, 16.6% of the lessons focus on preserving architectural history and cultural heritage. At least 7.5% of these courses are seen.

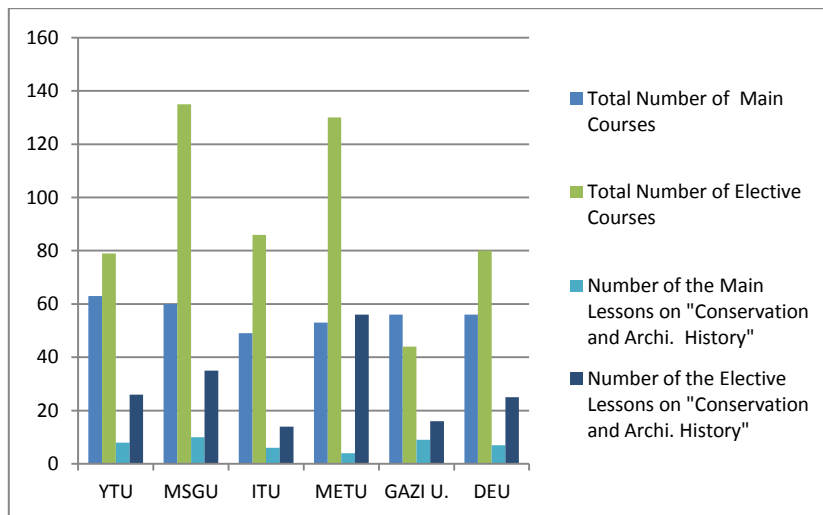


Figure 1. Main and elective lessons rates which are focused on “Conservation and Architectural History” in curriculum of Architecture department.

In the Architecture departments, the total ECTS credit in the curriculum is 240. When the course is evaluated according to the credits, in compulsory courses, tuition credit rates for “Conservation and Architectural History” “vary between 10% and 6%. In elective courses, this rate will change depending on the student's choice of those courses.

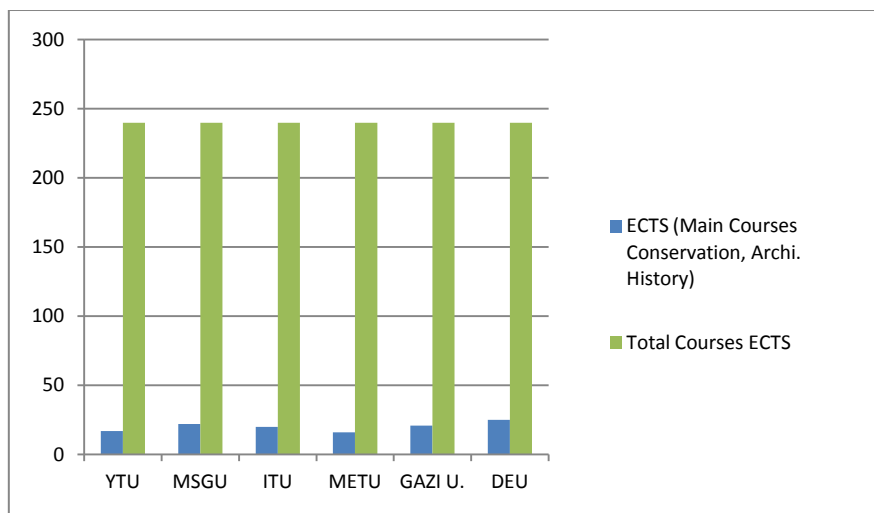


Figure 2 . ECTS rates of main courses which are focused on “Conservation and Architectural History” in curriculum of Architecture department.

4. Conclusion and Suggestions

It is important to understand the value of cultural heritage and to develop conservation methods. The students who are studying in the architectural departments of the universities will give direction to the future architecture. In order to protect the cultural heritage and to transfer from generation to generation, this education should be comprehensively given to the students.

There are differences between architectural departments, resulting from different models and traditions. However, in all the architectural departments the course is equal to the credits. These curriculums are planned for the education of architectural students to have similar knowledge. But it will be their local culture and cultural heritage knowledge, which makes them different. For this reason, compulsory courses and elective courses which are relation to “cultural heritage and conservation” in the architectural education of universities, are important. In addition, students of architecture should be also taught of cultural heritage via to given more elective courses about "history of civilization and the history of architecture”.

Within the scope of this research, "cultural heritage and conservation" courses in six universities of architecture department are examined as their rates in curriculums. “Cultural heritage, conservation, art, architecture and civilization history” courses are frequently seen in elective courses pools in six universities of architecture departments. However, the proportion of these courses is between 16.6 % and 7.5% in compulsory courses. Number of the courses which are related to cultural heritage, conservation, art and architecture and civilization history will positively affect to students conservation consciousness. Raising this ratio will increase the interest of the students to the protection of cultural heritage.

The selection rate of these courses will vary depending on the number of courses in the elective course pool. For this reason, these lessons related to cultural heritage, conservation and architectural history should be increased in the elective course list. In addition, the placement of summer surveys in the curriculum and the arrangement of cultural and technical trips to Historical Sites and Area will be increased concern to this topic.



5. References

- Ahunbay, Z., (1996) Tarihi Çevre Koruma ve Restorasyon, Yem Yayınları, İstanbul.
- Ayran, N. (1995). “*Mimari tasarım studyolari uzerine bazi notlar (Some notes on architectural design studios)*”, Yapi Journal,160, 54-60.
- Bruthland Report, “Report of the World Commission on Environment and Development: Our Common Future” , (1987), <http://www.un-documents.net/our-common-future.pdf>
- Korumaz, A., (2016), Kültürel miras yönetiminde karar destek sistemlerinin kullanımına yönelik bir model önerisi / A decision support model proposal for use in cultural heritage management, Selçuk Üniversitesi, Fen Bilimleri Enstitüsü, Mimarlık Anabilim Dalı, Basılmamış doktora tezi, Konya.
- Kuban, D., (1973),” *Anıt kavramı üzerine düşünceler*”, Mimarlık, Temmuz, sayı 7, İstanbul.
- ICOMOS (2013), Icomos Türkiye Mimari Mirası Koruma Bildirgesi “2013”, http://www.icomos.org.tr/Dosyalar/ICOMOSTR_0623153001387886624.pdf
- Madran, E, and Özgönül N., (2005), *Kültürel ve doğal değerlerin korunması*, TMMOB Mimarlar Odası.
- Nalçakan, H., and Ç. Polatoğlu, (2008), “*Türkiye’deki ve Dünyadaki Mimarlık Eğitiminin Karşılaştırmalı Analizi ile Küreselleşmenin Mimarlık Eğitimine Etkisinin İrdelenmesi*”, Megaron, YTÜ Mimarlık Fakültesi E. Dergi, Cilt 3, Sayı 1.80-103.
- Zancheti S.M., Ferreira Hidaka L.T., Ribeiro C., Aguiar B., (2009), “*Judgement and Validation in The Burra Charter Process: Introducing Feedback in Assessing the Cultural Significance of Heritage Sites*”, City & Time 4 (2): 5. [online] URL: <http://www.ct.ceci-br.org>.<http://www.itu.edu.tr>
- <http://www.metu.edu.tr>
- <http://www.msgs.edu.tr>
- <http://www.yildiz.edu.tr>
- <http://www.gazi.edu.tr>
- <http://www.deu.edu.tr>
- <http://whc.unesco.org/en/conventiontext/>
- <http://www.tdk.gov.tr/>
- <http://www.yapi.com.tr>



Vision about Teaching Methodology
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Abstract

This research formulates the convictions about formation of the whole personality of the musician, regarding the key relationship „universe-music”, as R. Schumann’s say: „Is not a good musician who is only a good musician.” (Schumann, 1993). There is competition of quality and quantity. It is not important how long one is practicing, but the handling of it from the point of view of strategy, initiative, concentration and maximal effectiveness for minimal time. For reference we have the Leimer-Giesecking System (Stoyanov, 1954). Practically to inspire that the little time is not an obstacle before the good result, only if we can set an orderliness and method in our lives. Other mark: Intransigence with respect to the quality as a fundament of the teaching vocation regardless whether we teach to professionals or amateurs. In general the difference in the approach here consists in the choice between intensive or routinely extensive practice.

Keywords: Idea, Means, Quality, Efficiency

Introduction

The format of this report is not able to comprise and exhaust the limitless problematic, but to epitomize the guidelines of the teaching-learning process and the relationship Teacher-Student in the subjects Piano, Keyboard Literature and Ear Training..

The Ancient Roman sentence “Non scholae sed vitae discimus” - We learn not for the school, but for the life-emphasizes of the trinity of the intellect, emotion and condition as an emanation of know and can (Ivanova, 2009), by application of the acquired knowledge in our way of live, as the core of the personal building.

The main questions are: What? Is the musical Idea: And How? (Ivanova, 2015). Hence the choice of optimal means corresponded to the performance. Solid cultural and educational background personal building is indispensable for the comprehension of the nature of the Music as an Art of the space-time continuum. (Ivanova, 2013).

The application of Judo principle –The path of clemency leads to love and softness as a universal approach toward everything, with which we interact and which surrounds us (Ivanova, 2015).

W. A. Mozart explained the best way the relevance idea-means: „Playing well piano? There is nothing easier than in the world: need only at a given moment, in a given manner, with a given finger, to push a given key” (Ivanova, 2015).

Method

The objectives of “Vision about the teaching methodology” are how to build Students as musicians and personalities”, based on the holistic approach, enshrined in educational policy of Assumption University of Thailand and its Uniqueness and Identity, and the curriculum of School of Music. Whether train future professionals, as Major Students or Free Elective’s amateurs, the approach should be the same in terms of quality. Here are the headlines, upon which we should work, in view of the presentation of vision and mission, penetrating in profundity and details



of the problematic of the music teaching home and abroad as representatives of the Bulgarian School, built on the best traditions and patterns of the European and Russian experience.

What distinguishes us is the priority of the content, a clear conception; the synoptic and architectural analysis of the musical shape, the deep knowledge and correlations; the aspiration toward the transcendent of category thinking as a transmission toward the universal; the initiation of the creative field as a lifestyle. (Ivanova, 2009, 2015)

Should be formulated the main grounds depicting the formation of the whole personality of the musician, which is „conditio sine qua non” regarding the key relationship „Universe-Music”, by following Monads - question of questions - Founding Idea: What? And the means to its realisation: How?

Findings

There is competition of quality and the quantity. It is not important how long one is practicing, but the handling of it from the point of view of strategy, initiative, concentration and maximal effectiveness for minimal time; clarification of the relativity of the space-time continuum (Cf. Theory of Relativity). For reference we have the Leimer-Giesecking doctrine (Stoyanov, 1954). Practically to inspire the conviction that the short time is not an obstacle before the good result, only if we can set an orderliness and method in our lives.

The Ancient Romans said: „Non scholae sed vitae discimus”. We learn not for the school, but for the life. This sentence stresses of the triad of intellect, emotion and conditions as an emanation of “know” and “can”, applying our knowledge in the way of live. Here is also helpful to consider Judo principle – “The Way of Softness”- Love and Clemency as a universal approach toward everything, with which we interact and which surrounds us.

Our task consists in thorough clarification of the circumstance that the classical music is an European phenomenon of the western and world civilization. We must explain that if the Europeans, study, for example, oriental music, it is necessary to deal with literary and philosophical segments and substrates, which saturate each „fiber” of the cultural space of the context and under line, i.e. we should have the respective knowledge, at least the necessary minimum in order to understand and interpret the musical message, revealing the composer’s individue willpower.

As stated genially by Schuman: „Is not a good musician who is only a good musician.”

Regarding the binding, the materialization of the idea with the means of the craft, Mozart depicted it in a simple but magnificent manner: „Playing well piano? There is nothing easier than that: it is necessary only at a given moment, in a given manner, with a given finger, to push a given key”. Other mark: Intransigence with respect to the quality as a fundament of the teaching vocation: regardless whether we teach to professionals or amateurs, the difference in the approach is not qualitative but quantitative. Analogically, for example, in the building installation business, regardless of its scale, there are needed same fundamentals and requisites as construction project and works, depending on the will and the resources invested by the costumer (Ivanova, 2015).

The reality in other countries made us encounter a new challenges. Our generation has been postulated strongly professionally lead by the noble idea that the only option in the art is „Gradus ad Parnasum”, e.g. Step to Perfection. In this manner, the piano teaching was oriented toward the non-alternative highest professionalism.

In this aspect, it seemed quite different situation that in other countries depending on the proportion population-territory-welfare the piano is learnt by millions and only a very little part of them succeeds the professional realization.



In addition, many of our Students are Free-elective ones.

In reality, the contribution of our teachers in the building of a completely new mentality, relevant in the penetration in the idiomatic of the European musical culture, is incredible (Ilievska, 1984). Anyway, have to delimitate the culture from the civilization, because they are not identical at all. The civilization, much or little, reflects the development of the material being, and the culture functions as an evolution of the spiritual beginning. We strive and for big satisfaction, succeed to develop creative personalities of the Students. Teachers form styles, tastes and criteria as immanent prerequisites for the correct understanding and interpretation of the music. We strive for giving all we have, stimulated by the noble desire to give them education, adapt to their attitudes and tens, as aspiration for aiming paradigm of musical interpretation optimal level .

Such differentiation and sophistication of the perceptions and concepts implicate deepening of the relationship teacher-student, based on the respect of the personality, contributing to mutual understanding and tolerance by clarity and concreteness of the verbal contact. This way of communication appears to be productive, and the positive results in the work process prove it incontestably.

As feedback, the teacher should attempt to penetrate in the behavior and cultural codes, knowing the mores, the trends, the customs and the language of people whom is teaching in terms of traditional pattern. This suggests dynamics, flexibility, consciousness, opening and expansion of the notions arsenal, respect towards the otherness, tolerance and curiosity.

Results, Conclusions and Recommendations

After the above stated, we can give the following classification and determination of our current pedagogical tasks and directions.

1. Problems – Diagnostic and Methodology for their solving.
2. Analysis of the performances.
3. Directions and streams.
4. Purposes and realizations.
5. The importance of repertoire.
6. To expand the correlation of the Ear-Training teaching and basic theoretical disciplines.
7. The adequate own example of the teacher as paradigm and pattern.
8. To develop teaching materials lab, with reference to the specifics of the Department of Music Performance.

I

Teacher's Assignments

The pedagogue is obliged, with lots of attention, tact, and love, to prepare highly educated specialists, capable of sustaining the competitiveness and to realize their abilities adequately in the profession they choose.

The teacher is responsible for the education of versatile personalities, capable of taking the optimum decisions in time and independently, to respond quickly to the challenges of any kind, to adapt flexibly to the different and changing conditions and circumstances.

The teacher must:

Motivate his students to do their best by developing constantly their intellectual and spiritual potential, to organize and intensify to the possible optimum their working process on the principle of „minimum strain, maximum results”, to develop and streamline their will and ability to concentrate their attention and memory, to have patience and endurance, to bring their intentions and acts to the perfect end, to have right general knowledge by searching for the connections, the common between the different fields of knowledge – especially between the disciplines and arts



similar to their profession, such as architecture, music, literature, painting, history, and natural sciences, including Free-Elective Students.

The teacher must focus on the education of a feeling for style, sense of proportion and tact in behavior, for moral and ethics, esthetics and etiquette, for development of the communicative skills.

To possess and educate high criteria for professionalism and entrepreneurial spirit for quality and realization of the musical product, to be exigent and self-critical, to welcome innovations and betterments, to react flexibly to the opportunities and innovations, to strive to the optimum, to ask from students intensively but not extensive labor efforts, to be economic and pragmatic, to use properly the facilities and options.

To apply practically what they learn theoretically, to remember that it is possible to become teachers themselves one day, to remember that „we learn not for the sake of school but for the sake of life”.

II

Specifics of the educational process:

Develop holistic thinking as a system of the professional knowledge and skills.

Encourage a sense for justice and objectivity.

Draw the limit between crafts, mastery, and art, to get aware of high art samples.

The teacher cares for the proper ratio of the information and its compliance to the level and personality of each student, supplies more music in the lesson, gives examples from the living musical heritage. The aim of the teacher is to inspire students love to the musical art in general, to avoid boredom and routine in the academic class.

III

Feedback:

The teacher must be aware whether his/her method is effective and whether the results of the academic process correspond to the desired ones:

Learn from and to listen to the opinion and recommendation of their leaders and colleagues, and of their very students: To develop and consolidate trust and respect, to achieve mutual understanding in all matters:

The teacher should recognize, respect, and approve the individuality of each student and apply the proper relevant approach to each student and to all students in general. Be a person of principles and justice.

To continue working hard on his/her personality, irrespective of the achievements so far and to be able to show and prove practically what he/she is teaching.

Be always available for consultation and assistance for the students, to give them optimism and confidence, to advice how to overcome crises and problems, to encourage them in all constructive initiatives.

Teach pupils how to organize optimally their working time and place, to develop priorities and to form strategic and tactical thinking.

Understand that not only the quantity is important but quality.

Acquire criteria in order to distinguish the good production of real quality from mediocrity and surrogate.

Highlight and stimulate Student's accomplishments.

To try to be always competitive amongst the best because since they want it, they can do it!

IV

Courses Academic process organization: Applied piano, Keyboard Literature, Ear-Training

About mastering of the examination material under the course-outline have to develop the foundations for the healthy professionalism as guarantee of a successful and complete future professional realization.



The knowledge and the organization of the pianistic repertoire is designed to introduce the student into the panorama of all main styles, schools, and epochs in the musical culture, to contribute to their versatile piano artistic development, to educate a feeling towards the style, character, quality, towards sound deriving, touch, dynamics, tempo deviations, and usage of pedal, phrasing and fingering, to obtain knowledge in the form, structure, harmonic, homophone, polyphonic structure, texture, embellishments, music paper writing, editing, use of different published editions, introduction to the specifics of the different national schools in order to obtain a sense for artistic measure and ability to „listen and hear” objectively, to develop the internal hearing and to construct proper musical perceptions and ideas, to help formation of the proper good taste, to overcome the fear from the stage and to develop the musical memory in its main manifestations – on the first place the hearing, visual, motive, tactile, to acquire the proper staging, position and sitting, which is indispensable condition in piano playing, regardless amateurs as Free-Elective students, or majoring/minor future professionals.

Distribution of the time during the lesson of 60 minutes, as follows:

1. Scales – in all varieties: 05 min. (Ivanova, 2015)
2. Technique Exercices – J. L. Hannon – 05 min.
3. Etudes – K. Czerny – op. 299 and op. 740 – 10 min.
4. Polyphonic Piece – J. S. Bach, G. F. Handel, etc. – 15 min.
5. Sonata form – Vienna Classics – J. Haydn, W. A. Mozart, L. van Beethoven – 15 min.
6. Romantic, Impressionistic, or Modern Play – 10 min.

The lesson is conducted as lecture and dialogue, with the active participation of the student and illustration of the problematic by showing at the instrument by the teacher. Each lesson is a stage to the next one, so that the progress can become obvious in a short term. The focus should be student’s assessment as independent work over the material at home by giving proper and clear methodological instructions. The creative activity should be fostered and not passive „copying” of the teacher’s recommendations only. Attentiveness and respect to the auxiliary means in the lesson should be developed, like notes, scores, audio-video-recordings and other references (Ilievska, 1978).

V

Keyboard Literature Lecture Timing:

First, the introduction into the world of the composer: Period, Age trends, styles, personality; second, creativity, genres and specific compositions and third-listening musical records, review scores and teacher’s Live Piano Performances.

Students follow the panorama of human civilization which requires significant knowledge. This approach is critical to transform the education database to become cultural background (Ivanova, 2015).

Note: In the above mentioned teaching-learning method during the lectures other practices are included too, such as musical scores sight-seeing reading, copying of a note text and other additional tasks and tests (Popova, Zlatanova, 1980).

VI

Ear-Training lesson:

With view of the course-outline and the practical needs of the musician, the following content of the academic lesson of 90 minutes should be used:

1. Check of the presence – 05 min.
2. Guessing tones – 05 min.
3. Reproduction of a short phrase – 05 min.
4. Two-parts performance – melodic and harmonic intervals – 10 min.
5. Triads and accords – 10 min.
6. Monophonic dictation – 10 min.



7. Diaphonic dictation – 15 min.
8. Ear training – monophonic – 10 min.
9. Singing in two and three parts – 10 min.
10. Reproduction of rhythmic formulas – 10 min.

The objectives consist of development of an attitude towards the main acoustic parameters of the tone – pitch, strength, duration and timbre, ability for hearing and reproduction, cultivation of the hearing as a main instrument in musical practice (Popdimitrov, 1977).

VII

Evaluation:

The students should clearly understand the objective criteria of the teacher and try to achieve optimal evaluations according to their labor, result, and abilities.

References

1. Ilievska, A. (1978). Publishing House Music, Sofia, "Start piano lessons".
2. Ivanova, M. (2009). Dissertation "Holistic-cognitive approach to the-performance process", NBU
3. Ivanova, M. (2015). "The Art of the Scales in the Methodology of Piano Education", TOJET, INTE 2015 Special Issue
4. Ivanova, M. (2013). "Music and Holism", Articles on Music Education, Sofia, Music Society "Vassil Stefanov"
5. Ivanova, M. (2016). "Relevance between Concept and Means in Pianism", TOJET, INTE 2016 Special Issue
6. Ivanova, M. (2017). "Importance of the Piano Repertoire and the Attitude towards its Formation - Approach, Figuration, Options", Hawaii XV International Educational Conference 2017 Proceeding Book
7. Popdimitrov, K. (1977). "Muzika", Sofia "Musical Rhythm".
8. Popova, L., Zlatanova, R. (1980). Editor "Muzika", Sofia "Guide to play a glance" (Ръководство за свирене от пръв поглед, Попова, Лили ; Златанова, Румяна Ред.
9. Schumann, R. (1993). "The vital rules for the musicians", Kiev, (Шуман Р. „Жизненные правила для музыкантов”, Киев, 1993 г.)
10. Stoyanov, A. (1954). "The Art of the Pianist", "Art and Science, Sofia



Possibilities of Application of Visual Art to Education Curriculum

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Abstract

Visual art with its ability to comprehensively influence the human development of individuals acquires special relevance in the dynamic development of community development and in an environment full of impersonal messages and negative information flow. Human brain activity is surrounded by visuality which is larger in comparison to hearing. Visual art is one of the means, by including its elements, to develop skills such as self-expression, ability to critically perceive and cognize the world and actively engage in various of human life activities. The object of the research: education process. The subject of the research: application possibilities of visual art's means in education. Goal of the research: to expand the view of the educational possibilities of visual art's application, by raising awareness of prerequisites of the potential for visual art, based on theoretical research and results of the practical research carried out, to draw conclusions, revealing development opportunities in interconnection of visual art's potential and pedagogic guidelines in education. Issues raised by the research: In what way the pedagogical potential of visual art reveals in personal development? In what way can means of visual art be purposefully used in education? Tasks of the research: To study theoretical and practical aspects of teaching visual art in the historical aspect in Latvia; To study application of visual art in education practice in implementation of certain pedagogical approaches; To study human, psychological, philosophical, arts literature on multi-functional possibilities of visual art and its complex influence on personal development; To carry out study of practical activity in application of visual art in education based on research of theoretical literature and experience of practical application of implemented approaches; To develop conclusions on visual art's application possibilities in implementing education based on theoretical and empirical research.

Keywords: Education process, Visual art, Pedagogical potential of visual art

Introduction

The question about the importance of art in human life has been raised among philosophers, artists, psychologists and pedagogues in all ages. Nowadays, when the younger generation grows in a visually fulfilled a world saturated with a negative flow of visual information, multifunctional visual products produced by the gaming industry, persistent visual advertising displays, festivals and shows of various visual quality, the architectonics of pedagogical cooperation between the teacher and the pupil is subjected to a complex and challenge-full situation when implementing the educational process. This raises the need to stress the issue of whether today the education process is being implemented in accordance with the fact that human brain activity is much more subjected to the visual perception in comparison to the hearing perception. Actualizing the purposeful inclusion of visual arts in the implementation of educational content, it's possible that it can become an important tool for solving particular problem aspects characteristic to modern education. Characterizing education of 21st century in general terms, it can be said that it is a life-long process, a component of our everyday lives and a conscious choice that brings gratification – desire to know more, faster, more accurate; it is a need to learn and to learn with understanding and joy, learn from each other regardless of social, economic or health status; it means learning in the environment suitable for individual needs using modern teaching aids (Par Izglītības...,2014). The Sustainable Development Strategy of Latvia until 2030 focuses on the fact that with the development of human ability to enter the labor market and build a professional career, education is also a process of development of human personality (Latvijas ilgtspējīgas...,2010). Consequently, the quality of education, its accessibility and content at all levels and in all age groups become especially topical in the context of Latvia's development. It is generally acknowledged that the quality of education in Latvia is not sufficient. Philosopher, the founder of integral theory, K. Wilber believes that a new society must be developed – one that will integrate consciousness, culture and nature, along with the formation of personal values, collective wisdom and technical skills (Vilbers, 2011). In order to prevent fragmentation of human work and life and mutual alienation, an integrated view of the educational process becomes more and more topical. According to K.



Wilber, such comprehensive view would gradually create a unity in diversity and general common features along with our differences, giving a legitimate work space to art, ethics, science and religion without reducing it only to an individual. At the same time, the supporters of these views raise a reasonable question: can such orientation exist in the context of cultural wars, identity politics, conflicting paradigms and individual policies? (Vilbers 2010). It can be presumed that it is a new beginning for a deeper and broader understanding of human existence which asks for perfection in all levels of education: society, organization/institution and the individual.

Scientists R. Wilkinson and K. Pikita speak about a paradoxical situation in human development, emphasizing the need for significant changes in education. The authors point out that presently humanity is in the age of the high material and technical achievements, but at the same time it experiences stress and tendency towards depression, feels insecure and does not feel a sense of community with people around (Vilkinsons, Pikita, 2011). K. Robinson, an internationally renowned expert in the promotion of creativity, innovations and empowerment, argues that education is not, and has never been, an objective process of developing natural abilities. The author notes that mass education is based on the prevailing economic vision and the phenomenon of academic knowledge inflation (Robinsons, 2013). In turn, people's feelings and opinions, sense of value, motivation and efforts are often ignored, which poses a general threat to the participation in current processes. K. Robinson sees that it is the existing education system that creates problems for the workforce in companies, organizations and public institutions, thus affecting both professionals and those without qualifications.

The above mentioned points out topical issues and existing problems in the field of education as a whole. Researcher I. Belousa highlights the transition from the acquisition of fragmented knowledge and skills, limited in sectors (cognitive approach) to the creation of innovations (social constructivist approach). The author rightly points out that sustainable education is comprehensive, it takes place everywhere, affects the whole society, its content is life, it is subject to evaluation, the teacher is an agent of change, and this process directed towards a positive future (Jaunais attīstības..., 2015). The concerns about educational problems are expressed also in the media environment, raising issues about providing support for the development of creativity and innovative capacities of pupils and youngsters starting from very early childhood, focusing on discovering and developing the child's innate capacities and believing that the society needs personalities rather than industrially beneficial people (Hauka 2015).

Both the Waldorf pedagogy and Emilio Regio's educational philosophy emphasize the integration of visual arts in the educational process. Educational institutions, which ground their work in these approaches, are in demand and work well around the world, ensuring a harmonious and full-fledged personality development. It can be noted that as a member of society every person is entitled to exercise the rights necessary for free development in economic, social and cultural spheres with the help of national policies, international cooperation and in accordance with each country's structure and resources, as well as the rights to participate freely in the cultural life and enjoy the arts (Universal Declaration...,1948). According to the Convention on the Rights of the Child, one of the goals of educating children is to respect and support every child's right to qualitative participation in cultural life and creative activities promoting appropriate and equal opportunities in cultural life and art (Convention on...,1989).

The research studies conducted by W. Earle, R. P. Jolley and J. S. Catterall and the findings stated in the program documents convincingly point to a number of benefits from the inclusion of visual arts in the educational content. Among others, it contributes to individual and moral development (Earle, 2013), contributes significantly to the holistic development of a personality (Jolley,2010), creates support for education and real life (Catterall, 2009), develops life skills (Art and..., 2009), eliminates discipline problems, improves communication, creates a sense of equality among pupils, enhances pupils' general achievement develops purposefulness and perseverance, increases motivation to learn, broadens the horizons, implements the link between science and art (The arts..., 2012).

The Company Harris Poll, after conducting an extensive social survey on the integration of visual arts in the educational process in America, has found that pupils' progress over the course of four years has improved by 2%, but 93% support this approach, while 86% of respondents indicate that there are improvements in relation to pupils'



attitudes towards education, 83% say that communication has become more effective among adults and peers, 79% believe that this is the first step of how to regain what is lost in the education of modern times (Americans believe...,2012). The European Union has recognized the educational aspects of visual arts in shaping the life skills of youth in the 21st century. This is confirmed by the European Commission's plan to carry out the monitoring of the educational effects of art on pupils' competences in the European Union (Art and..., 2009).

Including the visual art elements, it is possible to develop such skills as self-expression, ability to critically perceive and explore the world around and actively engage in diverse spheres of human activities. These questions still remain very significant. Culture and art are the most important components of human comprehensive education that ensure the full development of a personality. Latvia has acquired some historical experience in the evaluation of visual art in education.

The historical aspect of the formation of visual art education in Latvia

The development process of artistic culture in Latvia was essentially influenced by its historical heritage in 20ies - 30ies of last century. It is the time when valuable cognitions concerning education and teaching issues for the balanced development of personality were elaborated. Most of them are important also today. Certain activity was observed among teachers, artists and other interested persons who considered art as an important aspect in youth educating and teaching. The problem of pedagogical character was how to integrate mental potential of art in teaching. In solving concerned problem great importance was devoted to art teaching. R. Kroders in one of his publications pointed that society is not so incapable to feel colour, shape and sound as it sometimes seems. The teaching of such senses in point of fact differs from formal acquiring of knowledge. Along with scientific, religious, moral education, it was necessary to place artistic education. It expresses itself as an important addition to intellectual education in school life and promotes the development of attention, fantasy and creative action. R. Kroders characterizes artistic education as the culture of feeling organs and marked its importance in the development of sight and hearing for getting into the world of colours, shapes and sounds where abstract person wanders with blind soul. The author pointed also the importance of art in economic life, in making different objects and other multicoated spheres of human's activities (Kroders, 1939). Artist, teacher J. Springis moved forward the possibility for the establishment of the society of art lovers and thus to develop wide and versatile understanding of art with attention to more valuable life understanding. Considering art understanding of that time society there was opened wide sphere for action. It was necessary to introduce educational and teaching issues in the profitable direction. According to the opinion of most of the authors, such kind of job is not limited to preparing definite programmes, but it contains also series of others, enough complicated issues (Springis, 1925). How to promote understanding of art, skills for perceiving art, making dialogue between the receiver of artwork and artist's created works. In making dialogue with works of art A. Grikis made important attention to the thing that every intelligent individual and especially a teacher has to follow processes of art and to make the understanding of art role in education (Grikis, 1936). Already in 1920 A. Dauge remarked that art not only stimulates us to understand the beauty but also to create it. Teacher in his cognitions expressed the necessity of high culture education to promote the development of artistic perception. We can get significant impulses in historical experience for solving perception issues of works of art in modern schools. As it pointed A. Dauge art creates deep experiences and in the result, human obtains strong impulse not only for the development of his intellect but for his whole "I" mature what is the sacrifice of art (Dauge, 1920). The most part of authors consider that systematic work which improves the perception of work of arts should be started by inspection of original works what surrounded nature, present and history are reflected searching connection points with impressions of artist and viewer's memories.

Study of individual pedagogical approaches in the implementation of educational content that includes visual art

Waldorf pedagogy provides an important place to visual arts in its educational curriculum. The founder of this alternative approach is a German philosopher, occultist and pedagogue R. Steiner (1861 - 1925), whose activity was based on efforts to unleash human intellectual, social and, above all, spiritual forces (The Hutchinson ..., 1995). The first school, based on R. Steiner's philosophical views, was founded in Stuttgart (Germany, 1919) and its network exists also today in different countries of the world, including Latvia (Riga, Adazi). At the basis of



Waldorf pedagogy approach is the unification of science, art and religion, emphasizing artistic creativity and intuitive thinking. Thus, one of the basic principles of this approach is the inclusion of elements of art in all subjects. In turn, the educational process must be a work of art developed by the teacher and based on the regularities of the language of art. On the other hand, the educational institution that implements the concept of Waldorf pedagogy, has to adhere to several basic principles: to promote the child's ability to open-up for the world; not to expose children to premature intellectualization, which leaves a negative impact on the personality development; to stress the discovery of the human in the content of each subject; artistic must dominate in the learning process; in the process of upbringing the interaction between physical and spiritual elements must take place and it must reveal liveliness and independence; in the learning process all forms of diversity must be promoted, such as diverse teaching methods, learning space, implementation of the initiatives, and everything must be revealed through the motion and change. In Waldorf schools, such subjects are taught as visual arts, crafts, drama, eurythmy or art movements, vocal art, instrumental music, two foreign languages, mathematics, chemistry and physics. These subjects are not covered simultaneously, but periodically by each subject, then integrating them all together (Valdorfpedagoģija, 2015). A practising teacher believes that by drawing shapes in Grade 1 the writing skills are enhanced, the understanding about shapes is stimulated, and it facilitates the development of free-hand geometry up to technical drawing and projective geometry (Griezne, 2013). According to R. Steiner, art is essential also for the preparation of teachers, because it encourages exploring and learning the regularities of child's development. The pedagogue's perception of the child's development that is obtained through experience is the basis for spiritual pedagogical activity which fosters humanness within a human person (Šteiners, 1921). The experience of Waldorf pedagogy gives grounds for applying visual arts in the educational process also in general education institutions for development of a balanced personality.

The educational philosophy of Reggio Emilia stresses the influence of visual art on the personality development. This philosophy is originated in Italy after the World War II in the city called Reggio Emilia. Reggio Emilia currently is practised in more than 50 state funded educational institutions in which organize their activities in accordance with the established philosophical concept and they are ones of the most successful schools in the world. Reggio Emilia's philosophy, oriented towards the development of pre-school and elementary school learners, is based on a set of insights which also reveals the importance of visual art: Children have a strong interest, they are capable and curious; children learn better when working together with other children, family, teachers and the community; Children know "hundreds of languages" through which they make diverse discoveries – through moving, drawing, painting, modelling, creating collages, singing, playing musical instruments (Reggio Emilia...,2017). At the core of the implementation of Reggio Emilia philosophy is the unique, natural development of children in their own environment. The followers of this philosophy have the conviction that children have the right and they must be given an opportunity to develop their potential. Its operational experience is based on child-centred learning; creativity and aesthetics; collaboration; supportive environment; documentation; collaboration with parents. A child is considered to be both – an active knowledge constructor and a researcher. The process of acquiring educational content is predominantly organized in the form of project implementation, since such approach opens possibilities for research, observation, asking questions and discussing the issues in order to finally arrive at understanding. In their work educators incorporate important aspects that are proven in practice. They promote learning through collaboration and offer about hundred languages a variety of art materials (The hundred...,2017); show children's works and photos, present children's work; create portfolio of child's work (Reggio Emilia...,2017). It is important that the educators are specially trained in visual arts for working with teachers and children, in order to promote their expression using various media tools and symbol systems (Edwards, 2002). With the reference to the above mentioned, a research methodology has been identified, highlighting the importance of using visual arts in the educational process in accordance with the educational objective to provide to form an independent and developed personality for being a member of a democratic state of Latvia and society (Izglītības likums, 1999).

Characteristics of the potential possibilities of visual art

The cultural promoter and artist M. Fujimura believes that art is the cornerstone of the development of all civilization, pointing out that it is art that helps to understand oneself, teaches to respect the diversity of societies



and strengthen traditions, because art is everywhere and it is rooted in the very beginnings of human life (Fujimura, 2005). Art is one of the basic platforms of understanding the existence of a human life, which is based on the human ability to perceive and portray it in an imaginative way. It is important to point out that it is one of the forms of social consciousness that reflects people's interests, activities, the beliefs of different social groups, nations, society as a whole. In its broadest sense, art is all the processes and products of human mastery, imagination and inventiveness; opposite to nature (The Hutchinson ..., 1995). Nowadays, the manifestations of visual art are experiencing a peculiar condition in which the philosophical ideas of the era get thematically blended with the aesthetic and artistic ideas. At the same time, it can be noted that they open up new possibilities for creating new art products such as animation, video, manipulation in the digital environment, interactivity, synthesis of arts using sound, movement, light and images, which allows unifying elements of art language in a peculiar synthesis. Art scientist E. Gombrich notes that nowadays visual art is a time for courageous inventions and innovations, at the same time only a few comprehend what is happening and do not even realize how much of it has entered into human lives, influencing the formation of taste and preferences (Gombrich, 1999). This creates new challenges and the need for revising the educational content in the context of the age. Dialogue with visual art is fostered by its imaginative character. In psychology, the term "image" is considered to be a subjective phenomenon that arises as a result of subjective-practical, sensory-perceptive thinking, which is a reflection of reality, in which the most important categories (space, movement, colour, form, texture, etc.) exist at the same time. In an informative way, the image is an extensive representation form of the surrounding reality (Psiholoģijas vārdnīca, 1999). Consequently, it can become an important stimulus for teacher-pupil cooperation. According to the philosopher V. Ageyev, each visual art type uses only a set of expressions characteristic of it and determines the peculiarities of the dialogue in which the spectator participates as a person who perceives the information offered to him (Ageyevs, 2005). The imaginative thinking mechanisms play the key role in the process of artistic communication. For example, Cardinal J. Pujats commenting on the works created by artist V. Buss says that Buss is not satisfied just with the rendition of the outer shell, but he tries to dive into the essence of the phenomena that is being exposed, giving the spiritual interpretation of the narrative. Even more, the Cardinal states that the art created by an artist evolves from the in-depth aesthetic attitude towards reality – native land, countryside and cities, people's work (Valdis Bušs..., 2014). The viewer, building dialogue with the art, builds on his own experience and knowledge. Consequently, the impact of art on a person can be described as a variational and multifaceted. Due to the general depiction of objects and phenomena, visual art has a potential for influencing the whole person, thus it becomes an important tool for education and upbringing purposes.

Characteristics of the multifunctionality of visual arts

Artist V. Buss, describing the essence of visual arts, believes that real, great art in its diversity and versatility is not meant for people's entertainment. It can be a great experience that makes not only one or many people mentally deeper and stronger but gives the strength of even a whole nation to overcome the most difficult moments of its existence (Valdis Bušs..., 2014). Visual art is an emotional communication, the transmission of specific information between people and the exchange between contemporaries and the epochs. It is the language in which the artist expresses his/her feelings and experience in a form of images and opinion about various life situations. It also includes information about time, culture and achievements. Visual art is a system of signals when one generation passes on its experience to the next. The task of the artist is to find the basic concept of his/her time, which does not disappear, and to choose the appropriate form and means of expression. Thus, the visual art work becomes the most objective testimony of the time to which the work of art belongs to (Postašs, 2009). Art, which is a harmony between mind and emotions, turns to human mind, feelings, imagination and to the subconscious, showing the person the meaning and goals of his/her life and helping to understand the world and one's own self. An analysis of works of several authors (Ageyev, Dauge, Buss, Esaak, Fujimura, Kroders, Ostrow, Postašs, Reisman, Springis, Vyzman) who explore art and artistic activity, allows distinguishing a number of art's functions (see Table 1).



Table 1. The functions of visual art in opinion of artists, pedagogues and scientists

Visual art functions	Opinion of scientists, artists and pedagogues
Content function	Determining the content - What does the artwork mean at a given moment? This factor must be considered before trying to identify other functions: V. Buss, E. Esaak, P. Postazs, L. Vayzman;
Physical function	Masterfully designed works with a certain function: architecture, design, applied arts – A. Ageyev, E. Esaak, J. Springis;
Social function	Portraying social conditions: politics, patriotism, satire – E. Esaak, S. Reisman, S. Ostrow, L. Vayzman;
Personal function	Self-expression, communication, leisure, therapy, faith – A. Dauge, M. Fujimura, A. Grikis, R. Kroders, E. Esaak, L. Vayzman.

The teacher, writer and artist S. Esaak distinguishes three basic functions of art: social, personal, physical (Esaak, 2017). S. Reisman, the director of the movement “New York City's Percent for Art Program” and artist, designer and art historian S. Ostrow, have explored more in-depth the social function of visual art (Reisman& Ostrow, 2013) Professor L. Vayzman indicates six functions of art: art for delight, persuasion, commemoration, worship and ritual, commentary, and self-reflection (Vayzman, 2014). In general, visual arts are the processes and products of a human workmanship, imagination and inventory. The art education issues are historically and currently addressed by educators, psychologists, artists, writers, philosophers and other specialists both in Latvia and abroad.

Method

The object of the research: education process. The subject of the research: application possibilities of visual art's means in education. Goal of the research: to expand the view of the educational possibilities of visual art's application, by raising awareness of prerequisites of the potential for visual art, based on theoretical research and results of the practical research carried out, to draw conclusions, revealing development opportunities in interconnection of visual art's potential and pedagogic guidelines in education. Issues raised by the research: In what way the pedagogical potential of visual art reveals in personal development? In what way can means of visual art be purposefully used in education? Tasks of the research: To study theoretical and practical aspects of teaching visual art in the historical aspect in Latvia; To study application of visual art in education practice in implementation of certain pedagogical approaches; To study pedagogical, psychological, philosophical, arts literature on multi-functional possibilities of visual art and its complex influence on personal development; To carry out study of practical activity in application of visual art in education based on research of theoretical literature and experience of practical application of implemented approaches; To develop conclusions on visual art's application possibilities in implementing education based on theoretical and empirical research.

Findings

The authors conducted the research exploring the views of Year 2 students of study programme "Teacher" about the essence of visual art, understanding of art and its influence on personality development, as well as about the positive and negative aspects of visualization. 48 respondents participated in the survey (20 students in 2015, 28 students in 2016/2017).

Table 2. Essence of visual art in opinion of respondents

Essence of visual art	Opinion of respondents (%)
Expression of personal emotions	23
Expression of beauty	14
Expression of creativity	12
Manifestation of expression	12
Reflection of regular work	8
Expression of personal imagination	8
Expression of personal feelings	8
Expression of personal joy	8
Proof of personal intelligence	7



23% of respondents understand the essence of visual art as an expression of personal emotions, but 14% understand it as the expression of beauty. 12% of the future teachers involved in the survey see art as the expression of creativity and manifestation of expression. Defining visual art, students acknowledge regular work as important aspect (8%), expression of personal imagination and feelings (8%), as well as see art as proof of personal intelligence (7%). The components mentioned by future teachers defining the essence of art give grounds for a meaningful dialogue in the pedagogical process implementing the intended curricula.

The role of visual arts in personality development

In opinion of several scientists and educators (Dauge, Edwards, Esaak, Fujimura, Garrett, Kroders, Postazs, Buss, Vayzman) teaching visual art means not only showing how to mix the paints and make shapes out of clay, but also it needs to stimulate pupils' self-reflection, self-criticism, visualization skills, and ability to learn from mistakes while experimenting. Such skills are important for performing any type of work. With the help of the survey, the views of future teachers were clarified about the role of visual art in personality development. The opinion of respondents is revealed in Table 3.

Table 3. Visual art for the personality development

Personality development aspect	Opinion of respondents (%)
Self-expression of personality	19
Creativity development of personality	15
Discovering the versatility of visual art	13
Development of aesthetic feelings of personality	12
Development of emotional feelings of personality	10
General personality development	9
Intellectual development of personality	9
Development of a value conception of personality	7
Development of personal beliefs	6

The research results reveal that 19% of respondents believe that visual arts and creative activity provide possibilities for self-expression, 15% - for promoting creativity, 13% - for recognizing the versatility of arts, 12% - for formation of ethical views, 10% - for development of emotional feelings, 9% - for general personality development, 9% - for intellectual development, 7% - for developing understanding about values, 6% - for formation of a world-view. The respondents' answers reveal the complex and multifunctional effects of visual art on the development of personality. They encourage teachers to understand more comprehensively the areas of how visual arts affect the personality.

Actualization possibilities of visual art in the educational process

Visual art is a special language and at the same time an important tool for personality development that can have a significant impact on the whole educational process (Dauge, Fujimura, Kroders, Vayzman, Ostrow, Reisman, Springis). The aim of the survey was also to find out the views of the future teachers about the actualization possibilities of visual art in education. The views of respondents are presented in Table 4.

Table 4. Actualization possibilities of visual art in the educational process

Work forms for actualization of visual art	Opinion of respondents (%)
Visual art exhibitions	22
Information and communication technologies	20
Projects	16
Workshops, camps	9
Festivals, holidays	8
Discussions, presentations	6
Excursions	6
Art markets	4
Days of culture	4
Auctions, Leisure time	3



The obtained results show the versatile opinions of how the future teachers see the inclusion of visual art in the process of education:

- **visiting, organizing and arranging visual art exhibitions - 22%.** The art has its own language expressed through visual representations, which everyone needs to learn how to read. Visual images reflect our needs, everyday achievements, our expectations, experiences and ideas;
- **information and communication technologies – 20%.** Nowadays, the potential actualization of visual art is significantly influenced by the continuous development of information technologies, by creating qualitatively and quantitatively new communication level opportunities with non-present visual art works and processes that are taking place in the art space. The use of information and communication technologies becomes a learning method on the one hand and an art-making tool on the other hand;
- involvement in local and international **collaborative projects - 16%.** It is an opportunity not to distance oneself, but to cooperate, to create common experience, values and goals, showing mutual respect, sense of community and trust. When creating a collaborative network, it implies the principle of tolerance, including openness and respect for cultures and lifestyles; the principle of cooperation between cities and educational establishments, enabling new ways for combining the resources that are available to everyone and jointly address common issues; active participation in arts, culture and research;
- 9% of respondents mention **creative workshops and camps.** It is an opportunity to lay the foundation for a new level of cooperation in the future and to create a dialogue in the art space by acting practically, gaining new experience and discovering new dimensions in the cooperation process;
- **festivals** are acknowledged by 8%. Currently, it is recognized that festivals have informative and representative character, which encourages, stimulates and shows the achievements in arts. Participation in festivals is a great way for gaining experience in the international art context and motivates cooperation;
- organization of **excursions** is mentioned by 6% of respondents, the organization of **art markets and cultural days** – by 4%, while the importance of organizing **auctions and leisure time** is stressed by 3% of respondents, as it encourages the exchange of experience and thoughts, widens the horizon and mutual enrichment;

The summarized responses confirm that the teacher can apply the potential possibilities and functions of visual art in many different ways while implementing the curriculum, thus, encouraging, motivating and supporting each student and helping the students to find their place in the social environment and create meaningful life activities and interpersonal relationships.

Investigation of the positive and negative aspects of visualization

The use of visual techniques and materials goes hand in hand with the development of cultural history. As noted by scientist V. Ageyev, today expressions such as "visualization", "visual communication", "visual perception", "visual thinking" are often used in psychology, self-expression, semiotics, and visual art (Agejevs, 2005). The opinion of the future teachers on the advantages and disadvantages of visual art is presented in Table 5.

Table 5. Positive and negative aspects of visualization

Positive aspects	Negative aspects
It is an opportunity to understand the past and the present and sometimes also the future.	Not always can be understood without explanation.
Encourages the emergence of new ideas and creativity of the person	Copying of ideas; Putting ideas in the frames
The ability to visualize, show, and create unconventional things	Gloomy and negative colours and tones.
Visualization can move deeper than what is read, written, heard;	Creation of negative emotions with visual activity; May create unpleasant images that cause emotions of the same nature.
Creates positive emotions	Discriminatory attitude can be exercised
Ability to get acquainted with world's places without	



being there (photos, videos) Visual art is the most convenient way to get to know things; Ability to see and touch, better understanding of events; Explains explicitly There is a chance to create something unusual from unneeded things Beautiful, eye-catching, gives positive impression – flower beds, various natural landscapes; Influences person's mood With the help of visual art, everyone can express their views, and make the public think about things and events. A new vision, open creative thinking that fosters future development. Creating images that last longer in the memory Positively unburden daily life, creates a sense of safety; Creates the opportunity to live in the visual world More information is perceived in comparison with hearing. A message is communicated (symbols, mood, emotions, etc.)	Provides an inaccurate idea Others will not accept it and will criticize it. Untidy spaces collapsed buildings that cannot be restored. People with poor eyesight do not remember or perceive so well; can be difficult to see. Influence from others; It is possible to diminish other people's self-esteem It takes a lot of time. Intrusive message sweeps up the senses. Exaggeration of effects can make it difficult to see the essence Screaming colours and symbols give unpleasant feelings (e.g. ads for big promotions).

The research shows the interest of future teachers about the use and inclusion of visual art activities in today's educational practice. Respondents point to certain significant positive and negative aspects of self-expression, as well as give its critical evaluation. The opinions expressed by the respondents on multifunctional nature of visual art and its impact on human development are in line with the findings of scientists and artists. The research results show that visual art is an integral part of human life, which combines education, craftsmanship and ability to create. It is necessary to actualize and improve the readiness of the future teachers to assess the potential of visual art.



Conclusions

The 21st century is characterized by dynamism and rapid change, which brings both benefits and challenges into the content of education. Visual art is an integral part of the educational content, and its implementation can be grounded in significant historical experience and lessons learned from alternative pedagogical models. At the same time, it can be noted that the potential possibilities of implementation of visual art in the general education content for comprehensive and harmonious development of a person have not been properly assessed.

Nowadays the application of visual art for the implementation of educational content is significantly influenced by communication technologies. The virtual environment has become an important living space, which can also become an important tool for assessing the multifunctionality of visual art and enhancing human ability and understanding of the world.

The possibilities of using visual art for the implementation of educational content include the application of diverse forms of work in pedagogical practice. When modelling pedagogical practice, it is necessary to actualize person's self-expression, stimulation of creativity, and acquisition of moral ethical norms. Visual arts can become an important tool for preventing the fragmentation of educational content in sectors, as well as a tool for education, upbringing, socialization and for providing pedagogical support.

References

- Agejevs, V. (2005). *Semiotika*. Rīga: Jumava.
- Americans believe that the arts are vital to education – Americans for the Arts* (2012) Retrieved 21 June 2017, from <http://www.fendermusicfoundation.org/2012/07/americans-believe-that-the-arts-are-vital-to-education-americans-for-the-arts/>
- Arts and Cultural Education at School in Europe* (2009). Retrieved 22 June 2017, from http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/113EN.pdf
- Bušs, V. (2014). *Māksla. Atziņas. Versijas*. Rīga: Mansards.
- Catterall, James S. (2009). *Doing well and doing good by doing art: The effects of education in the visual and performing arts on the achievements and values of young adults*. Los Angeles/London: CreateSpace Independent Publishing Platform
- Convention on the Rights of the Child* (1989). Retrieved 27 June 2017, from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>
- Dauge A. (1920). Jaunas skolas ideja. *Izglītības ministrijas mēnešraksts*, 2, 12.
- Earle W. (2013). *The importance of teaching the arts*. Retrieved 27 June 2017, from http://www.spiked-online.com/newsite/article/the_importance_of_teaching_the_arts/13937#.WYWO_hXygdU
- Edwards, C.P. (2002). *Three Approaches from Europe: Waldorf, Montessori, and Reggio Emilia*. Retrieved 27 June 2017, from <http://ecrp.uiuc.edu/v4n1/edwards.html>
- Esaak, S. (2017) *What are the functions of art?* Retrieved 27 June 2017, from <https://www.thoughtco.com/what-are-the-functions-of-art-182414>
- Fujimura M. (2005). *Why Art?* Retrieved 20 June 2017, from <http://www.makotofujimura.com/writings/why-art/>
- Gombrihs E. H. (1999) *Mākslas vēsture*. Rīga: Zvaigzne ABC.
- Griezne M. (2013). Šajā skolā neliel atzīmes, raksta ar tinti, un visi spēlē flautu. *Ļaudis. Ļaudis Patiesā Dzīve*. Retrieved 27 June 2017, from <http://jauns.lv/raksts/sievietem/116535-saja-skola-neliel-atzimes-raksta-ar-tinti-un-visi-spele-flautu>
- Griķis, A. (1936). Nacionālā forma glezniecībā. *Kurzemes vārds*, 68, 7.
- Hauka, E. (2015). Uzticoties bērna iedzimtajām spējām. *Ļaudis Patiesā dzīve*, 15, 30 -35.
- Jolley, R.P. (2010). *Children and Pictures: drawing and understanding*. United Kingdom Malden: MA Wiley-Blackwell.
- Jaunais attīstības ietvars POST 2015: Nevalstisko organizāciju stratēģija. 2015. LAPAS* (2015) Retrieved 27 June 2017, from http://www.llf.partneribas.lv/resource/1424694282_LAPAS-post2015_LV_v2.pdf
- Izglītības likums*. (1998). Retrieved 27 June 2017, from <https://likumi.lv/doc.php?id=50759>
- Kroders, R. (1939). *Daiļuma gars kā audzinātājs. Kurzemes vārds*, 51, 8.



- Latvijas ilgtspējīgas attīstības stratēģija, Latvijas ilgtspējīgas attīstības stratēģija 2030.gadam (2010). Retrieved 27 June 2017, from <http://polsis.mk.gov.lv/view.do?id=3323>
- Par Izglītības attīstības pamatnostādņu 2014.-2020.gadam apstiprināšanu* (2014) Retrieved 27 June 2017, from <https://likumi.lv/doc.php?id=266406>
- Postaļs P. (2009). *Saruna ar sevi*. Rīga: Izdevējs Pēteris Postaļs.
- Psiholoģijas vārdnīca*.(1999). Dr. habil. psihol. G. Breslava redakcijā. Rīga: Mācību grāmata.
- Reggio Emilia philosophy*. Retrieved 27 June 2017, from <http://childrensgarden-vail.com/why-cgl/reggio-emilia-philosophy/>
- Robinsons, K. (2013). *Ne tikai ar prātu*. Rīga: Zvaigzne ABC.
- Reisman, S., Ostrow S. (2013). The social function of art. Retrieved 27 June 2017, from <https://artsinachangingamerica.org/the-social-function-of-art/>
- Ruppert S. (2006). *How the ARTS Benefit Student Achievement*. National Assembly of State Arts Agencies. Retrieved 20 June 2017, from <http://nasaa-arts.org/wp-content/uploads/2017/05/critical-evidence.pdf>.
- Springis, J. (1925). Gleznu galerija Liepājas pilsētas muzejā. *Kurzemes vārds*, 69, 4.
- Šteiners, R.(2007). *Mācību procesa organizācija atbilstoši cilvēka būtībai: 8 lekcijas (par vidusskolas vecumposmu), 1921. gada 12.-19. jūnijs, Štutgarte*. Rīga: RaKa.
- The arts and education: new opportunities for research* (2004) American Educational Research Association. Retrieved 27 June 2017, from <http://www.aep-arts.org/wp-content/uploads/2012/08/OpportunitiesResearch.pdf>
- The Hundred Languages of Children Exhibition*. Retrieved 27 June 2017, from <https://www.reggioaustralia.org.au/the-hundred-languages-of-children-exhibition>
- The Hutchinson Dictionary of Ideas*. (1995). Oxford: Helicon Publishing Ltd.
- Universal Declaration of Human Rights*. (1948). Retrieved 27 June 2017, from <https://www.un.org/en/universal-declaration-human-rights/index.html>
- Valdorfpedagoģija*. (2015). Retrieved 21 June 2017, from <http://tautasskola.lv/raksti/34>
- Vayzman, L. (2014). *Art purposes and function of art*. Retrieved 21 June 2017, from <https://laguardiaintroart1012643.wordpress.com/2014/10/10/art-purposes-and-function-of-art/>
- Vilbers, K. (2011). *Īsa visaptverošā vēsture*. Rīga: Jumava.
- Vilkinson, R., Pikita, K. (2011). *Līmeņrādis. Kāpēc mums ir nepieciešama vienlīdzīga sabiedrība. (Ne)laimīgas sabiedrības analīze*. Rīga: Zvaigzne ABC.



The Levels of Fulfillment of the Framework of Turkish Higher Education Competencies of Boğaziçi University and Sakarya University Students

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Abstract

In this study, the levels of fulfillment of the Framework of Turkish Higher Education Competencies of Boğaziçi University Faculty of Education students and Sakarya University Faculty of Education students has been examined at the undergraduate level. Knowledge (theoretical, factual), skills (Cognitive, applied), ability to work independently and take responsibility, learning competence, communication and social competence, area-specific competence were examined within the scope of the research. The study population consists of students that had education at Boğaziçi University and Sakarya University in the 2014-2015 academic year. The sample of the research consists of 307 students, participated in the study, that were randomly selected from Boğaziçi University and Sakarya University Faculty of Education. The study is in the descriptive scanning model and firstly the relevant literature was searched. "Survey" was selected as the scale type. 5-point Likert type scale was used in the Survey of Turkish Higher Education Competencies Framework Level Determination. SPSS 17 statistical program was used in analyzing the data obtained through the measuring instruments used. Descriptive scanning method was used as the study model. According to the results of statistical analyses of the application conducted within the scope of the study, it was found that Levels of Fulfillment of the Framework of Turkish Higher Education Competencies of Boğaziçi University Faculty of Education students at the undergraduate level are higher compared to Sakarya University Faculty of Education students.

Keywords: Higher Education, Quality, Accreditation, Framework of Turkish Higher Education Competencies, The Bologna Process.

Introduction

In the world, since the second half of the 20th century, as for Turkey, mostly with the 2000s, a massification has begun to emerge in higher education and this quantitative growth has brought the problem of qualitative leap nowadays (Çetinsaya, 2014, Akt: Gülpınar, 2014).

Higher Education in Turkey

The institutions of higher education established during the Ottoman era went through great transformations with the Republic. Among these transformations, the main ones were 1933 university reform and the higher education laws of 1946, 1960, 1973 and 1981. The legal framework for higher education was determined according to the constitutions of 1961 and 1982(Kucukcan and Gur, 2009).

Competencies Framework

Competency in the field of higher education tells what an individual, who successfully completes any higher education level, knows, does and is capable of (WEB 1).

Frames help to make it easy to understand and compare competence practice (WEB 3).



Studies of Creating the Framework for Turkey Higher Education Competencies

The first studies to establish the National Competencies Framework (NCF) in higher education in Turkey was initiated by the Council of Higher Education after the Summit of Ministers which was held during Bologna Process in 2005, in Bergen and which finalized the resolution of the framework of national competencies. Later, the Commission and the Working Group continued "Studies on the formation of Turkey Higher Education Competencies Framework in the light of the opinions coming from stakeholders. (WEB 8).

Method

Descriptive scanning method was used as the study model.

Population and Sample

The study population consists of students that had education at Boğaziçi University and Sakarya University in the 2014-2015 academic year.

Data Collection Tools

In the study, the Survey for the Determination of Turkish Higher Education Competency Framework Level at the Undergraduate Level was used.

1. The Survey for the Determination of Turkish Higher Education Competency Framework Level at the Undergraduate Level

The Level Determination Survey of Turkish Higher Education Competency Framework at the Undergraduate Level was used. The survey consists of 43 questions. It is a five-point likert scale test.

Data Analysis

According to the reliability analyzes made, the Cronbach-alpha value of the whole scale was determined as 0.950 and it was observed that a very good level of reliability was achieved. The reliability levels of scale dimensions are given in the table below. According to this, since the reliability levels of all dimensions are higher than 0.8 it is revealed that a good level of reliability has been achieved also in scale dimensions.

Findings

In this part, the findings obtained will be mentioned:

Table 1. Average, Standard Deviation, Skewness and Kurtosis Values of the Study Variables

Variable	Average	Standard Deviation	Skewness Value	Kurtois Value	Normal Distribution Conformity
s1	3,50	1,026	-,813	-,107	Conformable
s2	3,60	,906	-,906	,538	Conformable
s3	3,20	,950	-,263	-,409	Conformable
s4	3,25	,966	-,458	-,457	Conformable
s5	3,52	,892	-,823	,599	Conformable
s6	3,75	,796	1,106	1,573	Conformable
s7	3,72	,801	-1,049	1,350	Conformable
s8	3,71	,767	-,635	,435	Conformable
s9	3,67	,801	-,806	,732	Conformable
s10	3,55	,884	-,429	-,223	Conformable
s11	3,20	1,011	-,141	-,426	Conformable
s12	3,48	1,042	-,382	-,594	Conformable
s13	3,92	,880	-,990	1,068	Conformable
s14	3,74	,912	-,660	,270	Conformable
s15	3,69	,969	-,783	,434	Conformable



s16	3,84	,827	-,882	1,189	Conformable
s17	4,06	,752	-,991	1,977	Conformable
s18	4,03	,839	-1,161	1,901	Conformable
s19	4,18	,867	-1,235	1,788	Conformable
s20	3,80	,907	-,798	,664	Conformable
s21	3,84	,902	-,843	,690	Conformable
s22	3,67	,862	-,506	-,055	Conformable
s23	3,69	,888	-,728	,543	Conformable
s24	3,76	,846	-,671	,625	Conformable
s25	3,70	,895	-,548	,112	Conformable
s26	3,91	,904	-,738	,286	Conformable
s27	3,96	,884	-,930	1,066	Conformable
s28	4,01	1,111	-1,165	,564	Conformable
s29	4,01	1,136	-1,166	,621	Conformable
s30	3,79	1,293	-,925	-,319	Conformable
s31	3,78	1,226	-,969	-,002	Conformable
s32	3,83	,968	-,790	,175	Conformable
s33	4,15	,845	-1,379	1,641	Conformable
s34	4,21	,782	-1,210	1,414	Conformable
s35	4,18	,838	-1,436	1,819	Conformable
s36	4,17	,840	-1,095	1,782	Conformable
s37	4,11	,861	-1,019	,986	Conformable
s38	4,11	,859	-1,126	1,604	Conformable
s39	3,70	,924	-,439	-,041	Conformable
s40	4,06	,887	-1,171	1,756	Conformable
s41	4,21	,821	-1,309	1,461	Conformable
s42	3,70	,934	-,646	,399	Conformable
s43	3,68	,919	-,575	,310	Conformable

The arithmetic averages of expressions of scale dimensions were taken and new variables were created to determine how the Turkish Higher Education Proficiency Framework Level Scale dimensions at the undergraduate level were perceived by the participants in the survey with a holistic approach and to determine the average of the opinions shared. The following table contains the average, standard deviation, kurtosis and skewness values of the mentioned variables.

Variable	Average	Standard Deviation	Skewness Value	Kurtois Value	Normal Distribution Conformity
Knowledge Level	3,41	,745	-,694	,550	Conformable
Skill Level	3,68	,671	-,895	1,484	Conformable
Independent	3,61	,765	-,546	,357	Conformable

Competency of ability to work and take responsibility

Learning Competency	3,83	,627	-,844	1,189	Conformable
Field-specific Competency	4,03	,620	-1,288	3,229	Conformable
Communication and Social Competency	3,83	,627	-,844	1,189	Conformable



Table 2. Knowledge Level Variable Evaluation Scores and t-Test Results

Variable	University	n	X	ss	t	p
Knowledge Level	Boğaziçi University	228	3,52	,659	4,239	,000
	Sakarya University	76	3,06	,877		

When looked at the averages of the Knowledge Level variable, it has been found that the level of knowledge of Boğaziçi University students is higher than the level of knowledge of Sakarya University students according to the independent sample t-test results.

Table 3. Skill Level Variable Evaluation Scores and t-Test Results

Variable	University	n	X	ss	t	p
Skill Level	Boğaziçi University	228	3,77	,623	4,386	,000
	Sakarya University	76	3,37	,714		

According to the results of an independent sample t-test, it has been revealed that the skill level of Boğaziçi University students is higher than the skill level of Sakarya University students.

Table 4. Competency of Ability to Work and Take Responsibility Variable Evaluation Scores and t-Test Results

Variable	University	n	X	ss	t	p
Competency of Ability to Work and Take Responsibility	Boğaziçi University	228	3,69	,743	3,501	,001
	Sakarya University	76	3,34	,781		

According to the results of an independent sample t-Test, it has been found that the competency of ability to work independently and take responsibility of Boğaziçi University students is higher than Sakarya University students' competency of ability to work independently and take responsibility.

Table 5. Learning Competency Variable Evaluation Scores and t-Test Results

Variable	University	n	X	ss	t	p
Learning Competency	Boğaziçi University	228	4,12	,575	4,404	,001
	Sakarya University	76	3,72	,731		

According to the results of an independent sample t-Test, it has been revealed that the Learning Competency level of Boğaziçi University students is higher than the Learning Competency level of Sakarya University students.



Table 6. Communication and Social Competence Variable Evaluation Scores and t-Test Results

Variable	University	n	X	ss	t	p
Communication and Social Competency	Boğaziçi University	228	4,01	,505	9,951	,000
	Sakarya University	76	3,24	,607		

According to the results of an independent sample t-Test, it has been revealed that the Communication and Social Competency level of Boğaziçi University students is higher than the Communication and Social Competency level Sakarya University students.

Table 7. Field-specific Competency Variable Evaluation Scores and t-Test Results

Variable	University	n	X	ss	t	p
Field-specific Competency	Boğaziçi University	228	4,11	,518	3,527	,001
	Sakarya University	76	3,76	,806		

According to the results of an independent sample t-Test, it has been revealed that the field-specific competency level of Boğaziçi University students is higher than the field-specific competency level of Sakarya University students.

Results and Discussion

In this study, Boğaziçi and Sakarya University Faculty of Education students' levels of meeting THECF at undergraduate level were studied. The results obtained are as follows:

1. The averages for "Level of Knowledge" show a significant difference in favor of Boğaziçi University students in terms of two university students.
2. The averages for the "Skill Level" show a significant difference in favor of Boğaziçi University students in terms of two university students.
3. The averages for the "Competency of Ability to Work Independently and The Responsibility" show a significant difference in favor of Boğaziçi University students in terms of two university students.
4. The averages for the "Learning Competency" show a significant difference in favor of Boğaziçi University students in terms of two university students.
5. The averages for the "Communication and social competency" show a significant difference in favor of Boğaziçi University students in terms of two university students.
6. The averages for the "Field Specific Competency" show a significant difference in favor of Boğaziçi University students in terms of two university students.

As a result, when Boğaziçi and Sakarya University's level of meeting THECF at undergraduate level is examined, it has been seen that the level of Boğaziçi University Education Faculty students is higher than Sakarya University Education Faculty students.

In this part, some useful information is given as recommendation to researchers who will carry out new studies in this field.

1. The study was carried out only by comparing Boğaziçi and Sakarya University Faculty of Education Students. Students in different fields can be included in the study.



2. The perceived level of Turkish Higher Education Competency Framework of the students participating in the study can be re-evaluated by considering their economic levels and genders.
3. The number of students participating in the research can be increased.
4. In order to determine the students' level of meeting THECF in different places, the study can be conducted in different provinces, different regions or all over the country.
5. The reasons for the fact that Sakarya University Faculty of Education students' knowledge skill level, independent working and taking responsibility, learning, communication and social competencies are lower than Boğaziçi University Faculty of Education students can be studied. Studies can be done to increase these levels, skills of Sakarya University Faculty of Education students.

References

- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö.E., Karadeniz, Ş., Demirel, F. (2015). *Scientific → Research Methods*. (19)
- Çalışkan, E. (27-29 May 2011). Quality Assurance Approaches in Higher Education and →Austria example. *International Higher Education Congress: New Trends and Issues* Proceedings Book Volume 2. Karadeniz Technical University, Trabzon.
- Gülpınar, M.A. (2014). Reconsidering Higher Education and Medical Schools, Planning Future *Journal of Higher Education and Science*. (3). 156-166.
- Küçükcan, T., Gür, B. S. (2009). *Higher Education in Turkey* Ankara: Pelin Ofset. Tezsürücü, D. Bursalıoğlu, S.A. (2013). Change in Higher Education: Seeking Quality. *KSU Social Sciences Journal*. (2). 97-108.
- It was reached on 26.04.2015 at the address of WEB1, <http://tyyc.yok.gov.tr/>.
- It was reached on 04.01.2015 at the address of WEB 3 <http://www.cedefop.europa.eu/en/events-and-projects/projects/national-qualifications-frameworks>.
- It was reached on 03.01.2015 at the address of WEB 8 <http://tyyc.yok.gov.tr/?pid=20>.



Challenges and Solutions for Preschool Teachers in Their Educational Practice

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Abstract

The aim of each teacher's professional activity is a gradual awareness of one's own pedagogical activity, its independent planning, adjusting and implementing, and readiness to analyse and reflect on it. During the times of change, it is crucially important to find a personally significant meaning within a particular professional activity, and to be ready to implement one's own ideas, to communicate the achieved results and to be able to discuss them. This research is focussed on pedagogical challenges of preschool teachers during the process of implementing the child-centred approach. The challenges of pedagogical activity are caused by differences in teachers' perception, experiences and readiness to adopt the child-centred approach and educational content that comes with it, which is based on a holistic vision that promotes children's skills to learn independently, solve problems and make decisions, as well as their ability to think flexibly and to use the acquired knowledge and skills in different life situations (Elschenbroich, 2001, Marcon, 2002, Crain, 2005, Kinosh & Pukk, 2010). Despite the fact that in preschool education practice this approach is being employed already since the mid-1990s, the analysis of experience shows that many teachers understand differently the nature of teaching and learning, and tend to preserve both the academic aspect and their dominant (authoritative) role when choosing the learning content and form. The main challenges are: 1) changing the dominant role of teachers when ensuring child's meaningful activity; 2) the ability to balance between the academic and social aspects of teaching and upbringing; 3) the ability to reflect on one's activity and change. The aim of this research is to describe these pedagogical challenges and to develop recommendations for improving the pedagogical activity of preschool teachers while implementing the child-centred approach. The research results presented in this article are analysed as part of the case study. The data are obtained from the video analysis of teachers' pedagogical activity (N = 6), from surveying the preschool teachers (N = 102), from analysis of pedagogical documentation/ materials (integrated lesson plans) (N = 80), and from evaluation (reflection) of teachers' activity (N = 80).

Keywords: preschool education teacher, child-centred approach, reflection on teacher's activity.

Introduction

The changes brought about by the 21st century make a lot of people turn to new and challenging work environments in order to acquire new knowledge, skills, competences, new vision, values, and attitudes. In preschool education this situation is characterized by the transition from teacher-centred teaching to child-centred learning by reducing the academic approach and increasing socially oriented learning and improving the competence of pedagogues to ensure the child's holistic development (Eiropas Komisija, 2011). This requires a change in teachers' awareness about their professional pedagogical activity, its content and methods of implementation.

Despite the fact that in Latvia the child-centred approach in preschool educational practice was introduced already in mid-1990s, the analysis of experience (Grava, 2012; Mikelsone, Grava&Pavitola, 2017) shows that we still cannot talk about a complete transition to it. Therefore, it is important to identify the challenges and conditions that affect preschool teachers when they implement a child-centred approach in their pedagogical practice.

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Teacher's pedagogical professional activity during the implementation of change

The aim of each teacher's professional activity is a gradual awareness of his/her pedagogical activity, its independent planning, correction and implementation, and readiness to analyse and reflect on it. In the times of change, it is particularly important to find a personally significant meaning in the particular professional activity (Schein, 1993, *Пряжников*, 1996, Wenger, 1998), as well as readiness to implement ideas, communicate the results of one's activities (I.Lāce, 2014) and the ability to discuss them (Mikelsons & Odina, 2016). Learning to teach is not just a matter of applying decontextualized skills or reflecting on pre-defined patterns (Britzman, 1991: 8). Learning to teach (also to teach oneself) is always a process of formation. As Wenger suggests, learning is not only collection of skills and information, but also a certain personality formation process (Wenger, 1998:215). In such transformation process, the perception of who we are and what we can do is changing. Assuming that the process of self-formation is also the process of learning, four components can be distinguished (Wenger, 1998:5):

- 1) Meaning. Learning through the experience: the ability to perceive one's own life and the surrounding world as meaningful;
- 2) Learning. Learning as doing: joint activity based on common historical and social resources, background systems and views;
- 3) Communities. Learning to be affiliated (to belong): belonging to a social community in which activities are recognized as valuable and competent;
- 4) Identity. Learning as becoming: understanding how learning influences and shapes us in the context of community.

Being active in the educational environment teachers face different experiences related to education, teaching and learning in different contexts, therefore the concept of learning described by Wenger is useful for exploring the complex process of change in which all today's preschool teachers are involved.

Teachers are not always ready to accept and implement the new and changing context of teaching and learning. Especially if during their previous professional "history" they had always relied on the ratings provided by other authorities which they believed were objective, complying with general, predefined criteria, which everyone had to achieve in the same way. The teacher's success or failure was measured by implementation of curriculum and by the published results of national standardized tests (Timoštšuk & Ugaste, 2010). Today it is important for the teachers to be aware of how they learn, how they teach others, and how they respond to the changing learning contexts (Bullough & Gitlin, 2001:45). The responsibility for teacher's professional development is passed on to the teacher him/herself (de Janasz & Forret, 2008). It is solely up to the teacher what he/she will learn and how he/she will respond to the changing context of teaching (Bullough & Gitlin, 2001:45).

Adjustments in the teaching and learning context deeply transform the work of the teachers and bring about changes that make the teachers ask: can I be who I am (Bullough & Gitlin, 2001). For a better understanding of one's own professional self, the teachers need to learn to reflect on their activities. However, if the focus is maintained to standardized norms and if the teacher lacks the support of trusted team members, at the moment many teachers find it easier to accept the feedback rather than to reflect on his/her own actions. Speaking about one's own activity, teachers must be able to be honest and open to themselves and think – what can I do differently? Therefore, teachers must become more open to reflection, because it gives:

- 1) understanding of what has happened or where the teacher stands in his/her activity,
- 2) perception or ability to "see" what happens;
- 3) the ability to admit/ recognize one's feelings.



When teachers implement the change of the pedagogical approach, the process of self-formation becomes important; it is related to finding a personally significant meaning, taking individual responsibility for one's own work and ability to reflect on one's activities.

Theoretical basis of child-centred approach

In the second half of the 20th century and in the 21st century, in Latvia (Karule, 1992; Meikšāne, 1998, Krastiņa & Salīte, 2008, etc.) and in the world (Scheller, 1981; Marcon, 2002; Edwards, 2005), the theoretical ideas about the formation of a child-centred learning environment and the active involvement of children in the learning process are assessed as suitable for preschool education. It implies modelling of subjective experiences, which contributes to the development of children's experience of self and is related to the questions: what do children need; what is offered to them. This vision is based on the constructivism theory and is considered to be the most appropriate theoretical basis for preschool education in the 21st century (Motschnig-Pitrik & Holzinger, 2002; Krastiņa & Salīte, 2008; Sheridan, 2009; Zarina & Belousa, 2011). This means creating such learning environment in which the children want to learn and where they learn out of their personal initiative. Children want to learn and they learn independently from adults because learning is an internally motivated process. From a teacher this requires other professional competence, which is not related to creating a learning environment in which ready-made knowledge is delivered (Gordon, 2009).

The following constructivism aspects form the basis of the child-centred approach:

- 1) Children are active participants in the learning process; they construct knowledge themselves based on their previous experience. The construction of knowledge starts from this experience by overcoming the cognitive conflict between existing knowledge and the external unknown reality (Piažē, 2002). New knowledge is acquired with the help of speech, senses and active activity, adding them to the existing experience (Powell & Kalina, 2009). Teacher does not teach children but provide children with the opportunity to learn by themselves (Tafa, 2008), creating such learning environment, which encourages children to be curious and ask questions;
- 2) The social and cultural context is equally important for the individual and subjective experience of children. Acknowledging that the children are active participants in the learning process and design their own knowledge, the meaning is given to the social context – the role of the other people in the learning process (Выготский, 2005). All cognitive functions arise from social interaction, and any function in child's cultural development appears twice: at the social level – between people and at the individual level – within the child him/herself. This is evidenced by the nearest development zone theory developed by Vygotsky, which distinguishes between the child's real or actual level of development, which reveals child's ability to solve problems independently, and the potential level of development to which the learning process is oriented and which is determined by the ability to solve problems with the help of adults and in cooperation with the more capable peers. This means that for children's development such situations must be created, which children cannot solve on their own and in which they need support from the teacher and their peers. Also the children's previous experience is recognized in social and cultural context (Брунер, 1977), as well as the fact that children learn by observing, imitating and modelling the behaviour of others (Бандура, 2000);
- 3) Children are a closed informative system; they cannot acquire knowledge from outside – they only can construct it themselves (Glaserfeld, 1989). Without denying the objective reality, it is assumed that a child cannot know what reality is. The mental constructs that are based on past experience help to establish certain order in the flow of experience. When children face external or internal obstacles and the problem arises, they change, adjusting to the new experience (Glaserfeld, 1989). Thus, in the learning process the psychological and physiological peculiarities of children are important (Dougiamas, 1998; Улановский, 2008);



- 4) There is a relationship between the child's activity and thinking in the learning process (Piažē, 2002; Matthews, 2003; Выготский, 2005; Gordon, 2009) and child's daily life and personally relevant problem situations (Dewey, 1956). Learning is an active, creative and problem-oriented process that begins in a customary day-to-day environment when the child faces the unknown (Dewey, 1956; Sutinen, 2008). A teacher with his/her knowledge drives a child into new experiences, maintaining a balance between the learning organized by a teacher and learning that is performed independently by a child (Gordon, 2009). Therefore, learning cannot be viewed solely as an individual or just as a social process – individual cognitive and social processes have to be integrated into the acquisition of knowledge, because children learn in different ways: either trying to solve the problem independently, or co-working with peers or with the help of a teacher (Gordon, 2009). This allows describing the child development as a problem oriented activity in which the following roles are emphasized: children as researchers and teachers as children's supporters.
- 5) The formation of a child's attitude and solving problem situations are essential, particularly emphasizing conversation and self-reflection (Taylor, 1998). Children are directed towards formation of a positive attitude, mutual communication during the activities and the assessment of their achievements. The learning process is determined by three features: (1) active and collaborative participation of children in the learning process; (2) a learning process based on the formation of attitudes; (3) motivation of children for learning (Brostrom, 2006). Thus, the children's development is related to their desire to be curious and to explore, with the emergence of interest that promotes the child's motivation to learn.

All of these constructivism aspects share a key feature – learning as an active knowledge construction process based on past experiences (Murphy, 1997), in which the child participates in the formation of the environment and the learning process. In the educational environment, which gives the child an opportunity to solve his/her own problems and achieve the result, the child is encouraged to explore the world around him/her. Therefore, it is important to specify the contexts, conditions for teachers' pedagogical activity and the features that support the child-centred approach (see Table 1).

Table 1. Child-centred pedagogical activity of teachers for the holistic development of children

Context	Condition of pedagogical activity	Features
Problem-oriented context	Providing children with opportunities to choose (1)	- the choice of materials, resources and type of expression;
	Creation of problem situations for potential development of children (2)	- the choice of activity and time
		- support, if necessary, at the level of children's current developmental stage, in which the children themselves are able to solve the problem;
Continuous cognitive context	Ensuring self-motivated learning of children (3)	- creation of situations in which children cannot solve the problem independently, and providing support to them
		- ensuring conditions for children to ask questions;
	Variety in resolving a cognitive conflict (4)	- ensuring conditions for evoking interest in children
Social context	Development of a meaningful interaction (5)	- organization of active participation
		- indirect support (indirect teaching, knowledge transfer)
		- listening to children and waiting for children's reply
		- organization of conversations and peer



Subjective context	Ensuring /promoting the child's positive experience (6)	- cooperation
	Organization of child's self-reflection (7)	- a positive and interested attitude
		- respecting child's thoughts and feelings
	Attributing a personal meaning (8)	- Exploring previous subjective experiences of children
		- Organizing the self-evaluation of child's performance;
		- Linking the topic to the children's daily experiences (subjective meaning);
		- exploring children's interests and subjective experiences

Teachers' pedagogical activity always takes place in specific contexts, in which it is possible to determine the criteria and characteristics of pedagogical activity that can also be used for analysis of pedagogical experience.

Research design and data collection methods

For this research the case study (Geske&Grünfelds, 2006) is employed for analysing and interpreting the acquired data relevant to educational practices, preschool education in particular. The case study has a discerning nature and it focuses on a deeper exploration of the problem, concentrating on details and reciprocal links and describing the pedagogical challenges faced by preschool education teachers in Latvia.

Various data collection methods were used for this study ensuring the scientific validity of the case analysis: survey (N = 102), analysis of integrated lesson plans (N = 80), teachers' performance assessment (reflection) (N = 80), video analysis of teachers' pedagogical activity (N = 3) and interviews (N = 3). The choice of respondents was based on the subjective selection criteria, in particular the method of convenience, i.e. the most accessible representatives of the general sample were involved. In Latvia, there are 647 state preschool educational institutions which implement preschool education programs, and the data obtained from representative sample are attributed to the general sample as a whole. The study was conducted in the period from November 2016 to June 2017 in several stages, using the benefits of the case study methodology for collection of complex data.

In the first research phase, the survey was conducted and the integrated lesson plans analysed with the aim to clarify the problems that preschool teachers detect themselves and to discover their theoretical understanding about the implementation of the child-centred approach. It gives a general idea of the current situation in preschool education in Latvia.

In the second phase, the observation of teachers' pedagogical activity was performed, which was recorded on video, with the aim to identify the teachers' pedagogical activity in practice, followed by interviewing the teachers using a semi-structured interview with the goal to understand their subjective perception about a child-centred approach and to see the possible processes of change.

In the third phase, the reflections provided by the teachers were analysed.

Findings

In the first phase of the study, the survey results were analysed using both descriptive and analytical-statistical methods. Each response and all the responses together were analysed, clarifying the activities/ situations which the teachers themselves consider as problematic when implementing the child-centred approach.



A contradiction can be detected in the understanding and opinions expressed by the teachers – initially, teachers point out that children's individual development, age, abilities, etc. are important (37%), which confirms teachers' theoretical understanding of child's individual development as an important condition, but analysing problems which teachers face in their educational practice, 35% of respondents admit that the tasks given to children in day-to-day practice are not relevant to the child's experience, interests and their stage of development. Not always, when implementing the pedagogical process, the actual, individual needs of the children are taken into account. 27% of teachers believe that in preschool establishments the emotional well-being of children is provided, that the child is enjoying the learning process, the child is independent, noticed, listened to, and that the child's interest in various things is supported by the teacher and the parents. At the same time, only 2% of the respondents believe that a free, independent child's activity is an important way of acquiring knowledge in preschool age, and 4% of respondents consider the environment as a significant factor. Thus, it can be assumed that the teachers do not understand completely the content and substance of a child-centred approach.

28% of the respondents point to the problems in *teacher-child* relationships, dominated by the "strategy of influence" (Šteinberga& Tunne, 1999:19) or a teacher-centred pedagogical position when the teacher is a sole decision maker. Despite the fact that teachers theoretically understand/ know how children develop, learn and acquire new knowledge, however, in the teaching practice the dominant teacher's position is preserved. The answers of 12% of respondents allow to conclude that when planning the daily rhythm the preschool establishment does not take into account the time needed for acquiring skills and abilities, as often games, which children have started to play, get interrupted in order to follow the teacher's plan to continue with activities of another content. Survey data revealed that only 5% of respondents base their planning of an integrated learning process on preschool education programs and guidelines. This fact raises the question about the relevance and importance of this document to educators.

14% of respondents indicate that in preschool a child-oriented learning environment, the one that promotes initiative, autonomy, cooperation and interest, has not been created. Thus, describing the background of preschool education and identifying the main problems in the pedagogical work of teachers in implementing the child-centred approach, it can be concluded that the preschool teachers theoretically know what it is, what its content is, but in practice it is not fully implemented. The child's experience is taken into account minimally; they get very little involved in the planning of activities. The "strategy of influence" that is characteristic to teacher-centred approach is still seen in the preschool education practice. The question about the practical use of existing preschool education programs and guidelines is still open for discussion.

Analysing 80 integrated lesson plans, attention was paid to two aspects: defining the anticipated results and the development of the context for the child-centred approach. The anticipated results can be assessed from a teacher's position or a child's position. In the first case, the teacher decides on what content to teach, plans how to implement and evaluate this content. This approach focuses on the teacher's performance and on assessment of how well the children have learned the material they are working on. In the child-centred approach anticipated results tell what children will be able to do and what they will know at the end of a certain learning period. Anticipated results focus on what the child must achieve, not on the teacher's intentions. The context of the child-centred approach is analysed following the conditions and characteristics of teachers' pedagogical activity reflected in Table 1.

As a result it can be concluded that out of the 80 integrated lesson plans analysed, 64% of the planned anticipated results are designed as teacher-centred. For example, in the integrated lesson theme "Wild



Animals" the following anticipated results are defined: *"strengthen the understanding of the concepts - big, small, largest, and smallest", "to develop small finger muscles", "to develop imagination"*. The results to be achieved reveal the teacher's intention, not what the child will be able to do or know. When analysing the inclusion of the child-centred approach context (see Table 1) into the integrated lesson plan, a qualitative content analysis was employed, which emphasizes the integrated view on the data and the specific contexts and allows interpreting the social world in a subjective, but scientifically fashionable way (Pipere, 2011:227). The analysis confirmed that the focus of teachers is more on the content of the integrated lesson plan, for example, in natural science the aim is "to get to know a pet – a cat and get acquainted with the characteristics of a cat (fluffy, cute, angry)", as well as on a description of specific forms of work and methods, such as observation a living object, imitation, manipulation with objects, play using the movements. Contexts of child-centred approach and their conditions are revealed indirectly. They are not specially designed, but the content analysis shows that the integrated lesson plans generally have all the contexts and conditions, but they are not included in each plan separately. The problem-oriented context and social context are identified the most clearly, for example, the theme "Healthy Lifestyle" provides free choice for children, allowing children themselves to work with the characters and role-play situations in which different characters choose healthy products. The emphasis is also placed on the context of continuous reasoning and its condition of "ensuring the child's self-motivated learning" as well as its characteristic: to explore and deduce independently.

It can be concluded that the current preschool education lesson plans do not have provision for inclusion of special contexts of the child-centred approach. However, changing the integrated lesson planning structure, preschool teachers would be encouraged more to reflect on their pedagogical activity already in the planning process and develop integrated lessons plans, including all contexts of child-centred approach: continuous cognitive context, problem-oriented context, social context, subjective context and their conditions (see Table 1).

At the Stage 2 of the study an observation of teachers' performance was carried out and interviews, with the aim to clarify the actual situation of pre-school education practice. The child-teacher relationships were observed during the morning circle and play activities. For collection and analysis of observation data, a grounded cyclical approach described by Ansdell and Pavlicevics was applied: observation – description – interpretation (Martinsone, 2011). In total 3 cases were documented in three institutions. Observed cases were captured in video recordings. Total recording time for the video is 107.70 min. 39 episodes were distinguished for the case analysis.

Table.2 Data about the cases

Description of Case A	Description of Case B	Description of Case C
The case is observed on 10.02.2017. Participants: 1 teacher (10 years of teaching experience), 1 teacher's assistant, 16 children (3-4 y/o). Length of the video: 50, 32 min, 13 episodes documented.	The case is observed on 15.04.2017. Participants: 1 teacher (5 years of teaching experience), 1 teacher's assistant, 11 children (2-3 y/o). Length of the video: 29, 34 min, 14 episodes documented.	The case is observed on 21.04.2017. Participants: 1 teacher (5 years of teaching experience), 12 children (3 - 4 y/o). Length of the video: 28, 04 min, 12 episodes documented.

The recorded play activities and a morning circle are organized in routine conditions. Interviews were conducted on the same day following an observation. The purpose of the semi-structured interview was to find out the subjective experience of the preschool teachers in organizing the preschool educational process and to obtain in-depth information on teachers' understanding, attitudes and beliefs about the child-centred approach used for children's development. The interview



consisted of 15 questions based on the analysis of theory, observation of play activities and analysis of the data obtained from the surveys.

Respondents for observations and interviews were selected based on the researchers' personal subjective assessment and selection, which is supported by a non-probability sample (Geske & Grinfelds, 2006). Three pre-school teachers, with teaching experience of more than 5 years, were interviewed – they were the ones that led the play activities, which were video-recorded. The data for this study were collected separately (through observations and interviews), but analysed and interpreted in an integrated way.

Table 3. Summary of the characteristics recorded in interviews and observations according to the conditions mentioned in Table 1

Case A	I	V	I	V	I	V	I	V	I	V	I	V	I	V	I	V
Conditions	1.		2.		3.		4.		5.		6.		7.		8.	
Level	3	1	3	3	3	3	2	3	3	3	3	2	3	2	1	1

Case B	I	V	I	V	I	V	I	V	I	V	I	V	I	V	I	V
Conditions	1.		2.		3.		4.		5.		6.		7.		8.	
Level	2	2	3	3	3	2	3	3	3	2	3	2	3	2	2	1

Case C	I	V	I	V	I	V	I	V	I	V	I	V	I	V	I	V
Conditions	1.		2.		3.		4.		5.		6.		7.		8.	
Level	1	2	2	2	2	2	2	2	3	3	3	2	2	2	1	1

Abbreviations: I – found during the Interview; V- captured in Video recording

Characteristics of levels: 3 – corresponds (both features observed); 2 – partly compliant (a single feature observed); 1 - do not match (no features observed).

In all cases, the interviews acknowledge the significance of social context in preschool education practice, emphasizing both the need for meaningful interactions and for promoting the child's positive experience. However, in the video observations, no respect was found for children's thoughts and feelings in any of the cases, which shows that the promotion of a child's positive experience is only partially implemented. In the case A, also the formation of meaningful interactions was manifested only partly – the failure to wait for the child's response was observed, for example, *if the child cannot answer immediately to the teacher's question, the teacher responds in his/her place.*

Although in the interviews, in two cases (cases A, B), the child's self-reflection organization was highlighted, then in the video recordings only a partial manifestation of this characteristic was found in all cases.

Attribution of personal meaning is partly observed only in one of the interviews, for example *"from the very morning – when greeting each child and asking how he/she feels and what is new, the teacher must express interest and admire it all."* However, this feature was not present in any of video observations.

Thus, it becomes evident that although theoretically teachers are aware of the benefits of the child-centred approach for the child's holistic development, its features are not all applied in preschool teaching practice. Analysing the data obtained through video recordings and interviews, the following challenges for teachers are identified: the attribution personal meaning, ensuring the possibilities of choice, as well as providing the self-motivated learning.



During the third stage of this research, the teachers' reflections (N=80) on their work were analysed, with the aim to understand the teachers' ability to reflect and evaluate their activities, keeping in mind the need for professional development and readiness for change. It can be concluded that teachers' reflections are more of emotional character, they do not reveal much about the performed activities but rather the assumptions about children's feelings and their activities, such as "*children were interested*", "*children liked it*". The described situation or activity is not reflected fully, for example, "*I can communicate and cooperate with children*," or does not show that things can happen also differently: "*I can organize and manage active and interesting lessons both indoors and outdoors because I am a sports teacher*". Very few specific skills are described – what I did and what I will do next time. Consequently, there is no basis for awareness about what needs to be done to improve the performance (Callanan, 2003). A positive result, the one that matches the plans, is taken as self-evident and nothing is specifically analysed and evaluated in order to understand how it has been achieved. According to de Bono (2012), this means that there are no further steps assigned which would guarantee that this success can be repeated. Thus, it can be said that teachers provide more the evaluation of their performance, rather than the evaluation of the work process, and that the reflections have more nature of feedback rather than the one of reflection. The analysis of the interviews showed that teachers consider the concepts *self-reflection* and *feedback* as synonymous, for example, to the question "how is child's self-reflection organized?" the teachers responded: "*At the end of each lesson I ask the children what they liked and what they have learned*"; "*Feedback is a very important part of the play-activity*". However, reflection provides an understanding and awareness about what a person has mastered, and raises awareness about the fact that a person is able to change his/her attitude, behaviour, and performance both in individual and professional context (Mikelsone & Odina, 2016; Cottrell, 2013), which is very important when implementing changes in preschool educational practice.

Conclusions

The pedagogical activity of teachers always takes place in a specific environment, operating conditions, with the specific purpose and tasks for which they are responsible. By analysing the teachers' activities according to the nature of the child-centred approach, one can identify several challenges that teachers have to overcome or accept:

1. The research proved that the teachers know and understand the essence of the child-centred approach, but they do not apply it fully in their practice. Teachers ground their work in their pre-designed integrated weekly plan, but elaborating it they do not take into account (or take too little) the interests and needs of children, and also involve the children too little in the process of decision making. Therefore, one of the challenges that teachers should address is involvement of children in the planning of pedagogical process.
2. An essential condition for teachers' activity in a child-centered pedagogical process is the assignment of a personal meaning to the child's activity, linking it with child's daily life and his/her subjective experiences. Thus, a significant challenge in the work of a preschool education teacher is respecting the child's subjectivity and the development of a sense of a personal meaning.
3. When implementing the pedagogical process including integrated lessons, all contexts and conditions of the child-centred approach must be observed. If only one or a few of them are implemented, then it is not possible to talk about a holistic development of a child, as then the dominant role of the teacher and a "passive" role of the children is maintained, which is more characteristic for a teacher-centred approach. Thus, the challenge for preschool teachers is to be able to implement their pedagogical activities and to develop integrated lesson plans in a way that matches all four contexts and eight conditions of the child-centred approach.
4. It is important for preschool teachers to master reflection skills as an essential tool for implementing the change. Being in the process of transition from a teacher-centred position to



a child-centred approach, reflection ensures not only a deeper understanding of what teachers have learned and how they have done it, but it gives an opportunity to change their attitudes and behaviour both in individual and professional context, which is essential for the implementation of change in preschool educational practice. So the next challenge for preschool teachers is the acquisition of reflection skill and its regular application in their pedagogical work.

References

- Britzman, D. (1991). *Practice Makes Practice*. USA: State University of New York Press.
- Brostrom, S. (2006). *Care and Education: Towards a New Paradigm in Early Childhood Education*. Child Youth Care Forum.
- Bullough, R., & Gitlin, A. (2001). *Becoming a Student of Teaching*. Linking knowledge production and practice (2nd ed.). New York: Routledge Falmer.
- Callanan, G. A. (2003). What Price Career Success? *Career Development International*, Vol.8 (3), 126 - 133.
- Cottrell, S. (2013). *The Study Skills Handbook*. 4th ed. Palgrave Macmillan.
- Crain, W. (2005). *Lernen für die Welt von morgen. Kindzentrierte Pädagogik – Der Weg aus der Erziehungs- und Bildungskrise*. Arbor Verlag, Freiamt.
- de Bono, E. (2012). *Domā! Kamēr nav par vēlu*. Rīga: Zvaigzne ABC.
- de Janasz, S.C., Forret, M.L. (2008). Learning The Art of Networking: A Critical Skill for Enhancing Social Capital and Career Success.//*Journal of Management Education*, Vol.32 (5), 629 – 650. Available: <http://journals.sagepub.com/doi/pdf/10.1177/1052562907307637>.
- Dewey, J. (1956). *The Child and the Curriculum: And The School and Society*. University of Chicago Press.
- Dougiamas, M. (1998). *A journey into Constructivism*. Available: <https://dougiamas.com/archives/a-journey-into-constructivism/>.
- Edwards, S. (2005). Constructivism does not only happen in the individual: sociocultural theory and early childhood education.//In: *Early Child Development and Care*, Vol.175 (1), 37– 47.
- Eiropas Parlaments. (2011). *Eiropas parlamenta rezolūcija 2011.gada 12.maijā par bērnu agrīno izglītošanu Eiropas Savienībā* (I/2010/2159).
- Elschenbroich, D. (2001). *Weltwissen der Siebenjährigen. Wie Kinder die Welt entdecken können*. Antje Kunstmann Verlag, München.
- Geist, E. (2009). *Children are born mathematicians: Supporting Mathematical Development, Birth to Age 8*. Pearson Education.
- Geske, A., Grīnfelds, A. (2006). *Izglītības pētniecība*. Rīga, LU Akadēmiskais apgāds.
- Glaserfeld, E. (1989). Cognition, construction of knowledge, and teaching.//In: *Synthese* 80 (1), 121 - 140. Available: <https://www.univie.ac.at/constructivism/EvG/papers/118.pdf>.
- Gudjons, H. (1998). *Pedagoģijas pamatatziņas*. Rīga: Zvaigzne ABC.
- Gordon, M. (2009). Toward A Pragmatic Discourse of Constructivism: Reflections on Lessons from Practice.//In: *Educational Studies: Journal of the American Educational Studies Association*, Vol. 45 (1), 39-58.
- Grava J. (2012). Pirmsskolas vecuma bērna pētnieciskā darbība pieaugušo radītajā vidē. *Sabiedrība, integrācija, izglītība*. Starptautiskās zinātniskās konferences materiāli, I daļa. Rēzeknes augstskola, Latvija. 57.- 64.
- Karule, A. (1992). Apvienotā (integrētā) mācība 1.klasē.//*Izglītība un Kultūra*. Pielikums „Vispārējā izglītība”, Nr.4., 9.-12.
- Kinos, J., Pukk, M. (2010). *Lapsest lahtuv kasvatu*. Tallin, Esmtrükk.
- Krastiņa, E., Salīte, I. (2008). *Par pirmsskolas izglītības programmas modeli*. Metodisko materiālu “Obligātās pirmsskolas un sākumskolas izglītības izvērtējums un pilnveides iespējas” izstrāde.



- Datu analīze. Available: http://izm.izm.gov.lv/upload_file/Petijums_Daugavpils_Universitate.pdf.
- Lāce, I. (2014). Pedagoģiskais pašvērtējums topošā skolotāja karjeras attīstībā. Promocijas darbs pedagoģijas zinātņu doktora grāda iegūšanai augstskolas pedagoģijas apakšnozarē. Available: http://www.liepu.lv/uploads/files/Inguna_Lace_%20promocijas%20darbs%202014%20.pdf.
- Marcon, R.A. (2002). Moving up the grades: Relationship between preschool model and later school success.//In: *Early Childhood Research & Practice*, Vol.4 (1), 1–24. Available: <http://ecrp.uiuc.edu/v4n1/marcon.html>.
- Mārtinsons, K. (2011). *Ievads pētniecībā: stratēģijas, dizaini, metodes*. Rīga, RaKa
- Matthews, W.J. (2003). Constructivism in the Classroom: Epistemology, History and Empirical Evidence.//In: *Teacher Education Quarterly*, Vol.30 (3), 51 – 64. Available: <https://eric.ed.gov/?id=EJ852364>.
- Meikšāne, Dz. (1998). Rīcības stereotipi, identitāte un personības pašizjūta. *Personības pašizjūta un identitāte*. SIA „Mācību apgāds NT”.
- Mikelsone, I., Odina, I. (2016). Future Teachers’ Reflection to Understand Their Professional Identity.//In: *Proceedings of 1st International Conference on Lifelong Learning and Leadership for All*. ICLEL conference, Olomouck, 2015. Published by Sakarya University, Faculty of Education. Vol.1., 239-244. Available: http://media.wix.com/ugd/d546b1_a7b3edd54a2e41718bb5a79c754b7dc0.pdf.
- Mikelsone, I., Grava, J. & Pavītola, L. (2017). Diversification of teacher’s activity for holistic development of children in pre-school education practice.//In: *IDE-Online Journal (International Dialogues on Education: Past and Present)*, Volume 4 (1), Available: <http://www.ide-journal.org/article/2017-volume-4-number-1-diversification-of-teachers-activity-for-holistic-development-of-children-in-pre-school-education-practice/>.
- Motschnig -Pitrik R., Holzinger, A. (2002). Student - Centered Teaching Meets New Media: Concept and Case Study.//In: *Educational Technology & Society*, Vol. 5 (4). Available: http://www.ifets.info/journals/5_4/renate.html.
- Murphy, E. (1997). Constructivism: From philosophy to practice.//In: *Education*, Available: <http://files.eric.ed.gov/fulltext/ED444966.pdf>.
- Piažē Ž. (2002). *Bērnu intelektuālā attīstība*. Rīga, Pētergailis.
- Pipere, A. (2011). Kvalitatīvais pētījums. Datu analīze kvalitatīvajā pētījumā. *Ievads pētniecībā: stratēģijas, dizaini, metodes*. Sastādītāja K.Mārtinsons. Rīga, RaKa.
- Powell, K., Kalina, C. (2009). Cognitive and social constructivism: developing tools for an effective classroom.//In: *Education*, Vol. 130 (2), 241 -250.
- Scheller, I. (1981). *Erfahrungsbezogener Unterricht. Theorie, Praxis, Planung*. Scriptor-Ratgeber Schule, Vol.9. Scriptor.
- Schein, E.H. (1993). *Career Anchors: Discovering Your Real Values*. San Francisco: Pfeiffer.
- Sheridan, S. (2009). Discerning Pedagogical Quality in Preschool.//In: *Scandinavian Journal of Educational Research*, Vol. 53 (3), 245 -261.
- Sutinen, A. (2008). Constructivism and education: education as an interpretative transformational process.//In: *Studies in Philosophy and Education*, Vol. 27(1), 1–14.
- Šteinberga A., Tunne I. (1999). *Jauniešu pašizjūta un vērtības*. Rīga, RaKa.
- Tafa, E. (2008). Kindergarten reading and writing curricula in the European Union.//In: *Literacy*. Vol.42(3), 162 - 170. Available: <http://onlinelibrary.wiley.com/doi/10.1111/j.1741-4369.2008.00492.x/pdf>.
- Taylor, P. (1998). Constructivism: Value added. In: B. Fraser & K. Tobin (Eds). *International handbook of science education*. Part Two. Dordrecht, The Netherlands: Kluwer Academic Publishers.



- Timoštšuk, I., Ugaste, A. (2010). Student teachers' professional identity.//In: *Teaching and Teacher Education*, Vol.26, 1563 -1570.
- Vispārējās izglītības likums. (1999). Available: <https://likumi.lv/doc.php?id=20243>.
- Zariņa, S., Belousa, I. (2011). Environment for Meaningful Development of Reading Literacy in Pre-School.//In: *Discourse and Communication for Sustainable Education*, Vol 2 (1), 68–83.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge, UK: Cambridge University Press.
- Бандура, А. (2000). *Теория социального научения*. СПб.: Евразия.
- Брунер, Д. (1977). *Психология познания: За пределами непосредственной информации*. Москва: Прогресс.
- Выготский, Л. (2005). *Психология развития ребенка*. Москва: Эксмо.
- Пряжников, Н. (1996). *Профессиональное и личностное самоопределение*. Москва: Воронеж.
- Улановский, А. (2008). Конструктивизм, радикальный конструктивизм, социальный конструктивизм: мир как интерпретация.//*Вопросы психологии*. № 3., 3-37.



Health Literacy as Component of Adult Education in Recreation Process

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Abstract

The right to health and, consequently, to a higher quality of life is one of the fundamental rights of a person. Every human's individual responsibility is application of all opportunities provided by the state for the sake of own health protection. Therefore recreation is important - a purposefully organized rehabilitation of individual's physical, mental and emotional abilities, which promote the individual's productivity and also serve as prophylaxis to somatic and mental illnesses, health promotion and promotion of individual's productivity. The main functions of recreation are healing (human health rehabilitation), educational (development of spiritual potential) and sports function (development of physical abilities). In order to ensure the educational function of recreation, alongside the individual's responsibility and awareness of healthy lifestyle urgency and necessity, creation of the society's education on a new quality of education - health literacy – has to be emphasized. Therefore, health literacy has to be perceived as one of the most important components in adult education.

Key words: health literacy, recreation process, educational function of recreation, adult education.

Introduction

According to T.Koçe (Koçe, 2012), the essence of adult learning is to justify theoretically and develop an integrated training content for adults and efficient pedagogical techniques how to convert the theoretical knowledge into the necessary life skills. Education and living standard correlate directly and closely with health. In Latvia health literacy is on a pretty high level compared with lots of southern and eastern regions in the world, although it drops significantly behind the level of Scandinavian countries and several Central European countries. Health literacy shows correlation between the person's education level and their ability to maintain health, improve it or observe a health promoting treatment regimen. Health literacy is the cognitive and social knowledge, competences and skills which determine the individual's motivation and opportunities to obtain, understand and apply the information the way it would promote and guarantee a good health.

Aim of the research: study implementation of health literacy in adult education in the context of the recreation process.

Method

Literature analysis.

Interview.

C. Maslach's methodology for detection of burnout syndrome manifestations (processing of the research outcomes has been carried out with the help of software SPSS 11.5).

Findings Adult Education as Public Opinion Developer

According to the report developed by the International UNESCO Committee: "Learning: the Treasure Within" (1996), adult education is the matter of the whole nation, it is an impressive force for the society's transformation. Adult education changes into a system which initiates the society's renewal, accelerates the scientific, technological and social progress, it becomes the learners, educators and employers' common activity of innovation. In adult education learning to live together, acquisition of knowledge and skills, working on your own, development of your own life and living are set as the main



tasks. The power to stimulate change lies in the hands of conscious consumers and active citizens through the choices they make every day. The modern life gives a person new opportunities and choices, but at the same time also new risks and insecurity. People can choose different lifestyles, but at the same time they themselves are responsible for their own life development.

In the “Memorandum on Lifelong Learning” (2000) lifelong learning has been defined as all purposeful activities related to learning which are carried out independently with an intent to improve knowledge, skills and competence. It is not any longer just one aspect of education and training; it has to become the leading principle, providing and acquiring education in absolutely all educational areas. Such a vision is being introduced in life.

The term “lifelong learning” pays attention to time: it is education for the whole life course which happens either permanently or temporarily, but the term “lifewide learning” enriches the term, paying attention to dissemination of education which can penetrate into all our life areas during any stage of our life. The dimension of “lifewide learning” helps us see better how formal and non-formal learning supplement each other. It reminds us that purposeful and interesting learning can happen in the family, leisure time, social life and daily work life, also it makes us understand that teaching and learning are roles and types of action themselves which can be changed and exchanged in different times and places.

As T. Koçe (Koçe, 2012) emphasizes, the global goal of adult pedagogy is improvement of human quality of life.

Multidimensional Concept of Human Quality of Life

According to I. Brown (Brown, 2003), quality of life is a sensitive concept which provides us with an opportunity to look at human life from different points of view. One can look at both life in general and disability through the prism of quality of life, which enables us to see different aspects and be aware of the existing challenges. B. Bela and T. Tisenhofs (Bela, Tisenhofs, 2006) emphasize that quality of life mostly depends on the person’s creative approach to life, capacity and practical activity. The factors of quality of life include welfare, braveness, sustainability which is provided by education, health participation in social processes, the situation in family. I. Škestere (Škestere, 2012) in her research confirms that the assessment of quality of life is always closely related to what definition of quality of life has been chosen for the conceptual base, it is important to obtain a sufficiently broad insight into the definement spectrum of quality of life. On the basis of various authors’ cognitions on quality of life, a summary of definitions of quality of life and their descriptions has been carried out.

Table 1. Quality of life characterizing aspects from different authors’ point of view

Authors	Description
Emerson, (1985)	Satisfaction of the individual’s values, goals and needs through the actualization of the person’s abilities or lifestyle.
Parmenter, T. (1988)	Quality of life reflects the level in which the individual has been able to satisfy their needs and has developed own personal awareness of life, self-esteem and ability to integrate into the social environment.
Goode, D. (1990)	Quality of life has been guaranteed if the individual with or without disability has been provided with an opportunity to satisfy such needs as home, education, work, society, as well as living life which is considered as normal by the rest of the society.



Felce & Perry (1995)	Human satisfaction and feeling of comfort derive from the stage in which the individual's objective situations comply with their desires and needs.
Bach M. un Rioux M. (1996)	Social feeling of comfort, which is felt by the individual, community or society in general.
Cummins R. (1997)	Quality of life is a set of objective and subjective factors, which includes the material feeling of comfort, health, productivity, intimacy, safety, community's and emotional feeling of comfort.
Falce, D., Perry, J. (1997)	Quality of life is a multidimensional concept which includes the human personal feeling of comfort. It is related to intimate relationships, family life, friendship, standards of living, work, neighbourly relations, place of residence, country, home, education, health and safety.
World Health Organization Oort, (2005)	Perception of the individual's personal life position in the context with the system of culture and values, in which the individual lives, and in relation to the individual's goals, hopes, standards and worries. It is affected in a complex way by the person's physical health, psychological condition, person's opinion, social relations and the most significant factors of the environment.

According to the authors, health is a significant quality of life characterizing element. The respondents involved in S. Medne's (Medne, 2011) research "The Influence of Health on the Quality of Life," assessing the quality of life, have most highly appreciated the relationships in family and among friends, health and self-esteem follow only after it.

Despite the increase of medication consumption, respondents' health self-assessment and quality of life have not changed essentially. The research confirms that the respondents with a higher self-esteem assess their quality of life better. The common respondents' opinion and conclusion of the research is that health is very essential in the assessment of the quality of life and quality of life is affected by disease forms and the individual's common emotional prosperity – happiness and satisfaction.

The goal of the European Health Protection Policy "Health 2020" is to support an activity which would improve essentially people's health and welfare. A good health is important for economic and social development and economic recovery support. The main elements of health policy are the values which are included in the Constitution of the World Health Organization – all people with the possibly highest level of health; health development, where health is a resource which enables everyone to implement their potential and promote the society's development; problem solution, accepting new approaches for the health sector organization; involvement of the interested people on the basis of researches and experience; attention to the individual and collective endeavours in order to reduce essential drawbacks in the health sector. A good investment in health can be provided applying the human lifestyle approach and giving people the chance to participate themselves in the process.

Significance of Recreation in Promotion of Human Life Quality

Recreation is a purposefully organized recovery of the individual's physical, mental and emotional abilities, it promotes the individual's productivity, as well as serves for the somatic and mental disease prophylaxis, health improvement and individual's productivity promotion. A person can have the leisure time daily when the daily recreation activities are performed at home; at the weekend when the recreation



activities are performed outside home; on holiday when longer journeys with accommodation outside home are performed – the recreation tourism. According to many authors' opinions (Torkildsen, 1999; Jenkins, Pigram, 2003; Kari, 2008; Torjman, 2004; Korpela et al, 2014), I.

Kundziņa (Kundziņa, 2014) points out that recreation is a value for both the individual and society. It means that recreation can be characterized as an activity, diversity of form, motivation to get enjoyment, acting in leisure time, voluntary participation, universality, purposefulness, flexibility, creation of a by-product and satisfaction of human needs. Recreation has a direct impact on the factors which form the personality; improving, promoting and satisfying human involvement and needs in recreation activities and actions, their feeling of comfort and quality of life will improve. Awareness of the recreation significance and recreation activities improve the human quality of life and feeling of comfort, well-being and even safety. They do not have to have sports activities. The most important thing to consider is that wellbeing/feeling of comfort/well-being is the resource of economics and development both in the life of the society and every individual. Welfare, satisfaction and sense of happiness improve people's mental and emotional health, balance between their work and private life, self-realization and ability to cooperate and get on well with others.

Health Literacy in Recreation Process

The most important functions of recreation are the healing (human health recovery), educating (development of mental potential) and sports function (development of physical abilities). Implementation of the functions is related to the concept of *health literacy*. In the global context the meaning of *health literacy* is the opposite to the so called health illiteracy, i.e. lack of knowledge on own health, its assessment, maintenance, promotion, preservation. The term *health literacy* was used for the first time in 1974 in relation to the "necessity to incorporate pupils' education on various health issues in the school education system." During the following decades the term *health literacy* obtains an escalating popularity in the scientific discourse, which results in its wider and more varied definement, conceptualization and application. Regarding health literacy, one more recently emerged term has to be mentioned – *know-how*. This term includes not only the knowledge on something, but also sufficient skills to apply the knowledge practically in daily life. The term of the word compound *know-how* is in a way a synonym to *health literacy*.

According to I.Stars (Stars, 2015), the term of health literacy understanding can have several levels and at least two of them are – the individual or social context level and the second – in the biomedicine or public health perspective. Conceptually understanding of health literacy is characterized with two different criteria. The individuals functional skills (reading, speaking, listening, counting), the skill to find, understand and apply information for health improvement purposes, being able to function in the health care sector and making adequate decisions about own health are mentioned as the main health literacy elements. Another approach emphasizes that health literacy also includes the person's civic consciousness and skill to balance own individual activity with collective responsibility, as well as the competence of technologies and media, which provides the person with an ability to assess critically the available health information.

Health literacy is the cognitive and social knowledge, competences and skills, which determine the individuals' motivation and possibilities to obtain, comprehend and apply information so that it would promote and guarantee a good health. It characterizes the correlation between the person's level of education and their ability to maintain health, improve it or observe the health promoting treatment regimen. Acquisition of new knowledge increases the capacity of brain, therefore it is important to use any chance for new knowledge acquisition. Physical activities increase the capacity of knowledge acquisition, in its turn good knowledge helps to do sport all life long. Thinking is brain movement.



Further education, cultural activities, discussions, reading, chess and card games move away people from memory deterioration (LAB, 2014). In the work of the International Healthy Cities Conference (2015) one of the main cognitions: healthy aging is provision of continuous lifelong learning possibilities, learning as increase of productivity and a way of spending leisure time.

Results

In order to study implementation of the educating functions of the recreation process in the health literacy context in adult education, 2 groups of respondents were established, in total 90 members (45 for each). The respondents' professions in Group 1 (28 men and 17 women) are related to work in different companies, but the members of Group 2 (14 men and 31 women) are related to work with people. The selection was carried out randomly in compliance with the participants' voluntary choice to take part in the research.

In the recreation process it is important to find out the main health affecting problems. It is hard for people to balance their time- the time spent with the family, at work, for studies and relaxation. Thus the lack of time management skill, overconsumption of own energy and inability to replenish it, as well as the inability to rethink what we are going to do are quite often causes of stress and burnout. Almost everybody in their daily life uses the term "stress." However, hardly anybody is really aware of the true meaning of the word, neither the fact that the common negative meaning of the stress is so plain – it can not only harm, but also help and be even harmless.

As in the modern age of information overload, technologies and competition a human being is more and more often exposed to stress and the burnout syndrome, in the first stage of the research the respondents' burnout level was found out applying C.Maslach's methodology for burnout syndrome detection that consists of 22 statements which the respondents have to evaluate on the scale from 0 to 6 points. The chosen methodology measures 3 burnout components: emotional exhaustion, reduction level of depersonalization and personal achievements. The research data processing was carried out for each respondents' group separately and the outcomes are summarized visually in the pictures.

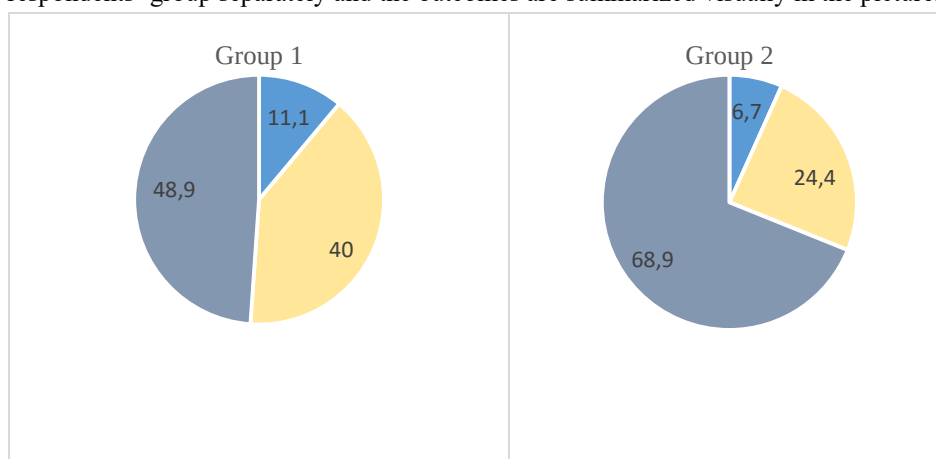


Figure 1.Reduction level % of personal achievements

According to the percentage data in Figure 1, it can be concluded that 48.9% of the people working in industry have a high reduction level of personal achievement (hereafter Group 1) and 68.9% to the workers whose jobs are related to work with people (hereafter Group 2), 40% respondents of Group 1 and 24.4% respondents of Group 2 have an average reduction level of personal achievements, in its turn a low reduction level of personal achievements is 11.1% and 6.7%, respectively respondents of Group 1 and Group 2.

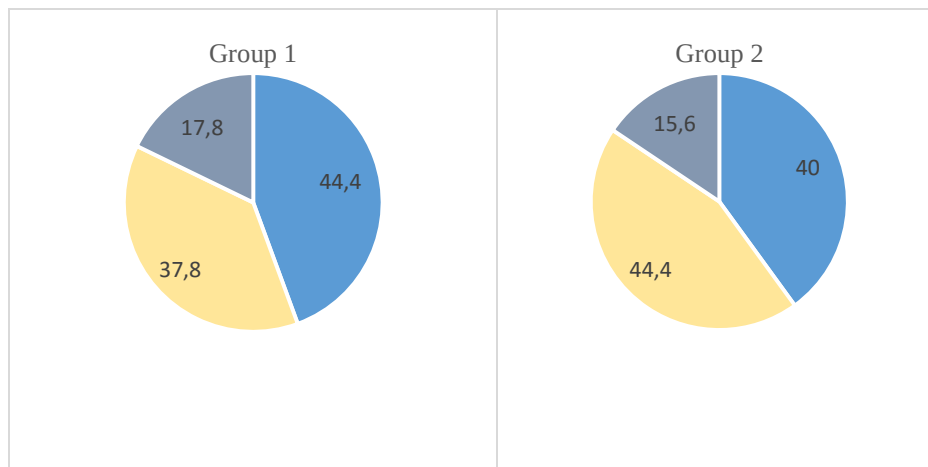


Figure 2. Depersonalization level

The percentage data collated in Figure 2 reveal that 17.8% of Group 1 and 15.6% respondents of Group 2 have a high depersonalization level, an average – respectively 37.8% and 44% respondents of both groups, in its turn a low depersonalization level is to 44.4% and 40% of respondents.

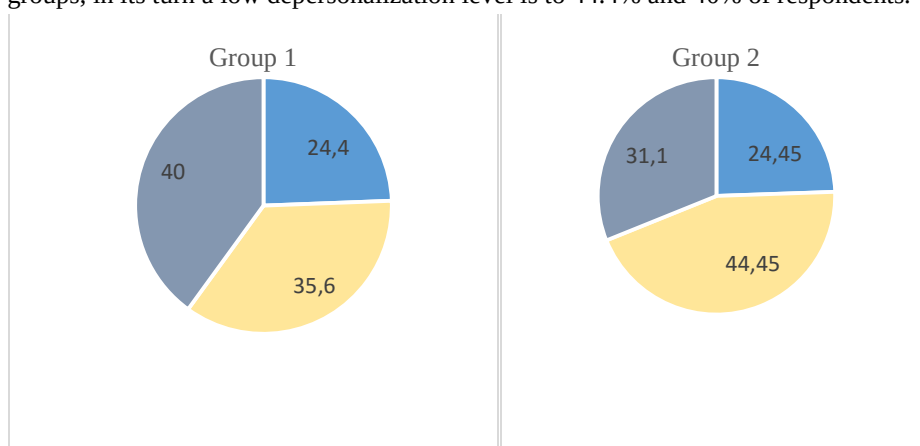


Figure 3. Emotional exhaustion level %.

The data collated in Figure 3 enable us to see that 40.0% respondents of Group 1 and 31.1% respondents of Group 2 have a high emotional level exhaustion, 35.6% respondents of Group 1 and 44.4% respondents of Group 2 have an average emotional exhaustion level, in its turn 24.4% respondents of Group 1 and 24.4% respondents of Group 2 have a low emotional exhaustion level. The research outcomes reveal that among the respondents with a high reduction, whose professions involve work with people, shares exceed statistically significantly (0.05) the respondents whose professions are connected with work in different companies, shares. Among the respondents with an average reduction, whose professions are connected with work in different companies, shares exceed statistically significantly the respondents who in their profession are connected with work with people, shares (0.01). Among the respondents with a low reduction there are no statistically significant differences. Among the respondents with a high depersonalization the shares do not differ statistically significantly, there are also no statistically significant differences regarding the average or low depersonalization. Among the respondents with a high emotional exhaustion level, whose professions are related to work in different companies, shares differ statistically significantly from the respondents whose professions are related to work with people, shares. There are statistically significant differences among the average level indicators of emotional exhaustion, but no differences among the indicators of the low emotional level.



The research reveals that the respondents, whose jobs are related to work with people, are more exposed to emotional exhaustion and depersonalization, but the respondents, whose jobs are related to the work in different companies, to personal achievement reduction.

During the 2nd stage of the research a task was set to find out the respondents' opinion on the recreation process, its significance in quality of life improvement.

Collating respondents' opinion in both groups it can be concluded that the most important aspects of the impact of recreation process in quality of life assurance are health, its enhancement, individual selfesteem, possibilities of self-realization, relationships in the family and at work.

During the 3rd stage of the research a task was set to find out the respondents awareness of health literacy. The explanation of the term aroused difficulties to the respondents. The "Health Study" acquired during the school times, frequent visits to doctors to control their health condition, involvement in work of different disease societies were mentioned most often. Involvement in various sports, individual sports activities and interests were mentioned less often. A few respondents emphasized the significance of interest groups in development of sporty activities. More active organization of different health promotion groups, which would be available for people of interest, was expressed as a recommendation. As a positive sample was mentioned the beach callisthenics group in Liepaja on the Baltic Sea coast together with a coach. Among the suggestions it was recommended to make an interest group for theoretical and practical classes in the health literacy context.

Implementation of the 4th task in the research encouraged the respondents to get involved in an education and practical activity which gave opportunities to assess promotion of health literacy in actualization of the recreation process. The instructor of the dance Zumba S. Priedola introduced the respondents with the dance, which combines elements of Latino dance, international music and fitness, its origin. The coach highlighted that both dancers and non-dancers can get involved in the classes equally well and fast as no previous knowledge in the dance art is needed. Zumba creates a free atmosphere which encourages people to move both non-dancers and the ones who usually do not like taking part in group classes. On the other hand, the dancers and experienced sports people are attracted by the change of rhythms, healthy and lively entertainment atmosphere during the classes. Anyone can enjoy the music and process. Zumba is based on the principle that the classes have to be simple enough and entertaining, so that the participants could attend them for a longer time and they would achieve noticeable health improvements. Zumba can be described as a cure or even therapy to fight low spirits and weariness.

In the interview the instructor points out that Zumba fitness classes have already been taking place in Liepaja for three years. The observations confirm that it is a huge socialization process. There are lots of women who attend the classes, for on daily basis they encounter monotonous lifestyle, depression.

Everything has changed due to Zumba classes. All Zumba participants have met other women, they have found equal peers of interest, they do not struggle with powerlessness and gloomy mood any longer, but they attend the classes, enjoy them. The number of men involved in the classes increases gradually. Another obvious criterion is that the participants accept challenges, set a goal and try to achieve it purposefully. Lots of people attend Zumba classes in Liepaja, thus these classes are like a mass of movement. People see that living healthily and actively is exciting, that is why they also invite others to join in. The instructor mentions the "hidden" training as the benefit of the classes: the participants can feel like in a party, but at the end of the class they are sweating; they have a high energy consumption level: during one class it is possible to burn 700 calories, depending on the individual physical fitness and movement intensity; it is a cure against stress and tiredness, participants forget about their worries;



their coordination and flexibility are improved; obesity problems are being solved; cardio training: dance movement strengthens body muscles, including the most important muscle - the heart.

In the respondents' assessments the main cognitions about the completed work are that in group classes can be involved not only the people who are already fit and with a good sense of coordination, but anybody, whatever their level of fitness is; help people feel and look well, improve their fitness, forget about the age; be aware of movement significance in health improvement and maintenance; simply become a little bit happier.

Conclusions and Recommendations

Striving towards the improvement of quality of life a necessity emerges to pay more attention to health, its enhancement. Knowledge on health, its positive and negative influencing factors are important. This confirms the need of the health literacy term's explanation to any member of the society. Due to the research it has become clear that adult education is an important base for health literacy promotion in the public recreation process.

In the health literacy context interdisciplinarity is very important, where solutions can be found in different areas of interconnection, providing availability of education in all ages, giving opportunities to acquire skills, an appropriate professional competence. An interdisciplinary point of view helps to choose a complex solution. In order to implement an interdisciplinary approach, needs and efficiency have to be assessed, the possibilities and necessity of integration have to be specified.

The theoretical cognitions of health literacy and recreation and practical skills can be acquired through action learning. Sitting at a desk is not a very suitable and efficient way of learning for adults. In a direct practical action learning both the knowledge is checked and acquired, and various methods and suggestions are tried out.

Experiential learning is assessed positively in adult education. Just such kind of learning is important in health literacy and recreation process, for it covers lots of learning areas, activates the activity, analysis of the events and reflection. In health therapy context the participants, joining together in groups of interest, generate new knowledge, develop abilities and improve skills.

Self-directed learning takes an important place in health literacy. It confirms the personality's ability to control own goals, sets the development and improvement criteria. Developing own action plan, setting the tasks to be completed, the human being promotes development of own self-assessment skills. In order to improve the procedure of the recreation process, it is important to be aware of its components, types of implementation, forms and methods.

References

- About Health 2020*. Retrieved from: <http://www.euro.who.int/en/health-topics/health-policy/health2020-the-european-policy-for-health-and-well-being/about-health-2020>
- Bela, B., Tisenhofs, T. (2006). *Dzīves kvalitāte Latvijā*. Rīga: Zinātne.
- Brown, I., Brown, I.R. (2003). *Quality of life and disability: an approach for community practitioners*, Jessica Kingsley Publishers Ltd.
- Constitution of the World Health Organization*. (2008.). World Health Organization. Retrieved from: http://www.who.int/governance/eb/who_constitution_en.pdf
- Koķe, T. (2012). Mūžizglītība autonomu ceļojums kopīgā laikā un telpā. In: Picaugušo izglītība. Rīga: RaKa. 7.-18.lpp.



Learning: the Treasure Within. (1996). Report to UNESCO of the International Commission on Education for the Twenty-first Century. Highlights. Retrieved from: <http://unesdoc.unesco.org/images/0010/001095/109590eo.pdf>

Maslach, C. (1993) Burnout: A multidimensional perspective// Professional burnout: Recent developments in the theory and research. Washington D.C.: Taylor & Francis, P. 19 – 32. Medne, S. (2011). Veselības ietekme uz dzīves kvalitāti. Retrieved from: <https://dspace.lu.lv/dspace/handle/7/10003> Mūžizglītības memorands. (2000). Retrieved from: http://www.tip.edu.lv/media/files/Muzizglitibas_memorands.pdf

What are the key components of health 2020? Retrieved from: <http://www.euro.who.int/en/healthtopics/health-policy/health-2020-the-european-policy-for-health-and-well-being/about-health2020/what-are-the-key-components-of-health-2020>

Šķestere, I. (2012). Pētījums par dzīves kvalitātes izvērtējuma metodēm un instrumentiem (1.daļa). Biedrības „Latvijas Kustība par neatkarīgu dzīvi” kapacitātes stiprināšana līdzdalībai sociālo pakalpojumu cilvēkiem ar invaliditāti plānošanas un kvalitātes izvērtēšanas procesos” (Līguma identifik. nr. 1DP/1.5.2.2.2./11/APIA/SIF/015/50) ietvaros. Retrieved from: http://www.sif.gov.lv/nodevumi/nodevumi/4881/petijums_dz_kvalit_1.pdf



The Development of Teachers' Pedagogical Competence in The Process of Self-Education at The University

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Abstract

The quality problem of teachers' professional work is connected with the students, trainee teachers', self-education options and motivation research during the study process. Students' purposeful self-education and development of self-reflection skills is one of the most significant pedagogic approaches in teachers' education that can guarantee the education transformation process of the 21st century in school practice which will be focused on creativity and innovations. In order to make it possible for the education system to provide a purposeful and productive acquisition of pupils' self-education skills, the issue about the teacher trainees' motivation and self-education skills during the study process has to be promoted, therefore improving formation of students' pedagogic competences during the study process at university. Research question is to encourage a scientific discussion about the significance of university students' independent studies, describing the individualized learning development possibilities in the pedagogic self-education competence formation process during the study time. The subject of the research: self-assessment of students' self-education competence in the study process at a higher educational establishment. Objective of the paper: to describe the competence of students' self-education in professional socialization within the study process. Research methods: analysis of theoretical findings, questionnaires and interviews, student self-assessment and self-reflection analysis. The study of pedagogical competence is based on the self-analysis of the student's practical performance in order to determine the motivation for professional growth. In the publication the significance of university students' independent studies has been described, characterizing the individualized learning development possibilities in the process of pedagogic self-education competence formation during the study time. The results of the research confirm that the dominant of productive studies is "learning" process, which contains the student's purposeful and according to his/her professional development needs carried out independent work. The characterizing criterion of effective, on student's professional growth oriented study process is the determined need and the ability of the future specialist to study independently, as the personal effort and activities of the independent work contribute to acquirement of lasting and qualitative knowledge, the motivation to continue or to enhance the obtained education, the development of purposeful pedagogical skills and competences.

Key words: self-education, competence, students, study process, pedagogical competence

Introduction

Nowadays in all professional activity areas the employees, who are able to think in a creative way, adapt quickly, communicate and work in a team, are required. However, quite often one can hear from employers saying that it is not possible to find such people. Why is it like that? As we live in the time of revolutionary changes and if we want to survive and develop, then the skills and competences, which we acquire at school, are essentially important. There is no doubt the character of very many people's work will change pretty soon. Most probably in future people will have to change not only their place of work but also their occupation several times in their lifetime. Pupils' parents wish education would help their children discover their gifts and abilities and also provide a purposeful and meaningful life. The youth desire the same. The more complicated the world becomes, the more creative and pedagogically professional teachers have to become in order to be able to overcome its challenges. Therefore, the society's demands for the change of the education system work and qualitatively educated teachers is justified.

Education plays a significant role in people's life, children's future and society's long-term global development. Education is not a linear process which prepares for the future. Actually, education develops a person's talents and perception abilities with what we are able to live the best life now and build a possibly better life for the future. Tom Friedman reasonably claims that we need not only a bigger number of secondary school leavers, but also more young people with an appropriate education. Our schools have got a doubly hard task: they have to



promote not only reading, writing and arithmetic skills, but also the knowledge about business management, innovations and creativity. In order to regain the old good life standards, we have to rearrange not only banks, but also schools (Friedman, 2007).

Education is a tool and foundation for further development of knowledge, skills, culture and personality, implementation of own abilities and talents. As education is a life-long process, then due to it, the person's literacy increases. An educated person's skills are a developed ability to generate personal judgments and behavioral strategies, analyze and evaluate their life activity, improve constantly personal experience, develop self-regulation and plan self-development. The self-education competence is the base of all above mentioned skills. The issue about the teacher trainees' independent learning and teaching skills has to be promoted in order the education system would be able to provide pupils with a purposeful and productive acquisition of self-education skills, as well as their professional self-realization challenges during their study time, thus developing the students' pedagogic competence formation process at university.

Goal of the publication

Encourage a scientific discussion about the significance of university students' independent studies, describing the individualized learning development possibilities in the pedagogic self-education competence formation process during the study time.

Research subject

Self-assessment of students' self-education competence in the study process at a higher educational establishment.

Research methods

The qualitative research methods have been used in the studies of the theoretical literature, normative and other documents: analysis and synthesis, analysis of students' self-education competence self-assessments with the help of a written questionnaire and oral interview, the logically constructive method in the development of conclusions and generalizations.

Teacher education: theoretical framework

Teacher learning is a complex problem entwined with beliefs and experiences (Berenson, 2012, 113). A teacher's competence is regarded as a strategic matter in most countries, and the training of teachers and a discussion about what kind of competencies are needed to teach seem to be ongoing issues (Goodwin & Oyler, 2008). The „new” professionalism of the teaching fraternity is anchored, to a large extent, on the ethos of the teaching profession. This ethos helps teachers to articulate the shared understanding of the values, beliefs and attitudes that are essential to guide present and inspire future generations of teachers to a higher level of professional excellence (Gopinathan, et.al 2008). The professional identity determines the paths then teachers choose for their professional development and it impacts their attitudes towards educational changes and reforms (Kozminsky, 2012, 13).

The concept of teachers as lifelong learners is a key component in considering teachers' life cycles, starting with their introduction to the profession via initial teacher education and continuing via professional development throughout their careers (Devitt, Oldham & Kerin, 2012). Changes in educational policy and proposed reforms can confront teachers and teachers-educators with a sense of professional identity crisis, which affects their commitment to teaching and may hinder their motivation, feelings of self- satisfaction and professional pride, and their sense of internal coherence (Day, Elliot & Kington, 2005). Collinson (2012) see career-long professional development as both professional and personal development, both formal and informal learning (Collinson, 2012, 59).

Competence is perceived as ability on knowledge, values and attitudes, an ability, which ensures readiness to act in authentic situations. The notion of competence, understood in this light, reflects didactic and methodical



aspects relying on an overall simple structure: knowledge, abilities, experience, attitudes and values. The structure of competence enables the description of learning as well the theoretical and practical aptness to bring it to be realized. Competence as a stimulating factor of social stability and development bears on individual ability to adapt to incessantly changing world, but also- change future through application of responsible understanding, professionalism and effective self-realization (Дахин, 2009). Competence as the promoting factor of social stability and development is individual's ability to adapt in the changing world and also change the future, by applying responsible understanding, professionalism and effective self-realization (Дахин, 2009).

The term *competence* is not necessarily a clear and neutral term to describe the qualities of teaching. According to Biesta (2011) there is a tension in the competence discourse between on the one hand a behavioristic approach that emphasizes doing, performing, achieving, observing, measuring and, ultimately, control, and on the other hand an integrative approach that emphasizes knowledge, skills, understanding, values, purpose and, ultimately, teacher agency.

Evaluating teachers' competencies

Evaluation of new teachers during the induction year raises a number of questions about the evaluation practices that are created. Research shows that certain issues need to be addressed, such as the processes involved, the focus of the evaluation and its validity (Fransson, 2012, 74).

Self – evaluation is used the organization of the study process of institutions of higher education as one of the forms of evaluation on regular basis (Rutka, 2009). Analyzing self-evaluation criteria offered to the students, one can conclude that they are mainly based on the requirements defined by the teachers' professional standard on the knowledge, skills and attitudes necessary for the teacher. Therefore, gradual recognition and independent planning, adjustment and implementation of own development (professional, life, personal), readiness to analyze oneself in time and constantly find personally important significance of the professional activity becomes the objective of professional self – implementation (Schein, 1993).

Research into evaluation in accordance with specified standards highlights the accompanying, challenges, and dilemmas (Delandshere & Arens, 2001; Imig & Imig 2008). For example, the risk that complex competencies and knowledge dimensions, might be simplified is stressed, as well as the fact that evaluation is a complex process that is almost impossible to judge fairly (Berliner, 2005; Samuseviča & Striguna, 2014).

In this context, Biesta (2009) questions whether standards really measure what is regarded as valuable competencies and wonders whether what is measurable becomes what we value. Successful and experienced teachers who have obtained pedagogic authority have to share their experience and cooperate with their new colleagues.

Reflection

As for reflection, the teachers consider it a necessity for becoming exemplary (Korthagen 2004). C. Rodgers (2002) formulates reflection as a multidimensional phenomenon:

- it is a meaning- making process that moves a learner from one experience into the next deeper understanding of its relationships with and connections to other experiences and ideas;
- it is a systematic, rigorous, disciplined way of thinking, with its roots in scientific inquiry;
- it needs to happen in community, in interaction with others;
- it requires attitudes that value the personal and intellectual growth of oneself and of others (Rodgers, 2002, 845).

Characterizing teachers' reflection it could be said that it is a specific way of thinking about pedagogical situations which cause confusion and perplexity, and emotions. Reflective skills, if practiced, can be learnt and improved. Essentially, we are talking of five criteria, which, in their collaborative action and personal



interaction, may lead towards a new profile of teacher education and training: professionalism, life-long learning, responsibility, co-operation, flexibility (Schulz, 2012, 184).

Description of self-education competence

Self-education is a purposeful and independent cognitive process which is directed by a person's needs, interest to obtain or develop knowledge and skills, create attitudes and new experience. Self-education in a particular area characterizes completeness of activity and simultaneously it is also the source of personal development. Self-education is a type of the subject's personal development which greatly affects its abilities in the experience enrichment. The goal of self-education is the subject's self-realization in one of the topical work dimensions: personal, social or professional.

Teachers' pedagogic competence is one of the education quality keys which is forged in the personal professional development process during both the study time and professional activity. In the modern society the phenomenon of the prevailing academic knowledge inflation is one of the strongest indicators which confirms the necessity of changes in education. Changes at school have to start with the teachers' help who are active self-education experts themselves and provide their pupils with a motivating personal example. Not a single teacher will be able to find their way in the complex future environment unless their knowledge, motivation and professionalism are connected with a constant personal, social and professional development. To what extent does a teacher trainee develop the self-education competence during the study process at university?

The description of higher education acquisition process and outcomes quality by the education theory lecturer Ken Robinson arises a justified analytical contemplation: *"most of the big universities have almost none individual training possibilities. The most often used study methods are mass lectures which are read by the teachers alienated from practice, and well-attended seminars which are led by badly-paid postgraduates. Homework is assessed without any feedback. The standardized tests and uniform evaluation system make the study process even more impersonal, for attention is focused on a better success statistics and fundraising, and not on every student's abilities"* (Robinson, 2013, 78). It is hard to admit, but we still do have in teachers' education the system which definitely could be called as the "initial filling model", because it envisages that during the study time a student develops the academic abilities and stores the necessary education resources for practice and supplements them gradually during the following years of work. The term "academic abilities" means here intelligence or development of mental abilities, less attention is paid to the development of skills and particular competences.

The theoretical researches emphasize that a student in a particular sociocultural environment, obtaining an individual education experience, creates own learning and interaction culture (Виготский, 1984; Macke, Hanke, Viehmann, 2008). Just the competence *"becomes the expression of such a skill which gives a person a chance to manage and work in the social and cultural diversity which is obtained through learning"* (Eichorst, 1998, 12-13). When analyzing the essence of the competence, implementation and expression specifics, groups of several skills are highlighted:

- disciplinary competence which characterizes planning, analysis, synthesis, methodology;
- professional competence which includes professional communication, activity in a multicultural environment, development of abilities;
- institutional competence, with which an innovative activity, implementation of innovations into practice, ability to work autonomously and in a group, interdisciplinary transformation is understood (Perrenoud, 2004).

An essential element of competence formation is the connection between the motivation and personal values, progress takes off only in the conditions where a human being is personally interested and motivated in the particular activity (Apsalons, 2013, Равен, 1999). Therefore the individual's ability to use efficiently and develop the obtained experience is understood with competence, for competence is a complex unity of knowledge, skills and attitudes which are manifested in activity, achieving the result. Knowledge includes the



areas of activity, facts, principles and theories. Skills provide capacity with the help of learning in order to perform activity applying knowledge (Key Competences for Adult Learning Professional, 2010). Competence from a potential opportunity turns into real abilities and professional ability only through an independent and active subject's activity. Thus one can confirm that the self-education competence develops and improves through activity.

If in the pedagogic process the acquisition of professional activity is implemented, focusing on the structure elements of activity approach, then such a didactic model gives a possibility to notice the regularities between the lecturers and students' goals, motives, interests and needs in connection and unity, which facilitates the formation of self-education competence (Леонтьев, 1986, Špona, 2006). Being competent in the self-education activity means to be able to update and mobilize knowledge, skills and experience, and also transformation skills in particular situations have got an essential meaning. Self-education competence is one of the leading personalities in the teacher's professional activity (Zaire-Beck, 2000).

In pedagogic practice *self-education competence* is characterized by not only a set of specified capacities and skills, but also by experience reflection of a systemized professional activity which develops creativity and innovations in the education area. The quality of professional activity in the pedagogy area greatly depends on the teacher's self-education competence, which, in its turn, reveals the necessity within the activity of the pedagogic higher education establishment to be aware, plan and implement the study process, which forms the trainee teachers' capacities and skills that are necessary for further development of self-education competence. The analysis of theoretical cognitions confirms that *student's self-education competence is an integrative quality of their study activity*, which is characterized by a purposeful, planned, systematic and independently organized cognitive activity, reflection of the acquired knowledge and experience, as well as a self-constructed and self-managed development in the professional mastery nuances of pedagogic activity.

The study environment, collaboration with lecturers and teachers from schools, as well as the test of own pedagogic skills and abilities into practice influence essentially formation of students' self-education competence, which determines formation of other key competences, for in the study work self-education competence is not only a goal, but also a tool for the development of the trainee teacher's personality.

Independent studies require from students self-discipline and high motivation, independent decision making, ability to find one's way in information and choose the most suitable ability to adapt and transform. Every student themselves has to be responsible for the opportunities in their professional development. The theoretical analysis confirms that the structure of student's self-education includes several important components:

- personalities and motivation which characterize awareness of personal development and attitude towards the necessity and need of self-education;
- individual self-education experience: psychological and practical readiness for self-education implementation; planning and realization of self-education;
- assessment of the self-education process and results.

Research outcomes

In order to find out the development level of the students, trainee teachers' self-education competence, diagnosing the criteria of the individualized independent learning, a questionnaire was worked out which gave the students a possibility to assess on a five-point scale their self-education skills, which are necessary for the acquisition of a purposeful pedagogic activity during the study process at university.

The students were offered in the questionnaire to assess and analyze the characteristic features and skills of the study activities which reveal the students' self-education motivation: purposefulness, independence, self-education and need for personal development; characteristics and skills of the real practical activity that confirm their independent learning habits: the need to extend their knowledge and skills, the skill to self-educate independently, the skill to solve learning problems during the study process, self-initiative in the profession

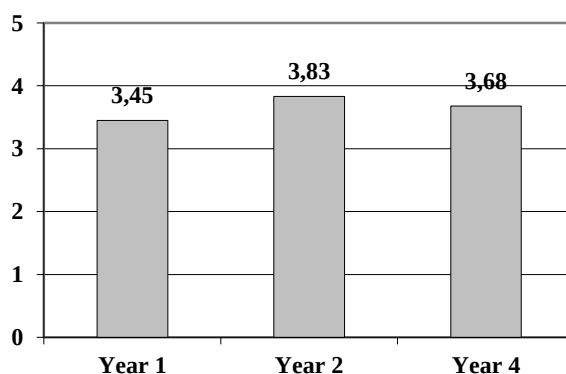


acquisition, participation and activity in studies; also statements were offered in order to ascertain the development of self-adjusting habits during the study process: the ability to organize their learning process, the skill to carry out the self-control of learning quality, the skill to carry out self-assessment and reflection.

To implement the research, on a basis of a random selection and students' voluntary choice to participate in the research, the 1st, 2nd and 4th year students (N=67) of different qualifications (preschool, primary school, basic school, music, sports, dance and special education) from the study program "Teacher" were involved, who were interested in assessing their self-education skills. To ensure the data reliability, during the research specified, individual studies were carried out about every student, providing every student the necessary time to fill in the questionnaire and some additional time for an individual interview about the procedure of the study process and students' learning skills. The choice of interviews as a research method is based on the cognition that every student constructs enthusiastically their individual reality of special experience, every student's reality is different and it is constructed socially. Therefore every student's evaluative statements are important to be aware of their individualized learning experience. The obtained information during the interview gave a chance to supplement the interpretation and generalization of the obtained data, facilitating understanding of the self-assessment data analysis provided by students.

During the development process of the self-education skills self-assessment and research planning, in the implementation period the publication authors' hypothetic assumptions were linked with the cognition that just the 4th year students' self-education average indicators would be the highest, for in the previous study period a significant amount of work was invested both in the acquisition of the chosen qualification at university and in practice at school and alongside the studies the independent learning skills have been developed in a purposeful way that can be judged by their collaboration with the lecturers in the scientific work. The analysis and summary of the research data did not confirm the previously made assumptions.

Picture 1. Average indicators of students' self-education competence assessment



As it can be seen in Picture 1, the 4th year students' average self-education competence indicators are lower than the 2nd year. It can be explained with the obtained information in the individual interviews that when the individual self-education experience in the 4th year increases, the students' self-assessment becomes more critical and adequate, for their own experience has been identified and updated analytically in the context of social and pedagogic reality, awareness about the real opportunities of their own pedagogic activity has been strengthened, the areas of professional activity have been crystallized in which they have to develop purposefully. From the 4th year students' point of view they are:

- purposefulness of professional activity (3.35);
- need to broaden their knowledge and skills (3.42);
- necessity for self-education (3.5).

As one can see, all of the above mentioned qualities are connected with the trainee teachers' motivation and development of professional dimension.



The 2nd year students' responses in the interviews confirm their high motivation in teacher's profession acquisition and reveal the increased self-assessment level in the assessment of their learning skills. The varying self-assessment of self-education competences is greatly affected by the students' learning experience obtained in the previous school. The 2nd year students are the pupils who have already encountered the initiated reform in transition to the development of pupils' competences in their school practice and it has provided a positive approval for their individual awareness about their abilities and skills. When arranging pedagogic studies, more attention has to be paid to the self-education skills, which have got the lowest indicators by the 2nd year students' assessment:

- skill to solve study problems (3.52);
- skill to carry out a self-assessment (3.57);
- skill to implement the learning self-control (3.6);
- planning of independent studies (3.67).

Conclusions and recommendations

In theoretical researches the approach of competences is characterized in different ways in compliance with the nuances of the professional activity specifics, but practically all scientists come to a common conclusion that in the specialists' educating process the focus on personal development and formation of professional competence is the most important.

In the pedagogic process of competence approach implementation at university the education results are offered not only in the context of the terms' knowledge-skills-knacks development, but also to guarantee the teacher trainee's readiness for professional activity (and the level of the readiness, i.e. competence), implementing the professional activity into its diverse and complex synthesis.

Self-education ability is one of the most topical items of professional competence, because the ability to self-educate independently is included in the requirements of education outcomes. In the modern society self-education is one of the professional activity's preconditions which is set for education and simultaneously it is an influential factor of the teacher's personal professional development.

The personalities, which higher education and teachers' education are associated with, are independent, critical and creative thinking, purposefulness, objectivity and honesty, ability to think in an abstract way and debate in a reasoned way, ensure and inspire. All these features are equally rooted in both the prevailing atmosphere of the educational institution, study process arrangement, and in the students' enthusiasm the particular education is acquired with.

The teachers' training programs have to guarantee the opportunity to promote students' individual reflections about the progress of competences and collaboration with lecturers and teachers from schools, and not only to assess the success of studies in compliance with the academic and professional standards. Despite the time restrictions at university that is given to the lecturers for their individual work with every student, the lecturers have to be ready to adapt to the society's development challenges and help their students develop in themselves such self-education skills which will be able to guarantee in practice the future specialists' successful professional activity, providing their pedagogic mastery.

The fact, how the teacher trainee has been directed to their professional development searches and confidence that the pedagogic mastery depends on personal self-development and self-improvement, greatly determines a successful practicing teacher's self-assertion in the professional activity.

The quality of the teacher trainee's self-education competence is provided with a close connection of the professional development areas such as: purposefulness, necessity to broaden own knowledge and skills, the



need of self-education, the skill to solve learning problems, the skill to carry out a self-assessment, promotion of the skill to implement learning self-control in the acquisition of professional activity during the study process. The transformation of skills in the professional activity competence is only possible in such a study process, where students themselves are active promoters and members of their development. Therefore in the study process the pedagogic competence formation factors as students' motivation and values orientation, personal responsibility, pedagogical interaction and active participation in their skills development obtain a special topicality.

Students' purposeful self-education and development of reflection skills is one of the most significant pedagogic approaches in the teacher trainees' education process, which can provide in school practice the transformation process of the 21st century education based on creativity and innovations.

References

- Apsalons, E. (2013). *Komunikatīvā kompetence: kā saprasties un veidot attiecības*. Rīga: Zvaigzne.
- Berenson, S.B. (2012). Improving Teacher Practice with Action Learning. In *Teachers' Life –cycle from Initial Teacher Education to Experienced Professional*. ATEE 2011 Annual Conference Proceedings, eds. I.Žogla, L.Rutka, 112 – 122.
- Biesta, G. (2011). Disciplines and theory in the academic study of education: A Comparative Analysis of the Anglo-American and Continental Construction of the Field. *Pedagogy, Culture and Society*, Vol. 19, No. 2.
- Biesta, G. (2009). Good education in an age of measurement: on the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*. 21, no.1, 33 – 48.
- Collinson, V. (2012). Rethinking Selection and Professional Development for Teachers/Leaders by Learning from Exemplary Teachers. *Teachers' Life –cycle from Initial Teacher Education to Experienced Professional*. ATEE 2011 Annual Conference Proceedings, eds I.Žogla, L.Rutka, 58 – 73.
- Berliner, D.C. (2005). The near impossibility of testing for teacher quality. *Journal of Teacher Education*, 56, No, 205 – 213.
- Day, C., Elliot, B., & Kington, A. (2005) Reform, standards and teacher identity: Challenges of sustaining commitment. *Teaching and Teacher Education*, 21 (5), 563 – 567.
- Delandshere, G. & Arens, S.A. (2001). Representations of teaching and standards-based reform: are we closing the debate about teacher education? *Teaching and Teacher Education*. 17, 547 – 566.
- Devitt, A., Oldham, E., & Kerin, M. (2012). Beginning a Career of learning about Learning: a Case Study of Student Teachers in an Initial Teacher Education Programme in Ireland. In *Teachers' Life –cycle from Initial Teacher Education to Experienced Professional*. ATEE 2011 Annual Conference Proceedings, eds. I.Žogla, L.Rutka, 283 – 296.
- Friedman, Thomas L. (2007). *The World is Flat 3.0: A Brief History of the TwentyFirst Century*, Picador, London.
- Fransson, G. (2012). Head Teachers on Evaluating Newly Qualified Teachers' Competencies: What to Focus on and How. In *Teachers' Life –cycle from Initial Teacher Education to Experienced Professional*. ATEE 2011 Annual Conference Proceedings, eds. I.Žogla, L.Rutka, 74 – 90.
- Goodwin, A.L. & Oyler, C. (2008). Teacher educators as gatekeeper. In *Handbook of research on teacher education: enduring questions in changing contexts*. (3rd. ed.), eds. M.Cochran- Smith, S. Feiman-Nemser & J.D. McIntyre, 468 -489. New York: Routledge.
- Gopinathan, S., Tan, S., Fang, Y., Ponnusamy, L.D., Ramos, C., & Chao, E. (2008). *Transforming teacher education: Redefining professionals for 21 st century schools*. Singapore: National Institute of Education.
- Imig, D.G. & Imig, S.R. (2008). From traditional certification to competitive certification. In *Handbook of research teacher education: enduring questions in changing contexts* (3.ed.), eds. Cochran-Smith, Marilyn, Feiman-Nemser, Sharon & McIntyre, D. John, 886 -907. New York: Routledge.



- Korthagen, F.J., Lughran, J. & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, 22, 1020 -1041.
- Kozminsky, L. (2012). Professional Identity of Teacher Educators in a Changing Reality. In *Teachers' Life – cycle from Initial Teacher Education to Experienced Professional*. ATEE 2011 Annual Conference Proceedings, eds. I.Žogla, L.Rutka, 12 – 19.
- Macke, G., Hanke, U., Viehmann, P. (2008) . *Hochschuldidaktik. Lehren, vortragen, prüfen*. Beltz Verlag, Weinheim und Basel.
- Robinsons, K. (2013). *Ne tikai ar prātu: Mācāmieš būt radoši*. Rīga: Zvaigzne ABC. [Ken Robinson OUT of OUR MINDS Learning to be Creative]
- Eichorst, A. (1998). *Selbstständigkeit im Unterricht*. München.
- OECD (2013). OECD SkillsOutlook 2013: First Results from the Survey of Adult Skills, OECD Publishing. <http://dx.doi.org/10.1787/9789264204256-en>
- Osborne, M. (2010). Key Competences for Adult Learning Professional. Retrieved from <http://www.realrpl.eu/media/realrpl/documents/Key%20Competences%20for%20AE%20Professionals%20Mike%20Osborne.pdf>
- Perrenoud, P. (2004). *L'universiteentretransmissiondesavoirsetdeveloppementde competences*. Geneve. Universite de Geneve.
- Rodgers, C. (2002). Defining Reflection: Another Look at John Dewey and Reflective Thinking. *Teachers College Record*, Vol. 104, No. 4, 842- 866.
- Rutka, L. (2009) Pedagoģa psiholoģiskā kompetence. *Latvijas Universitātes raksti: Pedagoģija un skolotāju izglītība*, 747. sējums, 170 – 181.lpp. Rīga: Latvijas Universitāte.
- Samuseviča, A. (2012). Support for the New Teacher in Professional Adaptation at School. *Mokymojo rengimas XXI amžiuje: pokyčiai ir perspektyvos. X tarptautinės mokslinės konferencijos medžiaga*, 70 -75.Šiauliai: Šiauliu universiteto leidykla.
- Samuseviča, A., Striguna, S. (2014). Pre –Service Teachers' Professional Socialization. In *Socialinis ugdymas: postmodernios visuomenės iššūkiai vaikui ir jaunimo socializacijai. VII Recenzuojamas testinis mokslo straipsnių rinkinys*. Vilnius: BMK Leidykla, 39- 46.
- Schein, E. H. (1993). *Career anchors: Discovering your values*. San Francisco: Pfeiffer.
- Schulz, D. (2012). Practice in Teacher Education: Preparing Teachers for Work and Life in an Educational Community. In *Teachers' Life –cycle from Initial Teacher Education to Experienced Professional*. ATEE 2011 Annual Conference Proceedings, eds. I.Žogla, L.Rutka, 182 – 196.
- Špona, A. (2001). *Audzināšanas teorija un prakse*. Rīga: RaKa.
- Špona, A. (2014). Jauni principi audzināšanā. *Teorija un prakse mūsdienu sabiedrības izglītībā. VII Starptautiskās zinātniskās konferences rakstu krājums*, 188-193. Rīga: RPIVA.
- Tatur, Y.G. (2004). Competency-based approach in the describing the results and design of higher education standards. *Proceedings of the second meeting of the methodological seminar*. Moscow.
- Zaire-Beck, E.S., Solyannikov Y.V. (2000). Technology of teaching the research activity as a factor in high-quality training of researchers at the Pedagogical University. In *Preparation of specialist in the field of education: research and organizational problems of training the highly qualified personnel: a collective monograph*. St.Petersburg: Harzen State Pedagogical University, Issue IX, 96-114.
- Виготский, Л.С. (1984). *Речь и мышление*. Москва: Просвещение.
- Дахин, А. Н. (2009). *Моделирование компетентности участников открытого образования*. Москва: НИИ школьных технологий.
- Леонтьев, А.Н. (1977). *Деятельность. Сознание. Личность*. Москва: Политиздат.
- Подчалимова, Г.Н. (2012). Развитие самообразовательной компетентности студентов в процессе проектной деятельности. *Ученые записки: электронный научный журнал Курского государственного университета*. No.4 (24) Т.1
- Равен, Д. (1999). *Компетентность в современном обществе*. Москва: Когито-Центр.



Analysis Of Physical Activities of 13 To 14 Years Old Primary School Pupils In Slovakia

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Abstract

The aim of the study was to find out and analyze the differences in opinions of pupils of 8th and 9th grades from 28 primary schools in Slovakia (n = 949, 8th graders = 542 and 9th graders = 407) about the content, forms, motives and possibilities to enjoy physical activities (PA) in their free time. The survey was conducted in the school year 2014/15, whereby their opinions were surveyed through inquiry (11 questions) and evaluated through the TAP 3 program of Gamo Banská Bystrica. The survey results indicate that pupils do not perform sufficient PAs in their free time. The PAs undertaken have a dominant recreational character and their main goal is the improvement and consolidation of health and physical fitness. Pupils in both groups are most significantly motivated to perform PA by their parents (more than 57%). Teachers of physical and sports education are the "smallest" motivator. The main factor preventing regular PAs for "ninth graders" are health problems and other leisure activities, and for "eighth graders" high financial costs. We observed statistically significant difference at $p=0.05\%$ in six cases of the 8th and 9th graders.

Keywords: survey, opinions, physical activity, boys, free time

Introduction

The meaning of exercise is contained in Galloway's (2007) thought: "For each hour we spend exercising we can prolong our life by 2 hours. That is what I call a great investment." According to WHO (WHO, 2007) physical inactivity is the fourth biggest killer in the world and the increase in the diseases of civilization points towards a direct link between lifestyle and the lack of physical activity in the majority of European countries. The results of research by STEM/MARK and Všeobecná zdravotná poisťovňa (the biggest health insurance facility in Slovakia) from 2013 (n=2058) in the Czech Republic (<http://www.tlukotsrdce.cz>) show that 55% of men and 60% of women have a high-risk waist circumference. Wagner (2015) claims that 65% of men in Slovakia are currently overweight and that this number will reach 71% by 2030. According to data of the Public Health Authority of the Slovak Republic (ÚVZSR) from 2013 (<http://www.uvzs.sk>) 13 – 15% of children aged 11 to 15 years are either overweight or obese. 20% of young people aged 18 to 24 are overweight. There is an ever increasing lack of interest in physical education and physical activity. Research by Peráčková (2008), Antala et al. (2012) and others show that for many children, physical education lessons are the sole opportunity to do some form of exercise.

Šimonek (2006) considers physical activity one of the most important parts of a healthy lifestyle especially during adolescence and supports his claim by referring to the words of the famous Greek writer Plutarchos: "Who thinks that they can ensure their good health by doing nothing proceeds as stupidly as someone who thinks that by being quiet they will improve their voice." There are numerous overseas studies (Hennesy et al., 2010; Vander Ploeg et al., 2013 and others) which link the physical activity of adolescents with that of their parents. Pařízková et al. (2007) also state that if a child is used to spending free time with their parents going for walks or doing various physical activities they will naturally create a positive attitude towards exercise.

Studies which are concerned with the quality and quantity of physical activities can be split into 2 groups regarding their methods:

- ✓ those which use objective data gained from pedometers and accelerometers, for example the works of Tudor-Locke-Basset (2004), Harris et al. (2009), Pagels-Boldemann-Raustorp (2011) and others.
- ✓ those which use data accumulated via questionnaires or surveys. These are the studies by Pratt et al. (1999), Nader et al. (2008), Łubkowska-Troszczyński (2011), Straňavská-Görner (2015) and others.

We realize that both approaches have their advantages and disadvantages and the ideal solution is to combine them together. Due to the large number of respondents in our research we have chosen a survey method.



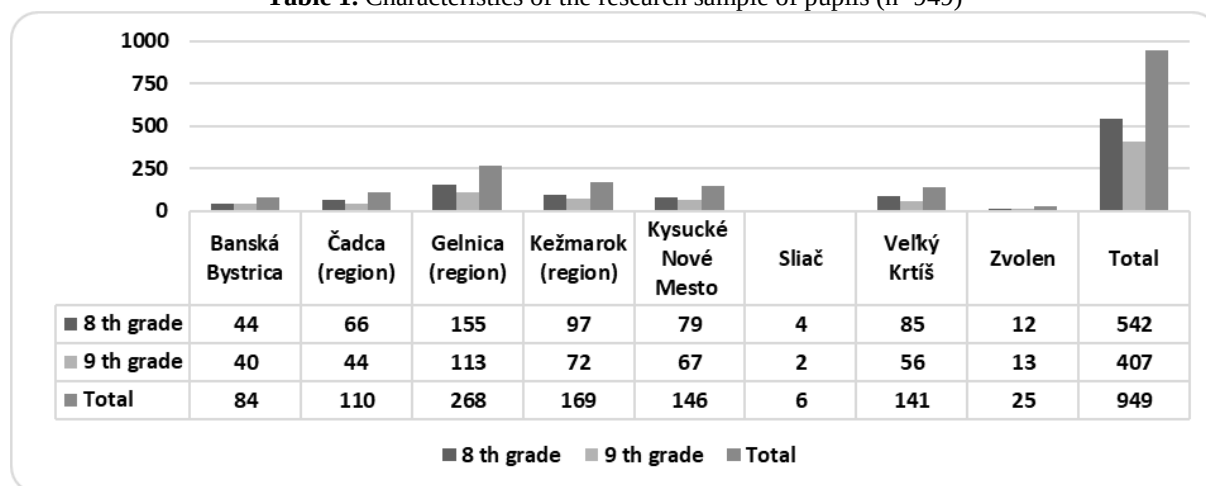
Goal

The goal of this study was to find and analyse the differences in the opinions among boys of 8th and 9th grade of second level education in primary schools in Slovakia, the amount, motives, forms and possibilities of and for physical activities during their free time. This study is a partial segment of the project **KEGA 002UMB-4/ 2014** carried out at the Department of Physical Education and Sports, Faculty of Arts, Matej Bel University in Banská Bystrica.

Methods

949 pupils of eight and ninth grade (542 from 8th grade and 407 from 9th grade) took part in the survey that was conducted in order to establish the amount, motives, forms and possibilities of and for physical activities. The survey was realised in May during the school year 2014/2015. We approached pupils from 28 primary schools (Tab. 1.) 18 schools were from the central region and 10 from the eastern region of Slovakia. The questionnaires were created and analysed with the use of program TAP 3 from Gamo in Banská Bystrica. The answers were analysed according to each respondent's school grade.

Table 1. Characteristics of the research sample of pupils (n=949)

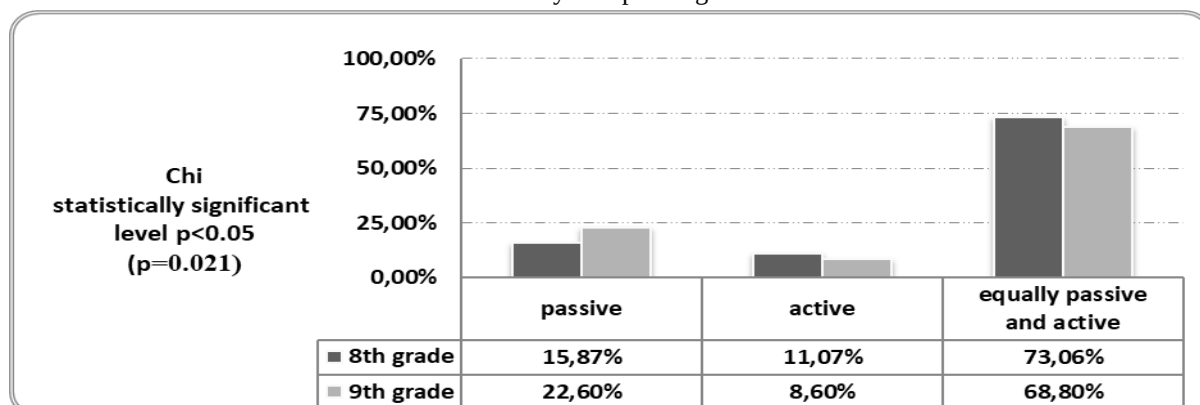


Results and discussion

Initially we wanted to find out how boys mostly spend their free time (Tab. 2). Almost $\frac{3}{4}$ of boys spend their free time “equally” actively and passively. From the table it is clear that the pupils in 8th grade are more active where 11.07% of boys prefer physical activities in their free time. Passive pastimes have a lower frequency among 8th graders (15.87%) compared to 22.6% in the 9th grade. This is also confirmed by the study of Nader et al. (2008) where the authors claim that the older the children the lower their interest in physical activities. At the age of 15 they only spent 49 minutes a day during a weekday and 35 minutes a day during the weekend being active. **The difference in answers among boys with regard to their school grade was statistically significant at the level $p < 0.05$.**



Table 2. Ways of spending free time



We then analysed the amount of physical activity (Tab. 3). The answers were similar in both research samples. 16.61% of 8th graders and 17.69% of 9th graders spend less than an hour a day on physical activities, in other words app. 58% of all respondents claim that they spend a maximum of two hours a day on physical activities. In comparison to the recommendation of Šimonek (2006) who states that 10 to 17 year olds should spend at least three hours a day on physical activity, resp. 20 hours a week we find our results to be very negative. Such low or rather inadequate physical activity rate in children during their free time has also been found by Pratt et al. (1999), Sigmund-Miklánková et al. (2007), Biddle et al. (2009) and others. **The difference in answers among boys with regard to their school grade was not statistically significant at the level $p < 0.05$.**

In regards to the amount of physical activities during weekends we found (Tab. 4) a pleasing fact that more than 82% of pupils of 8th and 9th grade spend their free time on physical activities for three or more hours a day. Ca.17% spend less than three hours a day on physical activities. As we agree with Kučera-Dylevský (1999) that “exercise affects development and development affects exercise” we recommend a suitable specific intervention in order to encourage an adequate level of physical activity in this group. **The difference in answers among boys with regard to their school grade was not statistically significant at the level $p < 0.05$.**

Table 3. Amount of physical activity of pupils during weekdays in hours per day

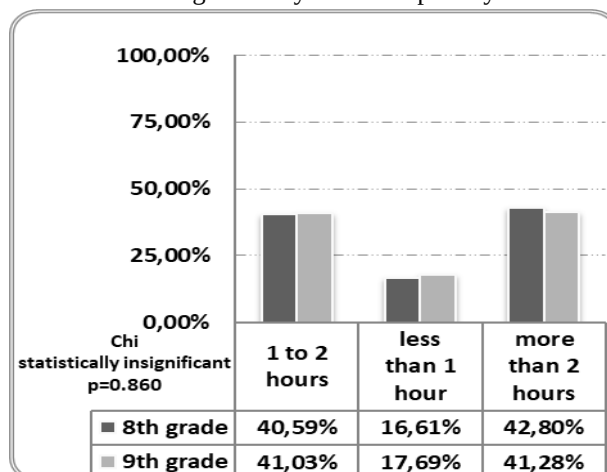
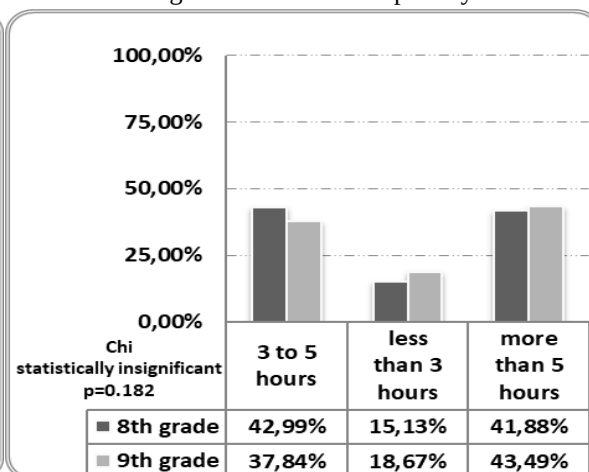


Table 4. Amount of physical activity of pupils during weekends in hours per day

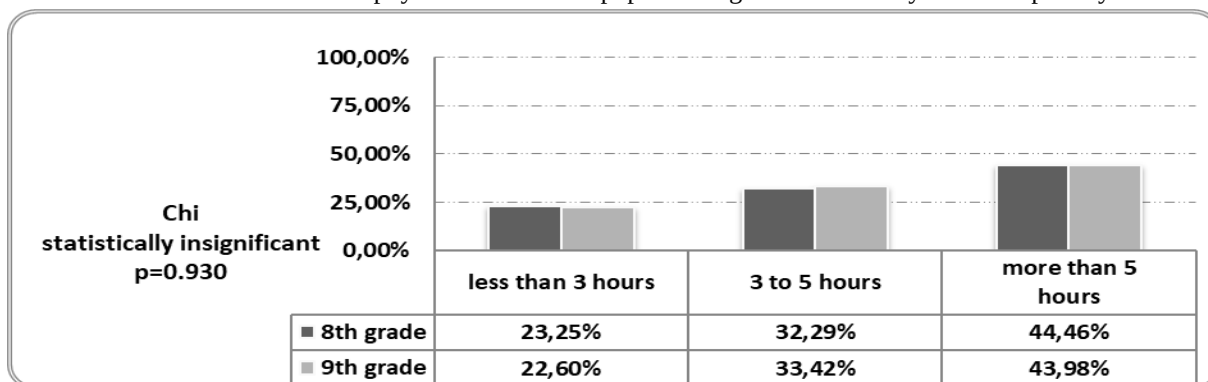


The amount of physical activity of pupils during summer holidays (Tab. 5) showed that the time they spend on physical activity increases slightly in comparison with the weekends - 44.46% of 8th graders and 43.98% of 9th graders spend their time actively for more than 5 hours per day. When analysing and comparing this question with the previous one we have found one negative aspect in the slightly increased percentage of pupils who spend less than 3 hours a day on physical activity (23.25% of 8th graders and 22.60% of 9th graders). During the summer holidays pupils have plenty of free time which they need to fill purposefully and actively. The study of



Drobes-Hillman (2012) states that there is plenty of evidence about the correlation between physical activity and drug abuse. It is less likely that physically active children would experiment with drugs. **The difference in answers among boys with regard to their school grade was not statistically significant.**

Table 5. The amount of physical activities of pupils during summer holidays in hours per day



When analysing the character of the physical activity in both groups we found that they are predominantly recreational (Tab. 6). The biggest difference between the number of answers was within the performance aspect - the difference between the 9th and the 8th grade was ca.7%. Moravec-Kampmiller-Vanderka-Laczo, (2007) and Raczek-Mynarski-Ljach (2002) discovered deepening differences in the levels of sports performance among children who practice sport and those who do not. **The difference in answers among boys with regard to their school grade was not statistically significant.**

Table 6. The character of physical activity of pupils

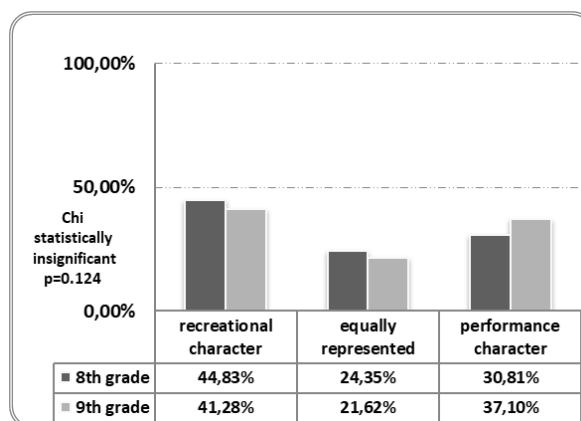
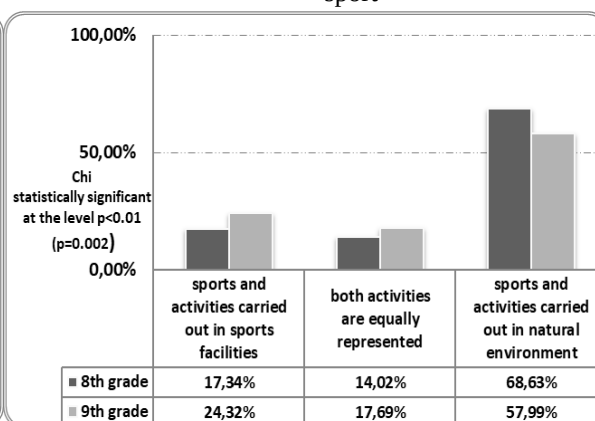


Table 7. The dominant place for pupils to practice sport



When identifying where sport activities take place (Tab. 7) we can positively say that 63% of pupils of 8th and 9th grade prefer outdoors. Watkins-Dalal (1995) claim that exercising outdoors is often a lot more challenging than in a gym or a playground. **The difference in answers among boys with regard to their school grade was statistically significant at the level p<0.01.**

When it comes to the type of sport, pupils of both grades prefer team sports, with the answer frequency close to 50% (Tab. 8). Bašková et al. (2009) claim that team sports are especially suitable physical activities for pupils. They not only evoke a feeling of companionship and mutual commitment but are also important for learning about reciprocity of opinions and formation of personalities during adolescence. **The difference in answers among boys with regard to their school grade was statistically significant at the level p<0.05.**



Table 8. The preference of forms of sport among physical activities

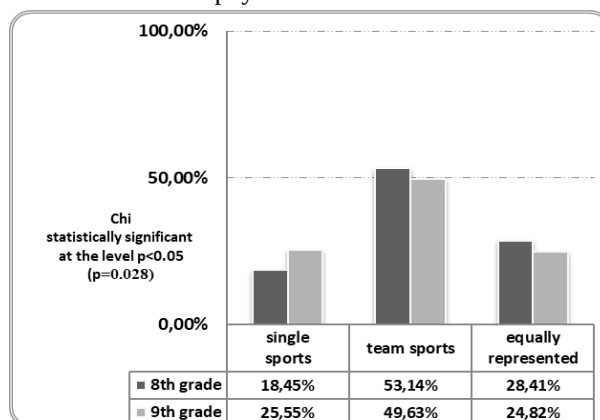
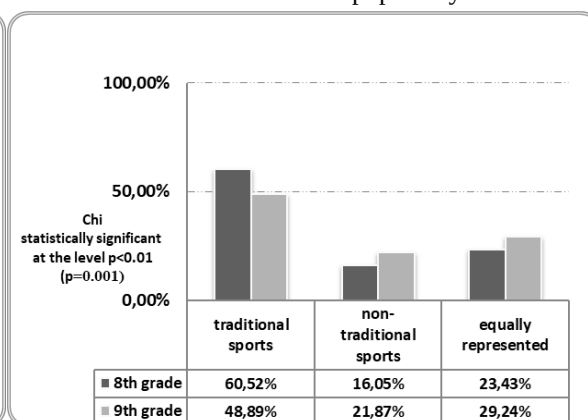


Table 9. The preference of sports and activities based on popularity



When we enquired about the preferences in sports and physical activities (traditional or less popular) we learned (Tab. 9) that pupils of both grades prefer traditional sports, however, 8th graders were inclined towards traditional sports even more. This fact came as no surprise, as traditional sports and games such as football were also dominant among boys in the studies of Nemec (2002), Kollár (2006), Antala et al. (2012) and others. **The difference in answers among boys with regard to their school grade was statistically significant at the level $p < 0.01$.**

The pupils agreed that they mostly practice sport and physical activities with friends, classmates from school or after-school clubs and sport leisure groups. This answer was chosen by more than 65% of pupils (Tab. 10). **The difference in answers among boys with regard to their school grade was not statistically significant.**

Table 10. Companions of pupils during physical activities

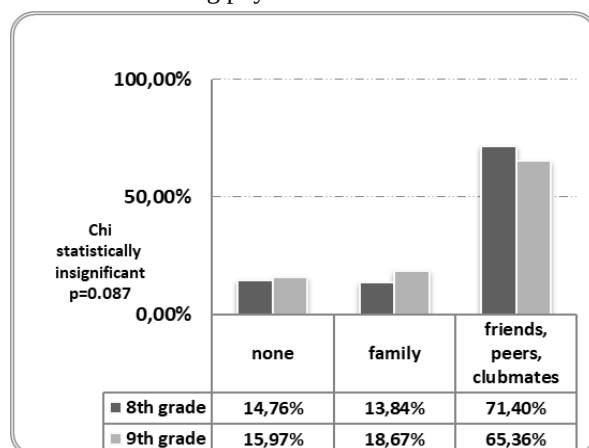
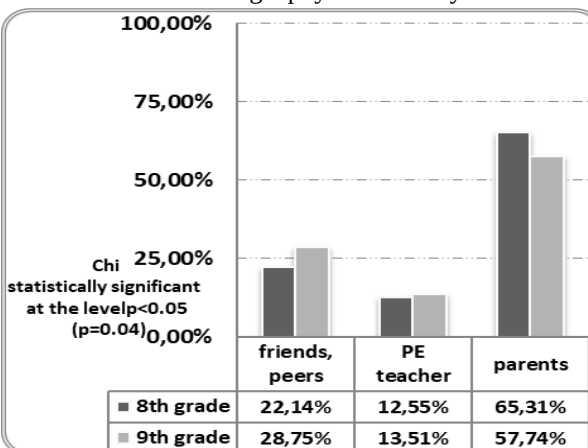


Table 11. Who influenced pupils when choosing a physical activity



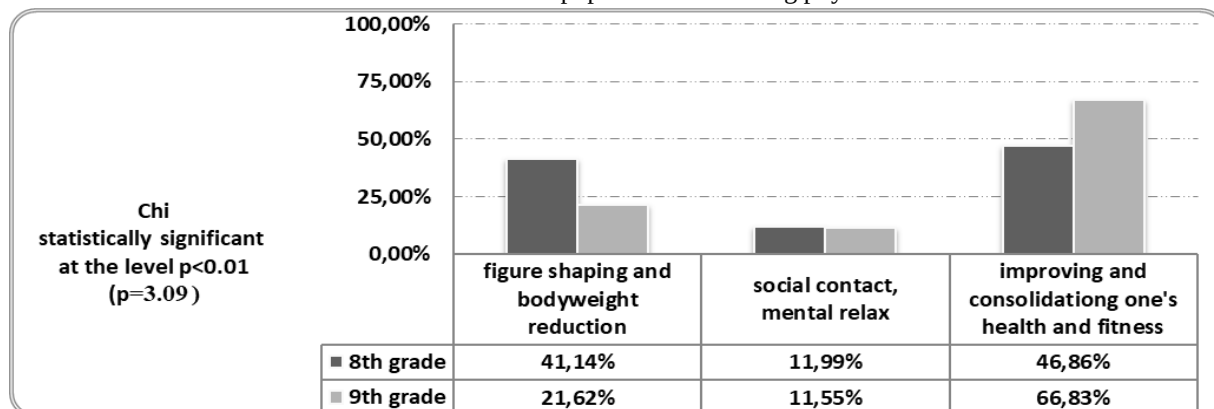
Parents had the biggest influence on whether pupils practice sport (Tab. 11). Moore et al. (1991) identified that the influence of active fathers was bigger than that of active mothers, however, the biggest influence was identified in families with both parents physically active. When compared with children whose parents were not physically active the result showed that children with active parents were six times more likely to practice sport. Less than 14% of pupils of both grades chose their PE teacher as a major motivator to practice sport. **The difference in answers among boys with regard to their school grade was statistically significant at the level $p < 0.05$.**

The strongest motivator to practice sport proved to be a desire to improve and strengthen their health and physical fitness (Tab. 12). This answer was chosen by 46.86% of 8th graders and 66.83% of 9th graders. 8th



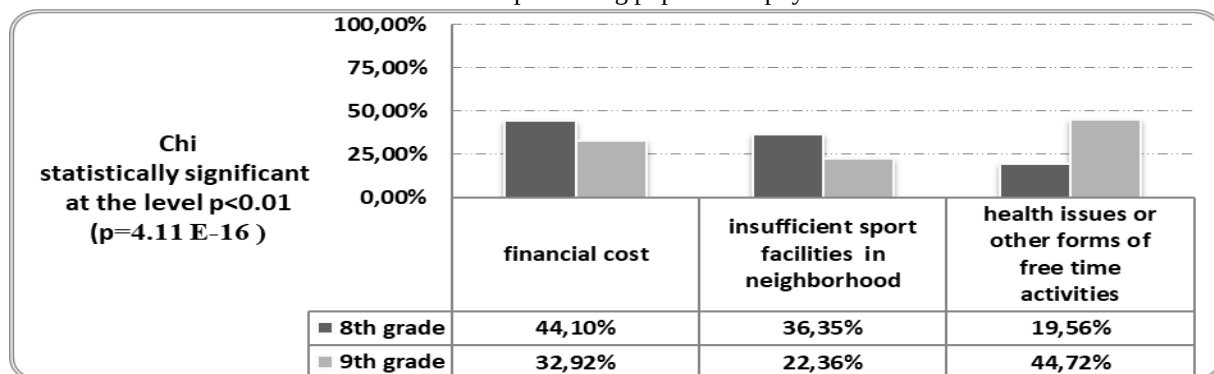
graders also often answered that they practice sport to improve their figure and lose weight (41.14%). Stackeová (2008) also confirms similar results in her study when she found that the primary motivation for people to join a gym was weight loss. **The difference in answers among boys with regard to their school grade was statistically significant at the level $p < 0.05$.**

Table 12. The main motive of pupils for undertaking physical activities



The last question was aimed at finding out the largest factor preventing pupils from practising sport (Tab. 13). The dominant answer among 8th graders was financial cost (44.10%), among 9th graders it was “health issues or other forms of free time activities” (44.72%). Studies by Reed-Philips (2006) point towards a fact that students who have gym or outdoor sport facilities close to school or directly in their home town are more physically active. **The difference in answers among boys with regard to their school grade was statistically significant at the level $p < 0.01$.**

Table 13. Main factor preventing pupils from physical activities



Conclusion

According to Frömel-Bauman (2006) physical activity has many functions in a person's life. Therefore it is very important for the promotion and prevention of health to make the lifestyle of our population active again. The results of our study point towards facts which need to be taken into consideration with regards to the individual age of adolescents:

- 8th graders are more active when it comes to free time activities;
- the amount of physical activities in both grades is in many cases low - during weekdays and weekends as well as summer holidays;
- the physical activity of 8th and 9th graders is mostly recreational and they usually practice outdoor sports;



- pupils of both grades prefer traditional team sports (football, basketball, volleyball, etc.);
- when analysing the major motive for physical activities we found significant differences, where for 8th graders it was mostly “improving figure and losing weight” for 9th graders it was “health benefits of sport”;
- we also identified some differences in the major factor which prevents them from practising sport - for 8th graders it was mostly “financial cost” and for 9th graders it was the option of “health issues and other ways of spending free time”.

References

- Antala, B. et al. (2012). *Telesná a športová výchova v názoroch žiakov základných a stredných škôl*. Bratislava: END, spol. sro. Topolčianky.
- Bašková, M., et al. (2009). *Výchova ku zdraviu*. Martin: Osveta.
- Biddle, S. J. H. et al. (2009). Physical activity and sedentary behaviours in youth : Data from three central-eastern European countries. *European Journal of Sport Science*. 9, pp. 295-301.
- Drobes, D. J.-Hillman, CH. H. (2012). Physical Activity and Cognitive Control: Implications for Drug Abuse. *Child development perspectives*, 6(4), pp. 367-373.
- Frömel, K.-Bauman, A. (2006). Intenzita a objem pohybové aktivity 15-69 leté populace České republiky. *Česká kinantropologie*, 10(2), pp. 126-138.
- Galloway, J. 2007. *Děti v kondici*. Praha: Grada.
- Harris, T.J.-Owen, C.G.-Victor, C.R.- Adams, R.-Ekelund, U.-Cook, D.G. (2009). A Comparison of Questionnaire, Accelerometer, and Pedometer: Measures in Older People. *Med Sci Sports Exerc*, 41(7), pp. 1392-1402.
- Tudor, R.-Locke, C.-Basset, T. D. R. (2004). Howmany steps/day are enough? Preliminary pedometer indices for public health. *Sports Med*, 34(1), pp. 1-8.
- Hennessy, E.-Hughes, S. O.- Goldberg, J. P.-Hyatt, R. R.-Economos, C. D. (2010). Parent-child interactions and objectively measured child physical activity: A cross-sectional study. *International Journal of Behavioral Nutrition and Physical Activity*, 7(71), pp. 1–14.
- Kollár, R. (2006). Stav vyučovania futbalu na 1. stupni ZŠ. *Súčasnosť a perspektívy telovýchovného procesu na školách*. Banská Bystrica: UMB PF, pp. 106-112.
- Kučera, M.-Dylevský, I. (1999). *Sportovní medicína*. Praha: Grada.
- Łubkowska, W.-Troszczyński, J. (2011). Próba weryfikacji aktywności ruchowej jako kryterium oceny postawy ciała dziewcząt i chłopców w wieku 7-15 lat. *Zeszyty Naukowe. Prace Instytutu Kultury Fizycznej. Uniwersytet Szczeciński*, 631(27), pp. 27-40.
- Moore, L. et al. (1991). Influence of parents' physical activity levels on activity levels of young children. *Journal of Pediatrics*, 118, pp. 215-219.
- Moravec, R.-Kampmiller, T.-Vanderka, M.-Laczo, E. (2007). *Teória a didaktika výkonnostného a vrcholového športu*. Bratislava: FTVŠ UK.
- Nader, P. R. et al. (2008). Moderate to Vigorous Physical Activity From Ages 9 to 15 years. *JAMA* 300(3), pp. 295-305.
- Nemec, M. (2002). *Príprava mladých futbalistov na školách a v oddieloch*. Banská Bystrica: FHV UMB.
- Pagels, P.-Boldemann, C.-Raustorp, A. (2011). Comparison of pedometer and accelerometer measures of physical activity during preschooltime on 3 to 5-year-old children. *Acta Paediatrica*, 100(1), pp. 116-120.
- Pařízková, J. et al. (2007). *Obezita v dětství a dospívání*. Praha: Galen
- Peráčková, J. (2008). *Režim dňa, voľný čas a telovýchovná aktivita žiakov vybraného gymnázia*. Telovýchovné a športové záujmy v rámci voľno-časových aktivít žiakov. Bratislava: UK, FTVŠ.
- Pratt, M.-Cacera, C. A.-Blanton, C. (1999). Levels of physical activity and inactivity in children and adults in the United States: current evidence and research issues. *Med. science in Sports and Exerc.*, 31(11), pp. 526-533.



- Raczek, J.-Mynarski, W.-Ljach, W. (2002). Kształtowanie i diagnozowanie koordynacyjnych zdolności motorycznych. Katowice: AWF.
- Reed, J. A.-Phillips, D. A. (2006). Relationship between physical activity and the proximity of exercise facilities and home exercise equipment used by undergraduate university students. *Journal of American College Health*, 53(6), pp. 285-290.
- Sigmund, E.-Miklánková, L. et al. (2007). Provází nástup dětí do 1. třídy základní školy výrazný pokles jejich pohybové aktivity? *Med. Sport. Boh. Slov.*, 16(2), pp. 78-84.
- Stackeová, D. (2008). Motivace k pohybové aktivitě. *Rehabilitace a fyzikální lékařství*, 15(1), pp. 22-26.
- Straňavská, S.-Görner, K. (2015). Športovo-pohybové aktivity v prírode v spôsobe života stredoškolskej mládeže v Humennom. *Telesná výchova a šport v živote človeka. Zvolen: Technická univerzita*, pp. 256-268.
- Šimonek, J. (2006). Športové záujmy a pohybová aktivita v dennom režime a ich vplyv na prevenciu drogových závislostí detí a mládeže. *Štúdie III. Nitra: Pedagogická fakulta UKF*, pp. 7-102.
- Van der Ploeg, K. A.-Kuhle, S.-Maximova, K.-McGavock, J.-Wu, B.-Veugelers, P. L. (2013). The importance of parental beliefs and support for pedometer-measured physical activity on schooldays and weekenddays among Canadian children. *BMC PublicHealth*, 13(1132), pp. 1-7.
- Wagnerová, K. (2015). Žijeme v storočí obezity: Sú tučnejší Slováci, alebo Slovenky? [cit. 2015-12-12] Dostupné z: <http://www.pluska.sk/zena/chudnutie/zijeme-storoci-obezity-15-rokov-budu-najchudsi-holandania.html>
- Watkins, D.-Dalal, M. (1995). *Camping and Walking*. Usborne: Publishing.
- World Health Organization. (2007). Steps to health: A European Framework to Promote Physical Activity for Health [online]. [cit. 2015-07-07]. Dostupné z: http://www.euro.who.int/__data/assets/pdf_file/0020/101684/E90191.pdf
- http://www.uvzsr.sk/docs/vs/vyrocná_správa_2013.pdf
- <http://www.tlukotsrdce.cz/clanek/240/pruzkum-stem-mark-jak-jsou-na-tom-cesi-s-obezitou/>



The Effect of Recreation-based Activities on Social Skills of Mentally Retarded Children

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Abstract

The purpose of this study is to measure the effect of recreational activity-based program on the social skills of mentally retarded students. The research sample is composed of a total of 50 educable mentally retarded students – 31 males and 19 females – aged between 9 and 12 who regularly attend Private Gül Bahçesi Education and Rehabilitation Center situated in Tuzla district of İstanbul province. Preliminary test, final test and uncontrolled group experimental model were used in the research. The program containing different activities in 2017 was applied for 13 weeks. Personal information form and Social Skills Evaluation Scale were used as data collection tool. Data were analyzed with SPSS 21 package program. Frequency and percentage distributions, Cronbach's Alpha, Shapiro Wilk-W and Wilcoxon test were applied. As a result of the research, it has been determined that recreation-based program has a positive effect on social skills of mentally retarded students. Significant differences at the level of 0.05 have been found between preliminary and final test. Considering and applying such activities for the development of retarded individuals as an alternative education can be useful.

Key Words: Recreation, Retarded Child, Social Skill

Introduction

The quality of life and the achievements of a person in life are directly proportional to their social skills (Sazak 2003, Türer 2010). Social skills are the most important and functional skills necessary for an individual to fulfill the expectations required by the rules of society and to live effectively and independently in society (Sucuoğlu ve Çiftçi, 2004, Dağseven 2008, Türer, 2010, Alptekin, 2012). These skills are behaviors that enable an individual to interact positively with others. They bear interpersonal attributes. These are desirable, communicative and reproducible behaviors. These behaviors include such abilities as initiating, maintaining and terminating relations appropriately, working with groups, helping, sharing, dealing with adverse situations, using social resources and making choices (Bacanlı 1999, Akfırat 2006, Dağseven 2008, Türer 2010, Alptekin 2012).

Teaching the social skills is highly important in that it helps individuals initiate and improve positive relations with others, it allows individuals meet the expectations of the environment, it allows them deliver their necessities, desires, wishes and preferences appropriately and helps this communication be maintained (Alptekin, 2012). This training is carried out in an environment that is under normal conditions without noticing. However, there is a need for systematic training for mentally retarded children who are the disadvantaged individuals. It is stated that social skills education can be performed on the basis of direct teaching, collaborative teaching, conscious process approach, peer-mediated teaching approaches with the purpose of making it easier for these children to have a social environment (Çiftçi 2001, Pınar and Tekinaslan, 2003). Trainings given to children with mental retardation will enable them to acquire social skills as well as it will easier to hold on to life in the future. At the same time, it makes it easy for the individual to get a job while going from being a student to an adult, to become a member of the community, and to overcome the challenges of later life (Alptekin, 2012)

Children whose physical, mental, emotional or social characteristics and are separated from normal children by terms of life skills are called mentally retarded children. They are classified as educable, teachable, severe and very severe mentally retarded individuals. Mentally retarded people can have difficulty in coping with the needs of everyday life, interpreting the behavior of others correctly and showing the expected social reactions (Pehlevan, 2010). There are



many factors affecting the socialization process of disabled individuals. Some of these are family, social groups (peer groups), various activities such as sports and games, school and socialization tools that are considered as mass media. These tools help the retarded people to adapt to a wider world within rules and values (socialization) (Usul, 2012).

When we look at the studies in literature on the social skill acquisition of mentally-retarded children, cooperative learning and creative drama method (Akfirat, 2006, Avcıoğlu, 2012), folk dances (Pehlevan, 2010), sports and orienting (Usul, 2012), peer-mediated social skills program Pınar and Tekinaslan 2003, Özyaydın ve ark., 2008), and direct teaching method were used to gain skills (Türer 2010, Alptekin 2012). Teaching was systematically carried out via researchers / teachers.

While social skills are the behaviors that ensure positive interaction with others in society, social competence denotes the demonstration of these behaviors and their positive evaluation by others (Akfirat, 2006). Social skills are very important in acceptance of mentally retarded individuals in society. Social skills include such skills as communicating, expressing emotions, working with groups and coping with adverse situations. When these skills are gained, mentally disabled individuals will be made available to the same services from which their peers benefit (Özyürek 2004, Türer 2010). It is possible to give these skills to mentally retarded children with education, a single activity or via a program composed of different activities.

Achieving the points that cannot be reached with courses in disabled students, providing the knowledge, skills and abilities that will help the students improve their personality and providing a self-expressive and self-confident personality development can only be realized with social activities (Tetik, 2008). Recreational activities are one of the social activities that will reduce the negative impact of people's situations, relax them psychologically, diversify their lives, reduce their stress and have a good time. It is possible to help the retarded people acquire social skills through recreational activities that can be used as an alternative education or the therapeutic recreation which has a therapeutic feature in order to increase their quality of life with sports, cultural and artistic activities (Başaran, 2015).

For this reason, the purpose of this study is to analyze the effect of recreation-based activities on the social skills of mentally retarded and educable children.

Research Problem: Recreational activities have an effect on social skills of educable and mentally retarded students.

Sub-problems of the Research:

- Recreation-based activities are effective on mentally retarded children's basic social skills.
- Recreation-based activities are effective on mentally retarded children's basic speaking skills.
- Recreation-based activities are effective on mentally retarded children's advanced speaking skills.
- Recreation-based activities are effective on mentally retarded children's skills of initiating relationship.
- Recreation-based activities are effective on mentally retarded children's skills of maintaining relationship.
- Recreation-based activities are effective on mentally retarded children's skills for group work.
- Recreation-based activities are effective on mentally retarded children's emotional skills.
- Recreation-based activities are effective on mentally retarded children's autocontrol skills.
- Recreation-based activities are effective on mentally retarded children's skills of coping with aggressive behaviors.
- Recreation-based activities are effective on mentally retarded children's skills of accepting the results.
- Recreation-based activities are effective on mentally retarded children's skills of giving directions.
- Recreation-based activities are effective on mentally retarded children's cognitive skills.



Method

Research method

Preliminary test, final test and uncontrolled group experimental model were used in this research.

Groups	Preliminary test	Procedure	Final Test
Experiment	T1	Activity training determined as recreational activity	T2

This research was applied between 24.01.17 and 26.04.17 for 3 days and 2 hours a week for a total of 13 weeks. Activities related to sports, culture and skills were included in the practice.

The program applied;

Activities Done	Period	Time	Content
Cinema	24 January Tuesday 2017	10:00 - 12:00	Children's movie was watched.
Chess	25 January Wednesday 2017	14:00 - 16:00	How the game is played was taught.
Cinema	27 January Friday 2017	10:00 - 12:00	Animation-Children's movie was watched.
Reading	31 January Tuesday 2017	10:00 - 12:00	Reading-Writing-Spelling activity was performed.
Intelligence games	1 February Wednesday 2017	14:00 - 16:00	It was emphasized on counting, measuring, money exchange and simple operations.
Zumba	3 February Friday 2017	10:00 - 12:00	Basic steps were taught.
Theatre	7 February Tuesday 2017	10:00 - 12:00	Children's theatre was watched.
Daily life skills	8 February Wednesday 2017	14:00 - 16:00	Play field in the class was arranged.
Drama	10 February Friday 2017	10:00 - 12:00	Improvisation/empathy work was performed regarding cooperation, sharing and respecting.
Dance	14 February Tuesday 2017	10:00 - 12:00	Hand-feet harmonized figures were taught.
Music	15 February Wednesday 2017	14:00 - 16:00	The ability to practice receptive language and expressive language was worked.
Chess	17 February Friday 2017	10:00 - 12:00	The movements of pawn, knight and king were shown.
Painting	21 February Tuesday 2017	10:00 - 12:00	The simple story told was portrayed as a painting.
Cooking	22 February Wednesday 2017	14:00 - 16:00	How to make a sandwich was taught.
Developing the senses	24 February Friday 2017	10:00 - 12:00	The story about "Sharing" was told. An activity was conducted regarding this matter.
Artistic activity	28 February Tuesday 2017	10:00 - 12:00	Small objects were made with clay.
Music	1 March Wednesday 2017	14:00 - 16:00	Nursery rhyme was taught.
Daily life skills	3 March Friday 2017	10:00 - 12:00	The activity of making up the bed was performed.
Drama	7 March Tuesday 2017	10:00 - 12:00	Pantomime, song, painting and creativity was used about the subject.



Football	8 March 2017	Wednesday	14:00 - 16:00	The activity of dribbling between slaloms was conducted.
Scientific skills activities	10 March 2017	Friday	10:00 - 12:00	With the help of big cards, the activity of separating what you see and improving the memory skills was performed.
Chess	14 March 2017	Tuesday	10:00 - 12:00	Chess was played in groups.
Reading	15 March 2017	Wednesday	14:00 - 16:00	Turkish language activities were held by trying to improve their vocabulary with nursery rhymes and poems.
Music	17 March 2017	Friday	10:00 - 12:00	A nursery rhyme was taught.
Painting	21 March 2017	Tuesday	10:00 - 12:00	A painting was made with crayons.
Cooking	22 March 2017	Wednesday	14:00 - 16:00	It was taught how to make a pastry.
Dance	24 March 2017	Friday	10:00 - 12:00	Hand-feet harmonized figures were taught.
Intelligence games	28 March 2017	Tuesday	10:00 - 12:00	Songs and rhymed poems were told to help the development of auditory memory.
Developing senses	29 March 2017	Wednesday	14:00 - 16:00	The story about "Tolerance to our environment" was told. An activity was held about the subject.
Volleyball	31 March 2017	Friday	10:00 - 12:00	Overarm pass and bump pass was worked.
Drama	4 April 2017	Tuesday	10:00 - 12:00	Dramas concerning playing a role, thinking, taking as a model and the ability to express the feelings were performed.
Cooking	5 April 2017	Wednesday	14:00 - 16:00	It was taught how to make a cookie.
Dance	7 April 2017	Friday	10:00 - 12:00	The activity of matched dance was performed.
Garden activity	11 April 2017	Tuesday	10:00 - 12:00	Flower planting was taught.
Scientific skills activity	12 April 2017	Wednesday	14:00 - 16:00	The activity of understanding the concepts of numbers and qualifying in counting was performed.
Daily life skills	14 April 2017	Friday	10:00 - 12:00	The activity of folding clothes was performed.
Reading	18 April 2017	Tuesday	10:00 - 12:00	Children's books were read.
Cinema	19 April 2017	Wednesday	14:00 - 16:00	Charade was played with illustrated cards showing different emotions.
23rd April Children's Day project	21 April 2017	Friday	10:00-12:00	Celebration activity for Children's Day was performed.
Football	25 April 2017	Tuesday	10:00-12:00	Shooting activity was performed with miniature goals.
Music	26 April 2017	Wednesday	14:00 - 16:00	The activity of imitating the sounds of the nature was performed (Birds-Snakes-Wind-Waterfall etc.)

Population and sample selection:

Research population is composed of a total of 50 educable mildly mentally retarded students – 31 males and 19 females – aged between 9 and 12 with 75 – 60 IQ scores who regularly attend Private Gül Bahçesi Education and Rehabilitation Center situated in Tuzla district of İstanbul province.

Data collection tools

Personal information form and social skills evaluation scale were applied as the data collection tool.



Personal information questionnaire:

With the purpose of determining the demographic information of research group, questions regarding age, sex, retardation and education status and family were included.

Social skills evaluation scale

This scale was prepared by Avcıoğlu (2007) in order to measure the social skill levels of children. Reliability and validity of the scale was performed and it was found that Cronbach' Alpha reliability coefficient as .98, split half reliability coefficient as .89 and test-retest reliability coefficient as .83.

The scale is composed of 12 parts and 69 questions. These are as follows; Basic Social Skills (13), Basic Speaking Skills (4), Advanced Speaking Skills (5), Skills of Initiating Relationship (5), Skills of Maintaining Relationship (6), Skills for Group work (7), Emotional Skills (6), Autocontrol Skills (6), Coping with Aggressive Behaviors (4), Skills of Accepting Results (3), Skills of Giving Directions (4) and Cognitive Skills (6).

Data Collection:

First, sample group was determined for the purpose of data collection. In this regard, it was discussed with the head of Rehabilitation center and the families of retarded students attending this center who voluntarily wanted to participate in the research were determined and permission was obtained from families. Parents were applied preliminary tests at the beginning of the program and final tests at the end of the program after 13 weeks.

Reliability-validity information:

In this study, the value of .980 was found to be the Cronbach' Alpha reliability value of the scale.

Data Analysis:

Data obtained from the research were analyzed with SPSS 21 package program on computer. Frequency and percentage distributions were obtained for demographic information and Cronbach' Alpha was used to measure the reliability of data related to the scale, Shapiro Wilk-W Test was used to determine whether they exhibit normal distribution and Wilcoxon-Signed Rank Test was used to test whether there is a change in social skills of the retarded students following preliminary and final test.

Findings

Table 1. Demographic Information of Children

	Gruplar	f	%
Sex	Male	31	62,0
	Female	19	38,0
Age	9	9	18,0
	10	9	18,0
	11	16	32,0
	12	16	32,0
Attending a Nursery	Yes	26	52,0
	No	24	48,0
How long did s/he go to a nursery	Didn't	24	48,0
	1 Year	21	42,0
	2 Years	5	10,0
Retardation Status	Special Learning Disability	22	44,0
	Mental Retardation	28	56,0
When Was the Retardation Determined	1 Age	11	22,0
	2 Age	9	18,0



3 Age	12	24,0
4 Age	8	16,0
5 Age	5	10,0
6 Age	5	10,0
Total	50	100,0

Of 50 students constituting the sample group in Table 1, 31 of them (62.0%) are male and 19 of them (38.0%) are female. 9 of them are 9 years old (18.0%), 9 of them are 10 years old (18.0%), 16 of them are 11 years old (32.0%) and 16 of them are 12 years old (32.0%). 26 of them attend the nursery school (52.0%) and 24 of them don't attend (48.0%). 22 children have special learning disability (44.0%) and 28 children have mental retardation (56.0%). 11 of them were found to be retarded at the age of 1 (22.0%), 9 of them at the age of 2 (18.0%), 12 of them at the age of 3 (24.0%), 8 of them at the age of 4 (16.0%), 5 of them at the age of 5 (10.0%) and 5 of them were found to be retarded at the age of 6 (10.0%).

Table 2. Demographic Information of Families

	Groups	<i>f</i>	%
Mother's Life	Alive	50	100,0
Mother's Occupation	Housewife	44	88,0
	Personnel (Worker)	5	10,0
	Teacher (Civil servant)	1	2,0
	Total	50	100,0
Mother's Education	Primary School	42	84,0
	High School	6	12,0
	Associate Degree	2	4,0
	Total	50	100,0
Father's Life	Alive	49	98,0
	Death	1	2,0
	Total	50	100,0
Father's Occupation	Self-employment	25	50,0
	Worker	21	42,0
	Teacher and civil servant	4	8,0
Father's Education	Primary School	43	86,0
	High School	6	12,0
	Associate Degree		
	Total	1	2,0
Parents Are Together	Yes	48	96,0
	No	2	4,0
Economic Condition of Family	Good (5001 +)	26	52,0
	Weak (5000 -)	24	48,0
	Total	50	100,0

Mothers of all students constituting the sample group in Table 2 are alive 50 (100.0%). 44 mothers are housewife (88.0%), 5 mothers are worker/employee (10.0%) and 1 mother (2.0%) is teacher. 42 mothers are primary school graduate (84.0%), 6 mothers are high school graduate (12.0%) and 2 mothers (4.0%) have two-year degree. Fathers of 49 people are alive (98.0%) and the father of 1 person (2.0%) passed away. Regarding the occupations of fathers, 21 fathers are worker (42.0%), 4 fathers are teacher-civil servant (8.0%). 43 fathers are primary school graduate (86.0%), 6 fathers are high school graduate (12.0%) and 1 father has a bachelor's degree (2.0%). Parents of 48 people



live together (96.0%) and the parents of 2 individuals divorced (4.0%). Economic condition of the families of 26 people is good (52.0%) and the economic condition of 24 families is weak (48.0%).

Table 3. Social Skills Wilcoxon-Signed-Rank Test Results of Children

	N	Pretest		Posttest		Z	p
		Mean	SD	Mean	SD		
Basic Social Skills	50	43,8800	7,85491	57,4400	5,10366	-6,176 ^b	,000
Basic Speaking Skills	50	14,4800	3,32118	18,6600	1,83626	-5,692 ^b	,000
Advanced Speaking Skills	50	14,9600	3,25112	20,9800	2,63795	-6,277 ^b	,000
Skills of Initiating Relationship	50	13,9800	2,77371	20,9000	2,27901	-6,197 ^b	,000
Skills of Maintaining Relationship	50	18,3800	4,25652	26,1200	2,98732	-6,118 ^b	,000
Skills of Coping with Aggressive Behavior	50	23,2400	4,43805	31,3600	2,87679	-6,214 ^b	,000
Skills of Accepting Results	50	17,2800	4,19932	24,6800	3,12619	-6,184 ^b	,000
Skills of Giving Directions	50	18,4200	3,87609	25,8400	3,01939	-6,231 ^b	,000
Cognitive Skills	50	12,3000	2,35822	17,1200	1,81423	-6,216 ^b	,000
Skills for Group work	50	9,1600	2,14152	13,0200	1,53184	-6,131 ^b	,000
Emotional Skills	50	13,0000	3,17516	17,7000	1,99233	-5,849 ^b	,000
Autocontrol Skills	50	17,0400	4,15004	24,6200	3,10950	-6,173 ^b	,000

As a result of the Wilcoxon-Signed-Rank Test performed with the purpose of measuring the effect of social skills education on retarded students in Table 3, statistically significant differences (.000) at a level of $p < 0.05$ were found between preliminary and final tests in all skills (Basic Social Skills, Basic Speaking Skills, Advanced Speaking Skills, Skills of Initiating Relationship, Skills of Maintaining Relationship, Skills for Group work, Emotional Skills, Autocontrol Skills, Coping with Aggressive Behaviors, Skills of Accepting Results, Skills of Giving Directions, Cognitive Skills).

Discussion, Conclusion and Suggestions

Of the 50 students in the sample group of the study, 31 of them are male and 19 of them are female. 18 people are aged between 9-10 and 32 of them are aged between 11-12. 26 individuals go to nursery school and 24 of them don't. 24 of them don't go to nursery school, 21 of them go for 1 year and 5 of them go for 2 years. 22 children have special learning disability and 28 children are mentally retarded children. Their intelligence level is 60-75%. 11 children were found to be retarded at the age of 1, 9 children were found to be retarded at the age of 2, 12 children were found to be retarded at the age of 3, 8 children at the age of 4, 5 children at the age of 5 and 5 children were found to be retarded at the age of 6.

Mothers of all the students who constitute the sample group are alive. 44 mothers are housewife, 5 mothers are worker/employee and 1 mother is teacher. 42 mothers are primary school graduate, 6 mothers are high school graduate and 2 mothers have two-year degree. Fathers of 49 people are alive and the father of 1 person passed away. Regarding the occupations of fathers, 21 fathers are worker, 4 fathers are teacher-civil servant. 43 fathers are primary school graduate, 6 fathers are high school graduate and 1 father has a bachelor's degree. Parents of 48 people live together and the parents of 2 individuals divorced. Economic condition of the families of 26 people is good and the economic condition of 24 families is weak.



In the study, the effect of recreation-based social skills training program on educable mentally-retarded students was determined. Statistically significant differences were found between preliminary and final tests of Basic Social Skills, Basic Speaking Skills, Advanced Speaking Skills, Skills of Initiating Relationship, Skills of Maintaining Relationship, Skills for Group work, Emotional Skills, Autocontrol Skills, Coping with Aggressive Behaviors, Skills of Accepting Results, Skills of Giving Directions, Cognitive Skills. This condition shows that the activities applied have a positive effect on all social skills of students and improve them. These results support the skills both in problem sentence and sub-problem sentences.

In literature, there are similar studies conducted on folk dances, drama and sports. In a study titled "The Effect of Turkish Folk Dances on Socialization of Mentally-Retarded Children", while there are positive development in such skills as basic social skills, skills of initiating relationship, skills of maintaining relationship, skills for group work, emotional skills, autocontrol skills, skills of coping with aggressive behaviors and skills of giving directions; no change has been observed in basic speaking skills, advanced speaking skills, skills of accepting results and cognitive skills (Pehlevan, 2010). The reason for the parts without any relation may be the study conducted with a single activity. While some skills stand out depending on the characteristics of the activity, some of them keep in the background. The result of Pehlevan complies with our skills of initiating and maintaining relationship and skills of giving directions. While the desired development in communication skills in folk dances has been found to be low, communication has come to the forefront in drama. In the study of Avcioğlu (2012) titled as "Effectiveness of Collaborative Learning and Drama Methods in Providing Social Skills to the Mentally-Retarded Children", it has been observed that children become skillful at self-introduction and they can generalize in free game activities with their peers as of the first week. Following the "Drama-based Social Skills Education" practice related to the social relations and cooperative behaviors, Aslan (2008) has found a significant difference between the final test score averages of experiment and control group children on behalf of the experiment group for "Cooperation, Social Relations 1 (Maintaining Positive Relations) and Social Relations 2 (Maintaining Relations with Group) Behaviors Sub-Scales".

In the study of Demirdağ (2010) titled "The Effect of Sports on Socialization of Educable Mentally-Retarded Children", it is stated that sports is effective on socialization of children and there is a relation between sports and socialization. There is a statistically significant difference between child's skills of self-introduction, apologizing, thanking and the skills of leadership concerning sports' share in increasing the ability of expression and harmonizing characteristic of sports. In the study of Sukan (2013) named "the effect of sports on socialization of mentally-retarded people", the mothers complaining that their children are hyperactive or inactive have stated that they observe a serious change in their children after doing sports, define this as a quietness, success and ability of their children have developed, their communication has become stronger with sports and they are accepted in the society. Sports is included in programs in many fields by utilizing its characteristics that increase self-confidence and provide psychological relaxing in addition to physical development. Athletic activities being quite useful for the development of handicapped contribute their socialization, communication skills and improvement in the sense of achievement. In the study of Özyayın et. Al. (2008) titled as "The Effect of the Program of Developing Friendship Skills on Social Interaction of Pre-school Children with Special Needs" performed with the purpose improving the communication skills of children at younger age, positive and visible increase has been established in social interaction behaviors of target children with their peer tutors. Moreover, target children have preserved their social interaction behaviors they learned after 3 and 4 weeks following the application process and they have been able to generalize to the other two peers in class.

Each activity included in our application program has been specified in a way to address one or more social skill levels of children and to help their development. The purpose of "Cinema" activity is to develop cognitive skills and emotional skills. "Chess" activity aims for cognitive skills, skills of accepting results and autocontrol skills. "Reading" activity aims for cognitive skills and skills of developing emotions. "Intelligence games" aim for cognitive skills and skills of accepting results. "Zumba" aims for the skills of giving directions. "Theatre" activity aims for cognitive skills and skills of developing emotions. "Daily life skills" are expected to develop basic social skills. "Drama" activity aims for the skills of basic speaking, maintaining relationship and developing emotions. "Dance" activity aims for the skills of giving directions and developing emotions. "Music and painting" activity aims for emotional skills. "Cooking" activity



aims for giving directions and basic social skills. It is expected that emotional skills and basic social skills will develop with "Developing emotions". "Art activity" aims for maintaining relationship and emotional skills. "Football and volleyball" aims for skills for group work, skills of coping with aggressive behaviors and autocontrol skills. "Scientific skills activity" is expected to develop cognitive skills. "Garden activity" aims for cognitive and emotional skills and skills of maintaining relationship. "23rd April Children's Day " activity aims for cognitive and emotional skills and skills of group work and maintaining relationship. The skills determined for each program aren't limited and address more skills and they may even complete each other. Such a program designed for multi-dimensional development of children has allowed them to learn by having fun and supported their multi-dimensional development of skills.

According to the answers of parents, it has been observed that the targeted development has been ensured in all skills following the comparison of the results of preliminary and final tests. When we analyze its reason by comparing with the studies we have reached, it can be said that our age group is appropriate for development and learning, they are mild/educable in terms of intelligence level and we have conducted the application with various activities that may address all social skills.

In conclusion, in this research conducted with the purpose of measuring the effect of recreation-based activities on social skill levels of educable mentally-retarded children, various activities directed to athletic, artistic, cultural areas and skills have been applied and it has been determined that these activities have positive constructive effect on social skills of students

Suggestions;

- Education programs given in schools and rehabilitation centers should be arranged in a way to be based on recreational activities.
- The program based on recreational activities should be diverse and develop all of their skills.
- Recreational Activity Based Socialization training program can be applied together with alternative active learning methods.
- Educational environments necessary for teachers to be able to successfully implement their educational practices should be organized and training equipment and personnel support should be provided.

Reference

- Akfırat, F.Ö. (2006). Social Competency, Social Skills, and Creative Drama. *Creative Drama Journal*, 1(1): 39-58
- Alptekin, S. (2012). Teaching The Social Skills To The Mentally Retarded Students Through Direct Instruction Approach, *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 31(1): 1-19.
- Aslan, E. (2008). Drama temelli sosyal beceri eğitiminin 6 yaş çocuklarının sosyal ilişkiler ve işbirliği davranışlarına etkisi. *Yayınlanmamış Yüksek lisans Tezi, Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü, İlköğretim Anabilim Dalı, Aydın*
- Avcıoğlu, H. (2007) Sosyal Becerileri Değerlendirme Ölçeğinin Geçerlik Ve Güvenirlik Çalışması (4-6 Yaş) AİBÜ, *Eğitim Fakültesi Dergisi*, 7(2): 87-101.
- Avcıoğlu, H. (2012). Zihinsel Yetersizliği Olan Çocuklara Sosyal Beceri Kazandırmada İşbirliğine Dayalı Öğrenme ve Drama Yöntemlerinin Etkililiği. *Eğitim ve Bilim*, Cilt: 37(163): 110-125
- Bacanlı, H. (1999). Sosyal Beceri Eğitimi. Pegem Akademi, 5. Baskı, Ankara, ISBN 978-605-364-373-9
- Başaran, Z. (2015). 12 Haftalık Rekreatif Etkinliklerin Kadın Hükümlülerin Sürekli Kaygı Düzeyine Etkisi, *International Journal of Science Culture and Sport (IntJSCS)*, 3, 561-575. Doi : 10.14486/IJSCS323
- Çıfci, İ. (2001). Zihinsel Engelli Bireyler İçin Hazırlanan Bilişsel Süreç Yaklaşımına Dayalı Sosyal Beceri Programının Etkililiğinin İncelenmesi. *Yayınlanmamış Doktora Tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara*



- Dağseven E.D. (2008). Zihinsel Yetersizlikten Etkilenmiş Öğrencilere Sosyal Becerilerin Kazandırılmasında Doğrudan Öğretim ve Bilişsel Süreç Yaklaşımları İle Yapılan Öğretimin Etkililiklerinin Ve Verimliliklerinin Karşılaştırılması. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Ankara
- Demirdağ, M. (2010). Öğretilbilir Zihinsel Engelli Çocukların Sosyalleşmeleri Üzerine Etkisinin Araştırılması, Yüksek Lisans Tezi, Dumlupınar Üniversitesi Sağlık Bilimleri Enstitüsü Beden Eğitimi ve Spor Anabilim Dalı, Kütahya.
- Özaydın, L., İftar, E.T., Kaner, S. (2008). Arkadaşlık Becerilerini Geliştirme Programının Özel Gereksinimi Olan Okul Öncesi Çocuklarının Sosyal Etkileşimlerine Etkisi. Ankara Üniversitesi, Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi 2008, 9 (1): 15-32
- Özyürek, A. (2004). "Kırsal Bölge ve Şehir Merkezinde Yaşayan 5-6 Yaş Grubu Çocuğa Sahip Anne- Babaların Çocuk Yetiştirme Tutumlarının İncelenmesi". Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.
- Pehleven, Ş. (2010) Zihinsel Engelli Çocukların Sosyalleşmelerinde Türk Halk Oyunlarının Etkisinin Araştırılması, Yüksek Lisans Tezi, Sakarya Üniversitesi, Sosyal Bilimler Enstitüsü, Beden Eğitimi ve Spor Öğretmenliği, Sakarya
- Pınar, E.S., Tekinaslan, İ.Ç. (2003). Zihinsel Engelli Birey İçin Hazırlanan Akran Aracılı Sosyal Beceri Öğretim Programının Etkililiğinin İncelenmesi. Ankara Üniversitesi, Eğitim Bilimleri Fakültesi, Özel Eğitim Dergisi, 4(2): 13-30
- Sazak, E. (2003). Zihin Engelli Birey İçin Hazırlanan Akran Aracılı Sosyal Beceri Öğretim Programının Etkiliğinin İncelenmesi. Yayınlanmamış Yüksek Lisans Tezi, Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü, Bolu
- Sucuoğlu, B. ve Çiftçi, İ. (2004). Bilişsel Süreç Yaklaşımıyla Sosyal Beceri Öğretimi, Kök Yayıncılık, Ankara
- Sukan, H. D. (2013) Fiziksel Aktivitenin Zihinsel Engelli Çocukların Sosyalleşmesine Etkisi, Yayınlanmamış Yüksek Lisans Tezi, Muğla Sıtkı Koçman Üniversitesi, Sosyal Bilimleri Enstitüsü, Beden Eğitimi ve Spor Anabilim dalı, Muğla.
- Tetik, V. (2008). Genel Liselerde Sosyal Etkinliklerin Uygulanmasında Okul Yöneticilerinin Etkililiği. Yayınlanmamış Yüksek Lisans Tezi, Yeditepe Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Türer, H. (2010). Zihinsel Engelli Öğrencilere Teşekkür Etme Ve Özür Dileme Becerilerinin Öğretiminde Doğrudan Öğretim Yönteminin Etkililiği. Yayınlanmamış Yüksek Lisans Tezi, Selçuk Üniversitesi, Eğitim Bilimleri Enstitüsü, Özel Eğitim Anabilim Dalı, Konya
- Usul, C. (2012) . Engellilerin Sosyalleşmesinde Oryantiring Sporunun Etkisi. Yayınlanmamış Yüksek Lisans Tezi, Bahçeşehir Üniversitesi, Fen Bilimleri Enstitüsü, Kentsel Sistemler Ve Ulaştırma Yönetimi, İstanbul



Anxiety and Stressful Situations in Elementary School Students

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Abstract

The present study focuses on anxiety manifestations in students in selected Czech elementary schools. The gained emotional experiences associated with the school could negatively affect both students' performance and their attitude to school in general. Assessment of the learning outcomes through tests could become a significant trigger for anxiety that can influence the students' learning outcomes. The present study analyses the degree of anxiety in relation to a typical stress situation in the school environment, such as the level of actual anxiety prior to and after testing. An anxiety measuring questionnaire and a scale to measure actual anxiety were used. It was confirmed that the level of actual anxiety among students is considerably higher prior to testing than after testing. With regard to the results and the primarily negative impact of testing in the school environment, the paper also introduces several useful recommendations for reducing anxiety among students.

Keywords: Anxiety, elementary school, stressful situations.

Introduction

It is generally known that long-term exposure to both positive and negative stressful events may cause the development of anxiety. According to Atkinson (Atkinson et al., 2003) anxiety is an unpleasant emotion characterized by terms such as 'concern', 'worry', 'stress', 'fear', which is to some extent experienced by all of us. However, Praško also points out that anxiety is a natural emotion experienced by everybody. This emotion is not always negative because it is often helpful and has an adaptive effect. It should also be noted that anxiety is part of everybody's life; the problem is if the frequency and intensity of anxiety experiencing have an increasing tendency that starts to cause problems in everyday life. According to Praško, an excessive emotion in the form of anxiety prevents natural life and adaptation to changing life conditions (Praško, 2003). In order to define its principles, anxiety must be distinguished from fear. Fear and anxiety are natural responses to a threat but in the case of fear such danger is clear and objective, while in the case of anxiety it is hidden and subjective (Pugnerová, Kvintová, 2016).

According to Erikson (Erikson, 2002), anxiety is a diffuse state of tension (caused by a loss of mutual regulation and subsequent failure of libidinous and aggressive control mechanisms) that magnifies and creates an illusion of external endangerment without suggesting appropriate defense mechanisms. Erikson also focuses on experiencing anxiety in children and claims that in childhood fear and anxiety are very close and indistinguishable, primarily because a child's immature organism is incapable of distinguishing between an internal and external, real and imaginary danger. Every child needs to learn this and for this purpose needs help from an understanding adult (Erikson, 2002).

Various literary resources agree that anxiety is to some extent innate and has a biological basis. Anxiety may develop as a result of complex effects, which include genetic predispositions, the personality of the individual and life events. This is also confirmed by Praško (Praško, Vyskočilová, Prašková, 2008), according to whom the cognitive behavioral model assumes innate vulnerability, which is in childhood joined by maladaptive learning. According to this model, anxious experiencing is learned either by imitating parents in childhood or is a result of maladaptive attitudes, which occur during maturing. Anxiousness is maintained by how individuals assess themselves, their environment and their future. Excessive and long-term anxiety has a negative effect on an individual's self-esteem, social experience, psyche and real potential.



In addition to innate predispositions that cause anxiety, the current Euro-American culture has a considerable effect on increased anxiety and neuroticism. Accelerated pace of life, rush, high expectations and performance orientation, all of this has a negative effect on the formation of the personality of an individual and an ability to adapt to new conditions.

Anxiety and stress in children in the first stage of elementary schools

The period around six years of age is significant especially in terms of the child's adaptation to a new school environment. The school becomes an important social milestone. Once preschool children are exposed to examination for school maturity, they find themselves in stressful situations. They need to address various tasks that have an influence on their future. Although they need not be aware of the seriousness of these tasks, they may sense it according to direct or consequential responses of parents, teachers, psychologists and physicians (Cap & Mareš, 2007). Children are vulnerable when they enroll in school and accept the role of a student, especially if they are sensitive, unprepared for school or immature.

According to Malá (2016) the following factors need to be considered in the assessment of children's anxiety: Developmental factor: assessment of the degree to which the child's brain is capable of distinguishing between a reasonable and logical threat based on real observation, and an unreal threat based on bad assessment, which does not correspond with what is observed. Maturation factor: identification of whether the child is able to distinguish between what is known and what is not (fear of strangers, this aspect is important for the survival of the child). Communicative factor: most of the child's emotions are expressed in a physical way, which means that anxiety is used by children to complain about physical problems. Children are also marked by increased visceral and emotional irritation, which is easily spread around the whole body, and greater mood instability decreased self-control and an ability of immediate relief.

Elkind (2009) calls today's children 'hurried children'. Similarly to other authors, he is concerned that the pressure of today's life forces children to mature more quickly and shortens their trouble-free childhood. According to Vágnerová (2005), an anxious student responds to usual situations as if they presented a threat, is in constant tension, is unable to concentrate, use own abilities and enjoy entertainment. Such children are incapable of adequate self-assessment and are unable to exploit their talents because they are burdened and exhausted by mental stress and negative anticipation. Today's children are forced to succeed not only in school but also in other spheres of life. According to Stuchlíková (2005), parents are often unconcerned about the fact that their child is anxious and that anxiety decreases their child's performance in school.

All of this causes much greater exposure of children to stressful situations that may lead to the development of anxiety disorders. Martinez (2015) claims that the current prevalence of anxiety disorders in children aged 7-11 years is 15.7%. The school is an additional stressor that may have a negative effect on children's mental health. This fact is confirmed by studies concluding that school stress is usual and that every student experiences at least one stressful situation in school per week. A higher prevalence of school stress occurs in children who have learning difficulties, which is also associated with negative experiencing (Kyriacou, 2003; p. 84). School situations are experienced in different ways. Emotional experiences affect students' performance and their attitudes to school, school results, social positions and acceptance by teachers or classmates. Especially in younger schoolchildren, emotional control is so important that it may become the source of failure (Vágnerová, 2001).

One of the major triggers for stress and anxiety in students in the first grade of elementary school is testing their acquired knowledge by means of tests. During written examination students experience excessive anxiety; in the Czech educational environment, this fact may present a significant barrier to optimum academic achievement. Cassidy and Johnson (in Jackson, 2015) claim that students exhibiting a high degree of anxiety associated with written testing achieve on average by 12 percentile points worse results independent of how much effort and



time they spend. Andrews & Wilding (2004), who primarily focus on anxiety associated with test situations, describe them as a physiological state, in which students experience excessive stress, fear, and discomfort during and prior to testing.

Although the Czech system of education is undergoing a period of renaissance in terms of educational approaches, supports joint education for all students and emphasizes a personalized approach to students, assessment of students' knowledge by means of tests is still the most frequent method. Although Czech education is regularly confronted with criticism, no radical measures have been taken to adjust the school environment to become a more comfortable place for learning and spending a substantial part of the day.

Anxiety reduction

Anxiety responses and anxiety coping can partially be influenced by the way of teaching (Vágnerová, 2005). Appropriate guidance has a calming, strengthening and healing effect; inappropriate guidance has an opposite influence (Matějček, 2011). To help the child alleviate anxiety means to help the child realize what is happening, localize the sources of anxiety and teach the child how to cope with these situations in an efficient way (Cohen, 2002, Verecka, 2002).

Effective methods of direct psychotherapeutic work with anxious children, which fall within the competence of clinical or school psychologists, include for example the following: imitation method – a student observes and has a tendency to repeat another student's behaviour, relaxation method or breathing exercises – a child is taught by suitable techniques to relieve anxiety in imaginary or real situations, abreaction method – reliving suppressed emotions in a safe and supporting environment, assertive training method – training of practical behaviour in certain situations and providing a child with safety in experiencing success and confidence in the child's conduct, the last example is rational-emotional therapy focusing on identification of irrational thoughts and efforts to process them in a rational way (Ellis, 2001, Matějček, 2011, Krowatschek & Domsch, 2007).

A more accessible method is reported by Krivohlavý (2001) and Kvintova, Kudlacek & Sigmundova, (2016) i.e. controlled physical activity, which has a positive effect not only on reducing anxiety but also on increasing positive self-assessment. Similarly, creative activities resulting in new and original creations, as stated by Holeček (2014), may help reduce anxiety.

General educational measures designed for anxious students are classified by Matějček (2011) into three tiers: 1. Encourage children's faith in themselves (self-esteem) and provide them with a sense of security in their actual environment. 2. Teach children to effectively control their strengths and weaknesses. 3. Help children build a system of safety measures that in the good time signal a danger of failure. Specific practical suggestions and documents serving as inspiration or applicable directly in lessons for the purposes of active learning about, preventing, mitigating and understanding anxiety can be found for example in publications by Pfeffer (2003), Buchwald (2013), Plummer (2013), Krowatschek and Domsch (2007), Černý & Grofová (2013).

Research objectives

The objective of this study is to identify the current degree of anxiety among students in the first stage of elementary schools. The testing was performed at two levels; prior to lessons and after lessons; then the level of actual anxiety was identified in a specifically demanding situation – prior to and after a written test. A partial objective was to compare the data by age, gender, and situation.

Methods

Anxiety was measured by means of the State-Trait Anxiety Inventory for Children – STAIC (Spielberger et al., 1973), adapted by Ruisel, Senka & Šebej (1983).



The advantage of this research tool is the duality in understanding anxiety as a state and a more stable personality trait. Due to this fact it is possible to comprehensively map anxious experiencing of an individual including specific manifestations of anxiety. This inventory also allows a qualitative assessment of situations, in which anxious feelings take place. The questionnaire is divided into two parts. These are self-report scales, one of which measures anxiety as the current state, while the other one measures the degree of anxiousness as a more stable state of personality. The scales can be used independently of each other. Each of the scales includes 20 items. In each of the items in the scale measuring current anxiety, the respondents choose one of three statements that best describes their current experiencing. In the scale measuring anxiety as a more permanent state of the personality, a single statement is selected that best describes how the respondent usually feels.

Regarding the fact that the present research study aims to examine whether the degree of anxiety changes by age, gender, and school environment, the scale measuring current anxiety was used.

Sample

The research sample consisted of 152 children, of whom 92 were boys and 60 were girls aged 6-11 years; average age was 8.41, MIN 6, MAX 11, SD 1.63. As far as ethical aspects are concerned, the legal guardians of all monitored students were informed about the content, course, and purpose of the testing at an informative meeting. At the same time, their written informed consent was given concerning the participation of their children in data collection, anonymity and processing and publication of the results of the study. The process of data collection respected the developmental level of the respondents, for example in the first and second grades the testing was carried out in small groups of up to 10 children.

Statistical data processing

The data were processed using the STATISTICA program, StatSoft, Inc. (2013). STATISTICA (Data Analysis Software System), version 12. For each variable, basic statistical quantities were calculated and distribution of normality verified. Normality was assessed using the Shapiro-Wilk normality test. Moreover, the paired t-test and Pearson correlation were applied. The level of statistical significance was tested at $\alpha \leq 0.05$; $\alpha \leq 0.01$; $\alpha \leq 0.001$.

Findings

Table 1 presents the levels of anxiety in the entire sample measured during the first measurement prior to lessons and second measurement after lessons. A statistically significant difference was measured between the higher anxiety level reported before lessons and the lower anxiety level reported after lessons.

Table 1. Degree of anxiety prior to lessons and after lessons in the entire sample

Variable	Mean	SD	N	Diff.	SD of diff.	t	Sv	p
Prior to lessons	32.697	7.336						
After lessons	28.997	7.993	152	3.710	8.311	5.508	151	0.000

Legend: SD-standard deviation, N-frequency, df= degree of freedom

Moreover, additional data were identified relating to above-average levels of anxiety in the entire sample. It was observed that prior to lessons, above-average levels of anxiety were reported by 25% (38) of students of the total sample of 152 students (sten scores 8-10); after lessons, above-average levels of anxiety were observed in 19% of students (29).

Table 2. Correlation of the degree of anxiety prior to lessons and after lessons in the entire sample

Variable	Average	Standard deviation	Age	Prior to lessons	After lessons
Age	8.408	1.629	1.000	0.253*	-0.193*
Prior to lessons	32.697	7.326	0.253*	1.000	0.415*



After lessons	28.987	7.993	-0.193*	0.415*	1.000

Legend: *p < .05000

Table 2 shows the associations between currently experienced anxiety and age established by means of the Pearson correlation coefficient. The degree of experienced anxiety is positively correlated with age (slight intensity), which means that increasing age increases the degree of experienced anxiety. On the contrary, after lessons a significant negative association was observed; increasing age decreases the degree of experienced anxiety.

An analysis of the anxiety scores in terms of intensity suggests that students in grades 1 and 2 show above-average anxiety levels: 15.2% of students prior to lessons, and 21.2% of students after lessons. Students in grades 3, 4 and 5 show a high anxiety score: 33% of students prior to lessons, and 16.2% of students after lessons.

The following tables (Table 3, 4, 5, 6) present gender-based differences in the degree of anxiety prior to lessons and after lessons, and experienced anxiety depending on age.

Table 3. Degree of anxiety prior to lessons and after lessons in boys

Variable	Average	SD	N	Difference	SD of difference	t	sv	p
Prior to lessons	33.630	7.446						
After lessons	29.043	7.530	92	4.587	9.111	4.829	91	0.000

Legend: *p < .05000

Table 4. Correlation between the degree of anxiety and age in boys

Variable	Average	SD	Age	Prior to lessons	After lessons
Age	8.50	1.64	1.00	0.05	-0.43*
Prior to lessons	33.63	7.48	0.05	1.00	0.26
After lessons	1.00	1.00	1.00	1.00	1.00

Table 5. Degree of anxiety prior to lessons and after lessons in girls

Variable	Average	SD	N	Difference	SD of difference	t	sv	p
Prior to lessons	31.267	6.957						
After lessons	28.900	8.719	60	2.367	6.742	2.719	59	0.008

Legend: *p < .05000

Table 6. Correlation between the degree of anxiety and age in girls

Variable	Average	Standard deviation	Age	Prior to lessons	After lessons
Age	8.27	1.64	1.00	0.57*	0.13
Prior to lessons	31.27	7.02	0.57*	1.00	0.65*
After lessons	28.90	8.80	0.13	0.65*	1.00

Legend: *p < .05000

As far as gender differences are concerned, it was demonstrated that in both genders the degree of experienced anxiety is statistically significantly higher prior to lessons than after lessons. Boys show a higher level of experienced anxiety prior to lessons than girls. After lessons, there are no significant differences in the degree of experienced anxiety.



At the same time, a correlation was demonstrated between age and experienced anxiety prior to lessons in girls. Increasing age in girls increases the degree of experienced anxiety prior to usual lessons ($r=0.57$). There is a moderately strong positive association between the degree of anxiety prior to lessons and after lessons ($r=0.65$). Girls with an increased degree of anxiety prior to lessons will report the same after lessons.

As far as boys are concerned, a significant negative association between age and the degree of anxiety was observed; increasing age in boys decreases the degree of experienced anxiety after lessons. It can be concluded that older boys are more relaxed after lessons than younger boys.

Table 7. Degree of anxiety prior to written test and after written test in grades 3 to 5

Variable	Average	SD	N	Difference	SD of difference	T	sv	p
Prior to test	38.187	8.855						
After test	27.465	6.997	86	10.721	10.236	9.713	85	0.000

Legend: SD-standard deviation, N-frequency, df= degree of freedom

The measurement of the currently experienced degree of anxiety prior to and after written testing included 86 students of the research sample from grades 3 to 5. Students from grades 1 and 2 were excluded because they only take a small number of written tests. The average age of the research sample was 9.7 years, MIN 8 and MAX 11, SD 0.81. An analysis of the degree of experienced anxiety prior to and after a specifically demanding school-based situation (written test) confirmed a significantly higher degree prior to testing rather than after testing. The t test criterion was carried out by the value of 9.71 at 85 degrees of freedom, the corresponding p value was 0.000.

In comparison with a usual school day without testing, the degree of experienced anxiety was significantly higher before testing than before a usual school day. The degree of anxiety after testing was comparable with the degree of anxiety after a usual school day.

A detailed analysis of anxiety levels revealed that of the group of 86 students, 51% showed an above-average degree of anxiety prior to testing (sten scores 8-10), after testing, above-average anxiety values were observed only in 9% of the students.

Limitations of the study

In all cases, the results could have been affected by intervening variables, such as changes concerning the respondents during the research period. However, it is very difficult to affect or eliminate these variables. The results could have also been influenced by an insufficient capability of introspection in especially anxious children, whose perception tends to be very limited.

Another potential source of inaccuracy of the results of the research study could be multiple testing within a short time period. Although the questionnaires were administered meticulously, some students might have remembered previous answers and might have used them or deliberately or without thinking changed them during the retest.

Regarding the fact that the data collection by means of testing was performed individually, in small groups, in various places, and in various classes, it was impossible to ensure identical conditions for all participants. The procedures and methods of data collection were always selected to be appropriate to the age of the participants; care was taken not to expose the participants to an increased risk of anxiety caused by completing the questionnaire or being in a new environment or situation.



Results, conclusions, and recommendations

The research study suggests that the average degree of anxiety in all students in the first stage of elementary school is significantly higher prior to lessons than after lessons. It can be assumed that classes and associated activities present a burden that increases anxiety, which is consistent with the conclusions formulated for example by Kopřiva et al. (1998) or Mlčák (1999). It should be noted however that of the entire sample, a high degree of anxiety is achieved by 25% of children prior to lessons, and 18.4% of children after lessons.

As far as gender-based differences are concerned, in their study Headley and Campbell (2011) state that girls show a twofold degree of anxiety symptoms as opposed to boys. Similarly, higher anxiety in girls is also mentioned for example by Vymětal (2004) and other authors. As suggested in their hypotheses, regarding their gender roles, boys might tend to admit feelings of anxiety less frequently. However, according to the present research study, boys seem to experience anxiety prior to lessons more than girls. While the degrees of anxiety after lessons are almost identical, with increasing age boys' anxiety after lessons decreases, in girls it increases in line with their degree of anxiety prior to lessons.

Anxiety related to testing represents a much more serious problem than many parents and teachers realize. As many as 16-20% of students report high anxiety scores, which makes it the most frequent negative aspect of academic achievement. A total of 18% of students reports a moderate degree of test-related anxiety (Cassady & Johnson, 2001; Jackson, 2015). An increased degree of anxiety might have a negative effect not only on the results of the test itself (Andrews & Wilding, 2004; Cassady & Johnson, 2001; Havlínová et al., 2006; Jackson, 2015).

To a large extent, the results of the present research on the degree currently experienced anxiety prior to testing are consistent with the mentioned studies and even exceed those results. In this research, an above-average degree of anxiety prior to testing was reported by 51% of students. The results corresponding to a very high degree of anxiety prior to testing (sten score 10) was achieved in the present study by 30% of students. This result could be related to age. Younger school-aged children are only building up their defense mechanisms, while older students already have some experience with testing.

The students' average anxiety score after testing showed to be lower than the average score of their anxiety after classes. This can be explained by Nakonečný's conclusion (2000), according to which anxiety reduction acts as a reward. Students who have undergone a difficult situation associated with anxiety then experience a state of relief and joy. The higher average score after lessons than after written testing can be explained by the findings formulated by Urbanovská and Škobrtal (2012). These authors explain that the period after lessons is marked not only by relief but also by concerns about the parents' negative reaction to academic failure, concerns about homework or things and phenomena not related to school.

What often happens is that teachers have a tendency to trivialize emotional problems and rather react to academic achievement and behavior, but it is emotional experiencing that might be the primary cause (Stuchlíková et al., 2005). Headley and Campbell (2011) focused on the ability of elementary school teachers to identify children with anxiety symptoms. According to the results, teachers are generally able to recognize a child who suffers from serious anxiety states and respond to them. However, they have problems identifying children with mild forms of anxiety from those who show serious disorders. It would surely be beneficial to enrich the present research study with teachers' responses aimed at identification of anxious children and compare them with the data collected.

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IGA_PdF_2017_033 Analysis of life satisfaction and self-concept in relation to the use of social networks in pre-service teachers.

References

- Andrews, B.; Wilding, J. M. (2004). The relation of depression and anxiety to life-stress and achievement in students. *British Journal of Psychology*. 95: 509–521. doi:10.1348/0007126042369802
- Atkinson, R. L., et al. (2003). *Psychologie*. 2., aktualiz. vyd., V Portálu 1. Praha: Portál, 751.
- Buchwald, P. (2013). *Stres ve škole a jak ho zvládnout*. Brno: Edika.
- Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary educational psychology*, 27(2), 270-295.
- Cohen, R. M., & Hrdlička, M. (2002). *Nejčastější psychické poruchy v klinické praxi*. Praha: Portál.
- Čáp, J. & Mareš, J. (2007). *Psychologie pro učitele*. Vyd. 2. Praha: Portál, 2007, 655 s.
- Černý, V., & Grofová, K. (2013). *Děti a emoce: učíme děti vnímat, poznávat a pracovat se svými pocity*. Brno: Edika.
- Elkind, D. (2009). *The hurried child*. Da Capo Press.
- Ellis, A. (2001). *Člověče, neboj se: jak ovládnout úzkost dřív než ovládne nás*. Praha: Lidové noviny.
- Erikson, E. H. (2002). *Dětství a společnost*. Praha: Argo.
- Havlíňová, M., Kopřiva, P., Mayer, I., Vildová, Z., Břízová, M., Číhalová, E., ... Zitková, B. *Program podpory zdraví ve škole: rukověť projektu Zdravá škola*. (2006). Program podpory zdraví ve škole: rukověť projektu Zdravá škola (2., rozš. vyd.). Praha: Portál.
- Headley, C., & Campbell, M. A. (2011). Teachers' recognition and referral of anxiety disorders in primary school children. *Australian Journal of Educational & Developmental Psychology*, 11, 78-90./
- Holeček, V. (2014). *Psychologie v učitelské praxi*. Praha: Grada.
- Jackson, R. (2015). *How to Tell if a Child Has Test Anxiety*. Psychology Today. Retrieved from: <https://www.psychologytoday.com/blog/school-thought/201503/how-tell-if-child-has-test-anxiety>
- Kopřiva, P., Vildová, Z., Mayer, I., Havlíňová, M., & Kolář, M. (1998). *Program podpory zdraví ve škole: rukověť projektu Zdravá škola*. Praha: Portál, 275 s.
- Krowatschek, D., & Domsch, H. (2007). *Do školy beze strachu: jak překonat obavy dětí z nepříjemných zážitků: rady pro rodiče dětí od 1. třídy do maturity*. Brno: Computer Press.
- Křivohlavý, J. (2001). *Psychologie zdraví*. Autor úvodu Vratislav SCHREIBER. Praha: Portál, 279 s
- Kvintová, J., Kudlacek, M., Sigmundová, D. (2016). Active Lifestyle as a Determinant of Life Satisfaction among University Students. *Anthropologist* 24, 1, pp. 179-185.
- Kyriacou, C. (2003). *Helping troubled pupils*. Nelson Thornes.
- Malá, E. (2016, 15. srpna). *Problémy s úzkostí a strachem*. Získáno 20. srpna 2016 z Šance dětem: <http://www.sancedetem.cz/cs/hledam-pomoc/rodina-v-problemove-situaci/psychicke-problemy-ditete/problemy-s-uzkosti-a-strachem.shtml#uzkost-a-uzkostne-stavy>
- Mareš, Jiří. *Pedagogická psychologie*. Vyd. 1. Praha: Portál, 2013. 702 s.
- Martinez, K. (2015). *The Unwanted Visitor: Anxiety in the Classroom*. Získáno 25. srpna 2016 z bc211: <http://www.bc211.ca/2015/03/the-unwanted-visitor-anxiety-in-the-classroom/>
- Matějček, Z. & Ráček P. (2011). *Praxe dětského psychologického poradenství*. Editor Jarmila KLÉGROVÁ. Praha: Portál, 342 s.
- Nakonečný, M. (2012). *Emoce*. Praha: Triton.
- Pfeffer, S. (2003). *Rozvíjíme emoce dětí: praktická příručka pro mateřské školy*. Praha: Portál.
- Plummer, D. (2013). *Učíme děti zvládat úzkost, obavy a stres: cvičení pro mladší školní věk*. Praha: Portál.
- Praško, J. (2003). *Jak se zbavit napětí, stresu a úzkosti*. Praha: Grada Publishing.
- Praško, J., Vyskočilová, J. & Prašková, J. (2008). *Úzkost a obavy: jak je překonat*. 2. vyd. Praha: Portál, 226 s.
- Pugnerová, M., Kvintová, J. (2016). *Přehled poruch psychického vývoje*. Praha: Grada.



- Ruisel, I., Senka, J., & Šebej, F. (1983). *Škála na meranie úzkosti a úzkostlivosti u detí ŠAD. Príručka*. Bratislava: Psychodiagnostické a didaktické testy.
- Spielberger, C. D., Edwards, C. D., Lushene, R. E., Montuori, J., & Platzek, D. (1973). STAIC preliminary man
- StatSoft, Inc. (2013). STATISTICA (data analysis software system), version 12. www.statsoft.com
- Stuchlíková, I. (ed.), Prokešová, L., Krejčí, M., Mazehóová, Y., & Kouřilová, J. (2005). *Zvládání emočních problémů školáků*. Praha: Portál.
- Urbanovská, E., & Škobrtal, P. (2012). *Sociální a pedagogická psychologie pro speciální pedagogii*. Olomouc: Univerzita Palackého v Olomouci.
- Vágnerová, M. (2001). *Kognitivní a sociální psychologie žáka základní školy*. Praha: Karolinum.
- Vágnerová, M. (2005). *Školní poradenská psychologie pro pedagogii*. Praha: Karolinum.
- Vymětal, J. (2004). *Úzkost a strach u dětí*. Praha: Portál.



A Suggestion On how Edmodo can Encourage a Lifelong Learning

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Abstract

Edmodo is basically a web application that is similar to Facebook but provides educational tools instead of a social media platform. Edmodo also reinforces classroom activities. Another benefit of Edmodo is that it allows teachers to create online classes. Teachers post assignments, lecture notes, exams, competitions, and also evaluate students and communicate with them via Edmodo. E-Learning makes it possible to learn about information and communication technologies. Applications such as Edmodo Classroom 2.0 makes it possible to learn even outside the classroom. These applications are viewed as solutions to insufficient class hours and issues that are experienced within the class. In the digital age, new generations tend to maintain different opinions and also different learning capabilities. It's important that we care about how this generation can learn and respond to diverse teaching methods for the sake of their future. Online activities that support a learning outside classroom is similar to other learning practices. Life-long learning is important for building the future of our education. It is a process that's alternative to formal education. It has no place and no time. Life-long learning aims to ensure the community is aware of all learning opportunities, it establishes a culture of learning so that people are excited by learning and they can enhance independent learning through technology. Students who use technology as a part of their life makes life-long learning necessary. E-learning environments and mass media are needed in lifelong learning activities to provide learning outside the school. In this study, a course work is explained with using Edmodo for life-long learning. It also explains how the learning continues in online environments and the benefits of life-long learning of Edmodo. In this way, it is thought that the researchers who study same subjects can benefit in an effective way.

Keywords: Life-long learning, Edmodo,

Introduction

Life-long learning, which allows people to accomplish self-realization, has become a social necessity by the development of technology. Information technology is a necessity to provide continuous education and to train individuals to have life-long learning skills. Cross (1981) said that one of the building blocks of life-long learning was the development that had happened in technology. Digital competence, namely having sufficient knowledge in information technology, has been counted among the eight qualifications required for life-long learning (Akbaş

& Özdemir, 2002). The most widely used technologies for life-long learning are distance learning tools, social media and open education systems. The realization of life-long learning through distance education and open education in the countries where the young population dominates will increase the human capital and turn those countries into information societies (Berberoğlu, 2010).



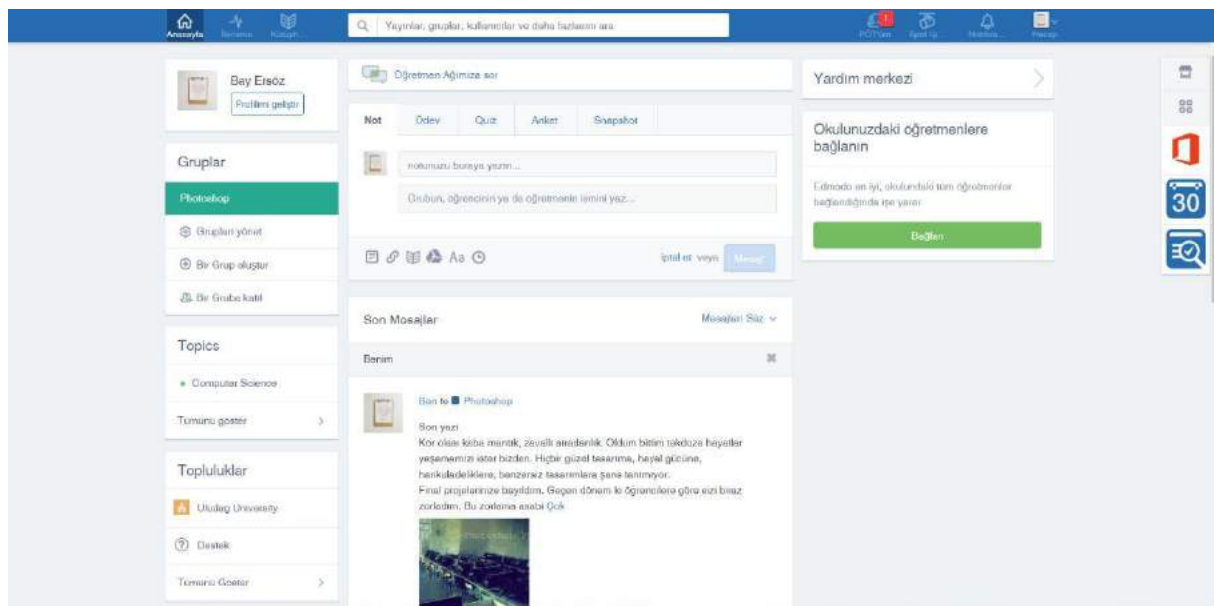
According to the Turkish Internet Metering Survey 2017 data, the new generation of users spend most of their time on social networks, especially on Facebook, Youtube, Instagram and Twitter. Social networks are websites that allow people to communicate with each other, create a circle of friends, and allow sharing of posts. Social networks have become a part of our lives as a realm utilized in every sector.

Today, the use of social networks for educational purposes has become quite popular. Various forms of social media allow for collaborative learning, communication over social networks, creation of learning groups, learning games, simulations, virtual worlds, immersive language learning, receiving guidance, messaging and collaborative projects – even when mobile – with people from all over the world. Online applications, educational social networks and similar applications provide education outside the classroom environment. Edmodo, Classroom 2.0 and Thinkbinder are the most known social networks used for educational purposes.

Edmodo

Edmodo is an educational social network with a structure similar to Facebook. It was founded by Borgi Hara and Hutter in 2008 and reached approximately 80 million users as of August 2017. With the help of Edmodo, students, teachers and parents join together in the same learning environment, creating a great learning community. Each user has his or her account, and to be a teacher one must have his or her account certified.

Figure 1 Edmodo homepage



Through Edmodo, teachers can create virtual classes and invite whoever they want to participate in these classes. According to Mathupayas's (2013) study, the most common applications on Edmodo are assignments, notes, comments, and file shares, in order. By creating a virtual classroom environment, Edmodo easily enables applications that are difficult to accomplish in the classroom. The basic practices and benefits provided by Edmodo are as follows:

Sharing: Teachers and students can share whatever they want on the main page of the course offered through Edmodo. Comments can be made under these posts shared. Moreover, interest areas can be followed, and all users on the globe can be reached through the posts shared. The posts provide interaction.

Assignments: Homework can be assigned to students in groups created by the teacher. In an assignment post, a delivery date can be determined, students' delivery dates of the assignment can be seen, and materials related to



the assignment can be added. Assignments also can be assessed easily via Edmodo and at the same time students can see the corrections made and the grades they get. Additionally, successful students can be rewarded with virtual badges. Badges provide gamification in education and increase the course motivation.

Library: Files, pictures and materials are kept in the library. Thus, materials used in lessons are stored orderly.

Users can use, download and send these materials to each other whenever they want.

Examinations and assessments: Examinations, quizzes and questionnaires can be easily administered via Edmodo, with the help of online forms. Assessments of these exams are also made online, and grades are assigned to students in the assignment grading section. Assigned grades, badges, and missed assignments are easily seen on the progress screen. Moreover, with the help of the export button, all the grades assigned to students can be downloaded by the teacher in the csv format.

The purpose of this research is to examine student views in terms of the usefulness of applications in Edmodo for life-long learning. The question “Can Edmodo applications be used for life-long learning?” was determined to be the problem statement, and accordingly, the research question was as follows.

1. What are the opinions of students about fulfilling life-long learning through Edmodo?

Method

In this study, Grounded Theory, one of the qualitative research methods, was used. Grounded Theory was developed in 1967 by Glaser and Strauss. In Grounded Theory, the researcher collects information through observations and materials as well as interviews. He creates categories by blending the data that he collects and clustering expressions that have similar meanings. Then, main categories are formed from these created categories.

Action research was adopted in the implementation of the method. Action research is a research approach that involves identifying problems related to the implementation process or collecting and analyzing data to understand and solve a problem that is already occurring. In this study, the practitioners were also the researchers and collected the data related to the problem that they determined while carrying on the application.

The participants of the study consisted of 22 randomly selected students who studied in the Department of Computer Education, Faculty of Education, Uludag University. An interview form was used as the data collection tool. The interview form was developed by the researchers. During the preparation of the interview questions, opinions of 2 subject matter experts were consulted, and the form was finalized by making necessary arrangements in the structured interview form. 22 students who were selected from the participants by simple randomization were directed open-ended questions.

The rest of the research data consisted of the interactions on Edmodo created by the students in the sample and the observation notes taken by the teacher. The data were collected through the answers given to the interview questions by the students participating in the research and then were analyzed. The interpretations that were obtained from the examined posts were coded in the context of the questions posed within the scope of the research. The resulting codes were grouped under categories. Then, frequency and percentage values of the categories were found.

Application Process

Students were given Photoshop education for 4 weeks. The lessons on campus were carried out together with Edmodo. The actions performed before, during and after the lessons are explained with pictures below.



The teacher shared subject-related materials with the students through Edmodo before coming to class (Figure 2). These materials included the pictures to be used in class, what topics were to be described, what students needed to read before coming to class and objectives. Related materials could be easily downloaded and used during class.

Figure 2 Related materials



After the lecture, the students prepared their designs using the technique they learned and shared them through Edmodo. The teacher followed these shared items from his computer and informed the student of the errors in the design. At the end of the lesson, the teacher shared the subject of the weekly homework, delivery date and other things to do. When students left the classroom, they did their homework until the subsequent week and uploaded it on Edmodo.

Figure 3 Assignments





The teacher assessed all the assignments on the system, rewarded successful students with virtual badges, and shared the profile of the best weekly student on the main page.

Figure 4 Best of week



Students shared their decent designs willingly on the home page. The teachers gave feedback for the assignments turned in in the first week of the course, and the students were asked to complete the missing items. In the weeks that followed, the teachers left complementary comments only under outstanding works shared by the students who improved themselves.

The lessons continued like that throughout the whole semester. At the end of the semester, the final project was shared over Edmodo again. The students uploaded the projects they prepared to the system between the relevant dates. The teachers assessed the projects. The students' end-of-the-semester grades, weekly assignments, midterm and final projects, and all of the badges they received were easily calculated by the assessment application provided by Edmodo.

Figure 5 Assessment via Edmodo

Photoshop

Yeni İhtisame Dönerine hoş geldin!

Eski sürümüne erişimin derki bahatlarında kaldırılacağı için unutma. Sonunda mı var? Buraya tıkla.

Notlar

Not Verme Örneği: 1

Öğrenci	Harfide teslim meyan ödevler	Klasör (Vize %50)	Teslim (Klasör) (Vize %50)	Yoklari çizm ile kendi portreleri yapıp, çizimi ödevi	Müspiteleyon	Karportali	AFAD Logo Yansıması	Karportali konulu Çaps Yansıması	Album kapağı tasarımı
Sarp Kocak	100%	Teslim edildi	Teslim edildi	5/5	5/5	5/5	Teslim edildi	Teslim edildi	5/5
Muayyen Kocak	98%	Teslim edildi	Teslim edildi	4/5	5/5	5/5	Teslim edildi	Teslim edildi	5/5
Zeynep Merve Mucul	98%	Teslim edildi	Teslim edildi	4/5	5/5	5/5		Teslim edildi	5/5
Naime Okay	98%	Teslim edildi	Teslim edildi	5/5	5/5	4/5		Teslim edildi	5/5
Kubra Cengiz	100%	Teslim edildi	Teslim edildi	5/5	5/5	5/5			5/5
Emelke Sengul	100%	Teslim edildi	Teslim edildi	5/5	5/5	5/5		Teslim edildi	5/5
Emine Arslan	97%	Teslim edildi	Teslim edildi	4/5				Teslim edildi	5/5
Zeynep Suluoğlu	98%	teslim edildi	Teslim edildi	5/5		4/5		Teslim edildi	5/5
Fatih Tatar	100%	Teslim edildi	Teslim edildi	5/5	5/5	5/5		Teslim edildi	5/5
Ahmet TETİK	97%	teslim edildi	Teslim edildi	5/5	4/5	5/5	Teslim edildi	Teslim edildi	5/5
Musa TİFTİKCI	100%	Teslim edildi	Teslim edildi	5/5					



Findings

In the coding of the data, the answers given by the students relating to their views on Edmodo were used. Responses close to each other were combined under the same codes and then categorized. Their opinions about learning with Edmodo were gathered under the categories of Sharing, Interaction, Assignment, Reward and Assessment.

Table 1. Opinions of students

Categories	Code	Examination
Sharing	Before lesson	Sharing materials to help us prepare for the next lesson
	Students' post	Likes to shares, comments written by friends
Interaction	Student-student	Students' correspondence between themselves
	Teacher- student	Interactions between teachers and students, comments.
	Other	People working in the same area communicate via Edmodo
Assignment	Assignment posts	How the assignments will be and the contents
	Submit assignment	Expressions that define when to deliver the assignments
Reward	Badges	Opinions of students about badges they have won
	Teacher's comments	Teacher's comments on student sharing
Assesment	Feedback	Teacher feedback during the course and during the preparation and sharing of assignments
	Exam	Making exams, assignments and other projects on Edmodo

The posts that the teacher shared about the subsequent lesson allowed the students to come prepared for the lesson. Sharing a lesson's objectives before coming to class intensified the belief that the lesson would be productive. A student answered the question "Were the materials helpful that the teacher shared about what he would teach before coming to class?" as follows:

"Of course, at least you have a chance to make a preliminary preparation about the subject. By doing research, you benefit your friends and teachers as well as yourself during the lesson. It is very successful in this respect."

The teacher showed to the students that he was knowledgeable and had a full grasp of the subject by the posts he

shared. This allowed the teacher to become a model to be followed in the eyes of the students.

Students had positive opinions about the assignment application. It gave the teacher a great deal of convenience to assign, collect and assess assignments. The response of a student to the question "Have you got an assignment through Edmodo, how did you submit it, and how was the assessment?" was

"Yes, I got assignment. I submitted it as if I was sending a file through the social networks. In this respect, it provided convenience. The assessment results were reported via Edmodo."

This shows the ease with which students receive and deliver assignments. For the teacher to share the successful posts and well-prepared assignments on the homepage, to give badges and to make encouraging comments to the posts increased the student motivation. To the question "Did you share anything through Edmodo? How were the attitudes of your teacher and friends to those posts? How did they feel to you?" a student gave the following answer:

"Yes, I did. When my teacher and my friends liked and commented on some of my posts, my enthusiasm for the lesson was growing, and their liking of my work positively affected me towards the lesson."



The fact that teachers rewarded outstanding and successful assignments with their comments increased the students' interests towards the lesson.

Discussion, Conclusion, and Implications

The data from the interview and observation forms were combined under 5 main categories as a result of the analyses based on the Grounded Theory framework. The claim that it would be possible to accomplish life-long learning using Edmodo was presented by comparing the interview data and the relevant literature to the life-long learning dynamics. The main themes created in this context were "Self-Realization, Flexibility, Motivation and Learning by Having Fun, Teachers as a Role Model, and Information and Communication Technologies". These themes, which were determined by the Grounded Theory method, were the building blocks that enabled the life-long learning with Edmodo.

Self-realization

Students agreed that Edmodo facilitated education, encouraged learning, and supported independent learning. Students could improve themselves from any location with access to the Internet by receiving any education they wanted.

The student-teacher and student-student communication increased greatly with the help of the nature of the interaction provided by Edmodo. A student who had never spoken in class since the beginning of the year shared 17 posts on Edmodo and even sent a greeting card to his friends.

Life-long learning helps the individual complete his personal development and fulfill his self-realization by ensuring that he is able to advance in the field in which he is interested. Thus, the quality of life of the individual increases.

Flexibility

Life-long learning can be adapted to changing needs. New technologies move with the technologies that will make learning easier. Students can learn without any time constraints also outside the classroom through e-learning environments and technology-based education, and can continue learning lifetime. They do not have to worry when they miss a lesson because with the help of Edmodo, they can listen again and review their notes. Throughout the examination period, by looking at all the posts shared on the homepage, they can understand what is taught in the course, how the course is carried out and by which assignments the course is reinforced. Lecture notes are always at their disposal.

Motivation and Learning by Having Fun

Learning environments need to have instruments that increase the life-long learners' motivations. With the help of Edmodo, motivation can be achieved in a number of ways. The virtual badges given to the successful actions of students have a great effect on the participation of the students in the classes. In the light of the answers given by the students, it is seen that the assignments given to the students were done more effectively as the students got badges, that the badges were encouraging, and that the students' interest in the courses increased. The answer a student gave to the question "Did you share anything through Edmodo, and how did it feel to you?" was

"Yeah. Attitudes were very good. Criticisms are very important for me to improve myself. Likes, humorous comments, memes, civilized negative views all added up many things to me and will continue to add up. Of course, it is pleasing for your posts to be appreciated. Moreover, comments are very important in terms of seeing the reflection of your ideas on the other side."

Another student expressed his feelings about the badge he received as follows:

"I got a badge as the champion of the week :) Thanks to this badge, I was listening to the lessons willingly every week and I was making more efforts to do the assignments in accordance with the topic of that week."



For students, Edmodo is a gamification tool. It encourages students to learn by having fun and increases their motivation to lessons.

Teachers as a role model

In the life-long learning approach, the teacher should be a role model, should guide and assist the students.

The teacher must deal with every student in the class in the same way and find solutions to their problems. In a classroom setting, it is not possible for a teacher to deal with everyone in a crowded classroom. Many students lose interest in the course and school due to the fact that the decent works they prepare are not seen and evaluated by the teachers (Karakelle & Canpolat, 2010).

The students complained that the teacher did not equally attend to everyone in the classroom. It was found in their comments that Edmodo amplified this interaction.

With the help of Edmodo, the teacher can share what he will teach in the lesson before he comes to class and the preparations to be made by the students before coming to class. Additionally, the fact that the teachers provided instant feedback to the comments shared by the students and easily assessed all the assignments on the same screen made them role models in the eyes of the students.

Information and communication technologies

The individual needs the use of technology in life-long learning. Information and communication technologies form the basis among the most important factors affecting life-long learning (Gönüç, Odabaşı & Kuzu, 2012). Learning with Edmodo is one of the best examples to be given about how learners can benefit from technology. In extracurricular settings, the individual meets the need for learning to the greatest extent through the Internet.

The students found Edmodo very useful because they were able access to the resources of the classroom and were able to communicate with the teacher personally any time they wanted outside the classroom with the help of Edmodo.

The students participating in the study spent an average of 6-7 hours per day on the Internet. The use of technology in education requires also the teacher to get in the virtual world. This allows the teacher to see the expectations and needs of the new generation and to understand how they learn better. It can be said that the use of Edmodo in life-long learning has many positive effects. Edmodo is an effective educational social network that enhances motivation in life-long learning, enhances the teacher-student interaction, and helps people fulfill self-realization. Effective use of technology and the popularization of e-applications and e-learning environments directly influence the increase in life-long learning.

References

- Akbaş, O., & Özdemir, S. M. (2002). Avrupa Birliğinde yaşam boyu öğrenme. *Milli Eğitim Dergisi*, 155(156), 112-126.
- Berberoğlu, B. (2010). Yaşam Boyu Öğrenme İle Bilgi Ve İletişim Teknolojilerin Açısından Türkiye nin Avrupa Birliğindeki Konumu. *Bilgi Ekonomisi ve Yönetimi Dergisi*, 5(2).
- Cross, P. (1981). Adults as Learners: Increasing Participation in Lifelong Learning.
- Gönüç, Selim, H. Ferhan Odabaşı, and Abdullah Kuzu. "Yaşam Boyu Öğrenmeyi Etkileyen Faktörler." *Gaziantep University Journal of Social Sciences* 11.2 (2012).
- IAB Türkiye İnternet Ölçümleme Araştırması Mart 2017. Date of access (01.09.2017)
https://iabturkiye.org/UploadFiles/TopTwentyFiles/Internet_audience_toplist_03_2017.pdf
- Karakelle, S., & Canpolat, S. (2010). Tükenmişlik düzeyi yüksek ilköğretim öğretmenlerinin öğrencilere yaklaşım biçimlerinin incelenmesi. *Eğitim ve Bilim*, 33(147), 106-120.



The Possibility of Predicting the Future Dominant Hand in Preschool Children

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Abstract

The aim of the research was to establish the possibility of predicting the dominant hand in preschool children with the motor test *Speed of performing sideways steps to the left and to the right side*. Research sample consisted of 232 children, both genders, aged 66 to 84 months. Sideways steps speed laterally to the left and to the right side was measured, and then its possible interconnection with the dominant hand were tested. The result have shown no statistically significant difference in the speed of sideways steps test. However, it was established that the left-handed respondents were faster performing *sideways steps to the left* ($M = 3.81$ sec). On average, somewhat lower results were obtained for the right-handed respondents in *sideways steps to the right* ($M = 3.89$ sec). Even though there was no statistically significant difference between the two groups of respondents, the obtained data indicate a symmetric bilateral transfer. Results of this research still indicate possible connections, so it would be necessary to conduct additional testing which would include genetic predisposition of the children, as well as previously acquired motor experience, and it would also be necessary to construct a new test with a longer distance for the sideways steps test up to 15 or even 20 meters. Authors believe that longer distance would result in more statistically significant differences and thus could help in the possible prediction of the dominant hand in preschool children.

Keywords: left handedness, motor sideways step test, right handedness

Introduction

Human brain as the centre of nerve activity alignment represents the main part of the central nervous system. It differs from that of most vertebrates and primates due to the rapid development of functional hemisphere, previously called hemispheric dominance. The term lateralization indicates the existence of differences in the functioning of the left and right hemispheres of the brain. Lateralization is a consequence of the brain hemisphere specialization, the dominance of one side of the body manifested as greater skill, strength and preferred use of the eye, hand or leg on that side of the body. The question is whether lateralization is an inborn or acquired characteristic of humans. Previous research has not provided an unambiguous answer to that question. Some researchers believe that lateralization is the consequence of brain hemisphere specialization (Sperry, 1967). Other researchers argue that lateralization is not just a physiological phenomenon which can be explained by the structural and functional differences between left and right brain hemispheres (Clark, 1957). In most people, left brain hemisphere is dominant and as one hemisphere always controls the opposite side of the body (due to nerve fibres crossing), for most humans the right side of the body is the dominant one. The left side of the brain localizes the functions of speech, writing, computing, abstract thinking, symbolic functions and relationships, as well as logical analysis. Complete lateralization, i.e., the consistent preference of the eye, hand and leg on one, mostly right side of the body, is observed only in humans. Lateralization represents the highest nerve specialization and in phylogenetic development emerges at the same time as the development of the use of hands in work and speech in communication. Forming lateralization is an aspect of the development that takes place during the first four years and ends between ages six and seven (Andrilović & Čudina, 1987). Besides physiological, lateralization is affected by psychological and social factors, too. The fact that most people



perform perceptive-motor tasks with their right hand has led to the conclusion that this phenomenon is normal and correct. However, in our ancestors the dominance of the left hand as well as the ambidexterity existed to a greater extent than today. This fact is confirmed by the findings of historic artefacts from the early Neolith, shaped for the left-handed to a greater proportion than in the contemporary times. This very fact poses a dilemma of whether this reduction came about due to changes in the demands of modern society (Clark, 1957). Today we live in a world where everything we use is primarily intended for the right-handed population. In exceptional cases, objects intended for the left-handed can be found.

Therefore, the left-handed children are in an inappropriate environment and are forced to adapt to the objects intended for the right-handed population. Left-handedness has long been the cause of conflicting opinions. Some saw it as a deviation from normality, as something abnormal and even pathological. Others explained left-handedness as a habit or a bad habit (Kosinac, 2007, p. 138), which resulted in many parents and teachers forcing children to write with their right hand. It should be emphasized that play as the basis for children's learning has an important role in the lateralization. Children express themselves spontaneously through play, which facilitates the development of lateralization in favour of children, i.e. children should not be encouraged to use the nondominant hand but should be allowed to develop according to their affinities.

Consequences of redirecting left-handedness to right-handedness can manifest in multiple areas of development: speech, motor development, character and intellectual development. Recent studies on brain development suggest the dominance of the left hand should not be abolished or redirected. Nevertheless, left-handed children need help in acquiring motor skills during learning, for example, learning how to set up and use writing supplies (Brković, 2000). These facts have pointed to the need for timely determination of the dominant hand in preschool age.

Methodology

Research Sample

Research sample in this study included 232 children of both genders aged 66 to 84 months, who attended several kindergartens in the city of Zagreb. The sample consisted of 122 boys and 110 girls. The research was conducted in accordance with the *Ethical code of practice for research with children* (Dulčić, 2003), i.e. parental consent for participation in the research was obtained for each participant, and each child could withdraw from participating in the research at any moment.

Variable Sample

For evaluating the speed of performing sideways steps to the left and to the right, MKKS motor test (sideways steps) was used.

Test description: Along a distance of 8 m, the respondent should move as fast as possible sideways and cross the target line, taking care not to cross their legs at any time. The test was repeated three times to the left and then three times to the right side.

For the assessment of the dominant hand, the children were observed when choosing a pencil for drawing on paper.

Data Analyses

The collected data were processed by basic descriptive statistics, and Kolmogorov-Smirnov test was made to test the normality. Central and dispersion parameters (arithmetic mean, standard deviation, coefficient of skewness, coefficient of curvature, minimum and maximum value) are shown in Table 1.

When processing the data obtained from three different measurements, the best results were taken for statistical processing, i.e., each child's best results since they best describe child's ability. As children at this age are prone to rapid loss of concentration, the best result of three measurements gives the most realistic picture of their potential. Reliability of internal consistency of the tests was expressed through Cronbach's alpha and the



homogeneity of tests was calculated with the correlation between the items. Differences between children who dominantly use their left or right hand were estimated by ANOVA statistical method for independent samples.

Results and Discussion

In this study, the total number of respondents was 232, and out of that number 16 respondents had left dominant hand while for the remaining children (N = 216) the right was the dominant hand. Table 1 shows the basic, central and dispersion parameters and Cronbach's alpha for the speed of performing sideways steps to the left and to the right vs. the dominant hand.

Table 1. Basic descriptive parameters and Cronbach's alpha

Dominant hand		MKKSR	MKKSL
right hand	M	3.89	3.95
	SD	0.51	0.53
	Min	2.78	2.97
	Max	5.54	6.11
	a3	0.65	0.83
	a4	0.46	1.08
	N	216	216
left hand	M	3.91	3.81
	SD	0.41	0.38
	Min	3.24	3.10
	Max	4.57	4.48
	a3	-0.04	-0.20
	a4	-1.20	-0.37
	N	16	16
Cronbach's α		0.90	0.90

Legend: M - arithmetic mean; SD - standard deviation, Min - minimal value of the results; Max - maximum value of the results; a3 - coefficient of skewness; a4 - coefficient of curvature; N – number of respondents; Cronbach's α - Cronbach's alpha; MKKSR - sideways steps to the right side; MKKSL - sideways steps to the left side.

The Kolmogorov-Smirnov test showed normal distribution of the obtained data. Both tests showed good reliability since Cronbach's alpha for both tests was high ($C\alpha = 0.90$) in addition to good homogeneity as a property of the composite tests (Dizdar, 2006) where all the correlations are significant at $p < 0.05$ (MKKSR: 0.70 – 0.79; MKKSL: 0.71 – 0.82). The best results for arithmetic mean are observed in the group of left-handed respondents, who performed sideways steps to the left side test (M = 3.81), that is, they performed this test the fastest. The second best result was achieved by the right-handed respondents, who did sideways steps to the right on average in 3.89 seconds. The left-handed respondents did the sideways steps test to the right side on average in 3.91 seconds, while the lowest average score was obtained by the right-handed respondents on the sideways steps test to the left side with average arithmetic mean of 3.95.

However, examining the results by groups of respondents, it is clear that the best results were obtained by the right-handed respondents when performing both tests: sideways steps to the right side and sideways steps to the left side, as their minimum result were 2.78 seconds and 2.97 seconds, with the right-handed children being faster on the test to the right than to the left side. Moreover, left-handed children had a lower minimum score, i.e., the fastest left-handed child (Min = 3.10 seconds) was slower than the fastest right-handed child (Min = 2.78 seconds). Similarly, the left-handed child achieved a better result in the speed of sideways steps to the side of the dominant hand than to the side of the nondominant hand (Min = 3.24). In addition, the slowest children achieved the lowest results for the nondominant hand.

Differences between the groups were determined by univariate variance analysis (ANOVA), i.e., the differences between the arithmetic means for each group of respondents (left-handed and right-handed) were determined for the tested variables (Table 2). Groups were homogeneous, based on the F value of the Levene's test coefficient and its level of significance (p), which was not statistically significant for either of the tested variables (MKKSR



- 0.46; MKKSL - 0.16). ANOVA analysis indicates there is no statistically significant difference between the left-handed and right-handed children in the tested variables. Since the level of significance for both tests - the sideways steps to the right side ($p = 0.89$) and the sideways steps to the left side ($p = 0.30$) was not below the 0.05 threshold, it can be concluded that there are no statistically significant differences between these groups of children.

Table 2. Significance of difference between groups, right-handed and left-handed vs. sideways steps to the right side and sideways steps to the left side

Variable	Levene's test		ANOVA	
	F	P	F	p
MKKSR	0.53	0.46	0.01	0.89
MKKSL	1.97	0.16	1.08	0.30

Legend: Levene's test -homogeneity test of variance of the analysed groups, F – Levene's coefficient, p - Levene's coefficient level of significance; ANOVA - univariate variance analysis; F - F ratio, p - Significance of F ratio, MKKSR - sideways steps to the right side; MKKSL - sideways steps to the left side.

Intrinsic motivation is one of the most important factors in children of this early age. Although in various situations a person can perform complex motor skills very successfully, even if he/she has never been in a similar situation before (Magill, 1998), experience of long-time preschool teachers indicates that when children are asked to perform given tasks for the first time or if they feel they would not be good enough and skilled they tend to avoid it and it can be difficult to motivate them to try the task at all. Additionally, asking such children to perform a motor activity as fast as possible, in most cases is unsuccessful. These factors, genetics, pre-motor experience and motivation are just some of the causes that may have affected the results of this research.

Conclusion

The conducted research did not confirm the connection between the dominant hand and better performance of the sideways steps to the one or the other side, thus the possibility to apply the constructed test for assessing dominant hands in preschool children has not been confirmed. However, even though the results show no statistically significant difference, it was noticed that the left-handed respondents had better results when performing sideways steps to the left, as well as the right-handed children when performing sideways steps to the right. The results point to the trend of faster execution of the given test, to the side that is the same as the dominant hand, i.e. symmetrical bilateral transfer occurred although the results showed no statistically significant difference.

The symmetry and asymmetry of bilateral transfer is still an open question to which researchers have not yet found an answer. It is generally accepted that the bilateral transfer is asymmetrical, which would indicate that more transfer occurs from the dominant hand/leg to the nondominant hand/leg (Magill, 1998).

The authors suggest that a possible reason for the absence of a statistically significant difference between the left- and right-handed children and the motor test *Speed of performing sideways steps to the left and to the right side* is the length of targeting line set at 8 meters, that is, the set distance which children had to overcome was too short to obtain statistically significant differences. As the results of this study indirectly point to possible differences, additional research should be carried out in which the dominant hand at this age would be determined by the modified tests.

In addition, the research data indicate that the children achieved the best results in the second and third measurements. As the research was conducted with preschool children, it is very likely that children would need to take a certain form of sideways-steps training. Experience working with children reveals that many of them do not understand what the term maximum speed means or what it means to run at a maximum speed. This reflects the complexity of research with children of preschool age.



This research has shown that such tests have a future in working with preschool children in predicting the dominant hand, but before these tests, it is necessary to conduct additional research to construct a measuring instrument that would enable the prediction in an appropriate manner.

References

- Adams, G. L. (1965). Effects of eye dominance on baseball batting. *Research quarterly for exercise and sport*, 36, 3-9.
- Blythe, S. G. (2008). *Uravnoteženi razvoj. Što sve dječji mozak treba za zdrav razvoj od rođenja do školskih dana [Balanced development. Whatever baby brain needs for a healthy development from birth to school days]*. Pušćine: Ostvarenje.
- Brković, A. D. (2000). *Razvojna psihologija [Developmental psychology]*. Užice: Učiteljski fakultet.
- Bubić, A. (2003). *Ispitivanje interakcije kod rješavanja Stroop zadatka [Investigating interaction when solving Stroop task]*. Diplomski rad. Zagreb: Odsjek za psihologiju Filozofskog fakulteta.
- Clark, M. M. (1957). *Left handedness*. London: University of London.
- Dizdar, D. (2006). *Kvantitativne metode [Quantitative methods]*. Zagreb: Kineziološki fakultet Sveučilišta u Zagrebu
- Dudaš, G. (1989). Lateralizacija slušanja raznovrsnih govornih znakova *[Lateralization of listening to various voices]*. *Govor*, 6, 65-74.
- Dulčić, A. (Ed.) (2003). *Etički kodeks istraživanja s djecom [Ethical Code of Research with Children]*. Zagreb: Državni zavod za zaštitu obitelji, materinstva i mladeži: Vijeće za djecu Vlade republike Hrvatske.
- Fink, W. H. (1938). *Probit analysis*. Cambridge: University press.
- Kosinac, Z. (2007). Ljevorukost - odraz dominacije jedne od moždanih polutki ili nešto drugo *[Left-handedness - a reflection of domination one of the brain tracts or something else]*. *Školski vjesnik*, 56(1-2), 137-149.
- Lund, F. H. (1932). The dependence of eye-hand coordination upon eye dominance. *The American Journal of Psychiatry*, 44, 756-762.
- Magill, R. A. (1998). *Motor learning. Concepts and applications*. Boston: McGraw- Hill.
- Sperry, R. W. (1967). *Mental unity following surgical disconnection. The Harvey lectures*. New York: Academic press.
- Sperry, R. W. (1981). *Some effects of disconnecting the cerebral hemispheres. Nobel Lecture*. Stockholm: Almqvist & Wiksell.
- Starc, B., Čudina-Obradović, M., Pleša, A., Profaca, B. i Letica, M. (2004). *Osobine i psihološki uvjeti razvoja djeteta predškolske dobi [Characteristics and psychological conditions of the development of preschool age child]*. Zagreb: Golden marketing – Tehnička knjiga.
- Vasta, R., Haith, M. M. i Miller, S. A. (1998). *Dječja psihologija [Child Psychology]*. Jastrebarsko: Naklada Slap.



Changes in Morphological Characteristics of Preschool Boys During Fifteen Years Period

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Abstract

The aim of this research was to determine the trend of changes in some morphological characteristics of preschool boys aged 6,5 years, who attended kindergartens in Zagreb, Croatia. The study included 374 boys. Four measurements were carried out every five years in the time span between 1998 and 2013 (in the year 1998, 2003, 2008, and 2013). The boys were measured by eleven anthropometric measurements and the body mass index (BMI) was calculated. ANOVA with Bonferonni post-hoc test was used to establish the differences. The results indicate that most of the measured variables showed statistically significant differences, while significant differences were not observed only in the BMI and upper arm circumference. The cause can be found in increased body height, which could diminish the importance of increased body mass. The obtained results confirm the negative impacts of inadequate diet and sedentary lifestyle on the increase of subcutaneous adipose tissue in preschool aged boys.

Keywords: anthropometric measurements, 6 year-old boys, inharmonious trend

Introduction

Determining the trends in the development of anthropometric dimensions is one of the most important tasks in studying the consequences of man's contemporary sedentary lifestyle. Such a lifestyle is characterized by a reduced need for movement. Consequences are increasingly present in the health status of people (Pulgarón, 2013). It has been established that there is a continuous increase in body weight throughout the world. Thus, on the worldwide level the percentage of obese children increased from 4,2% to 6,7% between 1990 and 2010. The same authors consider that by continuing this trend this percentage will increase to 9,1% by 2020, which would mark the year with almost 60 million obese children worldwide. The highest percentage would be found in Africa with around 12% (de Onis, Bloosner, & Borghi, 2010). With higher body weight and obesity, some morphological characteristics of children would certainly change, such as increased levels of subcutaneous adipose tissue (Olds, Tomkinson, Ferrar, & Maher, 2010). Such a trend was also established in Croatia, which is among the countries that are significantly affected by this negative trend, according to some indicators of the World Health Organization (WHO, 2014).

Such trends affect entire families. It is a known fact that in families in which parents have increased body weight these values usually will reflect on the morphological characteristics of their children, who will also be heavier or even obese. Increased body weight and obesity are established across Europe, only with differences with regard to the geographic regions. Countries that belong to the Mediterranean region and the British Isles are particularly vulnerable. Thus, the proportion of children with an inappropriate body weight in these countries is about 30%, while on the other hand, eastern and northern European countries has a smaller percentage of such children in the population (Cattaneo et al., 2009). Similar indicators have been recorded almost all over the world (Al Alawi, Abdulatif, Al Dhubaib, Mohammed, & Al Ansari, 2013).

As Croatia belongs to the Mediterranean countries, it could be assumed that negative trends are present, which has been confirmed by some research (Horvat, Mišigoj-Duraković, & Prskalo, 2009). It has been determined that the values of some morphological characteristics of preschool children have significantly increased during five years, primarily body weight and subcutaneous fat tissue. Other anthropometric measures did not change significantly.

Beside the assessing trends of increased body weight and obesity, it is certainly necessary to work on programs that would increase the level of participation of children in various forms of kinesiological activities. In this way,



with an adequate diet, the possibility of utilizing caloric intake would be increased (Armstrong, Lambert, & Lambert, 2011).

The aim of this research was to determine possible changes in some morphological characteristics during the fifteen year period of preschool boys who attended kindergartens and were in their final year before attending elementary school. Particular attention was directed on measures that characterize a possible increase of the subcutaneous adipose tissue and which can indicate negative consequences of contemporary lifestyle. The boys were measured between the years 1998 and 2013 on five-year intervals.

Methods

The study sample consisted of 374 preschool boys aged 6.5 years ($\pm$ 6 months). The measurements were carried out four times over a period of 15 years. In 1998 the sample included 59 boys, in 2003 90 boys, in 2008 there were 108 preschool boys, and in 2013 the sample comprised 108 boys.

The sample of variables consisted of eleven anthropometric measures: body weight, body height, sitting height, arm length, upper arm circumference, forearm circumference, thigh circumference, calf circumference, upper arm skinfold, abdominal skinfold, subscapular skinfold, and body mass indeks (BMI) was calculated. Parents' consents were collected for all of the participants. Trained measurers carried out measuring following the standard protocol during morning hours in three kindergartens in the city of Zagreb, Croatia.

Collected data were processed using the statistical program SPSS 23. The central and dispersive parameters were calculated for all the variables. The ANOVA was used, with Bonferonni post-hoc tests (variances for all variables were homogenous) for the purpose of determining secular changes in anthropometric measures of preschool boys over the period of fifteen years, i.e. in order to establish the differences in morphological characteristics between boys with the measurements conducted four times over the period of fifteen years. All other presumptions for applying the ANOVA were satisfied: all variables were ratio-type, revealing normal distributions, with all subsamples of participants higher than 30. The results were commented on the level of significance of $p < 0.05$.

Results and Discussion

Results of the ANOVA which reflect secular trends between the generations of boys at the age of 6.5 ($\pm$ 6 months), for all the measured anthropometric variables of preschool boys, collected during the period between 1998 and 2013 are shown in Table 1.

Table 1. Results of the ANOVA between boys at the age of six for all anthropometric variables

Variables	Year	Mean	Std.Deviation	F (df=3,37)	Differences between groups
Body weight	1998	22,68	4,71	4,360**	1998 - 2008 1998 - 2013
	2003	23,92	3,97		
	2008	24,97	4,19		
	2013	24,44	3,53		
Body height	1998	118,32	5,81	14,814**	1998-2003 1998-2008 1998-2013
	2003	121,94	5,53		
	2008	123,38	5,94		
	2013	123,92	4,87		
Sitting height	1998	65,08	6,14	4,793**	1998-2003 1998-2013
	2003	67,01	3,39		
	2008	66,75	3,24		
	2013	67,29	2,69		
Arm length	1998	49,49	3,76	23,177**	1998-2003 1998-2013 2008-2013
	2003	46,78	2,76		
	2008	49,88	2,41		
	2013	46,79	4,46		
Upper arm circumference	1998	18,18	2,08		



	2003	17,70	1,71		2003-2008
	2008	18,65	1,90	6,164**	2003-2013
	2013	18,67	1,85		
	1998	17,98	1,68		
Forearm circumference	2003	17,12	1,31	4,510*	1998-2003
	2008	17,32	1,72		
	2013	17,59	1,41		
	1998	33,99	3,93		
Thigh circumference	2003	34,79	3,57	2,338	
	2008	35,50	3,82		
	2013	35,12	3,25		
	1998	24,72	2,13		
Calf circumference	2003	24,52	2,20	7,466**	1998-2008
	2008	25,81	2,45		2003-2008
	2013	25,47	1,90		2003-2013
	1998	7,91	3,97		
Upper arm skinfold	2003	11,88	4,35	33,734**	1998-2003
	2008	12,05	3,51		1998-2008
	2013	8,03	3,44		2008-2013
	1998	4,09	3,14		1998-2003
Abdominal skinfold	2003	8,79	5,75	20,713**	1998-2008
	2008	9,38	5,20		2003-2013
	2013	6,27	3,86		2008-2013
	1998	4,63	2,88		
Subscapular skinfold	2003	6,73	3,88	15,701**	1998-2003
	2008	7,87	2,58		1998-2008
	2013	5,75	3,13		2008-2013
	1998	16,07	2,09		
BMI	2003	16,03	1,95	,876	
	2008	16,30	1,73		
	2013	15,89	1,94		

Legend: Bold – the highest and the lowest values of means and statistically significant differences; * significant differences at $p < 0.05$; ** significant differences at $p < 0.01$

The research was conducted in order to determine possible differences that would occur among boys aged 74 ± 6 months. Measurements began in 1998 and then periodically, every five years, 6,5 year-old boys were checked with eleven anthropometric measurements belonging to latent dimensions: longitudinal, circular, body mass, and subcutaneous adipose tissue. In addition, from the obtained results the body mass index (BMI) was calculated with the formula suggested by the Centers for Disease Control and Prevention (CDC, 2000).

From the obtained results it is evident that there is statistically significant difference at the level of significance of .01 in almost all measured variables. The results confirm that during the measurement period there were significant changes in morphological characteristics of boys in this age group.

The greatest changes were observed in the measures of the level of subcutaneous adipose tissue, subscapular, upper arm and abdominal skinfold. Especially, this refers to the differences in the amount of subcutaneous adipose tissue at the beginning of measurements and in the year 2008. During the entire measurement, that year showed the worst indicators regarding the number of overweight and obese children. Thus, in the sample of boys, the percentage of overweight children increased from 14% in 1998 to almost 19%, while the number of obese children increased to almost 11%. Research results show that in that year in the population of 6.5 year-old boys, the percentage of overweight and obese children increased to almost 30%. At that time, the problem of increasing body weight was being noticed around the world, including Croatia (Poljičanin & Benjak, 2013). Due to the perceived problem, changes in diet were implemented. Around the year 2008, under the influence of scientific and professional community in the kindergartens of Zagreb, significant changes were introduced in children's nutrition (Ministry of Health and Social Care, 2007). More fresh vegetables and fruits were introduced into their diet. The results of this study show that the trend of weight gain in the following period has stopped, thus, the latest anthropometric



measurement of preschool boys, related to body weight and subcutaneous adipose tissue, shows more appropriate results. In all the measures of subcutaneous adipose tissue there was a significant reduction, which is particularly evident in the last five-year period between 2008 and 2013. Body weight decreased, but still relatively. Also, the circumference measures had the highest values mostly during the third measurement. These results were expected, since they are affected by the subcutaneous adipose tissue values. In addition to the measures that estimate body fat, an increase in body height during the fifteen-year period is also noticeable. This finding again confirms that the increase in body height is still present (Tanner & Phyllis, 1990).

In addition to the changes in children's nutrition in kindergartens, there is a need to expand the number of programs in which the time that children spend in kinesiological activities would increase (Sindik & Horvat, 2015; Mišigoj-Duraković, S. Heimer, Gredelj, Z. Heimer, & Sorić, 2007).), as well as their efficiency (Horvat & Bokor, 2005).

Conclusion

The results of this fifteen-year research of preschool boys aged 72 ± 6 months, prior to their elementary school enrolment, showed that after the year 2008, when all values of body mass and subcutaneous adipose tissue were the highest, there was a moderate decrease and stopping of that trend. That year the values indicated that a significant number of boys that age is overweight and obese. The percentage was about 30% of all the boys who participated in the measurements. After the year 2008 there was a change in the children's diet in kindergartens. The amount of fresh fruit and vegetables were increased and carbohydrates were decreased. These changes after a five-year period (2013) showed their effect. Unlike body mass and adipose tissue measures, differences in BMI during the fifteen-year period were not statistically significant. It can be assumed that it was affected by an increase in height that, in some way, amortizes increase in body weight. In addition, it is necessary to carry out the WHO (2012) recommendations regarding the minimum time per day that children should spend in physical activity, which is 60 minutes.

References

- Al Alawi, S., Abdulatif, F., Al Dhubaib, D., Mohammed, H., & Al Ansari, A. (2013). Prevalence of overweight and obesity across preschool children from four cities of the Kingdom of Bahrain. *International Journal of Medical Science and Public Health*, 2(2), 507-510.
- Armstrong, M., Lambert, M.I., & Lambert, E.V. (2011). Secular trends in the prevalence of stunting, overweight and obesity among South African children (1994–2004). *European Journal of Clinical Nutrition*, 65, 835–840.
- Cattaneo, A., Monasta, L., Stamatakis, E., Lioret, S., Castetbon, K., Frenken, F., et al. (2009). Overweight and obesity in infants and pre-school children in the European Union: a review of existing data. *International Association for the Study of Obesity*, 11, 389-398.
- Centers for Disease Control and Prevention (2000). *What is a BMI percentile?* Retrieved May 9, 2017. from <https://www.cdc.gov/growthcharts/data/set1clinical/cj411023.pdf>
- de Onis, M., Bloosner, M., & Borghi, E. (2010). Global prevalence and trends of overweight and obesity among preschool children. *American Journal of Clinical Nutrition*, 92, 1257-64.
- Horvat, V., & Bokor, I. (2005). Koliko je stvarno vrijeme vježbanja. *Zbornik Učiteljske akademije u Zagrebu*, 10, 341-346.
- Horvat, V., Mišigoj-Duraković, M., & Prskalo, I. (2009). Body size and body composition change trend in preschool children over a period of five years. *Collegium Antropologicum*, 33(1), 99-103.
- Mišigoj-Duraković, M, Heimer, S., Gredelj, M., Heimer, Ž., & Sorić, M. (2007). Tjelesna neaktivost u Republici Hrvatskoj. *Acta Medica Croatica*, 61, 253-258.
- Olds, T.S., Tomkinson, G.R., Ferrar, K.E., & Maher, C.A. (2010). Trends in the prevalence of childhood overweight and obesity in Australia between 1985 and 2008. *International Journal of Obesity*, 34, 57–66.
- Poljičanin, T., & Benjak, T. (2013). *Hrvatski zdravstveno-statistički ljetopis 2012*. Zagreb: Hrvatski zavod za javno zdravstvo.



- Pulgarón, R.E. (2013). Childhood obesity: A review of increased risk for physical and psychological comorbidities. *Clinical Therapeutics*, 35(1), 18-32.
- Sindik, J., & Horvat, V. (2015). Struktura stavova roditelja prema tjelesnom vježbanju predškolske djece i njihovih korelata. *Naša škola*, 70(240), 57-70.
- Tanner, J.M., & Phyllis, E.B. (1990). *Worldwide variation in human growth* (2nd ed.). Cambridge (England); New York: Cambridge University.
- The Ministry of Health and Social Care (2007). *Izmjene i dopune Programa zdravstvene zaštite djece, higijene i pravilne prehrane djece u dječjim vrtićima*. Retrieved June 10, 2017. from http://narodne-novine.nn.hr/clanci/sluzbeni/2007_11_121_3527.html
- WHO (2012). *Global Recommendations on Physical Activity for Health*. Retrieved June 14, 2017. from http://whqlibdoc.who.int/publications/2010/9789241599979_eng.pdf
- WHO (2014). *Obesity and overweight*. Retrieved May 19, 2017. from <http://www.who.int/mediacentre/factsheets/fs311/en//index.html>



Perceived Life Satisfaction and Burnout Syndrome Among Teachers

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Abstract

The teaching profession is one of the professions considered vulnerable to a phenomenon called the burnout syndrome. Life satisfaction, which is a part of well-being, is supposed to be associated with a degree of burnout. The aim of the present study is to investigate the current susceptibility to the burnout syndrome among elementary school teachers and secondary school teachers in relation to subjectively perceived overall life satisfaction and work satisfaction. The data were obtained by means of the Maslach Burnout Inventory and the Life Satisfaction Questionnaire. The results showed that one-third of teachers were significantly emotionally distressed and showed a low level of personal satisfaction. One-fifth of teachers reported a high level of depersonalization. Teachers in elementary schools are significantly more emotionally exhausted than teachers in secondary schools. The level of work satisfaction is significantly negatively associated with the level of emotional exhaustion, and positively associated with overall life satisfaction and the level of personal satisfaction.

Keywords: Burnout, emotional exhaustion, life satisfaction, teachers.

Introduction

The teaching profession is classified in the group of helping professions. Helping professions refer to occupations that involve a regular and personal contact with people in a helping relationship. Teaching is another human service profession including regular interpersonal interactions with students and colleagues (Spittle et al., 2015, Křivohlavý, 2012). Furthermore, the society has placed an increased pressure on teachers, who are expected to actively engage in their work, to expand their activities beyond teaching, to be emotionally involved in the results of education, and to consider their profession rather a mission (Urbanek, 2005).

The term stressor indicates any circumstances, conditions or stimuli that produce stress and trigger a stress response in an individual, and are considered by the individual as situations threatening his/her mental or physical well-being (Pugnerová, Kvintová, 2016). Professional stressors are all stress situation and stimuli related to a profession. Professional stressors in the teaching profession are to some extent specific and differ from stressors in other professions (Urbanovská, 2001). Stress in the teaching profession is not only the result of a stress situation that arises in the course of teaching, but is also associated with other types of stress that teachers are exposed to, including their relationship with other teachers, superiors, parents and various educational institutions (Průcha, 2002).

The top five work-related stressors among teachers in Europe (ETUCE, 2007) were identified as working intensity, role overload, increased number of students in class, pupil misbehaviour and lack of support from management (Cefai, Cavioni, 2014). Similarly, in the UK, USA, Canada, Australia and New Zealand the most common teachers' stressors were identified as heavy workload, excessive reforms, and unacceptable pupil behaviour, and moreover emotional demands, performance appraisal and lack of time for personal and professional development (Williamson and Myhill 2008; Bricheno et al. 2009; Cefai, Cavioni, 2014). In many studies, the conflict of roles (informant, friend, supervisor) is considered one of the predictors of burnout. This is confirmed by the results of research studies revealing positive correlations between the conflict of roles and the level of burnout among teachers. The burnout syndrome specifically includes the dimensions of emotional exhaustion and depersonalization (Lee & Ashforth, 1996). Czech research studies add further stressors: time stress, permanent link with work-related issues, and low social and financial appreciation (Novotná, Miňhová, 2000; Holeček, Jirincová a Miňhová, 2001; Paulík, 2012).

Burnout

Burnout can be defined as a multidimensional chronic syndrome marked by exhaustion and withdrawal from one's work as the result of prolonged interpersonal stress (Maslach & Jackson, 1986, Schwarzer, Schmitz &



Tang, 2000). Burnout has been associated with decreased job performance, health consequences, and an increased probability to leave the profession in a variety of fields, including teaching (Maslach, Schaufeli, & Leiter, 2001; Richards et al., 2014). Lavian (2012) considers burnout a precursor to teachers' intention to leave their teaching professions. Rumschlag (2017) believes that burnout is the main reason for teachers leaving their professions in the 21st century. Hong (2010) specifies the reason for teachers leaving their professions as emotional burnout. The author adds that pre-service teachers tend to have naive and idealistic ideas about the teaching profession, which might result in burnout already in the first years after starting the teaching profession. This is also confirmed by a research study by Urbanovská (2011). According to Riggs (2013), approximately 9.5% of young teachers leave the teaching position during or after completion of the first school year.

It is generally agreed that the symptoms of burnout tend to be work-related and situation-specific. Burnout can be considered as prolonged job stress, in which work-related demands exceed an individual's resources, including a clear disparity between the initial effort and final effect. It could be characterized as a progressive loss of idealism, energy, and purpose in people working in helping professions (Cherniss, 2016). Work enthusiasm as a factor associated with burnout is also reported by Hagemann (2012, p. 10), who adds other factors such as length of experience, personal changes in management, change in orientation (from mission to performance), or lack of support of the teaching staff or bullying in the workplace. Hagemann (2012) adds that significant factors supporting burnout include a feeling of loneliness in the profession without sufficient supervision, lack of free time for relaxation, or breaks missing the purpose of relaxation.

Teachers who show symptoms indicating a high degree of burnout, but stay in the teaching profession, might experience a lower degree of motivation for transferring knowledge, which might have a negative effect on the quality of teaching (Cherniss, 2016), students' achievement, quality of attitudes towards colleagues and students, and general school development (Brunsting, Sreckovic, & Lane, 2014). Jinfeng et al. (2016) deal with the negative influence of the burnout process on an individual's motivation for knowledge sharing. Some research studies suggest that teachers tend to underrate their health and be less satisfied with their health than individuals in different professions (Paulík, 2013). For example in a research study by Sigmund, Kvintová, Pugnerová & Hřebíčková, (2014) teachers reported worse assessment than nurses, doctors, public servants, and sales representatives. At the same time, the intensity of health problems and the feeling of overall deterioration of teachers' health increases with age and length of teaching experience, and is also associated with decreased in job satisfaction (Paulík, 2012).

Life satisfaction

The concept of *life satisfaction* is an interdisciplinary construct without a clear terminological definition (Křeménková et al. 2017). Life satisfaction tends to be understood as one of the dimensions of the well-being construct (Kvintová et al., 2016). Keyes, Shmotkin, Ryff (2002) distinguish two concepts associated with well-being. The first is called subjective well-being (SWB), which according to Diener (1994) includes both the cognitive component representing conscious assessment of one's own life, and the emotional component consisting of the positive and negative emotion (Diener, Oishi, & Lucas, 2003). In other words, SWB can be defined in terms of life satisfaction and a balance of positive and negative emotional states (Hřebíčková, Blatný, Jelinek, 2010). Individuals with high SWB typically have a higher level of life satisfaction, positive mode, optimism and joy, and have less negative emotions such as sadness, anxiety or anger (Diener et al., 1997). The second concept represents psychological well-being (PWB), which is associated with addressing existential challenges and issues such as the meaning of life and personal growth (Hřebíčková, Blatný, Jelinek, 2010). Wood et al. (2009) refers to other components, including positive relations with others, autonomy, environmental mastery, and self-acceptance.

Regarding the stability of the construct of life satisfaction, scientific literature describes two perspectives. The first represents the traditional trait-like perspective, which is based on a dispositional/tendency approach. This approach is associated with stable personality characteristics and assumes considerable temporal stability and



cross-situational consistency (Diener, Lucas, 1999). The other represents a constructionist approach, which considers contextual intervening variables that affect the level of life satisfaction and therefore supports the measurements of the consequences of these interventions, i.e. fluctuations in life satisfaction judgements (Heller et al., 2006). It should be noted that a problematic aspect of the latter perspective is the low probability of repeating the measurement under identical conditions.

Research studies suggest a positive correlation between life satisfaction in teachers and high-quality education, professional achievement and other aspects of effective teaching (Baker & Martin, 2009; Spittle et al., 2011). A satisfied teacher has a positive effect on the class climate (Baker & Martin, 2009), is more creative and open to introducing new teaching approaches (Veen et al. 2005; Spittle et al., 2011). A satisfied teacher is more involved in the development of authentic human relationships with students and between students (Reynolds & Muijs, 2005), but also has a more positive attitude towards educational reforms and various intervention programmes (Spittle et al., 2011).

Research objectives

The main aim of the present study is to investigate the current susceptibility to the burnout syndrome among elementary school teachers and secondary school teachers in relation to subjectively perceived overall life satisfaction and work satisfaction. The following research questions were formulated: What is the prevalence of the burnout syndrome among elementary and secondary school teachers? What is the overall life and work satisfaction in elementary and secondary school teachers? What is the relationship between the level of the burnout syndrome and overall life and work satisfaction?

Methods

The data on the level of the burnout syndrome were collected by means of a self-report inventory called the Maslach Burnout Inventory (hereinafter referred to as MBI) designed by C. Maslach et al.(1986). According to Kebza and Šolcová (2003) this is the most frequently used method for measuring the burnout syndrome. The MBI is designed to assess three components of the burnout syndrome: emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA). It consists of 22 questions, of which 9 relate to the area of emotional exhaustion, 5 to depersonalization and 8 to the level of personal accomplishment. Emotional exhaustion and depersonalization are negative, on the other hand the third area of personal accomplishment is positive. In each item, the respondent considers two answers, i.e. the frequency and intensity of emotions. The answers are indicated on a 7-8-point rating scale. The frequency category is indicated on a 0-6 scale (0 = never, 1 = a few times a year or less, 2 = once a month or less, 3 = a few times a month, 4 = once a week, 5 = a few times a week, 6 = every day). The intensity category is indicated on a 0 to 7 scale (0 = never, 1 = slightly, 4 = moderately, 7 = significantly, very strongly). The critical value for the burnout syndrome is 17 points and higher in emotional exhaustion, 5 points and higher in depersonalization and 33 and lower in personal accomplishment. The validated Cronbach's alpha is 0.83 for frequency and 0.89 for intensity (Maslach & Jackson, 1981).

Individual dimensions of the burnout syndrome may be characterized as follows:

The dimension of emotional exhaustion is characterized by a state of emotional exhaustion, loss of zest for life, wearing out, loss of interest and strength for any activity, depletion, debilitation, and fatigue (Singh, & Arora, 2014). It is considered the most relevant indicator of the burnout syndrome.

Depersonalization is related to behaviour of an individual towards other people. This condition occurs when an individual does not receive the necessary positive feedback from those who the individual takes care of. This condition results in bitterness towards these persons, loss of respect and deference, or detached behaviour. The level of personal accomplishment represents a risk especially to those individuals who lack healthy self-confidence. Regarding the fact that these persons are not self-confident, they lack enthusiasm for dealing with these situations (Křivohlavý, 2012, p. 55). The last dimension is personal accomplishment, which expresses a tendency to negative assessment of oneself in relation to work and other people, and feelings of competence.



Life satisfaction was investigated by means of the Life Satisfaction Questionnaire (LSQ) developed by J. Fahrenberg, M. Myrtek, J. Schumacher and A. Brähler (2001). This questionnaire is used to capture the level of overall life satisfaction but also life satisfaction in ten significant life areas. These areas are as follows: Health (HEA), Work and employment (WOR), Financial situation (FIN), Leisure (LEI), Marriage and partnership (MAR), Relationship with own children (CHI), Own person (OWP), Sexuality (SEX), Friends, acquaintances and relatives (FAR), Housing (HOU). For each area, seven statements are provided; each respondent makes an assessment on a seven-point scale (from ‘very satisfied’ to ‘very dissatisfied’). For the calculation of the level of overall life satisfaction, the following areas are not included: Marriage and partnership (MAR), Relationship with own children (CHI) and Work and employment (WOR). In the present study the authors used only the following partial outcomes of the questionnaire: overall life satisfaction and work-related satisfaction.

Sample

The survey included a total of 122 teachers from the Olomouc region. 58 were elementary school teachers; 64 were secondary school teachers. The average age of the entire research sample was 45.56 years, SD 11.87, MAX 69 and MIN 24. The overall variability of the research sample was between 24 and 69 years of age. The most numerous age category was 46-55 years, followed by 25-35 years. The length of teaching experience ranged from 1 to 47 years.

In terms of respecting the code of ethics, all participants in the survey were fully informed of its purpose and of a possibility to terminate their participation at any time without giving a reason. All participants were informed of further data processing and ensuring anonymity. Each participant was involved on a voluntary basis and consented to data processing and publication.

Statistical processing

The data were processed using the STATISTICA programme, StatSoft, Inc. (2013). STATISTICA (Data Analysis Software System), version 12. For each variable, basic statistical quantities were calculated and distribution of normality verified. Normality was assessed using the Shapiro-Wilk normality test. Moreover, the paired t-test and Pearson correlation were applied. The level of statistical significance was tested at $\alpha \leq 0.05$; $\alpha \leq 0.01$; $\alpha \leq 0.001$.

Findings

During an analysis of various dimensions of the burnout syndrome it was observed that in the total sample of 122 teachers, almost one-third (28%) reported a high level of emotional exhaustion, which is considered a significant indicator of the burnout syndrome (see. Table 1). The average value of emotional exhaustion of the entire sample was 20.6; this value is in the category of medium to high risk of the burnout syndrome (range 17-26), MIN 0 (2 respondents) and MAX 49 (1 respondent).

Table 1. Individual dimensions of the burnout syndrome - entire sample

Dimensions of MBI	N	Mean	Low degree	Medium degree	High degree
			%	%	%
Emotional exhaustion (EE)	122	20.6	45.9	26.2	27.9
Depersonalization (DP)	122	8.10	49.2	27.9	22.9
Personal accomplishment (PA)	122	35.8	31.2	21.3	47.5



Table 1 also presents the percentage of respondents reporting a medium degree of emotional exhaustion. This is reported by 32 teachers (26.2%). A low risk of the burnout syndrome was reported by almost a half of the respondents (45.9%).

As far as depersonalization is concerned, the average value of the entire sample of teachers was 8.1, which means a medium risk of the burnout syndrome (range 7-12), MIN value was 0 (9 respondents) and MAX 24 (2 respondents). A high degree of depersonalization was reported by 23% of teachers, a medium degree of depersonalization was reported by 34 teachers (28%). As in the case of emotional exhaustion, in the category of depersonalization almost 50% of respondents reported a low level of depersonalization.

The last dimension of the burnout syndrome is personal accomplishment. It was observed that lower values of personal accomplishment led to a decreased risk of the burnout syndrome. The average value of personal accomplishment of the entire sample was 35.79; this value is in the category of a medium risk of the burnout syndrome (range 32-38), MIN 10 (1 respondent) and MAX 51 (1 respondent). As far as the percentages in various categories of personal accomplishment are concerned, a high degree of personal accomplishment was reported by 48% of respondents, a low level by 31% of teachers.

The authors also compared the values of individual dimensions of the burnout syndrome among respondents from various types of schools – elementary schools (N=58) and secondary schools (N=64) (see Table 2). Using the Student's two-sample t-test at a level of significance $\alpha = 0.05$ and $\alpha = 0.01$, a significant difference was observed in the item of emotional exhaustion and personal accomplishment. A higher level of emotional exhaustion was reported by elementary school teachers. Secondary school teachers are less emotionally exhausted and show significantly higher level of personal accomplishment. The differences in the values of depersonalization were not statistically significant.

Table 2. Correlation between the burnout syndrome and type of school

Variable	ES Mean	SS Mean	ES SD	SS SD	t	p	df	F-ratio variances	p- variances
EE	23.88	17.00	12.18	14.29	2.87	0.04	122	1.38	0.22
DP	7.97	8.24	6.51	7.19	-0.21	0.82	122	1.21	0.44
PA	33.69	38.10	10.12	7.28	-2.74	0.00	122	1.93	0.01

Legend: ES- elementary school sample, SS- secondary school sample, SD- standard deviation, EE- emotional exhaustion, PA-personal accomplishment, DP-depersonalization, OLS-overall life satisfaction

The authors also examined the correlation between the independent variable of length of teaching experience (TE) and the dimensions of the burnout syndrome. As suggested in Table 3, using the Pearson correlation coefficient at a level of significance $\alpha=0.05$ a significant correlation was identified between length of teaching experience and emotional exhaustion and depersonalization. In contrast, in the case of personal accomplishment, no significant correlation was observed.

Table 3. Pearson correlation coefficient: correlation between teaching experience and the burnout syndrome - entire sample

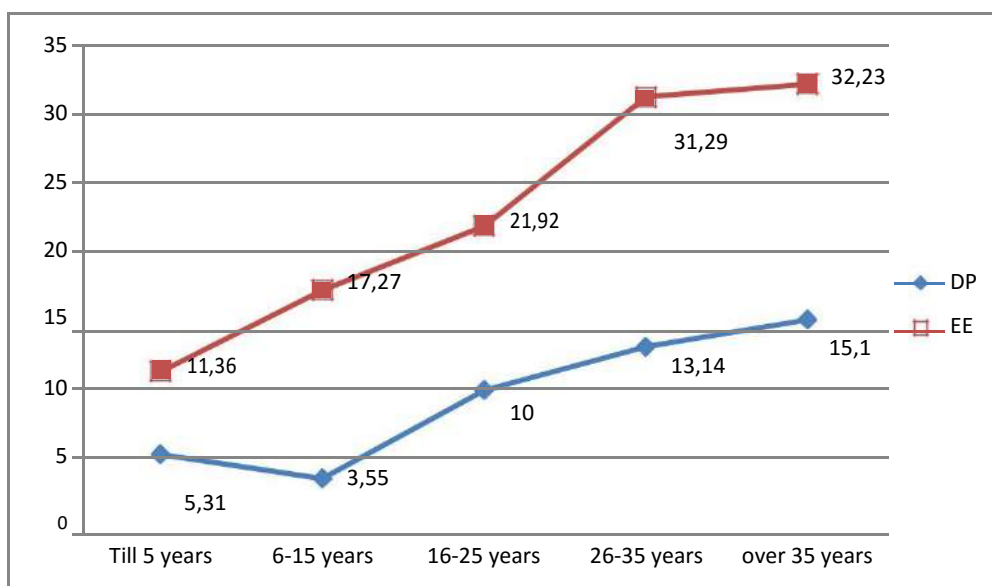
Variable	N	Average	SD	EE	PA	DP
Teaching experience	122	19.28	13.33	0.48*	-0.24	0.39*

Legend: SD- standard deviation, EE- emotional exhaustion, PA-personal accomplishment, DP-depersonalization,
* $p < .05000$



Graph 1 below presents the changes in the level of emotional exhaustion (EE) and depersonalization (DP) depending on the length of teaching experience. The values indicate the averages in the monitored dimensions of the burnout syndrome in respondents with the corresponding length of teaching experience. The results of the present study suggest that increasing length of teaching experience leads to a linear increase in emotional exhaustion. Similarly, the level of depersonalization increases with increasing length of teaching experience. Respondents with at least 26 years of experience report average values that indicate a high risk of the burnout syndrome.

Graph 1. Development of EE and DP depending on teaching experience



Another area of the research was life satisfaction (see Table 4). A test using the Pearson correlation coefficient suggested an indirect correlation between overall life satisfaction (OLS) and emotional exhaustion (EE). It may therefore be concluded that increasing overall life satisfaction leads to decreased emotional exhaustion (EE) and vice versa, increasing emotional exhaustion (EE) leads to decreased overall life satisfaction (OLS). A negative correlation was also demonstrated between overall life satisfaction and length of teaching experience. It can be concluded that increasing teaching experience leads to decreased overall life satisfaction. Direct correlation was revealed between the overall life satisfaction and personal accomplishment (PA). In the last categories (DP), the Spearman correlation did not reveal any significant associations with overall life satisfaction.

Table 4. Pearson correlation coefficient: correlation between OLS, burnout syndrome and teaching experience

Variable	N	Average	SD	EE	PA	DP	TE
OLS	122	253.34	33.48	-0.44*	0.21*	0.01	-0.27*

Legend: TE-teaching experience, SD- standard deviation, EE- emotional exhaustion, PA-personal accomplishment, DP-depersonalization, OLS-overall life satisfaction, * $p < .05000$

Table 5 shows the correlation between work-related satisfaction and the dimensions of the burnout syndrome, and overall life satisfaction. The average level of work-related satisfaction in the monitored sample was 35.93; minimum value 26, maximum value 46. The average value of life satisfaction was 253.44; minimum value 155 (1 respondent), maximum value 306 (1 respondent). Most values were in the range of 230- 297.



The following Table 5 shows the correlation between work-related satisfaction and the burnout syndrome, and overall life satisfaction. The testing was performed by means of the Pearson correlation coefficient at a level of significance $\alpha=0.05$. The results suggest that those respondents who are more satisfied at work show lower values of emotional exhaustion (indirect correlation). A significant positive correlation was demonstrated between work-related satisfaction and the level of personal accomplishment, as well as overall life satisfaction (direct correlation). It may therefore be concluded that increasing work-related satisfaction leads to decreased emotional exhaustion, increased performance and personal accomplishment, and increased overall life satisfaction.

Table 5. Pearson correlation coefficient: correlation between WOR, burnout syndrome and overall life satisfaction

Variable	N	Average	SD	EE	PA	DP	OLS
WOR	122	35.93	4.72	-0.57*	0.30*	-0.09	0.51*

Legend: WOR-work satisfaction, SD- standard deviation, EE- emotional exhaustion, PA-personal accomplishment, DP-depersonalization, OLS-overall life satisfaction, * $p < .05000$

Results, Conclusions and Recommendations

The results of the present study, similarly to other studies, suggest that the area of the burnout syndrome in teachers is a topical issue. Over the past two or three decades, burnout has been researched extensively in association with helping professions, such as nursing and social work. Numerous studies have been conducted to analyse the syndrome from different perspectives. The teaching profession belongs to one of the most hotly-debated domains that is prone to the burnout syndrome (Ghanizadeh & Jahedizadeh, 2015).

In the present research study, the Maslach Burnout Inventory was used to provide information about the prevalence and intensity of the three burnout dimensions. The study revealed that almost one-third of teachers showed a high degree of risk of burnout in the area of emotional exhaustion. The same percentage was observed in teachers reporting low personal accomplishment, i.e. another aspect contributing to burnout. More than one-fifth of respondents showed a high degree of risk of burnout in the area of depersonalization. The total number of respondents who achieved a medium or high value in the burnout dimensions (except personal accomplishment, where low and medium values are added) suggests that almost a half of teachers are at risk of the burnout syndrome and about a half successfully resist the burnout syndrome. Therefore, the authors of the present study agree with the conclusions formulated by Arvidsson et al. (2016).

The importance of emotional exhaustion as a significant predictor of the burnout syndrome is emphasised by many studies. For example, a study aimed at British teachers examined the effect of teachers' work on various burnout areas and a highly demanding nature of the teaching profession was confirmed (Kinman, Wray, Strange, 2011). This dimension is closely associated with the other two mentioned areas - depersonalization and personal accomplishment. This is also confirmed by Křivohlavý (2012). The author explains that in the process of burnout, the first symptom is emotional exhaustion. The reaction to emotional exhaustion is depersonalization, and finally these two factors cause a decrease in the level of personal accomplishment, which is associated with a decrease in work efficiency and loss of its sense.

Teacher burnout is associated with a multiple of causes and consequences (Ghanizadeh & Jahedizadeh, 2015). Examples of factors contributing to burnout are as follows: role overload, work pressure, classroom environment and self-esteem (Pishghadam & Sahebjam, 2012), other factors include: personality types (neuroticism and extraversion) and emotional intelligence (Dorman, 2003). However, the most commonly reported and most significant factor leading especially to emotional exhaustion is students' disruptive behaviour (Doménech & Gómez, 2010; Fernet, Guay, Senécal & Austin, 2012). Many studies on this issue suggest that the most



important intrinsic factor affecting teacher burnout is low self-efficacy (Klassen, Wilson, Siu et al., 2013; Skaalvik & Skaalvik, 2014; Yu, Wang, Zhai, Dai & Yang, 2015; Wang, Hall & Rahimi, 2015; Arvidsson, Håkansson, Karlson, Björk & Persson, 2016; Zee & Koomen, 2016). Ghanizadeh & Jahedizadeh (2015) consider self-efficacy one of the most predictable and reciprocal factors in both affecting and being effected by teachers' burnout. The level of self-efficacy influences not only well-being but as well as teacher competences and effectiveness of teaching that is supported by other research, for example Dofková, Kvintová (2016); Singh, Babita, (2014).

Teachers who feel under great work pressure are inclined to reduced self-assessment and distrust of their own abilities. This negative understanding of oneself and one's own work makes teachers believe that the school no longer meets their expectations and a considerable feeling of helplessness begins to develop. Teachers in this condition are more prone to burnout. If personal discomfort and a high degree of distrust of oneself last for a long time, teachers start to feel anxiety, are very sensitive to students' disobedience and their poor achievement, all of which leads to a high degree of emotional exhaustion and depersonalization (Yu, Wang, Zang et al, 2014). A study carried out among Finnish teachers confirmed a correlation between work demands and the burnout syndrome. Work demands also greatly affect teachers' health (Hakanen, Bakker & Schaufeli, 2005).

The present research confirmed that the degree of emotional exhaustion increased with the length of teaching experience, which can be explained by a loss of teachers' original ideals and increasing pressure on emotional experiencing as a result of various factors (lack of appreciation, inappropriate students' behaviour, and large amount of work duties) throughout the course of teachers' career. The effect of the length of teaching experience on the degree of emotional exhaustion was also confirmed by a study carried out among Chinese teachers (Wang, Ramos, Wu et al., 2014). Teachers with experience of over 10 years reported a substantially higher degree of emotional exhaustion than teachers with shorter teaching experience. A higher degree of emotional exhaustion was also confirmed in teachers with over 40 working hours per week compared with those with smaller workload.

A comparison of the results between elementary and secondary school teachers revealed a statistically significant difference in the dimension of emotional exhaustion. A significant difference was also observed in the area of personal accomplishment. It can therefore be concluded that in comparison with secondary school teachers, elementary school teachers are significantly more emotionally exhausted and report lower personal accomplishment.

The present research also confirmed a correlation between work satisfaction and the burnout syndrome. The occupational area is particularly influenced by emotional exhaustion and the degree of personal accomplishment. The causes of reduced personal accomplishment might be for example unfulfilled ideals and expectations, high demands of the teaching profession, insufficient appreciation of the teaching profession, and decreased teachers' social status (Hagemann, 2012). According to Křivohlavý (2012), a decrease in personal accomplishment results from lack of work-related fulfilment.

A positive relationship was also confirmed between work satisfaction and overall life satisfaction. This confirms the findings formulated by Hagemann (2012), who adds that the burnout syndrome is a result of failure not only in a single area (work-related area in our case) but also in other significant areas of life. Therefore, the onset of the burnout syndrome is affected not only by work, but also by the family, oneself, and social background. A study among British teachers examined whether the effect of social support in work improved mental well-being and prevented burnout. The results suggested that social support had a positive effect, even when a person was affected by a number of stressors (Kinman, Wray, Strange, 2011). As far as social support in the teaching profession is concerned, it can be concluded that this area is very weak. Mental well-being of teachers is not taken care of very well. Unlike other helping professions, the teaching profession lacks supervision, which acts as a prevention of burnout. As a result, the only sources of support include the family, friends and acquaintances.



Despite the global emphasis on quality in education, many countries face a lack of qualified teachers (Skaalvik & Skaalvik, 2016; Hong, 2012). One of the causes of the outflow of teachers is teacher stress, which is one of the factors contributing to burnout, and may have devastating consequences both for teachers and as well as the quality of education (Liu & Onwuegbuzie, 2012; Montgomery & Rupp, 2005; Stoeber & Rennert, 2008). According to Skaalvik & Skaalvik (2016) there are two causes of teachers leaving their profession. One of them is time pressure, emotional stress, and eventually leaving the teaching profession. The other one is associated with a lack of supervisory support and trust, low student motivation and value conflicts via lower self-efficacy and lower engagement to motivation to quit.

The results of the present study as well as relevant international studies suggest a serious need for preventive measures. For example Ghanizadeh & Jahedizadeh (2015) emphasise prevention through emotion regulation strategies in the workplace in order to decrease the manifestation of the burnout syndrome. The authors of the present study believe that measures should be taken in the preparation of pre-service teachers and in the context of teachers' lifelong learning.

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References

- Arvidsson, I., Håkansson, C., Karlson, B., Björk, J., & Persson, R. (2016). Burnout among Swedish school teachers—a cross-sectional analysis. *BMC public health*, 16(1), 823.
- Blasé JJ. (1982). A social-psychological grounded theory of teacher stress and burnout. *Educational Administration Quarterly*, 18(4), 93-113.
- Bricheno, P., Brown, S., & Lubansky, R. (2009). Teacher well being: A Review of the evidence. *Teacher Support Network*, 55.
- Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and treatment of children*, 37(4), 681-711.
- Cefai, C. & Cavioni, V. (2014). From neurasthenia to eudaimonia: Teachers' well-being and resilience. In *Social and emotional education in primary school*, pp. 133-148. Springer New York.
- Chang M. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, 21(3), 193-218.
- Cherniss, C. (2016). *Beyond Burnout: Helping Teachers, Nurses, Therapists and Lawyers Recover from Stress and Disillusionment*. Routledge.
- Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social indicators research*, 31(2), 103-157.
- Diener, E., & Lucas, R. E. (1999). 11 personality and subjective well-being. *Well-being: Foundations of hedonic psychology*, (213).
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual review of psychology*, 54(1), 403-425.
- Diener, E., Suh, E., & Oishi, S. (1997). Recent findings on subjective well-being. *Indian journal of clinical psychology*, 24, 25-41.
- Dofková, R., & Kvintová, J. (2016). The perception of self-efficacy of prospective math teachers at elementary schools.
- Doménech F, Gómez A. (2010). Barriers perceived by teachers at work, coping strategies, self-efficacy and burnout. *The Spanish Journal of Psychology*, 13(2):637- 654.



- Dorman J. Testing a model for teacher burnout. *Australian Journal of Educational & Developmental Psychology*, 2003;3:35- 47
- Fahrenberg, J., Myrtek, M., Schumacher, J., & Brähler, E. (2001). Dotazník životní spokojenosti. *Praha: Testcentrum*.
- Fernet C, Guay F, Senécal C, Austin S. Predicting intraindividual changes in teacher burnout: The role of perceived school environment and motivational factors. *Teaching and Teacher Education*, 2012;28(4):514-525.
- Ghanizadeh, A., & Jahedizadeh, S. (2015). Teacher burnout: A review of sources and ramifications. *British Journal of Education, Society, and Behavioural Sciences*, 6(1), 24-39.
- Hagemann, W. (2012). Syndrom vyhoření u učitelů: příčiny, pomoc, terapie. V Ústí nad Labem: Univerzita J. E. Purkyně, 119 s.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of school psychology*, 43(6), 495-513.
- Heller, D., Watson, D. and Ilies, R. (2006), The Dynamic Process of Life Satisfaction. *Journal of Personality*, 74: 1421–1450. doi:10.1111/j.1467-6494.2006.00415.x
- Helus, Z., Bravená, N. & Franclová M. (2012). Perspektivy učitelství. Praha: Univerzita Karlova v Praze, Pedagogická fakulta, 126 s.
- Holeček, V., Jiřincová, B., & Miňhová, J. (2001). Faktory ohrožení osobnosti učitele. *Učitelé a zdraví*, 3(1), 51-57.
- Hong, J. Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and teacher Education*, 26(8), 1530-1543.
- Hřebíčková, M., Blatný, M., & Jelínek, M. (2010). Personality as a predictor of subjective well-being in adulthood. *Ceskoslovenska Psychologie*, 54(1), 31.
- Jeon, L., Buettner, C. K., & Grant, A. A. (2017). Early Childhood Teachers' Psychological Well-Being: Exploring Potential Predictors of Depression, Stress, and Emotional Exhaustion. *Early Education and Development*, 1-17.
- Jinfeng, Z, Mingjie, Z. & Jianxin, Z. (2016). the interactive effects of personality and burnout on knowledge sharing among teachers. *Social Behavior*, 44(8), 1267-1280.
- Kebza, V. & Šolcová, I. (2003). Syndrom vyhoření. 2. rozšíř. vyd. Praha: Státní zdravotní ústav.
- Keyes, C. L., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: the empirical encounter of two traditions. *Journal of personality and social psychology*, 82(6), 1007.
- Khani, R., & Mirzaee, A. (2015). How do self-efficacy, contextual variables and stressors affect teacher burnout in an EFL context?. *Educational Psychology*, 35(1), 93-109.
- Kinman, G., Wray, S., & Strange, C. (2011). Emotional labour, burnout and job satisfaction in UK teachers: The role of workplace social support. *Educational Psychology*, 31(7), 843-856.
- Klassen, R., Wilson, E., Siu, A. F., Hannok, W., Wong, M. W., Wongsri, N. & Jansem, A. (2013). Preservice teachers' work stress, self-efficacy, and occupational commitment in four countries. *European journal of psychology of education*, 28(4), 1289-1309.
- Křeménková, L., Kvintová, J., & Pugnerová, M. (2017). Vztah životní spokojenosti a jejích složek s osobnostními charakteristikami u studentů učitelských oborů. *E-PEDAGOGIUM* 1, pp. 76-88.
- Křivohlavý, J. (2012). Hořet, ale nevyhořet. 2. přeprac. vyd. Kostelní Vydří: Karmelitánské nakladatelství, 2012. 175 s.
- Kvintová, J., & Sigmund, M. (2016). Physical activity, body composition and health assessment in current female University students with active and inactive lifestyles. *Journal of Physical Education and Sport*, 16, 627.
- Sigmund, M., Kvintová, J., Pugnerová, M., & Hřebíčková, H. (2014). Comparison of Live Satisfaction and ITS Components in Current Teachers and Selected Profession GROUPS. *E-Pedagogium*, (4).



- Lavian, R. H. (2012). The impact of organizational climate on burnout among homeroom teachers and special education teachers (full classes/individual pupils) in mainstream schools☆. *Teachers and Teaching*, 18(2), 233-247.
- Liu, S., & Onwuegbuzie, A. J. (2012). Chinese teachers' work stress and their turnover intention. *International Journal of Educational Research*, 53, 160-170.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1986). Maslach Burnout Inventory. Palo Alto.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(1), 397-422.
- Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education/Revue canadienne de l'éducation*, 458-486.
- Novotná, L., & Miňhová, J. (2000). *Psychopatologie pro učitele*. Západočeská univerzita, Pedagogická fakulta.
- Paulík, K. (2011). Zvládání zátěže v pomáhajících profesích muži a ženami. In E. Sollárová (Ed.), *Pomáhající profesie - aktuálně trendy v teorii, výskume a praxi. Sekcia 1 Zátěž a odolnost v pomáhajících profesích*, (pp. 62–72). Nitra: UKF.
- Paulík, K. (2012). Job satisfaction and stress among teachers. *New Educational Review*. 30(4), 138–149.
- Paulík, K. (2013). Stress and Subjective Health of Teachers 1. II, *An independent scientific journal for interdisciplinary research in pedagogy*, 76.
- Pishghadam R, Sahebjam S. Personality and emotional intelligence in teacher burnout. *The Spanish Journal of Psychology*. 2012;15(1):227-236.
- Prucha, J. (2002). *Moderní pedagogika. 2., přeprac. a aktualiz. vyd.* Praha: Portál, 2002. 481 s. ISBN 80-7178-631-4.
- Pugnerová, M., Kvintová, J. (2016). *Přehled poruch psychického vývoje*. Praha: Grada.
- Reynolds, D., & Muijs, D. (2015). Leading Effective Pedagogy. *Leading Futures: Global Perspectives on Educational Leadership*, 205.
- Reynolds, D., Chapman, C., Kelly, A., Muijs, D., & Sammons, P. (2011). Educational effectiveness: the development of the discipline, the critiques, the defence, and the present debate. *Effective Education*, 3(2), 109-127.
- Riggs, L. (2013). Why do teachers quit. *The Atlantic*, 10, 3-5.
- Rumschlag, K. E. (2017). Teacher Burnout: A Quantitative Analysis of Emotional Exhaustion, Personal Accomplishment, and Depersonalization. *International Management Review*, 13(1), 22-36.
- Schaufeli, W. B., Bakker, A. B., Hoogduin, K., Schaap, C., & Kladler, A. (2001). On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. *Psychology & health*, 16(5), 565-582.
- Schwarzer, R., Schmitz, G. S., & Tang, C. (2000). Teacher burnout in Hong Kong and Germany: A cross-cultural validation of the Maslach Burnout Inventory.
- Singh, G., & Arora, B. (2014). Teacher effectiveness and self-confidence as predictors of burnout among male secondary school teachers. *Edubeam Multidisciplinary-Online Research Journal*, 9(1), 1-13.
- Skaalvik, E. M., & Skaalvik, S. (2014). Teacher self-efficacy and perceived autonomy: Relations with teacher engagement, job satisfaction, and emotional exhaustion. *Psychological reports*, 114(1), 68-77.
- Skaalvik, E. M., & Skaalvik, S. (2016). *Teacher Stress and Teacher Self-Efficacy as Predictors of Engagement, Emotional Exhaustion, and Motivation to Leave the Teaching Profession*. *Creative Education*, 7, 1785-1799.
- Spittle, M., Kremer, P., Sullivan, AS. (2015). Burnout In Secondary School Physical Education Teaching. *Facta Universitatis: Series Physical Education*, 13(1), 33-43.
- Stoeber, J., & Rennert, D. (2008). Perfectionism in school teachers: Relations with stress appraisals, coping styles, and burnout. *Anxiety, stress, and coping*, 21(1), 37-53.
- Urbánek, P. (2005). *Vybrané problémy učitelské profese: aktuální analýza*. Vyd. 1. Liberec: Technická univerzita v Liberci, Fakulta pedagogická, 229 s.
- Urbanovská, E. (2001). Profesní stresory učitelů a syndrom vyhoření. *Škola a zdraví*, 21, 309-322.



- Urbanovská, E. (2011). Profesní stresory učitelů a vyhoření. Brno: Masarykova univerzita, Škola a zdraví pro 21. Století.
- Veen, K. V., & Lasky, S. (2005). Emotions as a lens to explore teacher identity and change: Different theoretical approaches. *Teaching and Teacher Education* 21(8), 895-898.
- Wang, H., Hall, N. C., & Rahimi, S. (2015). Self-efficacy and causal attributions in teachers: Effects on burnout, job satisfaction, illness, and quitting intentions. *Teaching and Teacher Education*, 47, 120-130.
- Wang, Y., Ramos, A., Wu, H., Liu, L., Yang, X., Wang, J., & Wang, L. (2015). Relationship between occupational stress and burnout among Chinese teachers: a cross-sectional survey in Liaoning, China. *International archives of occupational and environmental health*, 88(5), 589-597.
- Williamson, J., & Myhill, M. (2008). Under 'Constant Bombardment': Work intensification and the teachers' role. *Teaching: Professionalization, development and leadership*, 25-43.
- Wood, A. M., Joseph, S., & Maltby, J. (2009). Gratitude predicts psychological well-being above the Big Five facets. *Personality and Individual differences*, 46(4), 443-447.
- Yu, X., Wang, P., Zhai, X., Dai, H., & Yang, Q. (2015). The effect of work stress on job burnout among teachers: The mediating role of self-efficacy. *Social Indicators Research*, 122(3), 701-708.
- Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational research*, 86(4), 981-1015.



Emotional Intelligence as a Predictor of High School Teachers' Work Engagement*

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Abstract

This study aims to identify emotional intelligence levels of teachers as a predictor of their work engagement and the relationship between teachers' work engagement and emotional intelligence levels. The research was designed as a relational survey model. The research sample was composed of 353 teachers working at public high schools in Küçükçekmece district of İstanbul in the academic year of 2015-2016. The Work Engagement Scale (UWES-TR) and Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) were used as data collection instruments. Correlation and linear regression analysis were utilized in the data analysis. A statistically significant and positive relationship was found between teachers' work engagement and emotional intelligence levels in the research. It was also concluded that emotional intelligence is a significant predictor of work engagement.

Keywords: Work engagement, Emotional intelligence, Teacher opinions.

Introduction

Working life play a both materially and spiritually crucial role in the lives of humans who are social beings. Management is also important in working life. Concept of management which started to develop in 1880s has been addressed with different theories. Continuing its development as classical (traditional) approach, neo-classical (behavioral) approach, modern approach, and postmodern approach, management theories would regard human as a machine by ignoring their social and psychological requirements to increase productivity in the organizations in the first place. Then, human was regarded as a part of organization, and the importance of meeting human's social and psychological requirements started to be apprehended. Thus, psychologists and management theoreticians have started to examine and enhance humans' impacts on working life (Titrek, 2013).

Having developed in the beginning of 21st century and aiming to improve humans' positive traits, increase and strengthen their resilience and prevent them from orientating towards negative behaviors, positive psychology reflected on the organizational field as the positive organizational behavior (POB) (Keser and Yılmaz, 2009). According to Luthans (2002), "positive organizational behavior is the body of studies and applications regarding the strengths and psychological capacity of measurable, improvable and effectively manageable positive human resources for the development of today's working life" (Luthans, 2002: p.59 in Çalışkan, 2014). While negative situations in working life are examined and investigated in traditional psychology, positive organizational behavior studies examine the contrasts of these negative situations (Keser and Yılmaz, 2009). Improving and strengthening the positive traits, preventing the negative behaviors and revealing and enhancing individuals' potentials in educational organization that raise the future of the society are inevitably of importance and necessity. In this sense, teachers have crucial responsibilities in educational organizations. Teachers' performance of these responsibilities depends on several factors (Özdemir, 2016). As work engagement and emotional intelligence are considered among these factors, this study investigated whether emotional intelligence is a predictor of work engagement.

According to the definition by Lodahl and Kejner (1965), work engagement is the level of individuals' association with working or the fact that working has a significant place in individual's life (in Karacaoğlu, 2005). Work engagement is basically a concept regarding individuals' positive attitude toward their job or the act of working. Individuals with such an attitude feel energetic, are proud of what they do and feel happy when working (Gül, 2015).

* This study is adapted from the Miray Kabar's master thesis.



Work engagement means that individuals feel vigorous, commit themselves to their jobs or become satisfied with their jobs and concentrate on their jobs when they are working. There is continuity in work engagement. It is not dependent on a single object, event or person. It refers to an emotional and cognitive state. It comprises of three important dimensions: vigor, dedication and absorption. Vigor refers to being highly energetic, ambitious about work and mentally resilient when working. Dedication means regarding work as serving a meaning and purpose, perceiving it as being enthusing and inspiring, being proud of the work and evaluating the work specifically when working. Absorption is about fully concentrating on the work, being unaware of the time, only thinking about the work and being very happy when working (Hakanen, Bakker and Schaufeli, 2006; Eryılmaz and Doğan, 2012).

It is possible to say that concept of work engagement is related to similar concepts such as organizational engagement and occupational engagement and influenced by several factors either directly or indirectly. Work engagement may vary by certain individual differences. Situational attributes such as individual's working conditions and manager-employee relationship may affect individual's career. Hence, it can be assumed that individual's work-related behaviors are affected by both individual and situational variables. There are other factors, too. Term of employment in the organization, field of occupation, characteristics of the job and the organization itself may have an impact on work engagement. As is seen, there are several factors that are effective in the attitude of work engagement (Kurt, 2013). Engagement refers to an emotional state. Therefore, it can be implied that emotions have a prominent place in work engagement.

Concept of emotional intelligence of which foundations were laid by the concept of social intelligence introduced by the Psychologists Edward L. Thorndike in the literature has been addressed in several academic research studies due to countries' search for increasing the quality in various fields since 1980s. Today, there are three schools which have had individual contributions to the concept of emotional intelligence:

School of Emotional and Social Intelligence represented by Daniel Goleman et al., school pioneered by John D. Mayer and Peter Salovey, and the School of Reuven Bar-On. Goleman is the researcher who introduced the concept of emotional intelligence to world; Bar-On is the first person to produce the scientific emotional intelligence test and use it in the academic field; and

Mayer and Salovey are known as the specialists who brought emotional intelligence into the literature and ensured its study on the scientific platform (*in*: Delice, Günbeyi, 2013).

Defined for the first time by Peter Salovey of the Department of Psychology at University of Yale and John D. Mayer of University of New Hampshire in 1990, concept of emotional intelligence, according to them, is "a sub-form of social intelligence which is related to individuals' ability to monitor their own and others' feelings and emotions, distinguish between them and use and utilize this information in their own thoughts and actions (*in*: Kızıl, 2014).

Having become popular with Goleman's book "Emotional Intelligence" published in 1995, emotional intelligence allows for recognizing, evaluating and learning our and others' emotions and reflecting the information about emotions and energy of emotions to the daily life and work efficiently and giving appropriate reactions to them (*in* Titrek, 2013).

Emotional intelligence is important for individuals to achieve success and happiness either in their social lives or working life. Research studies show that individuals with high emotional intelligence can establish positive relations in their family and social lives, gain success more easily; are productive and respected and loved by their superiors and inferiors in their working lives and ascend in their careers rapidly. Employees with high emotional and social capacity who are aware of their emotions, can control their feelings and understand others' feelings are required in today's working life. Organizations who employ individuals with high emotional intelligence will host more positive and efficient communications and relations. Hence, team spirit can be



created to enhance performance, and success can be achieved through a happy and peaceful work environment, which will in return affect employee engagement positively (Doğan, Demiral, 2007).

In accordance with these facts, it is possible to say that it is important for teachers to have work engagement and emotional intelligence at educational institutions. Due to the importance that teachers who will shape the future have work engagement and emotional intelligence in educational organizations, requirement of studying their levels of work engagement and emotional intelligence guided this research.

Methodology

Descriptive relational survey model, which is a general survey model, was used in this study aiming to identify the relationship between teachers' levels of work engagement and emotional intelligence. The research population was 1912 teachers working at public high schools in Küçükçekmece district of İstanbul in the academic year of 2015-2016. Sample size calculation table prepared by Yazıcıoğlu and Erdoğan (2004) was utilized when choosing the sample. Accordingly, with a sampling error of 0.05 ($p=0.05$ and $q=0.5$), 333 teachers were deemed to be sufficient for the sample. Simple random convenience sampling method was used in the study. The sample of the research was composed of 353 teachers working at public high schools in Küçükçekmece district of İstanbul in the academic year of 2015-2016. Majority (56.4%) of the teachers who participated in the study are female. 34.3% of them were at the age of 20-30, 44.5% were at the age of 31-40, and % were at the age of 41 and older. 67.7% were married, and 24.4% were working at an Anatolian High School whereas 75.6% were working at a vocational high school. 69.7% of the teachers have an associate or bachelor's degree while 30.3% have a master's degree.

In the research, the Work Engagement Scale (UWES-TR) and Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) were used as data collection instruments. Information on the scales are given below.

The Work Engagement Scale

To measure teachers' work engagement levels, the Utrecht Work Engagement Scale (UWES) developed by Schaufeli et al. (2002) to measure employees' work engagement was used in the study. The Turkish adaptation and reliability-validity study of the scale was performed by Eryılmaz and Doğan (2012). The 17-item scale is composed of three aspects: vigor, dedication, and absorption. Developed in 5-point Likert type, the scale is graded with "Never fits (1)", "Not fit (2)", "Somewhat fits (3)", "Fits (4)", and "Completely fits (5)". The reliability of UWES-TR was investigated with internal consistency and test-retest methods. Cronbach's alpha reliability coefficient calculated for the whole scale is .94. The coefficients calculated for the subdimensions are .87 for vigor, .87 for dedication, and .84 for absorption. Test-retest reliability coefficients were found to be .85 for the whole scale, .89 for vigor, .80 for dedication, and .69 for absorption (Eryılmaz and Doğan, 2012). In this study, the Cronbach's alpha reliability coefficients were calculated to be .87 for vigor, .86 for dedication, .86 for absorption, and .95 for the whole scale.

Trait Emotional Intelligence Questionnaire - Short Form (TEIQue-SF)

To measure teachers' emotional intelligence levels, the Trait Emotional Intelligence Questionnaire - Short Form (TEIQue-SF) developed by Petrides and Furnham (2000, 2001) for identifying individual's level of self-perception regarding his/her emotional efficacies was also used in the study. The Turkish adaptation and reliability-validity study of the scale was performed by Deniz, Özer and Işık (2013). The 20-item questionnaire is composed of four factors: well-being, self-control, emotionality, and sociability. It is a 7-point Likert-type (1: strongly disagree, 7: strongly agree) measurement tool. Internal consistency reliability of TEIQue-SF was calculated with Cronbach's alpha coefficient. The coefficients are .72 for well-being, .70 for self-control, .66 for emotionality, .70 for sociability, and .81 for the whole questionnaire. Its test-retest reliability coefficient was found to be .86 (Deniz, Özer and Işık, 2013). In this study, the Cronbach's alpha reliability coefficients were



found to be .72 for well-being, .69 for self-control, .64 for emotionality, .68 for sociability, and .85 for the whole questionnaire.

Data Analysis

The data were analyzed in a software package for social sciences. Skewness and kurtosis values within the range of ± 3.29 according to Tabachnick and Fidell (2007) and ± 2 according to George and Mallery (2010) are acceptable for normality (Şentürk, Zahal, Yurga, Gürpınar and Altun, 2016). Based on this, it was accepted that the data exhibited normal distribution. Correlation and regression analyses were performed to identify the relationship between teachers' work engagement and emotional intelligence.

The scores obtained in the scales that were prepared in the 5-point Likert type were graded as "none" (1.00-1.80), "low" (1.81-2.60), "moderate" (2.61-3.40), "high" (3.41-4.20), and "very high" (4.21-5.00). For the correlation coefficients, as the absolute value, the relationships were interpreted as "low" 0.00- 0.29, "moderate" 0.30-0.69, and "high" 1.00-0.70 (Büyüköztürk, 2009). The teachers' work engagement levels were interpreted in accordance with their answers to the work engagement scale on the basis of this information. It was assumed that the ranges were equal in the 7-point Likert-type trait emotional intelligence questionnaire, and the score range was calculated to be 0.86 for the arithmetic means (Score range= (Highest Vale – Lowest Value)/7= (7 – 6)/7= 6/7 = 0,86) (Kaplanoğlu, 2014). According to this calculation, the evaluation range of the arithmetic means were accepted as "not available" (1.00- 1.86), "none" (1.87-2.71), "very little" (2.72-3.57), "moderate" (3.58-4.43), "somewhat high" (4.44-5.29), "high" (5.30-6.14), and "very high" (6.15-7.00).

Findings

The relationship between teachers' levels of work engagement and emotional intelligence was identified in a comparison through the correlation analysis. The analysis results are given in Table 1 and 2.

Table 1. Analysis Results Regarding the Relationship between Teachers' Levels of Work Engagement and Emotional Intelligence

		Work Engagement	Emotional Intelligence
Work Engagement	r	1	.475**
	p		.000
Emotional Intelligence	r	.475**	1
	p	.000	

Table 1 shows a statistically significant and positive relationship was found between the work engagement and emotional intelligence levels of the teachers working at high schools ($r=0.475^{**}$, $p<0.01$). Accordingly, it can be assumed that the emotional intelligence scores increased as the work engagement scores increased and the teachers with higher work engagement levels have higher levels of emotional intelligence.



Table 2. Analysis Results Regarding the Relationship between Teachers' Scores of Work Engagement Factors and Emotional Intelligence Factors

		Vigor	Dedication	Absorption	Well-being	Self-control	Emotionality	Sociability
Vigor	r	1	,794**	,853**	,407**	,181**	,133*	,300**
	p		,000	,000	,000	,001	,012	,000
Dedication	r	,794**	1	,767**	,458**	,168**	,162**	,275**
	p	,000		,000	,000	,002	,002	,000
Absorption	r	,853**	,767**	1	,396**	,145**	,103	,275**
	p	,000	,000		,000	,006	,053	,000
Well-being	r	,407**	,458**	,396**	1	,375**	,351**	,451**
	p	,000	,000	,000		,000	,000	,000
Self-control	r	,181**	,168**	,145**	,375**	1	,554**	,490**
	p	,001	,002	,006	,000		,000	,000
Emotionality	r	,133*	,162**	,103	,351**	,554**	1	,427**
	p	,012	,002	,053	,000	,000		,000
Sociability	r	,300**	,275**	,275**	,451**	,490**	,427**	1
	p	,000	,000	,000	,000	,000	,000	

Table 2 presents the relationship between teachers' scores of emotional intelligence factors and work engagement factors. Accordingly, vigor factor of the work engagement is positively and statistically significantly correlated to the emotional intelligence factors of well-being ($r=0.407^{**}$, $p<0.01$), self-control ($r=0.181^{**}$, $p<0.01$), emotionality ($r=0.133^{*}$, $p<0.05$), and sociability ($r=0.300^{**}$, $p<0.01$). Dedication factor of the work engagement is positively and statistically significantly correlated to the emotional intelligence factors of well-being ($r=0.458^{**}$, $p<0.01$), self-control ($r=0.168^{**}$, $p<0.01$), emotionality ($r=0.162^{*}$, $p<0.01$), and sociability ($r=0.275^{**}$, $p<0.01$). Absorption factor of the work engagement is positively and statistically significantly correlated to the emotional intelligence factors of well-being ($r=0.396^{**}$, $p<0.01$), self-control ($r=0.145^{**}$, $p<0.01$), and sociability ($r=0.275^{**}$, $p<0.01$). Absorption factor of the work engagement was not found statistically significantly correlated to the emotionality factor of the emotional intelligence ($r=0.103$, $p>0.05$).



There is a positive significant relationship between teachers' scores of emotional intelligence and work engagement ($r=0.397^{**}$, $p<0.01$).

Table 3. Regression Analysis Showing Emotional Intelligence's Effect on Work Engagement

	B	Std. Hata	β	t	p	R ²	F
	36,640	2,916		12,565	,000		
Emotional Intelligence	1,366	,135	,475	10,120	,000	,226	102,412

In the regression analysis performed to identify the effect of emotional intelligence scores on work engagement (Table 3), it was found that teachers' emotional intelligence levels predicted their work engagement levels at 22% ($R^2=.226$). Accordingly, the linear relationship between teachers' work engagement and emotional intelligence levels is statistically significant ($p<0.05$).

Conclusion, Discussion and Recommendation

A statistically significant and positive relationship was found between the work engagement and emotional intelligence levels of the teachers working at public high schools. It was concluded that emotional intelligence scores get higher as work engagement score increases. A positive and statistically significant relationship was determined between teachers' scores of "absorption" and "dedication" factors of work engagement and "well-being", "self-control", and "sociability" factors of the emotional intelligence. "Absorption" factor of the work engagement was found positively and statistically significantly correlated to the emotional intelligence factors of "well-being", "self-control", and "sociability".

It was determined in the regression analysis performed to identify the effect of emotional intelligence scores on work engagement that teachers' emotional intelligence levels predicted their work engagement levels at 22%. Accordingly, the linear relationship between teachers' work engagement and emotional intelligence levels is statistically significant. In other research studies conducted with different wage earners, similarly, emotional intelligence was found to be a significant predictor of work engagement. For instance, Toyama and Mauno (2017) and Zhu, Liu, Guo, Zhao and Lou (2015) achieved similar research findings in health organizations; Bartlett (2015), Clercq, Bouckenoghe, Raja and Matsyborska (2014), Thor (2012) and Ravichandran, Arasu and Kumar (2011) in different organizations. Lestari and Sawitri (2017) and Garrido and Pacheco (2012) also concluded in their research in educational organizations that emotional intelligence significantly predicts work engagement.

The following recommendations can be made to increase teachers' levels of work engagement and emotional intelligence in accordance with the data obtained in the research: Improving teachers' emotional intelligence levels will enhance their work engagement levels. Teachers play a key role in raising individuals with high emotional intelligence for the society. Thus, faculties of education which train teachers should attach importance to emotional intelligence. Curricula of these faculties can be rearranged to raise teachers with high emotional intelligence. It can be ensured that teachers take part in projects that will contribute to their professional developments and domestic or foreign in-service trainings (courses, seminars, etc.) In-service trainings on emotional intelligence (management of emotions, activation of emotions, empathy, social skills...) can be organized.

References

- Aslan, Ş. (2009). *Emotional Intelligence and Transactional, Interactive Leadership*. Ankara: Nobel Publishing and Distribution.
- Bartlett, S. (2015). *The relationship between emotional intelligence, work engagement, creativity and demographic variables*. Unpublished Master dissertation, University of South Africa, Pretoria.



- Büyükoztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2014). *Scientific Research Methods*. Ankara: Pegem A Publishing.
- Çalışkan, S. C. (2014). Towards developing new research models with positive organizational behavior variables: impact of positive organizational behavior variables on cynism, burnout and work engagement and mediating role of perception of organizational justice in this interaction. *Dokuz Eylül University Journal of Graduate School of Social Sciences*, 16 (3), 363-382.
- De Clercq, D., Bouckennooghe, D., Raja, U. & Matsyborska, G. (2014). Unpacking the goal congruence-organizational deviance relationship: the roles of work engagement and emotional intelligence. *Journal of Business Ethics*, 124(4), 695-711.
- Delice, M. & Günbeyi, M. (2013). An analysis of the relationships between emotional intelligence and leadership: a survey on Turkish national police. *Ataturk University, Journal of Economics and Administrative Sciences*, 27 (1), 209-239.
- Deniz, M. E., Ozer, E. & Işık, E. (2013). Emotional intelligence scale-short form (teique-sf) validity and reliability study. *Education and Science*, 38, 169.
- Dogan, S. & Demiral, Ö. (2007). The role and importance of emotional intelligence on institution. *Management and Economics*, 14 (1), 209-230.
- Dogan, S. & Şahin, F. (2007). Emotional intelligence: a conceptual view of its historical development and its importance for organizations. *Journal of Cukurova University Institute of Social Sciences*, 16 (1), 231-252.
- Eryılmaz, A. & Doğan, T. (2012). Subjective well-being at work: an investigation of the psychometric characteristics of the Utrecht job attachment scale. *Clinical Psychiatry*, 15.49-55.
- Garrido, M.P., & Pacheco, N.E. (2012). Perceived emotional Intelligence in primary school teachers and Its relationship with levels of burnout and engagement. *Revista De Educacion*, 539, 604-627.
- Gül, H. (2015). *A study of professional accountants in relation with work engagement, work morality and professional ethical behavior*. Doctoral Thesis. Canakkale Onsekiz Mart University, Institute of Social Sciences, Çanakkale.
- Gülova, A. A., Palamutcuoglu, B.T. & Palamutcuoglu, A.T. (2013). The Role of Relative Support between Emotional Labor and Job involvement: a research on university student affairs personnel. *Dokuz Eylül University Faculty of Economics and Administrative Sciences Journal*, 28 (2), 41-74.
- Kaplanoglu, E. (2014). The basic causes and potential consequences of occupational stress: a study of certified public accountants in Manisa province. *The Journal of Accounting and Finance*, 131-150.
- Karacaoğlu, K. (2005). An analysis of the relationships between attitudes to job involvement and demographic features of health staff: an application in Nevşehir. Istanbul University Faculty of Business Administration. *Journal of Business Administration Institute of Economics*, 52, 54-70.
- Kartal, H. (2015). *The relations and measurement between organizational commitment and the factors that affect organizational commitment and also affected from organizational commitment that job commitment and intentions to leave*. Unpublished master thesis. Istanbul Technical University, Department of Industrial Engineering, Istanbul.
- Keser A. & Yılmaz G. (2009). *Doing Business*. Inside: Wasti A., İşcan Ö. F. Kesera, Yılmaz G, Yürür S. Behavior in Working Life: Current Approaches. pp: 95-115. 1st edition. Kocaeli: Umuttepe Publications.
- Kızıl, Ş. (2014). *The relationship between teacher's emotional intelligence and organizational commitment (A case study in Balıkesir central)*. Unpublished master thesis, Okan University, Institute of Social Sciences, Istanbul.
- Kurt, E. (2013). *The mediating effect of occupational commitment on the relationship between perceived social support and job performance: a research in tourism organizations*. Unpublished master thesis, Hacettepe University, Institute of Social Sciences, Ankara.
- Lestari, S.D. & Sawitri, D.R. (2017). Correlation between emotional intelligence and work engagement of special need school teachers. *Advanced Science Letters*, 23 (4), 3480-3482.



- Otluoğlu, R. (2002). Affective behaviors and emotional education in primary school curriculum. *Marmara University Atatürk Education Faculty Journal of Educational Sciences*, 15, 163-172.
- Önen, A.S. (2012). The effects of student teachers' personality traits and emotional intelligence levels on stress coping. *Hacettepe University Journal of Education*, 42, 310-320.
- Özdemir, A. (2016). An investigation of the relationships between perceived administrative abilities, affective structures of teachers and work engagement. *Journal of Academic Social Research*, 4 (38), 129-143.
- Ravichandran, K., Arasu & R., Kumar, A. (2011). The impact of emotional intelligence on employee work engagement behavior: an empirical study. *International Journal of Business and Management*, 6 (11), 157-169.
- Senturk, Z., Zahal, O., Yurga, C., Gurpinar, E. & Altun, F. (2016). Investigation of music teachers' attitudes toward teaching profession according to their profile properties. *Journal of Human Sciences*, 13 (3), 5032-5052.
- Thor, S. (2012). *Organizational excellence: a study of the relationship between emotional intelligence and work engagement in process improvement experts*. Unpublished Doctoral dissertation thesis. George Fox University School of Business.
- Titrek, O. (2013). *Manage Feelings Smartly from IQ to EQ*. Ankara: Pegem Publications.
- Toyama, H. & Mauno, S. (2017). Associations of trait emotional intelligence with social support, work engagement, and creativity in Japanese eldercare nurses. *Japanese Psychological Research*, 59 (1), 14-25.
- Yazıcıoğlu, Y. & Erdoğan, S. (2004). *Spss Applied Scientific Research Methods*. Ankara: Detay Publishing.
- Zhu, Y., Liu, C.C., Guo, B.M., Zhao, L. & Lou, F.L. (2015). The impact of emotional intelligence on work engagement of registered nurses: the mediating role of organizational justice. *Journal Of Clinical Nursing*, 24 (15-16), 2115-2124.



English Medium Instruction: Support For Students and Professors in Social Sciences Education

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Abstract

This paper presents specific reference tools (Barrios, López-Gutiérrez & Lechuga, 2016) where we found that neither institutional language integrated support nor a specific language plan was being provided by the bilingual programme. This runs counter to experts' opinion who claim the need of such a plan. While studies show the importance of language support in bilingual instruction, they rarely address specific content professors' needs tending to remain distant from real teaching contexts. The educational Innovation Project provides professional development for subjects taught through the medium of English. The title "Support for students and professors" means moving into the reality of the classrooms to address specific needs of this specific academic scenario. We examine how language support has a dual focus that includes both students and instructors (Griffith, 2012). The paper concludes with a reflection on interdisciplinary innovation projects that provide professors with the tools to ensure the quality of bilingual programmes.

Keywords: English Medium Instruction, Higher Education, Social Sciences Education, Gender art

Introduction

This paper presents specific reference tools which continues the line started on the article published last year in 2nd International Conference on Higher Education Advances (HEAD '16) (Barrios, López-Gutiérrez & Lechuga, 2016), where we found that neither institutional language integrated support nor a specific language plan was being provided by the bilingual programme. This runs counter to experts' opinion calling for the need of such a plan: "The English-taught degree programme requires a language plan of its own, which will be complementary to the larger university policy and plan... it is a necessity for ensuring a smooth and collaborative transition into English medium" (Marsh et al., 2013, p. 15). While studies show the importance of language support in bilingual instruction, they rarely address specific content professors' needs, tending to remain distant from real teaching contexts. The educational Innovation Project (PIE 15-100) provides professional development for subjects like Gender Art (as Clotilde Lechuga is a member of international I+D project HAR2016-75662-P *Subjectivity Practices in the Contemporary Arts. Critic Reception and Identity Fiction from Gender Perspective* at Malaga University) which are included in Social Sciences Education taught through the medium of English in the Primary Education degree at the University of Málaga.

The title "Support for students and professors" means moving into the reality of the classrooms to address specific needs of this unique academic scenario. Firstly, the paper acknowledges a trend towards English Medium Instruction (EMI) in Higher Education while at the same time distinguishes EMI from adjunct CLIL (Brinton, Snow & Wesche, 2011) suggesting that more explicit language integration is needed. With this in mind, we present a professional development project for instructors which we will call the CLIL eye (Griffith, 2015). Secondly, we examine how language support has a dual focus that includes both students and instructors. Outlining these actions, the innovation project focuses on collaborative work, language support, and collective training in aspects related to a systematic monitoring of the experience. Finally, we will use a case study in which a glossary is integrated into a lecture and an external observer will provide assessment for the instructor on ways to improve discourse. The results indicate how, with this task design, language is



supported as not only the language of learning, and as language through learning (Coyle, et al., 2010), but more specifically as the language for teaching. The paper concludes with a reflection on interdisciplinary innovation projects that provide professors with the tools they need to ensure the quality of bilingual programmes.

The background of any discussion on plurilingualism in higher education in Europe begins with convergence. In Paris in 1998, European universities highlighted the need to create greater plurilingualism in Europe (Sorbonne Joint Declaration, Paris, 25/5/1998). After about a decade, Smit and Dafouz (2012) have reported “English medium university {EMI} courses all over continental Europe have tripled” (p.2). In Spain, Dafouz and Nuñez (2009) have cited more than thirty higher educational institutions offering bilingual degrees. Our study takes place at the University of Málaga in southern Spain and explores how a language specialist can assist content professors teaching through a second language.

In our search for usefulness, and in order to be as concrete as possible, we will share our initial prediction and research purpose. “Most teachers have not yet acquired the teaching competencies and abilities that are peculiar to CLIL {Content and Language Integrated Learning}. They have been unable to do so because broadly speaking suitable Teacher Education (TED) in CLIL is not offered in a systematic fashion” (Horriillo, 2012, p. 4). We predict university professors outside language areas could benefit from a CLIL/EMI practicum; and we will explore how to do this from multiple perspectives. Exploratory does not mean without purpose or without direction, rather what it means is that the project tends to work inductively from the bottom up rather than deductively.

Linguists find it easy to believe in bilingualism, but content professors find themselves uncomfortable in this new found role of language expert (Hynninen, 2012). We insist that, through a facilitative collaboration, professional development can impact teaching practice in higher education. Collaboration gives all involved a unique opportunity to learn from the other. Thus, our inquiry began by establishing a dialogue between a language specialist and a content specialist. In the next section we will point to the context, clarify terminology and in turn, reveal the research focus that surged out of the study.

This paper discusses relevant challenges facing bilingual instruction in our specific context. This collaborative initiative allows the content instructor to discover ways to improve teaching first by directing student discourse what Coyle et al, (2010) identify as the ‘language of learning’ and next by directing instructional discourse with what we describe as the ‘language for teaching’.

Context

English Medium Instruction (EMI) has been a growing trend across universities in Europe in the last 15 years. This movement was first introduced in Master’s degree programmes although it has progressively extended to bachelor’s programmes (Wächter & Maiworm, 2008). Not only is EMI a direct result of globalisation in Europe and elsewhere, but it also currently lies at the center of internationalisation strategies of many tertiary institutions around the globe (Doiz *et al.*, 2013; Gustafsson & Jacobs, 2013; Wilkinson, 2013). Many factors contribute to this need such as the promotion of job mobility, employability, staff and student exchanges and joint- and double-degrees substantiate the case for English-taught degree courses (Fortanet, 2008).

However, the first challenge is in the definition of EMI. EMI in its strictest definition, implies that language learning is implicit and not explicit. John Airey (2012) goes so far as to insist that he is “not an English teacher” while lecturing on Physics through the medium of English. So perhaps a clarification in terminology is in order. Brinton, Snow and Wesche (2011) have identified three types of CLIL in higher education. First, **theme based CLIL** where language instructors explicitly focus language by using contents. In the past this has been identified as English for Specific purposes (ESP) or a topic based approach. Second, these authors point to **sheltered CLIL**, where a focused content approach allows for only implicit language learning. This is



indeed EMI across Europe particularly in higher education. And finally *adjunct CLIL*, which allows for a content focus as well as integrating language. Given this clarification, our approach clearly takes the adjunct approach in that language support is explicitly provided to both students as well as to instructors.

After clarifying EMI and the adjunct CLIL approach and in line with authors such as Wilkinson (e.g., 2008) and Gustafsson and Jacobs (2013), many authors chose to use the term Integrated Content and Language in Higher Education (ICLHE) over the umbrella term Content and Language Integrated Learning (CLIL) since, as Gustafsson and Jacobs (2013) argue, this latter term is originally linked to school –rather than to university- contexts and “there are issues peculiar to higher education, such as disciplinarity, which make this CLIL approach distinctly different in the higher education context” (p. iii). For the purposes of this paper, we will use them interchangeably, but clearly point to the higher educational context as being specific to our research.

In the case of the Faculty of Education, at the University of Málaga a group in the Bachelor’s Degree in Primary Education has been partly taught through the medium of English since the academic year 2014-2015. On the whole, the evaluation of the experience by students and teachers has uncovered new challenges that have been addressed by an interdisciplinary innovation project with the goal of constantly improving the teaching/learning experience. After the first year, the assessment revealed that both students and instructors needed to improve language performance. How to tackle this dilemma will be the focus of this article.

During 2016-2017 course an innovative approach is taking place. Language support is being addressed in two directions and we will call this multi-perspective approach “developing the CLIL eye”. For students, an integrated glossary is offered as a tool to explicitly focus technical art terms during a lecture given by a guest professor who belongs to the bilingual team, in the subject Artistic and Visual Education, while for the instructor, an external observer evaluates instructor discourse and effectively offers vital feedback to improve teaching discourse which we will deem the language for teaching.

Literature review

Gajo (2007) has argued that teacher training must prepare instructors in bilingual didactics, which are different from traditional second language classes and different from traditional content classes. The eternal dilemma is finding specialists with both content and foreign language skills. Collaboration seems to tacitly be the answer.

In similar Spanish university contexts, both Rubio and Hermosín (2010) and Fortanet-Gomez (2012) have examined professors’ attitudes toward CLIL instruction. Rubio and Hermosín (2010) explored the “willingness of teachers and students to a hypothetical implementation of multilingualism in a Spanish university.” Their results at the University of Huelva demonstrate that over 50% of their sample would be willing to participate in such a program (Rubio & Hermosín, 2010, p. 107).

Fortanet-Gomez’s (2012) study in Castellon provides a more varied sample of professor participants. Her main conclusions about higher education show that 72.9% of professors feel that if they teach in English that this should include language objectives. Her study showed that 95.5% feel they should receive specific teacher training and 83.8 % think content teachers should coordinate with language teachers (Fortanet-Gomez, 2012, p. 58). She is not alone in this proposal.

Instructors’ willingness to grow professionally through this project cannot be underestimated. Clearly, quality instruction begins and ends with quality instructors and the success of every educational programme can be improved with specific teacher support networks. In the case of this project, the language specialist moved into areas of education and art to explore real content specialist’s needs. By bringing language learning theories directly into the context of these content classrooms, it was easier to put theories into practice.

Coyle et al (2010) discuss reconceptualising language learning where language needs are divided into three groups: The language of learning (vocabulary), the language for learning (discourse strategies) and the language



through learning (the ultimate success). (See Fig 1.) We present this project in such a way that the instructor is both instructor and learner. Language can be supported in many ways and we will focus on just two. One for the students to support the language of learning and one for the instructors to support the language for teaching.

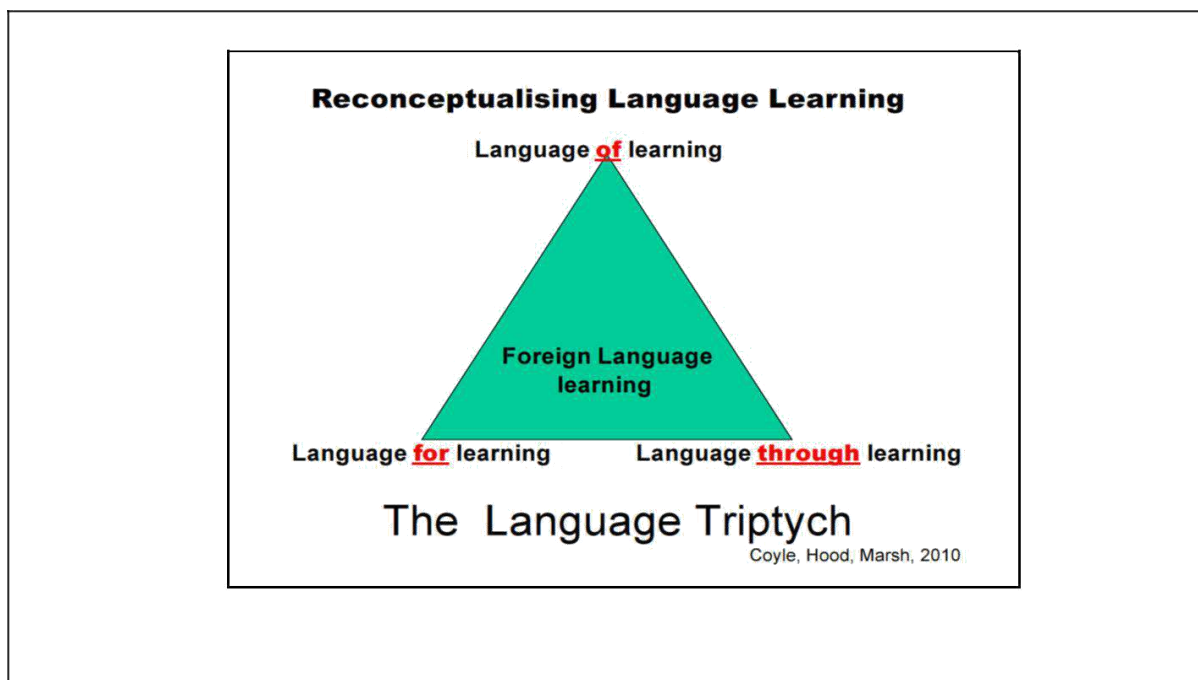


Figure 1. The language triptych as presented by Coyle, Hood and Marsh, 2010

In the case of this project we will highlight the language of learning with the integrated glossary. In this way we will illustrate specific language support for students. The explicit lexical focus will be incorporated in the lecture within the instructional design. At the same time, the external observer will provide both didactic and discursive feedback for the instructor. In this way, quality of the instruction through a second language is reinforced. The feedback uses error analysis and discourse features to aid professors in the communicative process. By highlighting the language for teaching, the feedback is particularly relevant to the context at hand.

Consequently, this collaborative case study will address language support using a highly contextualised classroom experience to illustrate how language can be successfully integrated into content classrooms. Stake (1995) would call this the “bounded context” of our case study. We have chosen one instructor, one classroom experience to highlight how language can be supported in two directions: First, for students through instructional design and second, for instructors through in-service assessment.

Method

Action research is about capacitating people to act because they choose to do so. The implication being, of course, that the participants are capacitated to define their world through experience developing a sense of empowerment and competence through action and interaction. Developing the CLIL eye is a support network that encompasses believing and doing: believing in CLIL and actively doing something to improve it. This is a commitment that involves action from all participants. The methodological choice of participatory action research will allow us to better address the specific qualitative needs of this particular bilingual programme.

In the Education department and as a response to challenges and difficulties faced during the early stages of the implementation of this partially-taught programme perceived by students and staff, a collaborative interdisciplinary innovation project was designed. Teaching through English in higher education involves constant assessment because CLIL cannot just be simply imposed by government policy-makers. Both top-



down and bottom-up perspectives are essential for the success and sustainability of any bilingual programme. Participatory action research purposefully takes a bottom-up approach.

The main project objectives and associated actions may be summed up along the following three lines: first, professional development for effective instruction through English, next, language provision, support and resources, and finally, monitoring and evaluation of the experience. As a follow-up, we present a specific case study to illustrate how language support and monitoring works in practice.

We seek not to quantify, but rather to qualify. Cohen and Manion (1989) have stated that case studies recognize the complexity and ‘embeddedness’ of social truths. However, we duly note that there are limits to this more open structure. “Case study data, paradoxically, is strong in reality but difficult to organize. In contrast, other research data is often weak in reality but susceptible to ready organization.... Case studies are a step to action.” (Cohen and Manion, 1989, p. 50)

Case study will allow us to create a professional development project for effective language integration. This innovative project engages professor participants in collaborative interdisciplinary training and practice to illustrate the multiple perspectives involved in any bilingual programme. Both language and non-language specialists are fully aware that there is a need for teamwork and cooperation and this need has been corroborated in previous tertiary education experiences: “Developing an English-taught degree programme requires coordination and, especially at the outset, more staff collaboration than may be considered essential in a domestic language programme” (Marsh *et al.*, 2013, p. 26). The actions have been discussed in detail in Barrios, López-Gutiérrez and Lechuga, (2016) to achieve the goal of professional development. In the case of this article, we will describe the following two specific actions:

- Assisted structured materials development; a consensus has been reached to develop language and content integrated tasks with the assistance of a framework designed to include subtasks, one of which is the integrated glossary.
- Formative classroom observation; language specialists observe content teachers teach in English and provide formative feedback within the specific classroom context.

How can we provide language support for both students and instructors? Whenever you have non native instructors, teaching non native students, explicit language support must be provided. Both students and teaching staff perceived the need language support in order to improve explicitly language proficiency for this bilingual programme. For students this language support is illustrated with instructional design; while for the instructor, language support is illustrated with the observer’s feedback of classroom performance.

Instructional design for students

Examining Coyle, et al. (2010), we see a differentiation between the language *of* learning (vocabulary) and the language *through* learning. In fact, language *through* learning is evidenced by effective language teaching. So in turn, we observe the more contextualized the language, the better the language learning; the more interesting the topic, the better the attention levels. The more language is supported, the easier it is for assessment to separate language and content issues. And we observe that the integrated approach addresses the balance of language and contents that provide for true quality in bilingual programmes.

With regard to materials development, a structured glossary has been integrated into a lecture on contemporary art. The specific language focus was supported throughout the lecture and students were provided a handout that re enforced this new terminology. The conference can be seen at the Faculty of Education Science youtube web page (Lechuga, 2016).



This class session was originally conceived for the first course in the Bachelor's Degree in Primary Education and aims to introduce contemporary art practices and a glossary in English language related to Social Science Education. Both the professor of the course as well as the visiting professor agreed that better language performance from the both students and professors could contribute to better instruction. So for students and in order to highlight the lexical items necessary for the lecture, selected words were chosen to create a glossary to support a lecture on the differences between traditional paintings and contemporary artwork.

The main topic of the lecture refers to a study made by Arthur Danto (2003) concerning History or Art evolution. In this study, the author elaborates on the differences between mimesis and reflection, both being essential concepts to be considered. Following Danto's theory, mimesis appears as a possible imitation of reality and reflection is able to be understood as meditation/opinion/criticism, all of which advance contemporary understanding (Lechuga, 2015). This terminology provides the specific terms to create a deeper understanding of art. The complexity of the ideas expressed called for specific lexical items to be defined and understood by students before and during the lecture. In consequence, these items were referred to and expanded upon during the class session.

Instructional feedback for Instructors

In the focalized classroom context, during the same lecture referred to in the previous paragraph, an external language specialist generated feedback for the instructor. Using a rubric developed in a similar project in the Computer Science Department at this same university (Griffith, 2012), the instructor's language performance was assessed. The main variables include pronunciation, usage and discourse together with interactional features for classroom instruction. With this specific language support for the instructor, we address the issue of the language for learning.

Linguistic and instructional data was collected from spoken performance during classroom instruction. One of the objectives of the innovation project is the monitoring and evaluation of the programme with the aim of detecting areas of improvement. This involves classroom observation including coaching. All non native instructors feel like learners at the same time they feel the responsibility to effectively transmit their contents. What this means is that professionals are encouraged to continually improve within the inherently imperfect context. Many studies (Rubio & Hermosín, 2010; Morgado & Coelho, 2012), show that university professors are reluctant, even anxious, as they face instruction through a language that is not their own. The innovative project aims to monitor instructors to improve the quality of their bilingual programme.

Findings

Implementation deals with instructional actions and seeks a more qualitative assessment of the bilingual programme. Undoubtedly, one factor is student proficiency, but the other is, the oftentimes overlooked, instructor proficiency. Fortanet-Gomez (2012) has noted: "While there is general agreement on the importance of this {second} language, its implementation as a language of instruction does not seem to be so evident. {O}ne of the main factors for the success of {multilingual policies} is the lecturers' proficiency..." (p. 52-) Instructors are well aware of this issue and we note that to discuss their role as language learners within their role as language instructors empowers them to improve. In this section we will describe the findings for our two participatory action research inquiries:

- 1) How can language be explicitly supported for students?
- 2) What are the common errors for instructors?

How can language be supported?



The classroom seminar is entitled ***Reflective learning: contemporary art in gender studies*** and aims to create a better understanding of evolution in artworks including social and gender issues. First, the language support plan consists in creating a glossary to introduce the subject, so both students and instructors focus on significant descriptions by collaborative learning and scaffolding which are reviewed at the end of the session. At the same time, teaching through images or Visual Thinking Strategies (VTS) uses scaffolding methodology based on the image of a painting, drawing, sculpture, video, etc. (González-Sanz, Feliu-Torruella & Cardona Gomez 2017).

In relation to specific vocabulary, seventeen slides are shown which combine either vocabulary highlighted in sentences or artwork pictures and links to art video recordings. The idea is to focus attention on keywords having selected nine concepts related to the history of art. These are Cultural Heritage, Mimesis, Reflection/Reflexion, White Cube, Contemporary art/Postmodern art, Cultural Intangible Heritage, Gender studies.

Some of glossary words are directly related to UNESCO Convention's normative as Cultural Heritage to Cultural Intangible Heritage as well as to the Diversity of Cultural Expressions (UNESCO, 1972, 2003, 2005) covering gender perspectives, Flamenco music, ecology, education or cultural diversity. Accurately this approach helps when explaining global interests in preserving Heritage. Moreover, Gender artworks are briefly introduced by a video performance made by a woman artist in which the precise representation of the young female in Eugène Delacroix's (1830), *Liberty Leading the People* painting is strongly criticized. Finally, last slide presents the same keywords separately so students can explain in English what they understood of concepts given and they are asked to connect them to concrete examples in a more specifically language focused conclusion. Adjunct CLIL allows for language to be supported within the content classroom in a highly integrated way.

What are the common errors in instructional discourse?

Fortanet-Gomez (2012) has speculated that "what might be the case is that the lack of experience in teaching in English might have led to relatively low self-confidence in using the language for teaching" p. 55. In order to further develop the CLIL eye, the instructor agreed that classroom observation proved highly relevant to specific teaching needs.

The main variables include pronunciation, usage and discourse together with interactional features for classroom instruction. Pronunciation was an issue, but never to the point of preventing communication. Vowel quality was challenging as was intonation. One of the main causes of foreign accents is that once learners have established the L1 sounds, they tend to perceive all new sounds in terms of those categories. Consequently, these perceptions leak into their L2 production. We remind readers that we are differentiating accent from mispronunciation. The most common errors occurred with vowel quality in that English vocalic patterns contain more sounds (14) than Spanish (5) or with the consonant sounds that exist in English, but not in Spanish. Spanish does not have the vowel digraphs: *ou, ow, eigh, au, aw, oo* and, in particular, the diphthong /*əʊ*/ was oftentimes mispronounced. For example: Moses (in Spanish *Moises*). What the instructor received was this comment: '*in English this sounds like noses, hoses, poses, closes.. es llana. And the o is /əʊ/.*' This type of feedback allowed her the ability to accommodate her accent into a target pattern. Another example is with the semi vocalic phoneme /*ju:*/. For example in Cubism. Here is the feedback provided: '*The u is semi vocalic.... Like the sound you, news, /kjubizm/*' None of these mispronunciations prove any different than what could be expected from Spanish speakers using English given the phonological contrasts between the two systems. We do make note here, however, that communication was never impaired due to these errors.

Table 2. Error analysis



UTTERANCE	CORRECTION	LINGUISTIC COMMENT
<i>Are you agree</i>	Do you think this is art?	Excessive use of <i>it</i>
<i>that is it a piece of art?</i>	Is this art? Is this a piece of art? Do you agree that this is art?	Improper use of <i>agree</i>
<i>Do you follow?</i>	Are you following me?	Wrong tense in EN
<i>Russian by that moment</i>	At that moment, at that time Usu. refers to a specific moment By that time (usually refers to simultaneous actions) by the time we got there it had started to rain	Prepositions and Time reference
<i>Culture heritage</i>	Cultural heritage	Word formation
DISCOURSE: OPENING AND CLOSING WERE AWKWARD	SAYING HELLO. It is my pleasure to be here today. Today we are going to discuss. I'd like to thank Sandra for the opportunity to speak with you today about..... SAYING GOODBYE Well that's all I have today. I hope you enjoyed the presentation. I hope you find this glossary helpful. Thanks for listening and I hope that you have gained something from the presentation today .	These are patterns that you take for granted in your first language. Practice modeling target structures within the context.

Usage and discourse errors will be described in this next section and can be referred to in Table 2. Perhaps more than the form focus, the underlying ideas in language learning serve to put content professors' foreign language performance into perspective in their new role as language experts. Some authors refer to this highly functional L2 usage as "multicompetence" (Cook, 2006). This author has argued L2 learners, including those who have reached the ultimate attainment stage in the L2, are not equivalent of two monolinguals in one brain. Instead, Cook maintained that L2 learners possess an integrated cognitive system, called multicompetence. L2 learners process information in both languages differently from that of monolingual native speakers. The resulting linguistic competence of a bilingual L2 learner is therefore qualitatively different from the one possessed by monolingual minds. Language learners must necessarily be measured in functional terms and not as a deviation from some unattainable ideal. Somehow, content professors are reassured by this idea of functional bilingualism. Developing the CLIL eye for instructors has meant understanding how proper CLIL instruction is not only within the realm of multicompetence, it is also within their reach.

The instructor who received this feedback has noted the relevance to her own professional development, not only as an English learner, but also with regard to proper communication strategies. Not only does the feedback uncover challenges such as pronunciation or specific sentences, but also more discursive strategies like how to introduce yourself or to finish your delivery. Certainly using this cooperative feedback has been insightful.

Conclusions and Recommendations

EMI initiatives in higher education are on the increase across Europe. Conditions, however, are not optimal and programmes that are completely or partially taught in English are launched with no specific attention to quality assurance. Higher Education institutions should establish requirements and provide resources so that teaching quality is not compromised and students can benefit from language development possibilities (see Marsh *et al.*, 2013). The university context requires a closer follow up, which indeed, has been the focus of this paper.



This study has dealt with the professional development of CLIL professors at the university level. Some universities find themselves in what Donald Schön calls a “squeeze-play”: An educational institution in which educational policy plays a small role. “In the normative curriculum, a practicum comes last, almost as an afterthought. (Schön, 1987, pp. 310-311)” Very little has been written about professional development at this tertiary level, but many of the issues related to action research developed in other academic settings apply. Nevertheless, there are some specific considerations related to professionals in higher education, their needs and their expectations. No one seems to address the challenges of the multi level classroom and we strongly recommend future research to pursue this area. Without the practical element, professional development in education is detached from the setting and the real challenges professors face every day. This study explored the question of whether participatory action research can provide meaningful experiences that add to good teaching practice through an in-service training. We have called this developing the CLIL eye.

Some final reflections pertain to the evaluative information provided by both students and staff. Students perceive the need for some kind of language support and provision which the institution, however, fails to provide systematically. In addition, students tend to demand a high level of English competence from the teachers and they admit that learning through English also requires a high command of English from them. Both teachers and learners agree on the need to improve their proficiency in English. In order to teach and learn cognitively complex and demanding disciplinary content, a high level of proficiency is indispensable. The support needed necessarily must be created within each context as the needs vary, across student groups, within the staff as well as in regard to specific contents. In service training seems to readily adapt to each context and address needs as they occur.

Not surprisingly, research evidence suggests that limitations in language ability may hinder students from expressing and exploring complex concepts (Met & Lorenz, 1997; Airey, 2009), and this conclusion is equally applicable to staff, who has also been found to face difficulties with non-subject related interactions and classroom management language (Dafouz & Núñez, 2009; Strotmann *et al.*, 2014). This coincides with our findings in that every bilingual programme discovers new ways to support language in its own unique search for quality.

Nevertheless, the question remains as to what is the appropriate benchmark for students and instructors. Although TOEFL 550 seems to be a common benchmark in some institutions (Marsh *et al.*, 2013, p. 18), the target for staff to reach a CEF C1 seems entirely reasonable. At the UMA, top down planners suggest that a B1 for students and a B2 for instructors is sufficient. However, when the research moves directly into the classroom, all needs assessment suggest that B2 for students and a proficient C1 for instructors seems to be more advisable if quality instruction is to be considered. Language must consistently be supported through instructional design as well as is qualitative assessment for instructors. Top-down planners in their desire to encourage more instructors to teach through a second language, underestimate the challenges that this context inspires.

The first year experience of a partially English-taught bachelor’s degree programme revealed major challenges regarding lack of integrated language provision and support, language competence level in students and staff, and mixed-level groups. In order to face these challenges, a collaborative interdisciplinary innovation project was initiated. In closing, we are fully convinced that no attempt to introduce a change in the medium of instruction will ever be successful if the teachers involved do not share, work together and collaborate in group discussions, needs identification and collective solutions. As we continue to seek quality instruction in our bilingual programme, we humbly feel we have taken a step in the right direction through this in-service training.



References

- Airey, J. (2009). Estimating undergraduate bilingual scientific literacy in Sweden. *International CLIL Research Journal*, 1(2), 26-35.
- Airey, J. (2012). I don't teach language: The linguistic attitudes of physics lecturers in Sweden. In U. Smit and E. DaFouz (Eds.), *AILA Review: Integrating Content and Language in Higher Education* Amsterdam: John Benjamins Publishing Co. 25, 64-79.
- Barrios, E., López-Gutiérrez, A., Lechuga, C. (2016). Facing Challenges in English Medium Instruction through Engaging in an Innovation Project. *Revista Procedia - Social and Behavioral Sciences*. 228 (2016), pp. 209 – 214. ELSEVIER (Scopus).
- Brinton, D., Snow, M., & Wesche, M. (2011). *Content-Based Second Language Instruction*. Ann Arbor: University of Michigan Press.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL Content and Language integrated Learning*. Cambridge University Press.
- Danto, A.C. (2003). *Más allá de la Caja Brillo. Las artes visuales desde la perspectiva posthistórica* [traducción, Alfredo Brotons Muñoz]. Madrid: AKAL
- Doiz, A., Lasagabaster, D., & Sierra, J.M. (2013). Introduction. In A. Doiz, D. Lasagabaster, & J.M. Sierra (Eds.), *English-medium instruction at universities: Global challenges* (pp. xvii-xxii). Bristol: Multilingual matters.
- Dafouz E., & Núñez, B. (2009). CLIL in higher education: Devising a new learning landscape. In E. Dafouz & M. Guerrini (Eds.), *CLIL across Educational Levels: Experiences from Primary, Secondary and Tertiary Contexts* (pp. 101- 112). Madrid: Richmond-Santillana.
- Fortanet, I. (2008). Questions for debate in English medium lecturing in Spain. In R. Wilkinson & V. Zegers, V. (Eds.), *Realizing Content and Language Integration in Higher Education* (pp. 21-31). Maastricht: Maastricht University.
- Gajo, L. (2007). Linguistic knowledge and subject knowledge: how does bilingualism contribute to subject development? *The International Journal of Bilingual Education and Bilingualism*, 10 (5), 563-581.
- Griffith, M. (2012a) CLIL and the Plurilingual University: Orientation for the Reluctant Professor. In *Propuestas de actividades y metodológicas específicas para la mejora del bilingüismo en ingeniería*. F. Manzano Agugliaro and A. García Cruz (Eds.). Almería: Universidad de Almería. 27-49.
- (2012b). Por qué enseñar en inglés y cómo: Apoyo a la docencia bilingüe ETS Informática. In *III Jornadas sobre innovación docente y adaptación al espacio europeo de educación superior en las titulaciones técnicas*. Grupo Docente Interdisciplinar de ETSI de Caminos, C, y P. (Ed.). Universidad de Granada. 249-254.
- (2015) "Integrating content and language in higher education-Professor support network," PhD dissertation, directed by Dr L. Taillefer, Department of English, French and German, University of Malaga.
- González-Sanz, M., Feliu-Torruella, M. & Cardona-Gómez, G. (2017). *Las Visual Thinking Strategies (VTS) desde la perspectiva del educador patrimonial. DAFO del método en su aplicación práctica = Visual Thinking Strategies from the perspectives of museum educators': a SWOT analysis of the method's practical implementation*. *Revista de educación* n° 375, enero-marzo 2017, pp. 160-183.
- Gustafsson, M., & Jacobs, C. (2013). Editorial: Student Learning and ICLHE–Frameworks and Contexts. *Journal of Academic Writing*, 3(1), ii-xii.
- Heron, J. (1989). *The Facilitator's Handbook*. London: Kogan Page.
- Klaassen, R. (2008). Preparing lecturers for English-medium instruction. In R. Wilkinson, & V. Zegers, V. (Eds.), *Realizing Content and Language Integration in Higher Education* (pp. 32-42). Maastricht: Maastricht University.
- Lechuga, C. (2015). *Paisaje Cultural: la imagen expandida en nuestro ideario procomún*.



- Prácticas artísticas que usan el Patrimonio Cultural y Natural/Cultural Landscape: expanded image in our procomun thinking.* Tesis Doctoral. PhD dissertation, co-directed by Dr Ignacio Henares and Isabel Garnelo. Department of History of Art. University of Granada (Spain). [Retrieved from <http://hdl.handle.net/10481/40032>]
- Lechuga, C. (2016). *Reflective learning: contemporary art in gender studies* Video. FACEDUMA. University of Málaga. [Retrieved from <https://www.youtube.com/watch?v=FoFWOEKnCqA&t=144s>].
- Lorenzo, F. A. (2008). "Instructional Discourse in bilingual settings. An empirical study of linguistic adjustments in content and language integrated learning." *Language Learning Journal*, (36) 1: 21-33.
- Marsh, D., Pavón-Vázquez, V., & Frigols-Martín, M.J. (2013). *The higher education languages landscape: Ensuring quality in English language degree programmes*. Valencia, Spain: Valencian International University.
- Met, M. & Lorenz, E. B. (1997). Lessons from U.S. immersion programs: Two decades of experience. In R.K. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp. 243-264). Cambridge University Press, Cambridge, UK.
- Smit, U., & Dafouz, E. (2012). *AILA Review: Integrating Content and Language in Higher Education* Amsterdam: John Benjamins Publishing Co. (25).
- Strotmann, B., Bamond, V., Lopez Lago, J. A., Bailen, M., Bonilla, S., & Montesinos, F. (2014). Improving bilingual higher education: Training university professors in content and language integrated learning. *Higher Learning Research Communications*, 4(1), 91-97. <http://dx.doi.org/10.18870/hlrc.v4i1.198>
- Wächter, B. & Maiworm, F. (2008). *English-Taught Programmes in European Higher Education. The Picture in 2007*. Bonn: Lemmens.
- Wilkinson, R., & Zegers, V. (2008). Introduction. In R. Wilkinson & V. Zegers (Eds.). *Realizing content and language integration in higher education* (pp. 1-9). Maastricht: Maastricht University.
- Wilkinson, R. (2013). English-medium instruction at a Dutch university: Challenges and pitfalls. In A. Doiz, D. Lasagabaster, & J.M. Sierra (Eds.), *English-medium instruction at universities: Global challenges Multilingual matters*. Bristol: 3-24.
- UNESCO (1972). Convention concerning the Protection of the World Cultural and Natural Heritage 1972. Paris, 16 November 1972. [Retrieved from <http://portal.unesco.org/en/ev.php>
URL_ID=13055&URL_DO=DO_TOPIC&URL_SECTION=201.html



Social Change and the Education of Urban Sciences*

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Abstract

The field of urban science, as the newest sub branches in the field of Social Sciences, is also one of the most dynamic fields in its category. Especially the relationship between social change and urbanization has updated the urban sciences literature in an increasing rate. The most important indication of this process is seen in the variance and uniqueness of local services and projects such as urban transformation, restoration and renovation and has had a tangible and practical effect on the daily lives of city-dwellers. On the other hand it can be said that local politics as a means of participating in politics have become preferred over central politics when considering the global urban networks especially as the power of metropolitan cities increase. The principal argument of this study is that most post-secondary education faculties in Turkey, which are expanded all throughout, can be in closer communication and contact with local administration, and such a circumstance gives credence and applicability to the field of urban sciences as a means of practical and effective social change. The increasingly urban world dynamics have distances the administrative systems from centralization; and favors smaller local governance that is closer to citizens at large. This in turn causes “Public Administration” field to gravitate towards “local” elements with respect to its “Public” side and to become defined as such. Increases in the quality, diversity and efficiency of public offerings also serve to improve the technologies and models that come about from this field, feeding back and strengthening this relationship. The theoretical foundations of this study is made by literature scanning, and the aim is to demonstrate that there is a clear increase both in quantitative aspects, like attendance, number of students and related courses, as well as in quality with respect to the diversification of topics and the increase in available literature.

Key Words: Urban Sciences, Social Change, Inter-disciplinary, Information Technologies.

Introduction

Cultural products creates its sources from the customs, moral values and practical life of the society.

Social education is the element of culture, brings up children within social manners and education and gets a social responsibility and the best manners of society. From this point of view social education gets a sense with in the conscience of human.

As Bookchin’s noted, “education, is the top priority for a radicalization of our time.” (1986: 41) Because “education took many forms in the past and proved itself able to adjust to changing circumstances... but the present change is not like past changes... We have never been in such a situation before. The art of living in a world oversaturated with information has still to be learned. And so has the yet more mind-bogglingly difficult art of grooming human beings for such a life.” (Bauman, 2010: 100-130) For example “education has certainly not reduced the phenomenon civil war; it may indeed have enhanced it; it may even be its principal source of nourishment.” (Wallerstein, 2003: 128)

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Besides “we once shaped our personalities by thinking about the social roles we assumed, or about the way others saw the individuals playing their social roles. We could do so because all roles related to common forms of authority, norms and values... I use the term ‘desocialization’ to describe the disappearance of the social roles, norms and values that were once used to construct the life-world. Desocialization is a direct result of the de-institutionalization of the economy, politics and religion. Whereas a system of production was of necessity seen as a system of social relations of production, a market economy governed by international competitiveness, the proliferation of new technologies and the speculative movement of capital has become increasingly divorced from the social relations of production. Similarly education can no longer transmit the behavioral norms (discipline, work, deferred gratification) imposed by a mode of production.” (Touraine, 2000: 39)

The tight relationship that exist between economic development, educational levels, and democracy is illustrated quite clearly in all over the world. (Huntington, 1993: 65; Fukuyama, 2006: 110-111) According to Fukuyama: “Middle-class societies arise as a result of universal education. The link between education and liberal democracy has been frequently noted, and would seem to be an all-important one... Inequality creeps into the system as a result of unequal Access to education; lack of education is the surest condemnation to second-class citizenship. The effect of education on political attitudes is complicated, but there are reasons for thinking it at least creates the conditions for democratic society.” (2006: 116)

Importance of University Education

Serious organizational transformations have been observed at the high education system of most countries recently. For example contemporary educational authorities reached a consensus on the importance of the approach to interdisciplinary education and its necessity. All in all, it can be concluded that in the period from the past until today, ‘interdisciplinarity’ in light of its development is gaining importance and its place in today’s generation’s understanding of knowledge.

On the other hand the searches for new alternatives have gained momentum especially after the urban and environmental problems, it has recently been applied to the real life. Especially environmental education has play a dominant role of social responsibilities. Because this type of critization perspective improves the students’ ability to order information, to relaize the difference between fact and opinion and to find the relevant data among irrelevant data and to comprehend and appreciate the past and next generations and to comprehend change and countinuity.

Environmental education is a process that allows individuals to explore and deeper understanding of environmental and urban management issues, engage in problem solving, responsible decisions and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and have the skills to make informed and. “The central aims of green democratic theory include community environmental education, democratization and integrated policy-making. As Bookchin suggests, “citizenship within the context of collective ecological management becomes a way of transforming urban dwellers into ‘ecological stewards’, giving those who may have no direct experience of nature some responsibility for, and democratic input into, managing the metabolism between society and the environment. Hence the vital importance of environmental education to foster this responsibility.” (Barry, 1999: 259)

Consequently, universities, that a great responsibility falls upon them, must add new responsibilities and objectives to their three traditional functions of undertaking research activities, offering vocational training and providing public services. Especially in the concept of environmental perspective, technology development centers, university-industry joint research centers and state universities on account of public research undertaken in and their role in the mentioned centers seem to be key elements in regional innovation systems.



While the most significant duties of the universities to educate students are the teaching-education and research, it is to produce knowledge for the existing sources of the governmental institutes. By linking the knowledge of the the universities and these institutes especially local management authorities, while increasing the quality of education the demanded and qualified man power are reached for the necessities of the country. Also university-local administrations cooperation is very important in order to provide efficiency and use local sources effectively.

On the other hand global competition forms an important element of oppression on the universities to become competitive with other universities not only at national level but also at the international level. The universities that aim to increase their competitiveness power in this market hasten their quality work.

Local Administration and Urban Sciences in the Current University Model*

The first consideration of urban science in our country has been in the form of courses in “city planning”, taking place in the curriculum’s in faculties of architecture. Afterwards, under the school of “Public Administration” it has branched out and has seen an appreciable increase in scope and detail.

In his work “The Education of Urban Sciences in Turkey” (1987), Prof. Dr. Ruşen Keleş, by compiling and analyzing the works of academicians in the field of urban sciences on the issue of their perceptions and experiences in schools, have presented an important contribution to the field.

30 years after Keleş’s study, urban sciences have grown beyond the bounds of city planning and architecture and has become a stronger and more well-defined field on it’s own right in the form of “Public Administration”, going so far as to become a separate faculty especially in higher education. As a result of this, there has been an increase in the number of students attending or taking courses on this field. In addition, “Public Administration, Urbanization and Environment” has become a category on it’s own for an Associate Professor degree. The number of students across the country in the “Public Administration and Political Sciences” field has surpassed well over 20,000 when considering other related fields like forest sciences, environmental engineering and similar.

When considering this from a quality perspective rather than quantity, it can be said that the urbanization literature stemming from the “establishment of cities” back until the ancient age, and that the “History of Civilizations” and “History of Political Thought” courses can be started with the concept and attributes of the “city”. The overlap between Urbanization and Public Administration courses have resulted in the “Urban Politics” courses and have transformed into courses that borrow from the foundation of sociology such as “Political Science” and “Sociology of the City”. Considering that nowadays the most current, modern and innovative service and production models are realized by arms of public administration, there is an inescapable gravitation towards “Modern Approaches to Administration”. The fundamental concepts of the field of “Administrative Sciences” such as administration, participation in public administration, privatization, efficiency and performance, have all been codified in local laws. In short it is easily claimed that the literature of urbanization and local administration have grown its share of the “Public Administration” field.

With the increased numbers of courses and faculties, along with the expansion of the field itself, local administrations, as the implementers of such programs have continued to strengthen, which came out of the need to fill the void after the narrowing of scope and focus of units within the central administrations. This education

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which has spread all across the network of universities in the country provides students with general conceptions of the fundamentals while at the same time observing these effects in their own local cities. As urbanization increases all throughout the world, it is clear that the models and differences along with unique facets of the fields come about naturally as a result.

For example Keleş, in the study mentioned above, thinks that “the education of urban sciences, whether it be university or higher-level education, benefits immensely from being studied within the country as opposed to abroad” and ties this with the unique socio-cultural circumstances. He continues: “because leaving aside the fundamental academic topics, the social, economical, political and administrative structure of the country is best handled by, and closest to urban sciences.” (1987: 227)

This statement is even more applicable to metropolitan establishments that have long surpassed the scale of cities. On one hand the growing scale of cities, complimented by advancements in technology and increase in quality of life, service offerings have grown and diversified. Understanding all this authentic frame of reference increasingly requires understanding the unique circumstances in lower local units to analyze effectively.

Conclusions

Nowadays urbanization - public administration - environment field have both become fundamental issues to be considered in unison, as well as containing countless sub-branches that have grown wider and deeper in their respective fields. Quality of the urbanization and environmental problems lessons is as important as education techniques, facilities and physical opportunities. So there is no doubt that the urban education programs and credits affect the quality of education positively. The adequacy of that education is relative.

In summary, this rich literature has found its practical applications in the implementation of local administrations with cooperation with universities and their partnerships. Despite being a controversial issue, “at least one university per city” can be considered the intersection of local administrations and the education of this field, which can be considered an interesting opportunity.

More modern administrative techniques and varied models of public service through liberal local policies can bring this relationship to more synergistic results.

References

- Barry, J. (1999). *Rethinking Green Politics: Nature, Virtue and Progress*. London: Sage Publication.
- Bauman, Z. (2010). *44 Letters from the Liquid Modern World*. Cambridge: Polity Press.
- Bauman, Z. (2012). *Liquid Modernity*. Cambridge: Polity Press.
- Bookchin, M. (1986). *Post-Scarcity Anarchism*. 2nd Edition. Montreal: Black Rose Books.
- Fukuyama, F. (2006). *The End of The History And The Last Man*. NY: Free Press.
- Huntington, S. P. (1993). *The Third Wave: Democratization in the Late 20th Century*. Norman University of Oklahoma Press.
- Keleş, R. (Haz.) (1987). *Türkiye’de Kentbilim Eğitimi*. Ankara: SBF Yayınları.
- Touraine, A. (2000). *Can We Live Together (Equality And Differences)*. (Trans. David Macey), California: Stanford University Press.
- Tunçer, A.S. (2015). Kamu yönetimi öğretilerindeki kavramsal değişim sürecinde yerel yönetim ve kentbilim unsurlarının rolü. 13. KAYFOR (Kamu Yönetiminde Değişimin Yönü ve Etkileri), Selçuk Üniversitesi, Konya, 1982-1991.
- Wallerstein, I. M. (2003). *Historical Capitalism with Capitalist Civilisation*. 11th Impression. London: Verso.



Motive Types Relations with Emotional Valence During Physical Activities

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Abstract

Literature reviews is assume that during physical activity occurs positive emotional changes. However, statistics on population physical activity habits indicate that only a small proportion of society engage in physical activity. As the reason is mentioned a lack of motivation. The research question of the present study is whether the motivation to engage in physical activity is related with emotional changes during physical activity? 50 voluntary participants, aged 20 to 59 years, took part in the study. The data were collected by both subjective and objective research methods. Motivation was measured by Motives for Physical Activity Measure- Revised scale (MPAM-R, 1997). Vitality or subjective wellbeing was measured by the Subjective Vitality Scale (Subjective Vitality Scale, 1997). Emotional changes during physical activity were recorded using Face Reader 3.0. The results show that some aspects of motivation - competence, enjoyment and health is associated with positive emotional changes during physical activity. Vitality also is related to positive emotional changes and are able to predict a positive emotional change during physical activity. It is concluded that the motivation to engage in physical activity is related to emotional changes during physical activity. We also conclude that, in order to encourage people, engage in physical activity more regularly, it is important to develop methods for developing people's intrinsic motivation to engage in physical activity in order to gain more fun, and to develop competence. In contrast the focus on appearance will be less effective for building models of physically active behavior and developing the habits of regular physical activity.

Keywords: motivation, self determination theory, emotions, physical activity.

Introduction

Physical activity, if it is performed regular, is very useful for the physical and psychological well-being of the population (World Health Organization (WHO), 2010). Studies have approved that leisure time physical activity positively affects the emotional state and positively correlates with happiness (Lyubomirsky & Layous 2013). However, only a small part of modern society performs the amount of physical activity recommended in general health guidelines (Sisson & Katzmarzik, 2008).

Many people say they are simply too busy to exercise, 45% people in Latvia mention that they do not have time (Eurobarometer: Sport and Physical Activity (2010)). Despite of all the health benefits provided by physical activity according to the population survey in 2013 39% of the population of Latvia say that they never practice physical exercise, 30 % practice seldom and just 6% of population of Latvia confirm, that they regularly practice physical exercise or sport activities (Eurobarometer: Sport and Physical Activity (2014)). Studies show that lack of motivation is a reason to perform a regular physical activity with a moderate intensity 150 minutes per week, which corresponds to recommendations (Wilson, Mack & Grattan, 2008).

Considering the positive effects of physical activity and the low level of motivation of a society to engage in physical activity it is essential to find out what motivates people to engage in physical activity in their free time.



A study on physical activity and motivation in Latvia was carried out in a student sample using self-assessment questionnaires. The results of this study indicate that there is a positive correlation between leisure time physical activity and motivation (Kaupuzs, 2013).

The aim of current study is to find out how the motivation to engage in physical activities is associated with emotional changes (valence) during physical activity using both self-assessment questionnaires and objective research methods (Face Reader, veloergometer, pulse meter).

By “motivation” we understand the inner interests of a person, the drives, the desires that urge the person to take on a particular activity or change ones behavior (Whitehead, 1993). It is possible not only to determine the relation between motivation and the habits of physical activity by using self-determination theory, but also to assess whether there is a positive correlation with the positive valence of emotions, vitality (subjective well-being) (Ryan, Deci, 2001). The authors of Self-Determination Theory explain subjective well – being with term “vitality”, that mean subjective energy level that is not opposed to fatigue or energy-based calories. This vitality, according to the authors of the theory, is related to psychological factors, where the basic need (competence, autonomy, psychological relatedness) increases satisfaction, but the dissatisfaction of these needs reduces energy / vitality. Both experimental and field studies have confirmed this assumption (Moller, Deci & Ryan, 2006; Nix, Manly & Deci, 1999).

Self-determination theory is used to study motivation in various areas of activity, including physical activity. White (1959) postulates that people driven by the need for competence or effectiveness. The theory is based on the assumption that an individual has three natural basic psychological needs - needs which are universal, innate and psychological. These needs are need for competence, autonomy, and psychological relatedness. An individual chooses to take or avoid performing a specific activity to meet the respective basic needs. Self-determination theory can be applied to many areas of activity, including physical activity (Deci & Ryan, 1985).

Emotions are formed on the basis of life experience, as well as on the basis of inherited affects, the function of emotions are the preservation of the body's homeostasis. Emotions are an informative signal and they are always situationally triggered. Most definitions of emotions include the following components: motivation, behavioral readiness (progression), behavioral tendencies, perceptual selectivity, cognition, associated with the state of activity, and sensation (Izard, 1992). The most complete and brightest emotions manifest the human face. Face expressions are universal (Ekman, Friesen & Tomkins, 1971).

The term physical activity is the main concept describing body movements, performed by muscles and consuming energy (Biddle, Fox & Boutcher, 2000). Physical activity is considered to be among basic human needs (Biddle & Mutrie 2005)

At a time when mental health care costs have risen, physical activity is a potentially alternative to maintaining health and well-being. Physical activity can also serve as an addition to traditional forms of therapy (pharmacology and psychotherapy), where physical activity has the advantage of low costs, has no side effects and can be applied more preventively than habitual health promotion (Biddle & Ekkekakis 2005).

Problem statement and sub-problems (hypotheses)

The current study aims at finding how to motivate to engage in physical activities leading to emotional changes (valence) during physical activity, using both self-assessment questionnaires and objective research methods (Face Reader, veloergometer, pulse meter). The research question: is the motivation to engage in physical activity associated with changes in emotions (emotional valence) during physical activity?



Method

Method of the research

Correlational study design was used. The variables of research issues were motivation, habits of physical activity and vitality. Criterion variable - emotional changes (positive or negative emotional valence). Information was also gathered on additional variables that could affect emotional changes - physical activity habits. The study was conducted in a laboratory, the data were collected individually. The study participants were informed about the purpose of the study (mentioning that physiological responses would be measured, without mentioning a specific measurement of emotions), respondents were informed about confidentiality of data.

Sample

The age range of participants was from 20 to 59 years, average age of 35.2 years (N = 50, Mean 35.2, SD 8.75). Respondents were selected on the basis of one criterion - the ability to pedal veloergometer for at least 15 minutes in mild to moderate intensity. There were no criteria for daily physical activity. As a result, 50 from 54 data were used for further research. Those excluded faced an unexpected situation during the study, for example, sudden pain. From these 50 data women are 84%, men are 16%. 84% of these respondents have higher education, 10% with incomplete higher education and 6% with secondary education.

Data collection tools.

The study used a self-assessment methodology for assessing the motivation of physical activity. The motivation for physical activity was measured by Motives for Physical Activity Measure-Revised scale (MPAM-R), (Cronbach alpha - pleasure 0,89; competence 0,86; appearance 0,89; health 0,82; social aspect 0,87;) (Ryan, et al., 1997). The methodology includes 30 assertions that respondents have to agree upon by using Likert type scale, where 1 means "does not match me, but 7 "fully fits me." The physical activity scale has five sub-scales that measure various motivational components of physical activity: pleasure/joy, competence, appearance, health and social aspects. Self-assessment questionnaires were also used to appreciate how the type of motivation for physical activity is related to emotional state (emotions) using Subjective Vitality Scales (Ryan & Frederick 1997). Subjective Vitality scales has two sub-scales that measure vitality state and vitality trait. Each scale includes seven allegations in which respondents are asked to evaluate by using Likert type scale where 1 means "I do not", and 7 "fully in line with me" (Cronbach's alpha for trait scale 0,84; for state scale 0,89) The methodology of both questionnaires was back translated from English to Latvian. Additionally, demographic data were collected and the physical activity habits (how long, how often and with which activities they are engaged) were identified.

During physical activity objective measurement of emotions was performed by using Face Reader. The software "Face Reader" is a program for analyzing automatic facial expression. It identifies six basic emotions: happiness, anger, grief, astonishment, fear, disgust, and a neutral emotional state. Emotions are recorded more than two times per second. Face Reader is usually combined with other methods to convey context and content to the resulting data (Zaman& Shrimpton-Smith,2006). Objective measurements of physical activity were used - pedaling veloergometer at moderate to moderate intensity by recording a pulse. The intensity of physical activity corresponded to a health promoting aerobic cyclic physical activity lasting for 15 minutes.

During physical activity pulse, face expressions were measured. In addition, data on respondents' gender, age, weight, education, occupation and physical activity habits will be obtained.

Data collection took place at the Laboratory of Physical Ability of the Latvian Academy of Sports Education.



Findings

The data set was analyzed computing Pearson correlation coefficients to determine the relationship or relationship between the study variables. The variables between which correlated statistically significantly were further entered into regression analysis.

Table 1. Descriptive statistics of variables (N=50)

Variables	Average	Standart deviation
Age	35.26	8.75
PA frequency	2.90	1.07
PA length	2.68	1.25
Motiv-Pleasure	5.33	1.15
Motiv-Competence	4.79	1.16
Motiv-Appearance	5.33	1.16
Motiv-Health	6.03	.94
Motiv-Social	4.00	1.60
Vitality-Trait	4.87	1.06
Vitality-State	4.84	1.4
Pulss	129,8	12.62
EmValence-Positive	6.09	10.84
EmValence-Negative	-5.41	14,4
EmValence-Neutral	-2.40	15.38

There were positive correlation between positive emotional changes and the motivation sub-scale competence $r(50) = .03, p < .05$ and the motivation sub-scale health $r(50) = .30, p < .05$. As well as statistically significant correlation between positive emotional changes and motivations sub-scale pleasure/joy $r(50) = .36, p < .01$. There was no statistically significant relationship with other motivation sub-scales (appearance, social factor). Also, the habits of physical activity (frequency of exercises and period of time, how long did they engage in physical activity) did not show statistically significant correlation with positive emotional changes.

Statistically significant positive correlations were also observed between positive emotional changes during physical activity and vitality. Both vitality as a trait $r(50) = .29, p < .05$, and vitality as a state $r(50) = .38, p < .01$. Neutral and negative emotional changes during physical activity did not show statistically significant correlations. See Table 2 for all the correlational coefficients.

Table 2. Pearson correlation analysis between emotion valence, motivation and vitality (N=50)

Variables	1	2	3	4	5	6	7	8	9	10
1 M-Pleasure/joy	-									
2 M-Competence	.76**	-								
3 M-Appearance	.30*	.48**	-							
4 M-Health	.59*	.48**	.59**	-						
5 M-Social	.56**	.54**	.27*	.44**	-					
6 EmVal-Positive	.36**	.32*	.25	.30*	.15	-				
7 EmVal-Negative	-.18	-.23	-.04	.09	-.12	-.36**	-			
8 EmVal-Neutral	-0.6	.11	-.00	-.25	.11	-.26	-.69**	-		
9 Vitality-Trait	.50**	.63**	.29*	.29*	.30*	.29*	-.13	-.10	-	
10 Vitality-State	.53**	.55**	.34*	.38**	.30*	.38**	-.23	.20	.74**	-

* $p < .05$, ** $p < .01$

The variables which showed statistically significant correlation to positive emotion changes (emotional valence), were entered into regression analysis. The model was statistically significant, $R^2 = 0.15$, $F(8.270) = p < .01$. The only statistical significant predictor of motivation to engage in physical activities was vitality state, $B = 3.63, p < .01$.



Results showed that motivational aspects are not predicting emotional change during physical activity. All in all, the relations between motivational components and positive emotional changes is statistically significant. A statistically significant correlation was observed between positive emotional changes and vitality - both as a state and a trait.

Also, this study indicates a statistically significant relation between vitality and positive emotional changes. Similarly, vitality is statistically significant correlated with all sub-scales of motivation - pleasure, competence, appearance, health and social aspect.

Results, Conclusions and Recommendations

According to the theory of Self-determination, competence is an internal motivation component, which means not only current skills but also aspects of the social environment, for example, when surrounding people - coaches, team / teammates, partners provide meaningful positive feedback, increase in individual competence. It also increases the person's motivation to work further in this area (Ryan, et al., 2009). Regarding the component of motivation Whitehead (1993) notes that children are already born internally motivated to be physically active. Whitehead's statement points to a number of aspects. First of all, the pleasure of moving - it is an internally motivated natural desire that we have from our childhood. Secondly, by surveying the respondents about what motivates them to do physical activity, 32% of respondents said that it was a family. This confirms Whitehead's statement about the essential role of behavioral models, the values we pass on from generation to generation. If this motivation can be saved - through physical luck, freedom and joy - then we can manage to achieve far more than promoting fitness behavior. Already in childhood behavioral pattern are established, helping people maintain lifelong physical activity. Thus, in a natural way, this behavioral model would be passed on from generation to generation (Whitehead, 1993).

External motivation defined as engagement in activities with aim to gain some benefits independent of the activity (Ryan, et al., 1997; Ryan, et al., 2009). This means that people engage in physical activity, not because physical activity seems to them to be interesting or give fun, but because they get something from physical activity (Frederick & Ryan, 1995; Ryan & Deci, 2008).

Competence, pleasure or joy are interpreted as internal motivation, but appearance, health and social aspect as an external factor. In this study, health as a component of external motivation was statistically significant correlated with positive emotional changes, in contrast to the external appearance and the social aspect.

With respect to the research question the results showed that a statistically significant correlation between individual components of motivation and positive emotional changes. There was no statistically significant correlation between the components of motivation and negative or neutral emotional changes. Among the components of motivation - competence, health and pleasure in this study - showed a statistically significant relationship with positive emotional changes.

A statistically significant correlation was observed between positive emotional changes and vitality - both as a state and trait. According studies (Moller, Deci & Ryan, 2006; Nix, Manly & Deci, 1999) the present study confirms assumptions and indicates a statistically significant relationship between vitality and positive emotional changes. Similarly, vitality is statistically significantly correlated to all sub-scales of motivation - pleasure, competence, appearance, health and social aspect. The obtained results indicate that the motivation does not predict changes in emotions during physical activity. Yet, the relationship between motivational components and positive emotional changes is statistically significant.



The study's limitation is a small sample that, perhaps might not be able to shed light on relationship between the other components of motivation described in the theory of self-determination - appearance and social aspect. Hypothetically it might be that the social aspect is more important for older respondents, but the design of a current study did not allow it to clarify this assumption. During the study, it was observed that vitality varied according to the day time when study was spent. In the morning, people generally showed higher levels of vitality than evening. Therefore, it is advisable in future to choose one time (morning or afternoon) as much as possible when planning the next study. This research took place in the laboratory, which means that laboratory offered to all the respondents the same conditions. In future, it would be useful to conduct a study, for example, in field conditions.

The theory of self-determination states that the possible reasons for the lack of motivation to engage in physical activity may be the feeling of incompetence experienced by a person during a physical activity. Since this competence statistically significantly correlated with positive emotional changes in the study, this study also confirms the theory (Izard, 1993) We can state that emotions including motivation to do or to avoid action also include behavior tendencies and behavioral readiness (progression). If positive emotions are experienced during physical activity, there is a reason to believe that people will be willing to do it repeatedly / regularly and vice versa. Another assumption of the theory of self-determination is that a person does not see the connection between the behavior and desired benefits - as a result there might be a decision not to do anything. For example, if a person has a motivation to lose weight we cannot expect results instantly. Also, activities for health promotion often do not give a quick and obvious result. Asking the respondents whether they had noticed any changes in their feelings of emotion after 15 minutes of physical activity, almost no respondent of the study changed their emotional state. Respondents were surprised to see the data that was captured by Face Reader hardware - the data obtained indirectly helped to create a clear link to it as emotionally affected by physical activity. In general, this means that in everyday life, rarely do you feel the connection with how physical activity increases the positive emotions.

The most important principle that must be followed in order to be optimally motivated and experienced by a person is the need for a person to experience specific psychological needs during the activity being performed. People by their nature are considered to be active, purpose-oriented, looking for a possibility to satisfy the three basic needs of the basic psychological needs.

We observed statistically significant correlations between positive changes in emotions during physical activity and vitality (both the character and the state). Also, the vitality state were able to predict positive emotional changes. Vitality (feature, state) statistically significantly correlated with all motivational sub-scales - pleasure, competence, external appearance, health and social aspect. Recent study (Ryan, Weinstein, 2008) highlights a vital aspect of vitality - contact with nature. It is pointed out that people who engage in physical activity in the open-air experience a higher level of vitality.

We conclude that it would be important to develop methods and to emphasize how to develop people's internal motivation in order to get pleasure from the activities performed and to develop their competence in order to encourage more and regular engagement of physical activity. In contrast, the emphasis on health benefits, external appearance will be less effective in developing behavioral patterns and developing the habit of regularly engaging in physical activity.

In general, we can conclude that motivation to engage in physical activity is associated with changes in emotions during physical activity. It is very important to develop behavioral patterns already in childhood, which means that organizers of sports activities should be advised to focus on sports activities for the whole family. It is also important for a trainer or sports expert to work so that physical active people can see the link between their activities and the immediate benefits they bring.



References

- Biddle, H.J. S & Mutrie N. (2005). *Psychology of physical Activity*. NY: Routledge: Taylor & Francis Group.
- Biddle, J.H. &Ekkekakis P.(2005), Physically active lifestyles and well-being. In. Oxford University Press, *The science of well-being* (pp.141- 171).
- Chatzisarantis, N. L.D. & Hagger M. S.(2009). Effects of an intervention based on self-determination theory on self-reported leisure-time physical activity participation. *Psychology and Health*, 24,(1), 29–48.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York:Plenum
- Deci, E.L & Ryan R.M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*,11(4), 227-268.
- Ekman P., Friesen W.V. &Tomkins S.S. (1971) Facial affect scoring technique (FAST): a first validity study. *Semiotica*, 3(1), 37-38.
- Eurobarometer: Sport and Physical Activity (2010). In Sport and Physical Activity. Special Eurobarometer, 334/Wave 72.3. Retrieved December 25, 2015, from http://ec.europa.eu/public_opinion/archives/ebs/ebs_334_en.pdf
- Eurobarometer: Sport and Physical Activity (2014). In Sport and Physical Activity. Special Eurobarometer, 135/Wave 7. Retrieved December 25,2015, from http://ec.europa.eu/health/nutrition_physical_activity/docs/ebs_412_en.pdf
- Hagger M. S., Chatzisarantis N. L.D. (2007). Intrinsic Motivation and self-determination in exercise and sport. *Human kinetics*, 153 - 392.
- Izard C. E.(1992). Basic emotions, relations among emotions, and emotion-cognition relations. *Psychological Review*, 99(3), 561-565.
- Kaupuzs, A.(2009). *Fiziskās aktivitātes gados veciem cilvēkiem*. Rēzekne: Ra.
- Kaupuzs, A.(2013). The relationship between physical activity and exercise motivation of the first year students from Rēzekne augstskola. *Lase journal of sports science*, 4, 3-15.
- Kuilenburg, H.&Uyl, M. (2005).*The FaceReader: Online facial expression recognition*. VicarVision, Proceedings of Measuring Behavior. Retrieved: 9 June 2011 from:http://www.vicarvision.nl/pub/fc_denuyl_and_vankuilenburg_2005.pdf.
- Lyubomirsky S., & Layous K. (2013). How do simple positive activities increase well-being? *Current Directions in Psychological Science*,22(1) 57–62.
- Moller A.C., Deci E.L., & Ryan M.R. (2006). Choice and Ego-Depletion: The Moderating Role of Autonomy. *Personality and Social Psychology Bulletin*, 32, 1024-1036.
- Ryan, R. M. & Deci E. L. (2008).Facilitating Optimal Motivation and Psychological Well-Being Across Life's Domains. *Canadian Psychology*, 49, (1), 14–23.
- Ryan, R.M., Frederick C.M., Lepes D., Rubio N., & Sheldon K.M.(1997). Intrinsic Motivation and Exercise Adherence. *Int. sport Psychology*,28, 335-354.
- Ryan, R.M., Frederick C.M. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well- being. *Journal of Personality*, 65:3.
- Ryan, R.M., Williams G.C., Patrick H., & Deci E.L. (2009). Self-determination theory and physical activity: the dynamics of motivation in development and wellness. *Hellenic Journal of Psychology*, 6,107-124.
- Ryan R. M. & Deci E. L. (2000). Self-Determination Theory and theFacilitation of Intrinsic Motivation,Social Development, and Well-Being. *American psychologist*. 55, 68-78.
- Ryan R. M. & Deci E. L. (2001). On hapiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annu. Rev. Psychol.* 52, 141–66.
- Sisson SB & Katzmarzik (2008). International prevalence of physical activity in youth and adults. *Obesity Reviews*, 9, 606-614].
- Wilson P.M., Mack D. E., & Grattan K.P. (2008). Understanding Motivation for Exercise: A Self-Determination Theory Perspective. *Canadian Psychology*, 49 (3), 250–256.
- Whitehead J.R., (1993).Physical Activity and Intrinsic Motivation. *President`s council on Physical Fitness and Sports Physical Activity and Fitness Research Diggest*,1(2),1-8.
- White, R. (1959). Motivation reconsidered: The concept of competence. *Psychological review*, 66, 297–333.
- Zaman, B., Shrimpton – Smith. T. (2006). The Facer Reader: Measuring instant fun of use, *Nordi CHI*, 457-460.



Risk Management in Park and Recreational Activities

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Abstract

The aim of this study was to investigate the management process of the risk management in the park and recreational activities and evaluating them in terms of the application processes. In this study, documentary screening and archival examination method were applied. Recreational activities have many risk factors. Especially, safety and health problems are frequent in recreational activities. Planning of sports and recreational areas should include, usage of materials, ergogenic aids, medical supports, and safety management strategies. The evaluation process was done particularly in protection and usage processes, health management, location and construction of the facilities, security dimensions. As a result, in the management processes of the park and recreation activities, construction processes, business processes and educational dimensions, service management process and risk management dimensions should be analyzed by managers and educators. Also, municipalities, universities and local sport administrations must be planning recreation risk management documents to public partners and athletes.

Keywords: Risk management, Park recreation, Recreational activities

Introduction

The use of open public spaces by children and urban residents varies depending on cultural and environmental factors (Albert et al., 2011). The participation of sports and recreation areas in contemporary city planning is important for creating healthy living environments (Ustundag et al., 2011). Sports and recreational activities are constantly vulnerable to multiple safety matters before, during and after activities. Positive applications could prevent the existence of accidents that provoke injuries to the participants (Zakaria et al., 2016).

Most of the accidents in parks occur from unsafe playground equipment, inattentiveness of the children, and neglect of the families (Gul, 2012). Miles and Priest (1999) remarked that management process is one of the essential components of the recreational activities. Additionally; program evaluation, program development and administration, risk management and research are the key elements of the management.

Definitions of Leisure and Recreation

Leisure: Discretionary time is the time remaining after sleeping, commuting, working, personal tasks and doing necessary household and which can be used in a chosen way (Tribe, 2015).

Recreation: Activities conducted in leisure time. Recreational activities comprise home-based activities such as watching television and reading, and those outside the home comprise theatre, cinema, sports, and tourism (Tribe, 2015).

Recreational activities categorized by Baud-Bovy and Lawson (2002) into six categories.



Table 1. Categories of recreational activities

Category of activities	Examples
Taking place about the home	Watching television, reading, listening to music, gardening, do-it-yourself hobbies,
Having a high social content	exercise, leisure use of computers Entertaining, eating out, drinking in bars, party going, visiting friends and relatives
Cultural, educational and artistic interests	Visiting theatres, concerts, exhibitions, museums, attending non-vocational classes
Pursuit of sport, either as participants or spectators	Golf, football, swimming, tennis, bowls, darts, gymnastics
Informal outdoor recreation	Driving for pleasure, day excursions to seaside and countryside, walking, picnicking
Leisure tourism involving overnight stay	Longer distance travel, tours, weekend breaks, holidays and vacations

Categories of recreational activities (Baud-Bovy and Lawson, 2002).

Attendance in recreational activities seemed to be undulating recently, with an increase in team, winter, water, and fitness sports participation. Individual sports decreased moderately in 2015 while racquet and outdoor sports continued to stay unchanged (Physical Activity Council, 2016).

Ambitiousness Youth, Young Adult & Adult Participation in Recreational Activities

Ambitiousness participation calculates non-participants' attentiveness in particular outdoor recreation, sports, fitness and leisure time activities. A lot of ambitiousness participants selected being attended to outdoor activities. In fact, youth and young adults in every age community described camping as their top interest. Bicycling follows as second among ambitiousness young adult participants, ages between 18 - 24, and the activity came in third among nonparticipants, ages between 6 - 12 and 13 - 27. Hiking and running/jogging were also activities that each age group wanted to try (The Outdoor Foundation, 2016).

For ambitiousness adult participants of all ages — and ambitiousness participants of all ages — camping and bicycling were in the top 3 most interesting activities out of a range of outdoor, sports, fitness and leisure time activities. Hiking and running/jogging also rated in the top 10 most attractive activities among adult participants (The Outdoor Foundation, 2016).

Risk Management

Risk management has a variety of roots and is applicated by a wide range of professionals. Risks that affect corporations can have issues with regard to financial performance and professional esteem, along with milieu, safety, and societal results. Consequently, managing risk efficiently helps the corporation to perform well in an environment full of ambivalence (www.iso.org).

The consideration of risk management emerged after World War II. Risk management has long been linked with the utilize of merchandise assurance to preserve individuals and corporations from diverse losses linked with casualties. Different shape of risk management, options to merchandise assurance, emerged throughout the 1950s when merchandise assurance was comprehended as very expensive and uncompleted for protection against risk (Dionne, 2013). One of the early developments in risk management was in the United States out of the assurance management purpose. The application of risk management became more common and more advantageous organized because the price of assurance in the 1950s had become prohibitive and the extent of coverage restricted. Corporations noticed that acquiring assurance was inadequate if there was also insufficient awareness to the preservation of property and people. Assurance customers, therefore, became worried with the standard of property protection, the standards of health and safety, product liability consequences and other risk control worries. This combined method to risk financing and risk



control advanced in Europe throughout the 1970s and the concept of total price of risk became crucial. As this method became established, it also became clear that there were many risks facing corporations that were not insurable. The instruments and methods of risk management were then spread to various disciplines. The maturity of the risk management discipline is now such that the associated with assurance is much weak. Insurance is now seen as one of the risk control methods, but it is only relevant to a certain section of dangerous risks. Risks related to economics, commercial, marketplace and fame issues are accepted as being particularly crucial, but outside the historical extent of insurance (Hopkin, 2017).

International Organization for Standardization (ISO) & Parks

ISO is an independent, non-governmental international organization with an affiliation of 163 national standards bodies. Through its members, it brings together specialists to share knowledge and develop voluntary, consensus-based, market relevant International Standards that support innovation and provide solutions to global challenges (www.iso.org).

Technical Committee of ISO (ISO/TC 83) about sports and other recreational facilities and equipment ISO has developed 76 standards. 32 standards are still in the development phase. 22 countries are the participating members of these standards and 24 countries are the observing member that includes Turkey (<https://www.iso.org/committee/50190.html>). There are 4 standards for playgrounds (ISO TC/254) and these standards also include amusement park standards (<https://www.iso.org/ics/97.200.40/x/>). These 4 standards contain standards of design and manufacture; operation and use; requirements for inspection during design, manufacture, operation, and use; biomechanical effects on amusement ride passengers.

As a participating membership of UK to ISO about standards for facilities and equipment that related to sports and other recreational activities, according to British Standards Institution (2008), there are eight main components that create the standardization.

Table 2. BS EN 1176 Standardization of children's playground equipment & surfacing

-
1. General safety requirements and test methods
 2. Additional specific safety requirements and test methods for swings
 3. Additional specific safety requirements and test methods for slides
 4. Additional specific safety requirements and test methods for runways
 5. Additional specific safety requirements and test methods for carousels
 6. Additional specific safety requirements and test methods for rocking equipment
 7. Guidance for installation, inspection, maintenance and operation
 8. Additional specific safety requirements and test methods for spatial networks
-

In Turkey, the standardization of playgrounds has been determined by the Turkish Standards Institute. TS EN 1177 standardization specifies the standardization of the impact-reducing playground floor layouts and the determination of the critical fall height. TS EN 1177-1 standardization introduces standards for general safety rules and test methods with playground components and ground rules.

International Organization for Standardization (ISO) & Risk Management

Risks affecting corporations can have resulted in terms of financial performance and professional fame, as well as environmental, safety and social consequences. Therefore, managing risk efficiently helps corporations to perform well in an environment full of unpredictability. ISO 31000:2009, Risk management – Principles and guidelines, provides principles, framework and a process for managing risk. It can be used by any corporation regardless of its size, activity or sector. Using ISO 31000 can help corporations increase the probability of obtaining objectives, increase the determination of opportunities and threats and effectively distribute and use resources for risk treatment. However, ISO 31000 cannot be used for authentication intentions but does provide guidance for inner or outer inspection schedules. Corporations take advantage of it can compare their risk management applications with an internationally recognized benchmark, providing sound principles for effective management and corporate governance (<https://www.iso.org/iso-31000-risk-management.html>).



Table 3. ISO Standardizations of sports and other recreational facilities and equipment and risk management

	Published ISO standards	ISO standards under development	Participating members	Observing members
ISO/TC 83 - Sports and other recreational facilities and equipment	76	32	22	24*
ISO/TC 262 – Risk management	3	3	53*	17

*Membership of Turkey (Table 3 is created from the datas that retrieved from www.iso.org).

Table 4. Ten steps to risk assessment and developing a risk management plan

1. Make a commitment as an organisation to risk management
2. Identify possible threats and risks
3. Assess the level of each risk
4. Decide to accept or treat each risk
5. Determine treatment options for all unacceptable risks
6. Formalise your risk management plan
7. Implement your treatment options
8. Communicate information to everyone affected
9. Review your risk management plan
10. Identify any new risks and update your action plan
Government of South Australia Office for Recreation and Sport (2016).

Application of the Risk Management in Park and Recreational Activities

The aim of risk management in recreation is to protect the recreation corporation's proprietorship (field, building, facility, etc.), the income of the recreational corporation and the recreational corporation's reputation (coach, athlete, spectator etc.) (Cobanoglu, 2008). The procedure of risk management can be applied as part of a best practice management system within the sport and leisure sector (Fuller & Drawer, 2004). Classification of the risk management in sports and recreational activities as followed;

1. Risk management in activities
2. Risk management in injuries
3. Risk management in facilities and equipment
4. Risk management in insurance and finance
5. Risk management in sports branches
(Yilmaz, 2013).

Results, Conclusions and Recommendations

Nearly 25% of adolescents reported at least one recreational injury. Injuries were mostly minor, reflecting soft tissue trauma and skin abrasions (Grimmer et al., 2000). Local governments need to produce effective policies to ensure that sports services are organized to promote sports and for the adoption by the public (Ucar, 2014). Designs that allow parents and children to socialize and at the same time take into account climatic characteristics should be prioritized (Uysal, 2015).

Risk management in park and recreational activities

Basically, there are four main sources of the risk in the park and recreational activities and these risk factors are facilities, equipment, program, and human. In terms of risk management approach, park and recreational activity corporations should analyze four key management areas: finance management, insurance management, facility management, injury management (Yilmaz, 2013).



Risk management in the park and recreational activities should consist of four basic processes: planning, identification, evaluation, prevention, and control. The aim of the risk management in the park and recreational activities should be; identifying the risks associated with the goals of the corporation, controlling the most critical risks first, and ensuring that the risks and the detailed understanding of the impact on the success of the corporation and prioritizing the risks.

Heat cramps, heat tiredness and heat strikes due to increased body temperature that can occur in hot and humid environments due to the physical activity are health problems that have frequently occurred in recent years. Because of this fact, injuries may occur which may lead to death rarely (Armstrong et al., 2007). Additionally, cardiac problems are the most common causes of death during recreational activities (Fornes & Lecomte, 2003). The risk plan for possible first aid interventions should include education programs covering personal health information, use of personal protective equipment, cleaning of pathogenic soils and materials, safe removal of pathogenic materials from the environment, proper hand washing and drying techniques and vaccination. Risk management plan should also include medical examination, proper activity program, emergency intervention team. Main components of the plan should be; symptoms of the illness, emergency health team, liquid intake, temperature limits, clothing, acclimatization, preventive approaches. Weather conditions can sometimes be life-threatening during sport and outdoor activities such as camping, hiking, cycling, fishing, and climbing, especially in open areas. Most of the natural disasters like storm, landslide, snow slide, flood, hail may result in loss of life (Twigg, 2004). The main components of the risk management plan for this situation are education (about weather conditions), intervention team, timing, location, nature, and equipment.

The necessity of wearing appropriate clothing and appropriate equipment for the activities should be constantly emphasized (Luke & Micheli, 1999). The tools and equipment that used in parks and recreational events must be of good quality and robust. The walls around the area where the activity is held should be covered with protective and soft material (Frosdick & Walley, 2010). The grounds of sporting areas should have the most efficient structure and should be well planned. There should be no tools or obstacle objects in the area of activity that could jeopardize the safety of the individuals. Additionally, slippery floor increases the risk factor of lower extremity injuries (Piekarz et al., 2015).

The most common, contemporary and least expensive method of transferring the risk is to take out insurance services. There are various types of insurance that should be considered recreational corporations. First one is liability insurance. The various classes covered by the liability insurance are; public liability insurance, occupational liability insurance, manager and responsible liability and association liability insurance. The second one is income protection insurances; workers' compensation insurance, personal accident insurance, participant insurance and travel insurance. The third one is insurance for the protection of assets. Other insurance types that might be considered by recreational corporations are cancellation and abandonment insurance, natural disaster insurance, private emergency insurance, tax audit and legal expense insurance (Yılmaz, 2013).

Participation of Turkey in ISO/TC 262 – Risk management indicates that Turkey recognized the importance of risk management, actively participates in the technical committee & applies the standardizations of risk management. However, the application of ISO/TC 83 - Sports and other recreational facilities and equipment standardizations are still being observed by ISO is Turkey. Application of ISO/TC 83 standardizations would make further investments with reduced risk factors.

Regarding the diversity of activity contents of park and recreation management, priority should be given to the risk factors that may be encountered in the planning process of the facilities should be; location selection, climatic conditions, landscape and architecture, transportation and users' expectations. Therefore, expectations should be taken into account, especially attendance of the participants in the physical activity, and specific and general risk factors should be considered that different age groups may encounter in the same field of activity.

References

- Albert, G., Abo-Kalla, H., Baron, M. (2011). Transport and Environmental Variables and the Impact of Cultural Differences on Playground Use. *Journal of Urban Planning and Development*, 137:291-297.
- Armstrong, L. E., Casa, D. J., Millard-Stafford, M., Moran, D. S., Pyne, S. W., & Roberts, W. O. (2007). Exertional heat illness during training and competition. *Medicine & Science in Sports & Exercise*, 39(3), 556-572.



- Baud-Bovy, M., & Lawson, F. (1998). *Tourism and recreation: handbook of planning and design*. Butterworth-Heinemann Ltd.
- British Standards Institution. (2008). *Playground equipment and surfacing. General safety requirements and test methods* (ISBN 978 0 580 64112 1). London: BSI Group Headquarters.
- Cobanoğlu, H.O. (2008). *Sporda risk yönetimi: Turkcell süper ligindeki sporcuların risk değerlendirmeleri üzerine bir araştırma*. Yüksek Lisans Tezi. Eskişehir: Anadolu Üniversitesi.
- Dionne, G. (2013). Risk management: History, definition, and critique. *Risk Management and Insurance Review*, 16(2), 147-166.
- Fornes, P., & Lecomte, D. (2003). Pathology of sudden death during recreational sports activity: an autopsy study of 31 cases. *The American journal of forensic medicine and pathology*, 24(1), 9-16.
- Frosdick, S., & Walley, L. (2010). *Sports and Safety Management*. Taylor & Francis.
- Fuller, C., & Drawer, S. (2004). The application of risk management in sport. *Sports medicine*, 34(6), 349-356. Government of South Australia Office for Recreation and Sport. (2016). *Risk Management Resource For Recreation & Sport Organisations*. South Australia.
- Grimmer, K. A., Jones, D., & Williams, J. (2000). Prevalence of adolescent injury from recreational exercise: an Australian perspective. *Journal of adolescent health*, 27(4), 266-272.
- Gul, E. D. (2012). Ailelerin çocuk bahçelerine ve çocuk bahçelerindeki materyallere bakış açılarının incelenmesi. *Cukurova Universitesi Sosyal Bilimler Enstitüsü Dergisi*, 21(3).
- Hopkin, P. (2017). *Fundamentals of risk management: understanding, evaluating and implementing effective risk management*. Kogan Page Publishers.
- International Organization for Standardization. (2015). *ISO 31000 Risk management* (ISBN 978-92-67-10645-8). Switzerland: ISO copyright office.
- Leopkey, B., & Parent, M. M. (2009). Risk management issues in large-scale sporting events: A stakeholder perspective. *European Sport Management Quarterly*, 9(2), 187-208.
- Luke, A., & Micheli, L. (1999). Sports injuries: emergency assessment and field-side care. *Pediatrics in review*, 20, 291-302.
- Miles, J. C., & Priest, S. (1999). *Adventure Programming*. Venture Publishing, Inc., 1999 Cato Avenue, State College, PA 16801.
- Physical Activity Council. (2016). *2016 Participation Report The Physical Activity Council's annual study tracking sports, fitness, and recreation participation in the US*. USA. Sports Marketing Surveys.
- Piekarz, M., Jenkins, I., & Mills, P. (2015). *Risk and Safety Management in the Leisure, Events, Tourism and Sports Industries*. CABI.
- The Outdoor Foundation. (2016). *Outdoor Recreation Participation Topline Report 2016* (202.271.3252). Washington DC.
- Tribe, J. (2015). *The economics of recreation, leisure and tourism*. Routledge.
- Twigg, J. (2004). *Disaster risk reduction: Mitigation and preparedness in development and emergency programming*. Humanitarian Practice Network, Overseas Development Institute.
- Ucar, A. (2014). Formulation of Sport and Recreation Policies in Turkey and Delivering These Services. *Yerel Politikalar*, (6):27-48.
- Ustundag, O., Devecioglu, S., & Akarsu, E. (2011). The Role and Importance of Sport and Recreational Areas in Urban Planning. In 6th International Advanced Technologies Symposium (IATS'11), Elazığ, Turkey.
- Uysal, A. B. (2015). Çocuk Oyun Alanlarının Geliştirilmesinde Bir Yerel Katılım Deneyimi. *Megaron*, 10(3).
- Yılmaz, I. (Ed.). (2013). *Sporda Risk Yönetimi*. Eskişehir: Anadolu University Web-Ofset.
- Zakaria, J., Harun, M. T., Salamuddin, N., & Taff, M. A. M. (2016). Risk Management Practices towards Developments of Sport and Recreational Activities in Malaysia. *Open Access Library Journal*, 3(07), 1.

Web Sources

- <https://www.iso.org/>
- <https://www.iso.org/committee/50190.html>
- <https://www.iso.org/ics/97.200.40/x/>
- <https://www.iso.org/iso-31000-risk-management.html>



Endurance Test Sets for Individualization Training Swimmers

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Abstract

Successful training in swimming is impossible without precise and correct control of a swimmers' training process. The coach must have as much information as possible about the athlete's fitness to obtain a comprehensive picture of the course of training and to optimally plan future activities. The results of performing a specific exercise depend on the state of function which is most vital for ensuring performance under certain conditions. The key precondition logically underpinning the informative nature of the tests is that the results of the test. Thus exercises which provoke immediate maximum deviations from training effects can provide the most objective pedagogical evaluation of various endurance components. The use of specially designed swimming test sets allows swimmers to learn the necessary control of their training process, helps determine strengths and weaknesses of their preparation and prepares them to accept operative corrections. The aim of the work is to optimize the management of swimmers' training processes on the basis of special testing results. In order to determine their areas of need, two of Latvia's best swimmers were tested with 6 specific endurance test sets. Once determined, the swimmers were given different swimming sets to develop their areas of weakness. For all swimmers we have developed 6 areas of sets to either sustain or improve a swimmer's endurance (endurance of anaerobic and aerobic ability). Intensity for each set differs depending on whether the athlete is improving or sustaining these areas. Intensity within the sets for improvement of the areas ranges between 83-98% of maximum speed and to sustain the areas 80-96% of maximum speed depending on individual swimmer results from the test sets.

Key words: sport swimming, endurance, testing, training planning

Introduction

Effective control of an athlete's training is only possible if the coach knows what is happening to the athlete's organism at each stage of training (Counsilman 1977, Shirkovce 2002, Maglischo 2003, Vasilie, 2014, Talanian 2015, Dalamitros 2016,).

Successful swimming training is impossible without accurate and appropriate monitoring of the swimmer. The process of planning and organizing training is largely driven by analyzing changes in the swimmer's capabilities during various



periods and stages of training and ascertaining her strengths and weaknesses. The coach must have as much information as possible about the athlete's fitness to obtain a comprehensive picture of the course of training and to optimally plan future activities. The results of performing a specific exercise depend on the state of function which is most vital for ensuring performance under certain conditions (Sokolovas 2002, Maglischo, 2003, Anderson et al, 2008, Ford et al, 2011., Williams 2011).

The key precondition logically underpinning the informative nature of the tests is that the results of the test (Petrovich, 1989, Petrovich et al, 1990 Oliveira et al, 2012). Thus exercises which provoke immediate maximum deviations from training effects can provide the most objective pedagogical evaluation of various endurance components.

The results of the exercises are mutually comparable, therefore testing under the auspices of this program provides objective information about the proportional development of specific characteristics during various stages of training.

The aim of the work is to optimize the management of swimmers' training processes on the basis of special testing results.

Methods and organization

The study involved two Latvian athletes, both breaststroke swimmers. One of them, P., was National champion 50 and 100 m swimmer, 18 years old; while the other, V., was National champion in 200m breaststroke, 19 years old. In order to compare the overall endurance fitness and just the training of these athletes and encourage improved results, a set of tests was employed over three (3) sessions to determine and evaluate the swimmers' special endurance development level. Interval exercises with maximum swimming speed (Petrovich, 1998, Shirkovec, 2002) can be used for the pedagogical control of the various special endurance criteria.

A-2×25 m, rest interval 80 s – anaerobic alactic power;

B-16×25 m, rest interval 80 s – anaerobic alactic capacity;

C-4×50 m, rest interval 45 s – anaerobic lactate power;

D-4×50 m, rest interval 10 s – anaerobic lactate capacity;

E-8×50 m, rest interval 10 s – aerobic power;

F-16×50 m, rest interval 10 s – aerobic capacity.

In order to evaluate the developmental balance of special endurance components, the following special coefficients were used:

$K_1=A/B$ – describes anaerobic alactic capacity compared with alactic power;

$K_2=B/C$ – describes lactic capacity compared with alactic capacity;

$K_3=C/D$ – describes lactic capacity compared with lactic power;

$K_4=D/E$ – describes aerobic power compared with lactic capacity;

$K_5=E/F$ – describes aerobic capacity compared with aerobic capacity;

K_6, K_7, K_8, K_9 ($K_6=A/C$; $K_7=A/D$; $K_8=A/E$; $K_9=A/F$) – describes all components compared with alactic power (maximum speed);

$K_{10}=D/F$ – describes aerobic capacity compared with lactic capacity.

In order to comprehensively assess their special endurance development level, the athletes' individual coefficients were compared with model indicators. If an individual coefficient describing a particular characteristic is significantly lower than the relevant model coefficient, the given characteristic has a development reserve and close attention must be paid to this characteristic in the immediate future. If the coefficient is greater than the model coefficient, it can be considered that the given characteristic is overly developed, possibly at the expense of some other characteristic.

Indicators were measured after each test. Time was measured in seconds after each test using a SEIKO hand chronometer.



Pulse rates were taken by the swimmers themselves. The pulse rate was measured on the carotid artery, 3 times after workout at interval: 0-10 s (P_1), 30-40 s (P_2) and 60-70 s (P_3). Together with sporting results, these indicators are often the most objective criteria used by trainers working with swimmers. The size of the P_1 indicator reveals the reaction to load of the cardiovascular system. P_2 and P_3 indicators describe recovery of heartrate frequency.

Lactate indicators were determined using a lactate express diagnosis device in the third minute after completion of the C, D, E, F tests and the first minute after test A.

Results

In order to determine and evaluate the swimmers' special endurance development level, we used the aforementioned set of tests. The test results are shown in table 1.

Table 1. Athlete's results of the special endurance test (time, heart rate and lactate) at the beginning of swimming season.

Swimmer		Alactic power Test A	Alactic capacity Test B	Anaerobic power Test C	Anaerobic capacity Test D	Aerobic power Test E	Aerobic capacity Test F
V.	Time, s*	30.1	29.75	33.8	36.29	36.65	37.4
	Heart rate, 10 s**	25-24-18	26-24-18	29-26-21	29-26-21	30-24-22	30-25-20
	Heart rate's per 10s sum	67	68	76	76	76	75
	La, mmol/l	4,7	6.6	12,5	8.5	8.6	9.5
P.	Time, s*	31.28	31.75	37.65	39.48	41.35	43.22
	Heart rate's per 10s sum	29-26-20	30-26-25	33-28-25	32-27-24	33-27-24	32-28-25
	P-sum	74	81	86	83	84	85
	La, mmol/l	7.2	7.5	11.4	9.1	8.5	10.6

* - average test time on 50 m;

** - number of heart rate in 10 seconds immediately after the swim, after 30 seconds, after 60 seconds.

After summarizing the test results we obtained the following individual coefficients (see table 2).

Table 2. Athletes 'special endurance individual coefficients in comparison with model indicators

Coefficients		Normality range	Swimmer V.		Swimmer P.	
K ₁	A/B	0.97-0.99	1.01	Higher	0.99	Normal
K ₂	B/C	0.89-0.92	0.88	Lower	0.83	Lower
K ₃	C/D	0.95-0.97	0.93	Lower	0.95	Normal
K ₄	D/E	0.97-0.99	0.99	Normal	0.95	Lower
K ₅	E/F	0.97-0.99	0.97	Normal	0.95	Lower
K ₆	A/C	0.87-0.90	0.89	Normal	0.83	Lower
K ₇	A/D	0.84-0.87	0.84	Normal	0.79	Lower
K ₈	A/E	0.81-0.83	0.82	Normal	0.75	Lower



K ₉	A/F	0.79-0.82	0.8	Normal	0.72	Lower
K ₁₀	D/F	0.93-0.96	0.97	Higher	0.91	Lower

Swimmer V., whose specialty is 200m breaststroke, scored within the normal range for six coefficients covering aerobic power, capacity development and anaerobic capacity levels. Anaerobic alactic and lactic power are in development reserve. Pulse and lactic indicators recorded after the tests align with accepted bodily reactions and loads.

Swimmer P. had only two coefficients within normal range. These are alactic power and lactic capacity. All other endurance components– anaerobic power and capacity, aerobic power and capacity – are poorly developed. Furthermore, pulse reaction to test loads is inadequate, pulse indicators are higher than the accepted norm, and recovery takes longer. This may be regarded as an inadequate endurance level or due to individual cardiovascular system peculiarities. Furthermore, lactic indicators after tests align with accepted bodily reactions and loads. The test result explain why swimmer P. is only successful in sprint distances.

Comparing the test results for both swimmers, we conclude that the overall endurance component development level is satisfactory for swimmer V. and unsatisfactory for swimmer P.

Based on both swimmers' test results, individual training programs were created to achieve improvement in the proportional development of special endurance components. The tasks were performed over a single season from 6 September 2012 to 2 July 2012. Sports training theory and the criteria of athletic swimming were used to select and systematize efficient interval training series in order to realize the reserve of the weaker components of special endurance (see table 3). The column “intensity” presents the results for the respective distances as a percentage in accordance with the length to be swum for the given exercise. Intensity can be calculated using this formula:

$A=R/I \times 100$, where:

A – Training session time, 50m;

R – Existing result (average time 50m) in concrete test

I – required training set's intensity, in percentage from every specifics test.

Table 3. Basic swimming sets for general development of special endurance

Energy supply mechanisms/ Load capacity	Exercises	Intensity, %
Anaerobic alactic power	2×25 m, i*-15 s	90-92
	2×25 m, i-80 s and more	95-97
Anaerobic alactic capacity	8-16×25 m, i-15 s	88-90
	8-16×25 m, i-80 s and more	93-95
	16×100 m, i-30s	81-84
	8-16×100 m, i-80 s and more	87-89
Anaerobic lactic power	2×50 m, i-20 s	88-90
	2×50 m, i-40 s	90-92
	4×50 m, i-45 s	88-90
Anaerobic lactic capacity	4×100 m, i-20 s	86-87
Aerobic power	2×50 m, i-80 s and more	89-92
	2×200 m, i-60 s	88-90
	4×200 m, i-60 s	85-87
	2×200 m, i-80 s and more	93-95



Aerobic capacity	4x200 m, i-90 s and more	90-93
	10 and more times 50m,100m or 200 m	AnTh** mode, 2000 m and longer distances

*i – rest interval;

** - anaerobic threshold.

For example, analysis revealed that swimmer P. had weak aerobic capacity and power. We proposed the following exercises to realize the aerobic capacity reserve:

- 1) swimming (2000 m and more) with average result 1min.50 sec in100 m, once per week in September and October;
- 2) 20*50 m, breaststroke, rest interval-15 s with result 45-47 s three times per week, throughout the training cycle;
- 3) 8x200 m in anaerobic threshold mode with result 3.05-3.10 once per fortnight from December to March; with result 3.00-2.59 from March to July; Rest interval 30-40sek.
- 4) 8-10*100, rest interval-30 s with result 1.24-1.25 from March to July.

An analogous method was used to calculate the training swimming sets results for both swimmers by performing exercises to develop the individual components of endurance. Taking account of the rather high pulse indicators for swimmer P., we increased the rest intervals when swimming 100 and 200 m. For example, when swimming 16x100 m, during rest interval-30s swimmer's heart rate was 25 per 10 s, or 150 per one min. So rest interval was prolonged till heart rate became 20 per 10 s, or 120 per minute.

Comparing repeated test results for both athletes after six months, we concluded that the special exercises helped to improve the lactic capacity and power (K_2 , K_3) indicators for both athletes. Swimmer V. was also able to record an increase in anaerobic capacity (K_1 , K_2). Over six months swimmer P. also achieved improved aerobic capacity indicators. Overall swimmer V. had 9 out of 10 coefficients in the normal range, while swimmer P. only had three. Continuing training by individual training parameters, after the start of the repeated testing season (ten months later), two swimmers' results are presented (see tables 4 and 5).

Table 4. Swimmer's V. tests of the special endurance results (time, heart rate and lactate) at the beginning and at the end of the swimming season.

Load capacity	Alactic power Test A		Alactic capacity Test B		Anaerobic power Test C		Anaerobic capacity Test D		Aerobic power Test E		Aerobic capacity Test F	
Time, s*	30.1	29.0	29.75	29.1	33.8	32.7	36.29	35.5	36.65	35.8	37.4	36.9
Heart rate per 10 s, sum	67	69	68	70	76	75	76	75	76	74	75	74
La, mmol/l	4.7	4.5	6.6	7.0	12,5	13.4	8.5	8.6	8.6	7.8	9.5	8.8

*results at start of season – standard font, end of season - bold.

Results in all tests improved, with no change in pulse indicators. Lactate indicators fell in tests E and F (aerobic power and capacity indicators). The improvement of results with lower pulse indicators indicate increased work economy.



Table 5. Swimmer's P. tests of the special endurance results (time, heart rate and lactate) at the beginning and at the end of the swimming season.

Load capacity	Alactic power Test A		Alactic capacity Test B		Anaerobic power Test C		Anaerobic capacity Test D		Aerobic power Test E		Aerobic capacity Test F	
Time, s*	31.28	31.1	31.75	31.4	37.65	35.0	39.48	38.11	41.35	39.1	43.22	40.4
Heart rate per 10 s,												
sum	74	73	81	79	86	85	83	80	84	82	85	83
La, mmol/l	7.2	7.0	7.5	7.6	11.4	10.5	9.1	8.1	8.5	8	10.6	8.8

* Results at the beginning of swimming season – standard font, end of season - bold.

Swimmer P. saw an improvement for all test results, as well as a reduction in lactic quantity. Pulse indicators remained high, indicating individual reaction to training loads. Throughout the season the athlete's rest intervals were increased in order to ensure recovery in accordance with the load. Regarding improvement of overall results, we could not achieve proportional development improvement for all special endurance components (see table 6). While the athletes saw improvement in the aerobic endurance components, in comparison with alactic power (maximum speed) two of them remained in development reserve. During the season the four lagging endurance components were raised within normal bounds. There were no changes in the aerobic capacity coefficient or the relationship between maximum speed and anaerobic lactic power and capacity.

Table 6. Comparison of athletes' individual P. coefficients with model indicators

Coefficients		Normal range	First test		Repeated test	
K ₁	A/B	0.97-0.99	0.99	Normal	0.99	Normal
K ₂	B/C	0.89-0.92	0.83	Lower	0.89	Normal
K ₃	C/D	0.95-0.97	0.95	Normal	0.91	Lower
K ₄	D/E	0.97-0.99	0.95	Lower	0.97	Normal
K ₅	E/F	0.97-0.99	0.95	Lower	0.95	Lower
K ₆	A/C	0.87-0.90	0.83	Lower	0.88	Normal
K ₇	A/D	0.84-0.87	0.79	Lower	0.81	Lower
K ₈	A/E	0.81-0.83	0.75	Lower	0.79	Lower
K ₉	A/F	0.79-0.82	0.72	Lower	0.79	Normal
K ₁₀	D/F	0.93-0.96	0.91	Lower	0.94	Normal

Conclusions

In reading the above results, equally increasing proportionate (7%) results across the test sets (percentage of time) assists in determining strengths and weaknesses in the associated tests. The following are conclusions based upon the above results.

1. Using the proposed test system makes it possible to determine and evaluate swimmers' special endurance development level, and on this basis to establish the various components of fitness.
2. The proposed exercises make it possible to implement reserves for improving the weakest components of special endurance, as well as improving the balance of special endurance component development for each athlete individually.



3. The time required to improve the weakest components of endurance depends on the swimmers' individual characteristics.

Discussion: Testing over three sessions allowed recovery of the athletes giving more accurate test results and deeper knowledge and insight into their overall fitness. Upon repeating these tests, athletes and coaches should be aiming to reduce pulse rate and lactate measurements.

To use these test sets beneficially for each swimmer, individualization of each athletes work out is essential. To stay within the correct load, coaches must use an individual swimmer's test results to find the correct pace the athlete should working at. With deviation from that pace, the swimmer will enter an alternate load working a different system. For swimmers not meeting required times, rest periods should be increased to increase the load capacity and allow athletes to achieve the desired (individualized swimming time) outcomes.

References

- Anderson, M., Hopkins, W., Alan Roberts & David Pyne (2008). Ability of test measures to predict competitive performance in elite swimmers. *Journal of Sports Sciences*. 26, 2, 123-130.
- Counsilman, J.E., (1977). Adaptation in skeletal muscle during training for sprint and endurance swimming. *Swimming Medicine IV*, Baltimore. Competitive Swimming Manual for Coaches and Swimmers. Bloomington, In: Councilman Co. Dudley, G.A., Abraham, W.M. & Terjung, R.L. (1982).
- Dalamitros A.A., Zafeiridis A.S., Toubekis A.G., Tsalis G.A., Pelarigo J.G., Manou V., Kellis S. (2016). The effects of short- and long-interval protocols on swimming performance, aerobic adaptations and technical parameters: a training study. *Journal of Strength and Conditioning Research / National Strength & Conditioning Association*.
- Ford, P., De Ste Croix, M., Lloyd, R., Meyers, R., Moosavi, M., Oliver, J., Kevin Till & Craig Williams, W. (2011). The Long-Term Athlete Development model: Physiological evidence and application. *Journal of Sports Sciences*, 29, 4, 389-402.
- Maglischo, E.W. (2003). *Swimming Faster*. The essential references on technique, training and program design. Human Kinetics Inc. University Park Press. 505-520.
- Maglischo, E.W. (2003). Specific of aerobic training. *World Clinic Yearbook*, edited by R.M. Ousley, 15-29. Fort Lauderdale, FL: American Swimming Coaches Association.
- Oliveira, M., Caputo, F., Lucas, R., Benedito S. Denadai, Camila Greco. (2012). Physiological and Stroke Parameters to Assess Aerobic Capacity in Swimming. *International Journal of Sports Physiology and Performance*, 7, 218-223.
- Petrovich G., Nekhvyadovich A., Prilutsky P. Petrov I. (1990). Method for calculating the individual operating modes of swimmers in aerobic and anaerobic power zones on the basis of the analysis of competitive activity: Method of Recom. Minsk, -48 p.
- Petrovich G. (1998). Stage evaluation of special endurance swimmers for the purpose of correcting the training process: methodical recommendations. Minsk, - 45 p.
- Shirkovets E. (2002) Management of swimmer training by determining zones of power on the lactate curve. *Swimming: Collection*. 51-58.
- Sokolovas, G. (2002). Seasonal training design. *American Swimming Magazine*, 4, 20-23.
- Talanian, J.L., (2015,). Defining Different Types of Interval Training: Do we need to use more specific terminology? *Sport and exercise medicine*, Volume 1, Issue 5, 2015, 161-163.
- Vasile, L. (2014). Endurance Training in Performance Swimming. Original Research Article. *Procedia - Social and Behavioral Sciences*, Volume 117, 19, 232-237.



Knowledge Transfer Through Clusters

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Abstract

Clusters are viewed as a subject worth attention paid by scholars and politicians for they are able to add to regional economy development through various outcomes of their performance. Valuable observations are made on how the clusters performance could be estimated. Scientific literature suggests that innovation, knowledge transfer, social networks, collaboration, regional/ national proximity, competitiveness, research and development (R&D) is an integral part of cluster studies. The aim of this study is to suggest a tool, which would allow evaluating the efficiency of clusters performance in terms of knowledge transfer, understood in the most general way. There are various aspects of cluster performance emphasized by different researchers. We offer a system of indicators, which could be used for cluster performance description where transfer of knowledge is the key phenomenon taken into account. It is offered to include 44 indicators into the system used for cluster performance evaluation. The indicators are attributed into three groups according to different facets that they represent. The groups are named as Resources, Activities and Processes. Transfer of knowledge is viewed as a very important part of cluster performance and is ascribed to activities, which are difficult to measure. For integration of the indicators included into the system we employ one of multi-criteria methods, specifically, SAW method. The results suggest that clusters, which show good results with processes, stay in high positions, while clusters, which are keeping behind with processes, show worse results in cluster performance. This system of indicators could be used in further research to detect if these three groups of indicators should be rated the same for clusters belonging to different sectors.

Introduction

It is notable that the interest in clusters and their role in sustainable regional development are increasing as scholars often review this topic (Tvaronavičienė 2017a, 2017b; Razminienė, Tvaronavičienė, 2017; Monni et al., 2017). Valuable observations are made on how the clusters should be researched in order to improve their performance which would result in economic growth both in regional and national scale. Scientific literature suggests that innovation, knowledge sharing, social networks, collaboration, regional/ national proximity, competitiveness, research and development (R&D) is an integral part of cluster studies (Zemlickienė et al. 2017; Rezk et al. 2015; Fuschi and Tvaronavičienė 2016; Tvaronavičienė 2016; Razminienė et al. 2016; Dobrovolskienė et al. 2017; Tvaronavičienė 2017; Panfiluk and Szymańska 2017; Prause and Atari 2017; Tetsman et al. 2017; Oganisjana et al., 2017). These phenomena are of high importance when talking about the performance of the clusters for the results depends on how they are managed and evaluated. Different authors agree that geographic proximity is worth the attention that it gets for it enables collaboration, innovation (Letaifa and Rabeau 2013; Boschma et al. 2013; Castellani et al. 2013; D'Este et al. 2013; Maskell 2014) and knowledge sharing (Crespo et al. 2014; D'Angelo et al. 2013; Sokół, Figurska, 2017). In addition, social networks are analysed to understand their relationship with innovations (Casanueva 2013; Letaifa and Rabeau 2013), production (Carswell 2013) and knowledge sharing (Lorenzen and Mudambi 2013). The scholars suggest that industry clustering has positive effect on innovation performance and knowledge (Lai et al. 2014; Tavassoli and Tavassoli 2014; Bouncken and Kraus 2013; Morrison et al. 2013; Feldman 2014). Literature study, data collection and analysis allow making a conclusion that profit making or capital accumulation can differ depending on companies upgrade (Tokatli 2013) or path dependence (Dobusch and Schussler 2013). D'Agostino (2013) studies the relationship between a region's home and foreign investments in R&D that affects home's regional knowledge production. Recent researches on competitiveness and clusters for regions and regional



policy show that policies are mostly focussed on strengthening existing agglomerations rather than establishing new ones (Ketels 2013). The concept of creating shared value which is emphasized by scholars in cluster studies also receives critique for several reasons, such as not being original, ignoring tension between social and economic goals, being naïve about the challenges of business compliance and having basis of shallow conception of the corporation's role on society. On the other hand, this concept has strengths for successfully appealing to practitioners and scholars, elevating social goals to strategic level, articulating a clear role for governments in responsible behaviour, adding rigor to ideas of “conscious capitalism” and providing an umbrella construct loosely connected concepts (Crane *et al.* 2014).

Authors view knowledge transfer from different angles. Bouncken and Kraus (2013) emphasize that damaging or encouraging effects for firms in clusters depend on three types of innovation performance: sharing knowledge with the partner, learning from the partner and technological uncertainty. The study resolves that positive results of co-opetition are achieved on revolutionary innovation when SMEs integrate their partners' knowledge or even if a greater technological uncertainty prevails. Hence, negative influence on revolutionary innovation is discovered when SMEs are sharing knowledge with their partners. Casanueva *et al.* (2013) analysed a wide range of ties in order to understand how they impact the transition of tacit and explicit knowledge. The results show that a central position is significant in product innovation while the role of structural holes is weaker. The study of Corredoira and McDermott (2014) shows that suppliers benefit from multinational corporation subsidiaries in cases when they collaborate with non-market institutions and are able to recombine experiential knowledge with standards gained from the subsidiaries. Crespo *et al.* (2014) claim that an evolutionary framework is presented in their work, where regional resilience is accounted by emphasising local knowledge sharing. A paper presents simple statistical measures, which characterize the structure of cluster which allows studying such properties as degree distribution and degree correlation of regional knowledge networks. Feldman (2014) provides a literature analysis that observes the mechanisms and institutions that promotes the creation of useful knowledge. Lai *et al.* (2014) suggest that industry clustering has positive effect on corporate innovation performance and corporate knowledge. Stanko and Olleros (2013) investigate knowledge spill-over mechanisms' effects on industry innovativeness and profit and their changes in industry growth. The findings suggest that the outsourcing negatively affects innovativeness but benefits profitability. Despite the attempts to detect the links among these phenomena and indicate their influence on each or several factors that are analysed by scholars, it is still complicated to evaluate the performance of the clusters. Different methods are applied in order to analyse qualitative and quantitative data, such as correlation and regression analysis (Casanueva *et al.* 2013; Lai *et al.* 2014; Tavassoli, Carbonara 2014; Crespo *et al.* 2014; D'Angelo *et al.* 2013), gravitation model (Castellani *et al.* 2013), case analysis (Ben Lafeita and Rabeu 2013; Boschma *et al.* 2013; Bouncken and Kraus 2013; Carswell 2013; Lorenzen, Mudambi 2013; Tokatli 2013; Dobusch and Schussler 2013; Morrison *et al.* 2013) or literature analysis (Crane *et al.* 2014; D'Agostino *et al.* 2013; Maskell 2014; Feldman 2014; D'Este *et al.* 2013; Ketels 2013). The problem of providing the most effective way to evaluate the data of different phenomena which are mentioned in clusters' studies could be by performing quantitative evaluation of clusters' performance (Ginevičius, A. 2007; Rutkauskas, Ginevičius 2011). The aim of this study is to suggest a tool, which would allow evaluating the efficiency of clusters performance in terms of knowledge transfer, understood in the most general way. Clusters' performance is complicated to evaluate for the measures of the aspects that must be calculated differ and the most appropriate solution to formalize these aspects should be found. There are many methodologies used in decision making sharing common characteristics of conflicting criteria, incomparable units, and difficulties in selection of alternatives. The alternatives are not predetermined but instead a set of objective functions is optimized subject to a set of constraints (Pohekar and Ramachandran 2004). Different multi-criteria evaluation methods are suggested by scholars for quantitative evaluation of the performance of a certain phenomenon (Simanaviciene and Ustinovichius 2010; Chen 2012; Ginevičius *et al.* 2013). Ginevičius *et al.* (2013) emphasize the importance of the development of a set of criteria as a stage of multi-criteria evaluation of a complex phenomenon. A single level set of criteria can be provided for experts to determine the weight of each criterion if their number is small and possible to conceive. On the other hand, if there are more criteria which makes it difficult to separate the most important ones from the less important, their number must be



reduced by forming a hierarchical structure where each hierarchical level is evaluated starting with the lowest one. Hence, the criteria in each hierarchical level must have the weight determined. The study is structured as follows. Part 1 provides the theoretical information of multi-criteria methods in quantitative evaluation. Part 2 gives the design of research and the methods of data evaluation. Part 3 presents the clusters that are considered in the study and illustrates the results of the evaluation of cluster performance. Conclusive remarks are incorporated in the final section of the study.

The methodology of quantitative evaluation of cluster performance

Multi-criteria Decision Making is a well-known branch of decision making. It deals with decision problems which involve a number of decision criteria. Multi-criteria Decision making as a discipline is rather young for the models and techniques of modern multi-criteria decision making were started to develop since 1950s and 1960s when many scholars were proposing their new models and techniques of multi-criteria decision making. The interest in this field is growing for the number of researches and development are continuously growing in the past decades (Zavadskas *et al.* 2014; Pohekar, Ramachandran 2004). Multi-criteria decision making, as described by Vincke (1992), is the most directly characterised by a set of multiple criteria method. The methods that were developed since 1950s differ in the required quality and quantity of additional information, the methodology used, the simplicity, the sensitivity tools used, and the mathematical properties they verify (Zavadskas *et al.* 2014). The main features that are shared by different methodologies are conflict among criteria, incomparable units, difficulties in selection of alternatives. The alternatives are not predetermined in multi-criteria decision making, a set of objective functions is optimized regarding to a set of constraints. The best solution is sought by evaluating a small number of alternatives against a set of criteria which are often hard to quantify. The alternatives are sought by making comparisons between the alternatives with respect to each criterion. Multi-criteria decision making methods can be used in solving both theoretical and practical problems. They are universal for their potential to quantitatively evaluate any complicated object described by a set of criteria (Ginevičius 2008). Quantitative multi-criteria evaluation methods may be different regarding their concept, various types of data normalization may be used, data and the weights of criteria may be combined in different ways, the range of the criteria values may vary and the importance of data can be viewed accordingly. The important point is that it is possible to make decisions based on the results of multi-criteria analysis, compare them, and analyse the reasons of some alternatives which are leading or staying behind. The influence of particular criterion and its weight can be detected and decision made respectively (Ginevičius, Podvezko 2008b). In order to apply multi-criteria evaluation methods, these procedures should be followed in such order: development of a set of criteria describing the considered object; determination of the weights and significances of criteria; choosing of an appropriate multi-criteria evaluation method (Ginevičius *et al.* 2008). The purpose of quantitative evaluation of cluster performance is the effective management of the cluster after the targeted criteria are examined and all the possibilities of improving them are considered and applied. Multi-criteria analysis should perfectly serve this purpose and allow making valuable observations in cluster performance improvement after the evaluation is made. A hierarchical structure must be considered to be made for cluster performance evaluation and simple additive weighting method applied to calculate the results. A socioeconomic system is large and complicated, therefore, the main goal is grouping the criteria describing its performance according to some particular characteristics, rather than searching for their interrelations (Ginevičius, R. 2007). The criteria that allow cluster performance evaluation are suggested by Klasterių studija (2012). 44 criteria are selected for further examination. Before providing the criteria for evaluation of the experts, a hierarchical structure must be created with different hierarchical levels for experts cannot cope with numerous criteria. The number of criteria must not exceed 12 (Ginevičius, R. 2011). For this reason a hierarchical structure must be divided into hierarchical levels depending on the connecting theme of the criteria. The later step includes the weights assigned by the experts. Their given weights must be reasonable and coincide to a certain degree. Since the weights of criteria are evaluated by experts, the consistency of their estimates should be checked. It is usually performed by using the concordance coefficient W and Pearson correlation coefficient χ^2 (Kendall 1970; Podvezko 2007). Further processing of the results must include multi-criteria evaluation of the performance of the cluster. Multi-criteria methods are used for both theoretical and practical tasks since they are universal and



enable to carry out a quantitative study for any complex phenomenon with many indices (Ginevičius, Podvezko 2008a; Jakimavičius and Burinskienė 2007; Žvirblis and Zinkevičiūtė 2008; Jakimavičius and Burinskienė 2009; Shevchenko *et al.* 2008; Wu *et al.* 2009; Žvirblis and Buračas 2010; Ginevičius *et al.* 2010; Podvezko 2011). It is important to formalize various aspects, which is developing and integrating the criteria into one generalized quantity, while evaluating cluster's performance. The problem arises for the criteria may be multidimensional and oppositely directed, which indicate the increasing value of some criteria show that the situation is getting better, while some cases indicate vice versa – the increasing of some criteria show the situation is getting worse. These problems may be solved by applying multi-criteria methods for performance of certain phenomenon evaluation (Ginevičius *et al.* 2013; Tvaronavičienė *et al.* 2015b). The multi-criteria SAW (Simple Additive Weighting) method was applied to process the results. SAW method was developed in 1968 and applied for multi-criteria decision making in various fields, which contain multi-criteria decision making problems, group decision making, contractors ranking, performance assessment model in a sector, evaluation of certain zones, analysis and ranking (Zavadskas *et al.* 2010). This method is one of the simplest methods and most often used in multi-criteria decision making technique (Malczewski 1997; Janssen 1992; Eastman 1993). The method is based on the weighted average. An evaluation score is calculated for each alternative by multiplying the scaled value given to the alternative of that attribute with the weights of relative importance directly assigned by decision maker followed by summing of the products for all criteria (Şener *et al.* 2006).

The evaluation of selected clusters' performance

This study continues and complements the previous study where four clusters were evaluated by a certain set of criteria (see more Tvaronavičienė *et al.* 2015b, Razminienė *et al.* 2016). This study involves three more clusters with different characteristics, described in Table 1.

Table 1. Successful clusters (source: author's compilation)

Cluster	Name	Establishment year	Number		Specialization	Sector
			of	members		
A	Vilnius Cluster	Film2011	22		Cinema and advertising	Services, changing client's physical or mental qualities
B	Wellness Cluster iVita	2011	11		Health promotion	Services, changing client's physical or mental qualities
C	Laser Engineering Technologies Cluster (LITEK)	and2011	13		Lasers and components	laserElectronics industry
D	Baltic Automotive Components Cluster (BACC)	2013	17		Engineering industry (manufacturing of machinery and devices)	Metal y and manufacturing machinery and equipment manufacturing industry
E	Latvian Added Value and Healthy Food Cluster (LHAVHFC)	High2010	31		Food Processing and Manufacturing	Food and beverage industry
F	Smart Cluster	Food2013	18		Food Processing and Manufacturing	Food and beverage industry
G	Užupis Cluster	Creative2010	9		Information communication technologies; creative	andServices, changing client's physical or mental qualities industries



A hierarchical structure was composed according to the common themes for experts would be able to evaluate the importance of each criterion (Figure2) (see Appendices). The main purpose is to provide an adequate number of criteria in one group which should not exceed 12 criteria. In this case, the maximum number is 10 for it is still possible to process this number of criteria and they were divided into groups according to the theme that they are connected. The main components are resources, activities and processes in cluster performance and the criteria that are singled out allow giving the measures for these components. European Secretariat for Cluster Analysis (ESCA) suggests cluster benchmarking indicators, grouped according certain features. They include structure of the cluster, cluster management and governance / strategy of the cluster organization, financing of the cluster management, services provided by the cluster organization (spectrum and intensity), contacts and interaction with relevant players, achievements and recognition of the cluster organization. These indicators can serve as very relevant guidelines in cluster performance evaluation and some of them are used in this research but the groups are modified according to the measures that indicators should be valued and the certain features they present. The indicators of cluster performance are put into three major groups: resources, activities and processes, which were found to be important after literature analysis. Resources include indicators which can be evaluated in numbers, both in terms of money and units (Table 2). This group represents the characteristics of a cluster, cluster's profile with the official information and statistics. The second group represents activities which cannot be measured in units or this kind of evaluation would be inaccurate; hence, activities were asked to be measured according to their importance, ascribing points from 1 to 10, where 1 means low importance, 10 means high importance. According to scholars, one layer of indicators in the hierarchical system should involve 10 – 12 criteria at most.

Table 2. Cluster performance indicators: resources

Resources
Number of cluster coordinating members
Number of cluster members - companies, R&D subjects, supporting organizations
Number of R&D personnel
University graduates working at cluster companies
Common cluster projects in two years
Financed common cluster projects in two years with cluster initiatives co-financing
External financing for cluster initiatives in two years
Total sum of cluster members' investments for cluster initiatives in two years

Activities naturally split into market activities and communication activities (Table 3, Table 4), following this rule of criteria for one group. Market activities reflect features, such as supply, orders, distribution, tenders for clients, as well as advertisement, exhibitions and fairs, internet site, cluster's imagine. Communication activities involve internal communication of cluster members. These are all necessary events of clear communication that is very important for firms in cluster to share all information with cluster members. The idea is to evaluate if meetings, integration events, communication platform, publications, co-operation, training, data base satisfy the needs of cluster members so that communication can work precisely. These features cannot be measured easily by exact numbers, as mentioned above, so special scale of evaluation was suggested.

Table 3. Cluster performance indicators: market activities

Market activities
Common supply and order scheme
Common distribution channels
Common cluster members' tenders for external clients
Exchange of common market information between cluster members
Cluster advertisement (leaflets, media)
Common participation in exhibitions and fairs
Lobbying
Common internet site
Visual identification (common logo, brand)
Contacts and image of cluster in mass media



Table 4. Cluster performance indicators: market activities

Communication activities
Regular meetings of cluster members
Cluster integration events
Common communication platform
Common cluster publications (booklets, newsletters, etc.)
Co-operation while creating new products or technologies
Co-operation while creating innovations (organizational, marketing, etc.)
Common training, workshops, conferences, internships
Common data base
Informal sharing of knowledge and experience
Transference of technologies

The last group is processes, which is divided into processes of human resources management (HRM processes) and international processes (Table 5, Table 6). HRM processes involve not only changes in human resources and their training but also R&D projects and expenses, EU SF projects. This information needs to be provided in per cent or units for objective evaluation in further calculations. International processes involve more diverse informational about products or goods, new members, start-ups, foreign markets, export, agreements, international exhibitions and sales offices that are connected to sales or foreign markets and R&D. These factors also need to be evaluated in per cent or units.

Table 5. Cluster performance indicators: HRM processes

HRM Processes
Increase of cluster members' employees in two years
Number of internal cluster training participants in two years
Number of cluster organized common training in two years
Number of qualification upgraded employees in two years
Increase of direct employment in cluster innovative activities
Part of R&D expenses in common expenses in two years
Number of common submitted/funded EU SF projects in two years
Number of common international R&D projects, funded not from EU SF, in two years

Table 6. Cluster performance indicators: activities

International Processes
Products/goods of cluster, sold in internal market
Products/goods of cluster, sold in external market
New cluster members in two years
Start-up in cluster
Foreign markets where members of cluster works
Part of export in total cluster sales
Number of official co-operation agreements with foreign entities
Participation in international exhibitions and sales offices in two years

The indicators were given in the questionnaire survey which was submitted in clusters and the indicators were supposed to be evaluated in different ways. Resources require providing exact figures for they can be measured in units or Euros so the questions asked to provide these figures accordingly. Processes include information about expenses, change in a number of different indicators, exact numbers of indicators which also need to be correct. While activities and processes can be expressed in exact figures, activities needed a different kind of evaluation. Hence, clusters were asked to rate activities from 1 to 10 according to the performance of the cluster. Communication activities and Marketing activities took the same weight in total Activities for they are of the same importance as well as International processes together with HRM processes had the same weights ascribed in total Processes. Literature analysis, where several scientific papers were viewed from the point of methodology used in cluster study (also see Tvaronavičienė *et al.*, 2015a), reveals that scholars are pointing out the same features characteristic to clusters which are also included in these three groups of indicators.



Innovativeness, knowledge sharing, common distribution channels, qualified human resources and initiatives can be seen as characteristic features that indicate cluster performance. Processes and activities include these indicators expressed in different measures, where processes provide exact numbers, while activities reflect the degree of fulfilment that relies more on personal opinion than numbers. Razminienė *et al.* (2016) emphasize that processes in comparison to activities should get more prominence in final cluster efficiency evaluation. According to the conclusions that were made after the literature analysis, processes were given the weight of 0,7 while activities and resources share equal weight of 0,15. The proportion was chosen as universal for all the clusters in different industries, so there is an assumption that it may be altered in further researches depending on the industry and the profile of the cluster. In this study it is considered to be adequate as it enables discussion for further application and development of the calculation of the final results.

Table 7. The results of multi-criteria evaluation of clusters' performance (Source: author's compilation)

Cluster	Resources	Activities	Processes	Total
A	0,07	0,18	0,16	0,15
B	0,11	0,10	0,25	0,21
C	0,04	0,13	0,05	0,06
D	0,25	0,11	0,14	0,15
E	0,16	0,11	0,10	0,11
F	0,14	0,17	0,12	0,13
G	0,24	0,19	0,17	0,18

Table7 provides the results of the multi-criteria analysis where the total weights determined the results. The study took several phases with different criteria which were provided for experts to evaluate and give the weights. Hierarchical structure was composed to limit the number of criteria which needed to be valued for experts are able to cover only a limited number of criteria (in this case, the number was limited 8-10 criteria). The later stage took literature analysis which helped to determine the weights of the main components in clusters' performance evaluation. The literature analysis has shown that the processes are the most important in clusters' performance and should be given a greater weight than recourses and activities. Hence, the resources and activities should share the equal values. The results in Table 7 can be used for further case study in deeper analysis of clusters and their performance. Benchmarking could be employed to compare the criteria and to make observations of what can be done in order to achieve better results and to create value. The study is still open and more research must be made paying attention to the different nature of clusters as they specialize in different industries and their concentration on every criterion may differ. It may be helpful for companies in clusters for comparison can identify their strengths and weaknesses and indicate the possibilities of performance improvement.

Findings

The interest in clusters is growing in the last century. Access to foreign markets, sources of foreign investments, and global knowledge networks are essential ingredients to the growth and development prospects of low and middle-income countries. These are the main issues that companies in clusters aim at. Clusters represent a complex form of organization, in which social ties (the community), productive networks of local firms, and the web of local institutions and collective agents form a co- operative and competitive density. Clusters are a characteristic phenomenon in local or regional markets, but their function is to build a competitive advantage for cluster members on a larger scale – not only national but international. Companies today experience many challenges as well as meet the opportunities because of continuing technological revolution. The aim of companies is to enhance competencies and create competitive advantages in global competition and this can be achieved through pulling from a common and accessible pool of resources, information and demand for innovation which means that companies can profit from belonging to a cluster. Cluster studies can be a useful pool of information for policy makers as well as company managers in helping companies to gain a competitive advantage and get great success in markets. Here, one of multi-criteria methods is used for the integration of indicators included into the system. SAW method is used after the system was created, including 44 indicators out of which three main groups were formed.



Results, Conclusions and Recommendations

The results suggest that knowledge sharing, innovativeness, common distribution channels, qualified human resources and initiatives may be referred to as the most important indicators of cluster performance. These main indicators are included in processes and activities. Here, processes are evaluated in exact numbers whereas activities reflect the degree of fulfilment expressed through rating. Hence, the evaluation system is suggested, which implies that processes are the most important in cluster performance evaluation, while processes and activities share the same value. Transfer of knowledge is viewed as a very important part of cluster performance and is ascribed to activities, which are difficult to measure. Hence, activities reflect the degree of fulfilment expressed through rating, which suggests more personal opinion than exact figures. As the literature analysis implies, the most important indicators are ascribed to processes for during the research the weights given for these three groups were changed and clusters which show good results with processes, stay in high positions, and while clusters which are keeping behind with processes, show even worse results in cluster performance. This system of indicators could be used in further research to detect if these three groups of indicators should be rated the same for clusters belonging to different sectors.

References

- Ben Letaifa, S., Rabeau, Y. (2013). Too close to collaborate? How geographic proximity could impede entrepreneurship and innovation. *Journal of business research*, 66(10), 2071-2078. <http://dx.doi.org/10.1016/j.jbusres.2013.02.033>
- Boschma, R., Minondo, A., Navarro, M. (2013). The Emergence of New Industries at the Regional Level in Spain: A Proximity Approach Based on Product Relatedness. *Economic geography*, 89(1), 29-51. <http://dx.doi.org/10.1111/j.1944-8287.2012.01170.x>
- Bouncken, R. B., Kraus, S. (2013). Innovation in knowledge-intensive industries: The double-edged sword of cooptation. *Journal of business research*, 66(10), 2060-2070. <http://dx.doi.org/10.1016/j.jbusres.2013.02.032>
- Carswell, G. (2013). Dalits and local labour markets in rural India: experiences from the Tiruppur textile region in Tamil Nadu. *Transactions of the institute of British geographers*, 38(2), 325-338. <http://dx.doi.org/10.1111/j.1475-5661.2012.00530.x>
- Casanueva, C., Castro, I., Galan, J.L. (2013). Informational networks and innovation in mature industrial clusters. *Journal of business research*, 66(5), 603-613. <http://dx.doi.org/10.1016/j.jbusres.2012.02.043>
- Castellani, D., Jimenez, A., Zanfei, A. (2013). How remote are R&D labs? Distance factors and international innovative activities. *Journal of international business studies*, 44(7), 649-675. <http://dx.doi.org/10.1057/jibs.2013.30>
- Chang, YH., Yeh, CH. (2001). Evaluating airline competitiveness using multiattribute decision making. *Omega*, 29(5), 405-415.
- Chen, TY. (2012). Comparative analysis of SAW and TOPSIS based on interval-valued fuzzy sets: Discussions on score functions and weight constraints. *Expert systems with applications*, 39, 1848-1861.
- Crane, A., Palazzo, G., Spence, L.J., Matten, D. (2014). Contesting the Value of "Creating Shared Value. *California management review* 56(2), 130-149. <http://dx.doi.org/10.1525/cmr.2014.56.2.130>
- Crespo, J., Suire, R., Vicente, J. (2014). Lock-in or lock-out? How structural properties of knowledge networks affect regional resilience. *Journal of economic geography*, 14(1), 199-219. <http://dx.doi.org/10.1093/jeg/lbt006>
- D'Agostino, L.M., Laursen, K., Santangelo, G.D. (2013). The impact of R&D offshoring on the home knowledge production of OECD investing regions. *Journal of economic geography*, 13(1), 145-175. <http://dx.doi.org/10.1093/jeg/lbs012>
- D'Angelo, A., Majocchi, A., Zucchella, A., Buck, T. (2013). Geographical pathways for SME internationalization: insights from an Italian sample. *International marketing review*, 30(2), 80-105. <http://dx.doi.org/10.1108/02651331311314538>
- D'Este, P., Guy, F., Iammarino, S. (2017) Shaping the formation of university-industry research collaborations: what type of proximity does really matter? *Journal of economic geography*, 13(4), 537-558, 2013. <http://dx.doi.org/10.1093/jeg/lbs010>
- Dobrovolskienė, N., Tvaronavičienė, M., Tamošiūnienė, R. (2017). Tackling projects on sustainability: a Lithuanian case study. *Entrepreneurship and Sustainability Issues*, 4(4), 477-488. [http://doi.org/10.9770/jesi.2017.4.4\(6\)](http://doi.org/10.9770/jesi.2017.4.4(6))
- Dobusch, L., Schussler, E. (2013). Theorizing path dependence: a review of positive feedback mechanisms in technology markets, regional clusters, and organizations. *Industrial and corporate change*, 22(3), 617-647. <http://doi.org/10.1093/icc/dts029>



- Eastman, JR. (1993) IDRISI: a grid based geographic analysis system, version 4.1. Graduate School of Geography, Clark University, Worcester.
- Feldman, MP. (2014). The character of innovative places: entrepreneurial strategy, economic development, and prosperity, *Small business economics*, 43(1), 9-20. <http://doi.org/10.1007/s11187-014-9574-4>
- Fuschi, D.L., Tvaronavičienė M. (2016). A network based business partnership model for SMEs management. *Entrepreneurship and sustainability issues*, 3(3), 282-289. [http://doi.org/10.9770/jesi.2016.3.3\(5\)](http://doi.org/10.9770/jesi.2016.3.3(5))
- Ginevičius, A. (2007) Quantitative evaluation of enterprise marketing effectiveness. *Technological and Economic Development of Economy*, 13(1), 19–23.
- Ginevičius, R. (2007). Hierarchical structuring of processes and phenomena. *Business: Theory and Practice*, 8(1), 14–18, 2007 (in Lithuanian).
- Ginevičius, R. (2008). Normalization of quantities of various dimensions. *Journal of Business Economics and Management*, 9(1), 79-86.
- Ginevičius, A. (2011). Increasing Economic Effectiveness of Marketing: Doctoral Dissertation. Vilnius: Technika., p.145
- Ginevičius, R., Podvezko, V. (2008a). Daugiakriterinio vertinimo taikymo galimybės kiekybiniam socialinių reiškinių vertinimui (Multicriteria methods' application possibilities for evaluation of social phenomena). *Business: Theory and Practice*, 9 (2), 81 – 87.
- Ginevičius, R., Podvezko, V. (2008b). Multicriteria graphical- analytical evaluation of the financial state of construction enterprises. *Technological and Economic Development of Economy*, 14(4), 452-461.
- Ginevičius, R., Podvezko, V., Raslanas, S. (2008), Evaluating the alternative solutions of wall insulation by multicriteria methods. *Journal of Civil Engineering and Management*, 14(4), 217-226.
- Ginevičius, R., Podvezko, V., Ginevičius, A. (2013), Quantitative evaluation of enterprise marketing activities. *Journal of Business Economics and Management*, 14(1), 200-212. <http://doi.org/10.3846/16111699.2012.731143>
- Ginevičius, R., Krivka, A., Šimkūnaitė J. (2010). The model of forming competitive strategy of an enterprise under the conditions of oligopolic market, *Journal of Business Economics and Management*, 11(3), 367–395. <http://doi.org/10.3846/jbem.2010.18>
- Hilkevics, S., Hilkevics, A. (2017). The comparative analysis of technology transfer models. *Entrepreneurship and Sustainability Issues*, 4(4), 540-558. [http://doi.org/10.9770/jesi.2017.4.4\(11\)](http://doi.org/10.9770/jesi.2017.4.4(11))
- Jakimavičius, M., Burinskienė, M. (2007). Automobile transport system analysis and ranking in Lithuanian administrative regions. *Transport*, 22(3), 214–220.
- Jakimavičius, M., Burinskienė, M. (2009). A GIS and multi-criteria-based analysis and ranking of transportation zones of Vilnius city. *Technological and Economic Development of Economy*, 15(1), 39–48. <http://doi.org/10.3846/1392-8619.2009.15.39-48>
- Janssen, R. (1992). Multiobjective decision support for environmental management. Kluwer, Dordrecht, 1992, pp. 232.
- Jucevičius, R., Kiškienė, A., Leichteris, E., Stumbrytė, G., Klasterių studija, Žinių ekonomikos forumas, 2012.
- Kendall, M. Rank Correlation Methods. 4th ed. London: Griffin, 1970.
- Ketels, C. (2013). Recent research on competitiveness and clusters: what are the implications for regional policy? *Cambridge journal of region's economy and society*, 6(2): 269-284. <http://doi.org/10.1093/cjres/rst008>
- Khanagha, A., Dehkordi, AM. Zali, MR., Hejazi, SR. (2017). Performance implications of entrepreneurial orientation at public research and technology institutions, *Entrepreneurship and Sustainability Issues*, 4(4), 601-610. [http://doi.org/10.9770/jesi.2017.4.4\(15\)](http://doi.org/10.9770/jesi.2017.4.4(15))
- Lai, YL., Hsu, MS., Lin, FJ., Chen, YM., Lin, YH. (2014), The effects of industry cluster knowledge management on innovation performance. *Journal of business research* 67(5): 34-739. <http://doi.org/10.1016/j.jbusres.2013.11.036>
- Lorenzen, M., Mudambi, R. (2013). Clusters, Connectivity and Catch-up: Bollywood and Bangalore in the Global Economy, *Journal of economic geography*, 13(3), 501-534. <http://doi.org/10.1016/j.jbusres.2013.11.03610.1093/jeg/lbs017>



- Malczewski, J. (1997). Propagation of errors in multicriteria location analysis: a case study, Fandel G, Gal T (eds) Multiple criteria decision making. Springer, Berlin Heidelberg New York, 1997, 154–155.
- Maskell, P. (2014). Accessing remote knowledge-the roles of trade fairs, pipelines, crowdsourcing and listening posts, *Journal of economic geography*, 14(5), 883-902. <http://doi.org/10.1093/jeg/lbu002>
- Monni, S.; Palumbo, Tvaronavičienė, M. 2017. Cluster performance: an attempt to evaluate the Lithuanian case, *Entrepreneurship and Sustainability Issues*, 5(1), 43-57. [http://doi.org/10.9770/jesi.2017.5.1\(4\)](http://doi.org/10.9770/jesi.2017.5.1(4))
- Morrison, A., Rabellotti, R., Zirulia L. (2013). When Do Global Pipelines Enhance the Diffusion of Knowledge in Clusters?, *Economic geography*, 89(1), pp. 77-96, 2013. <http://doi.org/10.1111/j.1944-8287.2012.01167.x>
- Oganisjana, K.; Svirina, A.; Surikova, S.; Grinberga-Zālīte, G.; Kozlovskis, K. (2017). Engaging society and universities for sustainable entrepreneurship, *Entrepreneurship and Sustainability Issues*, 5(1), 9-22. [http://doi.org/10.9770/jesi.2017.5.1\(1\)](http://doi.org/10.9770/jesi.2017.5.1(1))
- Panfiluk, E., Szymańska, E. (2017). The measurement of the innovativeness of health tourism services using an adequacy matrix title of the article. *Entrepreneurship and Sustainability Issues*, 4(4), 400-420. [http://doi.org/10.9770/jesi.2017.4.4\(1\)](http://doi.org/10.9770/jesi.2017.4.4(1))
- Podvezko, V. (2007). Determining the level of agreement of expert estimates. *International Journal of Management and Decision Making*, 8(5/6), 586–600.
- Podvezko, V. (2011). The Comparative Analysis of MCDA Methods SAW and COPRAS. *Inžinerinė Ekonomika-Engineering Economics*, 22(2): 134–146.
- Polatidis, H., Haralambopoulos, DA., Munda, G., Vreeker R. (2006). Selecting an Appropriate Multi-Criteria Decision Analysis Technique for Renewable Energy Planning, Energy Sources, Part B: Economics, Planning, and Policy, 1(2), 181-193. <http://doi.org/10.1080/009083190881607>
- Prause, G., Atari S. (2017). On sustainable production networks for Industry 4.0. *Entrepreneurship and Sustainability Issues*, 4(4), 421-431. [http://doi.org/10.9770/jesi.2017.4.4\(2\)](http://doi.org/10.9770/jesi.2017.4.4(2))
- Rutkauskas, AV., Ginevičius, A. (2011). Integrated management of marketing risk and efficiency. *Journal of Business Economics and Management*, 12(1), 5–23.
- Razminienė, K.; Tvaronavičienė, M. (2017). Clusters' role in globalization // *Contemporary Issues in Business, Management and Education* 2017 eISSN 2029-7963/eISBN 978-609-476-012-9 <https://doi.org/10.3846/cbme.2017.028> p. 1-8.
- Razminienė, K., Tvaronavičienė, M., Zemlickienė V. (2016). Evaluation of cluster efficiency measurement tool. *Terra economicus*, 14(3), 101-111.
- Rezk, M.R.A., Ibrahim, H.H., Tvaronavičienė, M., Sakr, M.M., Piccinetti, L. (2015). Measuring of innovation activities in Egypt: the case of industry. *Entrepreneurship and sustainability issues*. 3(1), 47-55. [http://doi.org/10.9770/jesi.2015.3.1\(4\)](http://doi.org/10.9770/jesi.2015.3.1(4))
- Şener, B., Süzen, ML., Doyuran, V. (2006). Landfill site selection by using geographic information systems. *Environmental Geology*, 49(3). 376–388. <http://doi.org/10.1007/s00254-005-0075-2>
- Shevchenko, G., Ustinovičius, L., Andruskevicius, A. (2008). Multi-attribute analysis of investments risk alternatives in construction. *Technological and Economic Development of Economy*. 14(3), 428–443. DOI: <http://doi.org/10.3846/1392-8619.2008.14.428-443>
- Simanaviciene, R., Ustinovichius, L. (2010), Sensitivity Analysis for Multiple Criteria Decision Making Methods: TOPSIS and SAW. *Procedia Social and Behavioral Sciences* 2 (2010): 7743–7744.
- Sokoł, A.; Figurska, I. 2017. Creativity as one of the core competencies of studying knowledge workers 5(1): 23-35. [http://doi.org/10.9770/jesi.2017.5.1\(2\)](http://doi.org/10.9770/jesi.2017.5.1(2))
- Tavassoli, S., Carbonara, N. (2014). The role of knowledge variety and intensity for regional innovation. *Small business economics*, 43(2), 493-509. <http://doi.org/10.1007/s11187-014-9547-7>
- Tetsman, I., Bazienė, K., Viselga, G. (2017). Technologies for sustainable circular business: using crushing device for used tires. *Entrepreneurship and Sustainability Issues*, 4(4), 432-440. DOI:10.9770/jesi.2017.4.4(3)
- Tokatli, N. (2013). Toward a better understanding of the apparel industry: a critique of the upgrading literature. *Journal of economic geography*, 13(6), 993-1011. <http://doi.org/10.1093/jeg/lbs043>
- Tvaronavičienė, M. (2016). Entrepreneurship and energy consumption patterns: case of households in selected countries, *Entrepreneurship and Sustainability Issues*, 4(1), 74-82. [http://dx.doi.org/10.9770/jesi.2016.4.1\(7\)](http://dx.doi.org/10.9770/jesi.2016.4.1(7))
- Tvaronaviciene, M. (2017a). If clustering impacts energy security: case of service sector in selected countries// The International Scientific Conference „Contemporary Issues in Business, Management and Education“, 5th International Scientific Conference „Contemporary Issues in Business, Management and



- Education“ *Contemporary Issues in Business, Management and Education*’2017 eISSN 2029-7963/eISBN 978-609-476-012-9 <https://doi.org/10.3846/cbme.2017.021> p.1-9
- Tvaronavičienė, M. (2017b). Clusters, innovations and energy efficiency: if relationship could be traced. *Marketing and Management of Innovations*, 2, 382 – 391.
- Tvaronavičienė, M., Černevičiūtė, J. (2015). Technology transfer phenomenon and its impact on sustainable development. *Journal of Security and Sustainability Issues*, 5(1), 87–97.
- Tvaronavičienė, M., Razminienė, K., Piccinetti, L. (2015a). Approaches towards cluster analys. *Economics & sociology: journal of scientific papers*, 8(1), 19-27.
- Tvaronavičienė, M., Razminienė, K., Piccinetti, L. (2015b). Cluster efficiency study through benchmarking. *Entrepreneurship and sustainability issues*, 3(2), 120-128.
- Wu, HY., Tzeng, GH., Chen, YH. (2009). A fuzzy MCDM approach for evaluating banking performance based on Balanced Scorecard, *Expert Systems with Applications*, 36(6). 10135–10147, 2009. DOI:10.1016/j.eswa.2009.01.005
- Zavadskas, EK., Turskis, Z. (2011). Multiple criteria decision making. *Technological and economic development of economy*, 17(2), 397–427. <http://dx.doi.org/10.3846/20294913.2011.593291>
- Zavadskas, EK., Turskis, Z., Kildienė, S. (2014). State of art surveys of overviews on MCDM/MADM methods. *Technological and economic development of economy*, 20(1), 165–179. <http://dx.doi.org/10.3846/20294913.2014.892037>
- Zavadskas, EK., Vilutienė, T., Turskis, Z., Tamošaitienė, J. (2010). Contractor selection for construction works by applying saw- g and topsis grey techniques. *Journal of Business Economics and Management*, 11(1), 34– 55.
- Vincke, P. Multicriteria Decision Aid. Wiley: New York, 1992.
- Zemlickiene, V., Mačiulis, A., Tvaronavičienė M. (2017). Factors impacting the commercial potential of technologies: expert approach. *Technological and Economic Development of Economy* 23(2), 410-42. <http://dx.doi.org/10.3846/20294913.2016.1271061>
- Žvirblis, A., Buračas, A. (2010). The consolidated measurement of the financial markets development: the case of transitional economies. *Technological and Economic Development of Economy* 16(2): 266–27. <http://dx.doi.org/10.3846/tede.2010.17>
- Žvirblis, A., Zinkevičiūtė, V. (2008). The integrated evaluation of the macro environment of companies providing transport services. *Transport*, (23)3, 266–272. <http://dx.doi.org/10.3846/1648-4142.2008.23.266-272>



3D Biomechanical Analysis of Targeted and Non-Targeted Drag Flick Shooting Technique in Field Hockey and Training Strategies

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Abstract

This study compared targeted and non-targeted drag flick field hockey shooting techniques in the penalty corner area, using a three-dimensional kinematic analysis. Eleven male field hockey players (mean age 19,82±1,40 years) participated voluntarily. Seven high-speed cameras (Oqus 7+) with 120Hz refresh rates were used. Field calibration was completed via the wand method. The data was evaluated in two phases: starting and finishing. Players undertook three drag flick shots to the box using targeted and non-targeted techniques. The angular kinematics and stroke force applied to the stick were analyzed using the Qualisys Track Manager Program V2.12, and ball velocity statistics were gathered with the SPSS 18.0 program. To make an accurate target shot the players attempted to maximize their targeted shooting rates, particularly by decreasing the speed of their lower extremities.

Key Words: Penalty Corner, Drag Flick, Kinematic, Ball Velocity.

Introduction

Field hockey is a high-intensity sport due to its multi-dimensional nature and has quite long-standing background (Sharma et al., 2012). It requires physical fitness, psychological skills, techniques, and strategies (Anders and Myers, 2008). There are various shooting techniques used in this sport. The drag flick shooting technique examined in this study is known as the highest-scoring technique in field hockey and the mechanics of each phase of the technique is significant in terms of performance (Bari et al., 2014b). This shooting technique is the most common offensive technique in both outdoor and indoor field hockey and is preferred for goal shooting. One of the most important scoring plays is the penalty corner technique (Laird and Sutherland, 2003; Pineiro, 2008), and success depends on three main technical applications: pusher, stopper, and drag flicker (Lees, 2002). During a penalty corner, the drag flick is much more effective than the hits or pushes and is used more by male players than female players (Bari et al., 2014b). According to hockey rules (FIH 2009), there is no stipulation regarding the maximum and minimum height of the ball when the first shot at scoring a goal is a push or a drag flick (Bari et al., 2014a; Yusoff et al., 2008).

There is a need for biomechanical studies to develop well-targeted shooting techniques for drag flick shots made at the penalty corner. Most sports techniques were discovered in order to increase the performance or via trial and error in order to meet the needs of changing equipment or rules (Carr, 1997).



Biomechanical analysis is essential to find the key mechanical factors of physical performance (Gómez et al., 2012). Various biomechanical studies have been conducted on field hockey. Some researchers focused on shooting techniques (Chivers and Elliot, 1987; Kerr and Ness, 2006; Brétigny et al., 2008) and reviewed the biomechanical model of the drag flick in search of the best performance. In several studies, the kinematic data was provided about the drag flick and players of different levels (McLaughlin, 1997; Yusoff et al., 2008; López de Subijana et al., 2010).

All the angular movements of the joints must be evaluated correctly for the players to develop better performance in competitions and improve their current performance. As field hockey is a target-oriented sport, the criterion for evaluating performance is the ball reaching the goal post at the end. Ball velocity becomes significant at this point, because a high-speed ball gives a goalkeeper less time to save. Decreasing the speed of the joints is another method for targeting points the goalie will have difficulty meeting, thus increasing the goal rate.

The aim of this study was to compare the biomechanical characteristics of targeted and non-targeted drag flick shots made at the penalty corner. The secondary aim of the study was to understand the training strategies and methods.

Method

Eleven (N=11) male field hockey players (mean age $\pm$ SD 19,82 $\pm$ 1,40 years; mean height $\pm$ SD 174,88 $\pm$ 5,63 cm; mean weight $\pm$ SD 70,10 $\pm$ 8,01 kg) who represented Turkey's Men's National Hockey Team and Bolu Highway Hockey Club participated in this study voluntarily and were all informed about the study. No players had significant musculoskeletal injuries according to their recent medical histories. This study was approved by the Human Ethics Committee, University of Kocaeli, with the protocol code KOÜ KAEK 2015/173 and was conducted in a manner consistent with the recommendations of the declaration of Helsinki.

This study was experimental, so a 3D videography kinematic method was used for data collection.

All players had approximately 20 minutes to warm-up, including running and dynamic exercises. Players used their own sticks (91cm long and 600gm average weight) and a white, rigid field hockey ball that weighed approximately 156-163gm.

12.5cm diameter reflector markers were attached to the players' joints: olecranon on the elbows; medial styloid on the wrists; acromion on the shoulders; trochanter major on the hips; patellar lateral condyle on the knees; lateral malleolus on the ankles; and also to the stick. The hockey ball was also covered by a reflective material for tracking.

The measurements were made with Qualisys Motion Analysis System software and seven high-speed 120 Hz video cameras (Oqus 7+) were used for recording the performance of the players (Figure 1). After placing the video cameras in the field, the calibration was carried out dynamically via the wand calibration method, using a 60.3cm long T-shaped calibration stick. A Sports Radar Gun (km.h⁻¹), Astro Products, CA was used to measure the velocity of the ball.

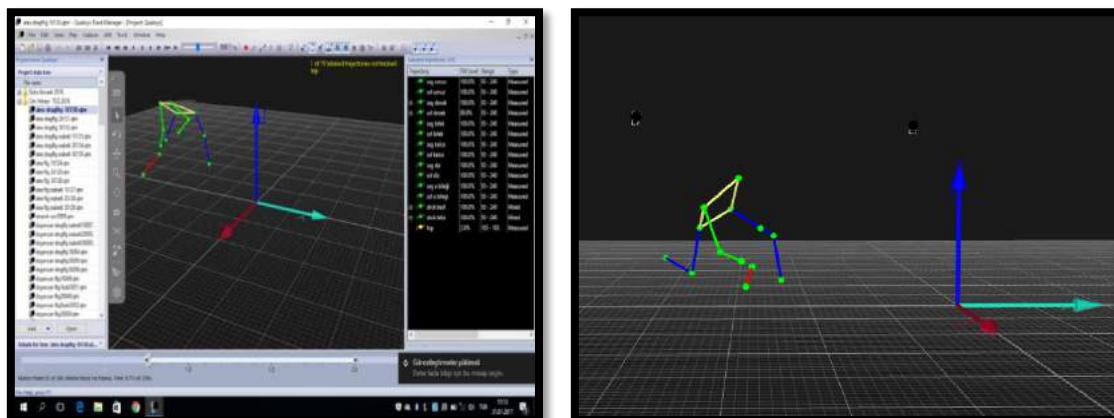


Figure 1. A capture from Qualisys Track Manager software.

The players performed six drag flick shots at a distance of 9.15m from the goal post. Three were targeted (at a 40x40 cm size, iron-framed panel attached in the middle of the crossbar) and three were non-targeted. Kinematic data figures obtained in the study used the moment when the left, supporting foot stepped on the ground as the starting phase and the moment the ball left the stick as the finishing phase. The hockey stick angles were taken on a YZ plane and the force variable was calculated with the formula $F=m \times a$ (force applied to the stick = weight of the stick $\times$ the acceleration of the stick at the finish).

Statistical Analysis

The descriptive statistics of the anthropometric parameters and the angular kinematic parameters were obtained by using SPSS 18.0 (SPSS Inc., Chicago, IL, USA) software program. The comparison between the targeted and non-targeted shots of the drag flick shooting techniques, t-test was applied. Besides, at the identification of the relation between the angular kinematic parameters and both the force applied on the stick and the ball velocity; Pearson Correlation test was applied on the data. The significance level was accepted as $p \leq 0.05$.

Findings

The kinematic figures derived from the 3D motion analysis of the players and the statistical definitions and comparisons of these figures, the results of the shooting force to the stick, and the ball velocity are presented as tables.

Table 1. Comparison of the angular kinematic values in the starting and finishing phases of the non-targeted and targeted drag flick shots (t test)

	Non-Targeted Drag Flick - Targeted Drag Flick			
	Mean $\pm$ SD	Mean $\pm$ SD	t	p
	Starting			
Right Shoulder				
Angular Velocity ($^{\circ}/s$)	-238,22 $\pm$ 145,97	-104,74 $\pm$ 231,48	-3,300	,003*
Right Hip				
Angular Acceleration ($^{\circ}/s^2$)	5155,49 $\pm$ 3273,36	1238,64 $\pm$ 5990,57	3,492	,002*
Left Knee				
Angular Velocity ($^{\circ}/s$)	-240,38 $\pm$ 213,26	-159,2 $\pm$ 263,91	-2,090	,047*
	Finishing			
Right Hip				
Angular Acceleration ($^{\circ}/s^2$)	-809,97 $\pm$ 4489,09	-3014,65 $\pm$ 3810,88	2,421	,024*

* $p \leq 0.05$



When Table 1 was examined, the verifications were: a negative decrease rate of %55 in the mean angular velocity of the right shoulder at the starting phase of the drag flick shots of the players (non-targeted shot: $-238,22 \pm 145,97$ %/s; targeted shot: $-104,74 \pm 231,48$ %/s) and a %34 decrease in the mean angular velocity of the left knee (non-targeted shot: $-238,22 \pm 145,97$ %/s; targeted shot: $-104,74 \pm 231,48$ %/s) and a positive decrease rate of %76 in the mean angular acceleration of the right hip (non-targeted shot: $5155,49 \pm 3273,36$ %/s²; targeted shot: $1238,64 \pm 5990,57$ %/s²). There were statistically significant differences found in the results ($p \leq 0.05$). As for the finishing phase of the drag flick shots, a negative increase at the mean angular acceleration of the right hip and a statistically meaningful difference were found.

Table 2. Ball velocity figures measured by radar regarding the non-targeted and targeted drag flick shots

Ball Velocity	Non-Targeted Drag Flick - Targeted Drag Flick						z	p
	Min-Max	X	SD	Min-Max	X	SD		
km.h ⁻¹	11-58	41,12	12,87	10-51	35,91	13,68	-2,606 ^a	,009*
m.s ⁻¹ **	3,06-16,11	11,42	3,58	2,78-14,17	9,97	3,80		

* $p \leq 0.05$

When Table 2 was examined, a %13 decrease was identified between the means of non-targeted (mean $\pm$ SD $11,42 \pm 3,58$ m.s⁻¹) and targeted (mean $\pm$ SD $9,97 \pm 3,80$ m.s⁻¹) drag flick shots in the ball velocity data. There was a statistically significant difference ($p \leq 0.05$).

Table 3. Comparison of the force applied on the stick at non-targeted and targeted drag flick shots

	Non-Targeted Drag Flick - Targeted Drag Flick				z	p
	X	SD	X	SD		
Force Applied on the Stick (N)	135,56	123,32	131,64	107,34	-1,193 ^a	,233

* $p \leq 0.05$

When Table 3 was examined, there was no statistically significant difference found in the force applied to the stick between the mean of the targeted and non-targeted drag flick shots ($p > 0.05$).

At the review of the correlation results in the study, a meaningful relationship was found between some of the variants at the angular kinematics and the ball velocity values. Accordingly, the ball velocity was affected by the angular velocity of the right elbow ($r=,445$) and the left hip ($r=,449$) and the angular acceleration of the right hip ($r=-,452$) and the trunk ($r=-,506$) at the starting phase of the players' non-targeted drag flick shots. During the finishing phase, the angular acceleration of the right hip ($r=,399$), the left hip ($r=,399$), and the trunk angle ($r=,404$) affected the ball velocity ($p \leq 0.05$). During the starting phase of targeted drag flick shots, the angular velocity of the right hip ($r=,401$) and the trunk angle ($r=,485$) were found to affect the ball velocity ($p \leq 0.05$). No relationship was found between the ball velocity values and the other angular kinematics at the starting and finishing phases of the non-targeted and targeted drag flick shots ($p \leq 0.05$).

Furthermore, a meaningful relationship was found between some variations of the angular kinematics and the force applied to the stick. Accordingly, the kinematics affecting the force applied to the stick at the starting phase of non-targeted drag flick shots were: the angles of the right shoulder ($r=,415$), the right hip ($r=-,427$), the stick (YZ) ($r=,556$), the angular velocity of the right knee ($r=,381$), the left knee ($r=,499$), the right shoulder ($r=-,403$), the angular acceleration of the right elbow ($r=,418$) and the stick (YZ) ($r=-,393$). As for the finishing phase, the angles of the right shoulder ($r=,455$), the left knee ($r=,387$) and the left hip ($r=-,376$), the angular acceleration of the right shoulder ($r=-,392$), and the angular velocity of the trunk ($r=,390$) and the stick (YZ) ($r=,495$) were verified as affecting the force on the stick ($p \leq 0.05$). As with the targeted drag flick shots, the force on the stick was affected by the left knee ($r=,521$), the right hip ($r=-,557$) and stick (YZ) ($r=,566$) angles, the right knee ($r=,694$), the right shoulder ($r=-,515$) and the trunk ($r=-,436$) angular acceleration, the left hip ($r=,474$), the left



knee ($r=,746$) and the trunk ($r=,571$) angular velocity during the starting phase. At the finishing phase it was affected by the right shoulder ($r=,680$), the left hip ($r=,460$) and right knee ($r=,603$) angles, the right knee ($r=,714$) and trunk ($r=,434$) angular acceleration, and the left hip ($r=,455$) and stick (YZ) ($r=,724$) angular velocity ($p\leq 0.05$). No relation was identified between the force applied to the stick and the other angular kinematics at the starting and finishing phases of the non-targeted and targeted drag flick shots ($p\leq 0.05$).

Discussion

The purpose of this study was to compare the kinetic (force on the stick) and kinematic (angle, angular velocity, angular acceleration, and ball velocity) variations of targeted and non-targeted shots performed by elite hockey players, using 3D kinematic analysis of the field hockey drag flick shooting technique. A significant difference was found between the ball velocity of the non-targeted drag flick shots ($11,42 \text{ m.s}^{-1}$) and the targeted drag flick shots ($9,97 \text{ m.s}^{-1}$) ($p\leq 0.05$). A significant %13 decrease in ball velocity was observed during targeted drag flick shots ($p\leq 0.05$), and this decrease increased the target rates.

In McLaughlin's 1997 study, he compared the values of fourteen male field hockey players to the values achieved by Australian field hockey national team member Greg Corbett. During the drag flick shot, the mean ball velocity ($19.1 \pm 1.84 \text{ m/s}$) when released from the stick surface is $15.2\text{-}21.8 \text{ m/s}$, while Corbett exhibited a ball velocity of 21.9 m/s at release. It was observed that, as the ball velocity decreased, the angular velocity of the shoulder increased and that of the hip decreased. The angular velocity of the hip and the shoulder affected the ball velocity.

Baker et al. (2009) measured the ball velocity values by radar and found ball velocity was 30.5 m.s^{-1} . Hussain et al. (2012) found ball velocity values during the drag flick shots of $31.85\pm 0.86 \text{ m/s}$ for college-level players and $30.99\pm 4.33 \text{ m/s}$ for those playing at the state level. There was no significant difference between the two groups ($p>0.05$). It was suggested that these insignificant ball velocity differences between the groups resulted from the increasing movement of the shoulder compared to the hip during oscillation. In a different study, Hussain et al. (2011) found that the ball velocity of players assessed in a body position of 45° and 90° during the execution of penalty shots on the upper right and left corners and in the right and left corner areas was between 25.42 m.s^{-1} - 33.57 m.s^{-1} . Different levels of training affected the ball velocity.

Even though some researchers state there is no significant difference between successful and unsuccessful drag flick shots (Bari et al., 2014b), the study results suggested that the highest ball velocity ever reached made an important contribution to "scoring a goal" (Bari et al., 2014a). More velocity results in less time for the goalkeeper to save.

The conclusions of the study reported meaningful differences between targeted and non-targeted ball velocity values, and decreases in the ball velocity resulting in an increased target rate, reflecting the results of our own study (Karadenizli, 2006). In Satti's 2004 study, conducted via kinematic analysis of targeted and non-targeted shots in basketball, air resistance and ball rotation had a slight effect and the angle and the velocity had to be in an appropriate combination vertically and horizontally (Gürol and Yılmaz, 2016). Ratko et al. (2006) found that the angle of the elbow movement is important for targeted and non-targeted shots. Miller and Barlett's 1996 demonstrated that the elbow extensors significantly contributed to ball velocity during the shot (Gürol and Yılmaz, 2016). Speed and accuracy are inversely correlated according to Fitt's Law; the faster the ball moves, the less accurate the shots are. Another factor affecting accuracy is the difficulty of the shot. In other words, the smaller an area the well-defended target has, the longer a distance it has. Thus, it can be concluded that speed and accuracy do not correlate and other strategies may be required while carrying out the motor tasks. Furthermore, as the target width decreases the necessary time for the motion increases (Karadenizli et al., 2014).



Jennings et al. (2010) reviewed the forces between the stick, the ball on the stick, and the position of the ball. It was verified that the normal force between the ball and the stick decreased while the ball was moving towards the stick head during the shots. During a drag flick shot, the force applied and the position of the ball was significant in controlling the drag flick shot.

According to our evaluation results, there were significant differences between the angular velocity of the right shoulder, the left knee, and the right hip at the starting phase of targeted and non-targeted shots. At the finishing phase, this difference was only present in the angular acceleration of the right hip ($p < 0.05$).

Although significant differences were not encountered in the value of the left knee angle (non-targeted: 145° ; targeted: 144°), the right knee angle (non-targeted: 116° ; targeted: 114°) at the starting phase of the drag flick shots and at the finishing phase ($p > 0.05$) showed similarities with those of Chivers and Elliott (1987) (150°) and López de Subijana et al. (2010) (male group: 156° - 114°). Thus, the players moved with similar knee joint angles during the drag flicks.

Ibrahim et al. (2017) found that body axial rotation and lateral rotation towards the target, right wrist flexion, and left wrist extension are the main contributors to the speed of the stick head. They advised coaches to emphasize trunk rotations and wrist flexion and extension movements to maximizing stick head speed.

Initially, there is a backward oscillation of the arm during the low shots. During this oscillation, the shoulder rotates externally with abduction, in a position of humerus level with the shoulder. The flexor and internal rotator muscles that stretch during this movement pull the humerus down towards the front of the body. To perform an ideal drag flick shot from this body position, the players in our study demonstrated a decrease in angular velocity at %55 in their right shoulder flexors at the start of the drag flick shot and a decrease in the angular velocity at %34 in the left knee while making a knee flexion in addition to external rotation at the flexion position ($p \leq 0.05$). At the start of the drag flick shot, a decrease of %76 at their angular acceleration of the right hip and an increase at the angular acceleration of the left hip was reported for the finishing phase ($p \leq 0.05$). Consequently, an effective and targeted drag flick shot required a decrease in the angular acceleration of the right hip by placing it in an external rotation position as horizontal as possible at the start of the low shot. At the finish, there was a need for increased angular acceleration via the hip rotation and placing the left foot in a position vertical to the shooting line.

Recommendations

By incorporating more target-oriented exercises in their training and repeating them frequently, coaches will be able to prevent their players' speeds decreasing during targeted shots. This will increase the players' skills and improve performance during high-accuracy shots. Furthermore, identification of the shooting dynamic variances and discovery of the key kinematic elements affecting the shooting dynamics contributes a great deal to sports scientists and coaches in terms of comprehending shooting dynamics.

Conclusion

In order to execute accurately-targeted shots during the application of the drag flick shooting technique, the players in this study tried to maximize their performance by decreasing their speed both in their lower extremities and in their ball velocity.

References

- Anders, E., Myers, S. (2008). Field Hockey: Steps to Success. Champaign: Human Kinetics.
Baker, J., Farrow, D., Elliott, B., Alderson, J. (2009). The influence on processing time on expert anticipation. *International Journal of Sport Psychology*, 40, 476-479.



- Bari, M.A., Ansari, N.W., Ahmad, F., Hussain, I. (2014a). Three dimensional analysis of drag-flick in the field hockey of university players. *Advances in Physics Theories and Applications*, 29, 87-93.
- Bari, M.A., Ansari, N.W., Hussain, I., Ahmad, F., Ali Khan, M.A. (2014b). Three dimensional analysis of variation between successful and unsuccessful drag flick techniques in field hockey. *International Journal of Research Studies in Science, Engineering and Technology [IJRSSET]*, May, 1(2), 74-78.
- Brétigny, P., Seifert, L., Leory, D., Chollet, D. (2008). Upper-limb kinematics and coordination of short grip and classic drives in field hockey. *Journal of Applied Biomechanics*, 24(3), 215-223.
- Carr, G. (1997). *Mechanics of Sport. A Practitioners Guide*. Human Kinetics Campaing, IL, USA, 61825-5076.
- Chivers, L., Elliott, B. (1987). The penalty corner in field hockey. *Excel*, 4(1), 5-8.
- Gómez, M., López de Subijana, C., Antonio, R., Navarro, E. (2012). Kinematic Pattern of the Drag-Flick: a Case Study. *Journal of Human Kinetics*, 35(1).
- Gürol, B., Yılmaz, İ. (2016). Basketbolda Serbest Atışın Kinematik Analizi. *İÜ Spor Bilimleri Dergisi*, 6(4), 1303-1414.
- Hussain, I., Mohammad, A., Khan, A., Bari, M.A., Ahmad, A., Ahmad, S. (2011). Penalty stroke in field hockey: a biomechanical study. ISSN 1750-9823 (print), *International Journal of Sports Science and Engineering*, 5(1), 53-57.
- Hussain, I., Ahmed, S., Khan, S. (2012). Biomechanical study on drag flick in field hockey. *International Journal of Behavioral Social and Movement Sciences*, July, 1(3).
- Ibrahim, R., Faber, G.S., Kingma, I., Van Dieën, J.H. (2017). Kinematic analysis of the drag flick in field hockey. *Sports Biomechanics*, Mar, 16(1), 45-57.
- Jennings, M.J., Blanchonette, I., Lucas, S.R., Morgan, S.W., Helmer, R.J.N., Yang, C. (2010). Instrumentation of a field hockey stick to detect stick and ball interaction during a drag flick. 8th Conference of the International Sports Engineering Association (ISEA), Procedia Engineering, March, 2, 2979–2984.
- Karadenizli Akan, Z.İ. (2006). Hentbolde isabetli kale atışlarında submaksimal atış hızı ve atış kuvvetinin biyomekanik analizi. Doktora tezi. Marmara Üniversitesi, Sağlık Bilimleri Enstitüsü, Beden Eğitimi ve Spor Anabilim Dalı.
- Karadenizli, Z.İ., İnal, H.S., Meriç, B., Aydın, M., Bulgan, Ç. (2014). Accuracy and Velocity of the Elite Female Turkish Handball Players. *International Journal of Sports Science*, 4(1), 21-26.
- Kerr, R., Ness, K. (2006). Kinematics of the field hockey penalty corner push-in. *Journal of Sports Biomechanics*, January, 5 (1), 47-61.
- Laird, P., Sutherland, P. (2003). Penalty corners in field hockey: a guide to success. *International Journal of Performance Analysis in Sport*, 3(1), 19-26.
- Lees, A. (2002). Technique analysis in sports: a critical review. *Journal of Sports Sciences*, 20(10), 813-828.
- López de Subijana, C., Juarez, D., Mallo, J., Navarro, E. (2010). Biomechanical analysis of the penalty-corner drag-flick of elite male and female hockey players. *Sports Biomechanics*, June, 9(2), 72-78.
- McLaughlin, P. (1997). Three-dimensional biomechanical analysis of the hockey drag flick: full report. Belconnen, A.C.T., Australia: Australian Sports Commission.
- Miller, S.A., Barlett, R. (1996). The relationship between basketball shooting kinematics, distance and playing position, *Journal of Sports Sciences*, 14(3), 243-253.
- Pineiro, R. (2008). Observación y análisis de la acción de gol en hockey hierba [The goal play in field hockey: observation and analysis]. Wanceulen, Sevilla.
- Ratko, S., Cvetko, S., Katarina, H., (2006). Biomechanical analysis of free shooting technique in basketball in relation to precision and position of the players. XXIV ISBS Symposium 2006, Salzburg – Austria, Saturday, 15 July 2006, SAP-24: 10:45 - 11:15, 1-4.
- Satti, S. (2004). *The Perfect Basketball Shot*, Physics Department, The College of Wooster, Wooster, Ohio 44691, May 6.
- Sharma, A., Tripathi, V., Koley, S. (2012). Correlations of anthropometric characteristics with physical fitness tests in Indian professional hockey players. *Journal of Human Sport & Exercise*, September, 7(3), 698-705.
- Yusoff, S., Hasan, N., Wilson, B. (2008). Three-dimensional biomechanical analysis of the hockey drag flick performed in competition. ISN Bulletin, National Sport Institute of Malaysia, 1, 35-43.



Art and Creativity as a Chance in The Perspective of Developing The Principles of Education

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Abstract

The aim of this paper is to look at the problem of possibility to implement the art and creativity into the teaching curriculum as the chance to develop the principles of education. In this paper an attempt is made to work out the methodology for comparative analysis of principles of education. The basic hypothesis is that the art may be successfully implemented into the school curriculum seeking at least three base targets of education: 1. Art may foster a culture of self-education giving knowledge and understanding of diverse societies. 2. Art may develop skills of inquiry, approach and participation advancing questioning and understanding and empathy. 3. Art would help in developing and verifying attitudes. The art is the search for meaning that consists of uncovering or creating connections and relationships of various kinds. That is why the art and creativity may be concerned as a call for attention to underlying beliefs, attitudes and values enables individuals to examine the foundations upon their views rest and develop the stronger sense of themselves as the persons. The art and creativity in education may be treated as a personal inquiry that is based on permanent questioning of assumptions and self-correction. That makes an art a strategy, protecting from lapsing into the dogmatism and enabling people to respond positively to the opportunities and challenges of the rapidly changing world. And finally, the art may serve as a toolkit developing the skills of good questioning and helping to avoid the indoctrination and ideological impact. Art may help in developing skills of participation and responsible action. We have not underestimate the role of art in social changes and integration of cultures as the challenge to active and responsible participation: the art while proposing linguistic and non-linguistic activities, such as drawing, drama, happenings, games, simulations and so on, may help students to learn from the very beginning self-confidence and socially and morally responsible behavior. As far as the art provokes questions, these questions may lead to inquiry and gives us the possibility to communicate, to discuss, to meditate, to think, to reflect upon what we do and who we are and where are we going. That is why the art may enable us to elaborate questioning, analyze and criticize the concepts that are taken for granted.

Keywords: Art, creativity, development, principles of education.

Introduction

In the classical situation of education where there is one educator and others are learners, there is a prevailing passive attitude of observance. One can easily imagine a certain state of expectancy, as the learner passively lets him/herself “be taught, educated”. He/she transfers all the competences of the subject to the “real” educator, a kind of demiurge, organizer or planner. This passive state does not require any subjectivity, responsibility, or initiative. In the classical conception of the education process the responsibility is simply passed on to the one who takes it in order to get out of the learner an expected social product. In the classical conception of the education there seems to be no question about the *personalization* of the education process: in the objective process of objective knowledge transference knowledge is considered a thing to be transmitted from a material collection of knowledge pieces into the no less material head of the learner who is ready to receive it.

Then knowledge, if detached from the reality as a process, produces a set of theories of teaching and learning, with their sets of formalized and finite knowledge, and recipes (methods) for transmission, theories that are absolutely detached from the real social life and its needs. Such metaphysical material thinking makes the *education process a special activity detached from the reality*.

Speaking about the modern education we should stress the resemblance of dialogical nature of inquiry and dialogical nature of Art. Any modern theory of education is the scientific inquiry and as such as much as the art itself is the search for meaning that consists of uncovering or creating connections and relationships of various kinds. The education theories should look for underlying beliefs, attitudes and values of individuals to examine the foundations upon their views rest and develop the stronger sense of themselves as the persons. Any



educational theory should be treated as a strategy, protecting from lapsing into the dogmatism and enabling people to respond positively to the opportunities and challenges of the rapidly changing world.

The same with art: it may be a toolkit developing the skills of good questioning and helping students to avoid the political indoctrination and ideological impact.

Competencies of the modern education and the role of art

The principles and standards of so called objective or traditional pedagogy are determined by the theoretical preconditions of scientific thinking that emerge from the theoretical reconstruction of the reality by exact sciences. If reality exists irrespective of our analysis and of ourselves then scrutinizing and analyzing “scientific” glance does not change the reality at the time of investigation and we may see the reality “as it really is”. This enables us to look at the reality “objectively” – free of any interest or subjectivity. When a scientist seeks for the truth he eliminates himself as a subject from the process of cognition in favour of objective attitude, the objective truth, in favour of the possibility to see the world what it really is rather what it looks like to him. The principle of “eliminating” the subject may also result from the standard (metaphysical, mechanical) construction of a cognitive subject-object opposition when the subject as though stood in front of an objectively, “naturally” existing reality and because of this position the subject seeks to get the objective knowledge of the reality that opposes him. Quite opposite is in the case of reflecting the piece of art: it is impossible to create such a mental construction of “self-renunciation” or desubjectifying the subject. The *traditional concept of education* is based on the idea of the classical disjunction between the subject and object of learning understood as teaching or educating. “Here, on the one hand there are “educators” who are the subjects or actors, or “those who” organize the process by setting goals, select the tools, and take the responsibilities for the results; on the other, there are the learners or objects – things, or “those to whom” the process is meant as receivers, that is those who within a given frame or education model are modeled, formed and changed (they are taught). The implications of this disjunction of subject and object of the learning process as applied in this education model are such that the subject (“agent”, “actor”) is the teacher, the learner therefore becoming an object” (Baranova, Degesys, 2015). In the case of reflecting the piece of art the processes are declared to be the greatest and independent value and the goals of human activity are the activity and the process itself, but not the results. The reflecting of the art leaves the rooms for creativity or originality, but this is not all. What is even more, implementing of the art in the school curriculum implies the demand of individuality, subjectivity and personal commitment for the results and sense of education.

In the classical education, the knowledge is treated as the sufficient amount of information about reality with a purpose to change and transform this reality. Knowledge is understood as a tool or as a tool-kit for operating on reality; knowledge was considered to give the beholder a power to react to reality and get the desirable results. Thus, the extracting, categorization, storage and transmission of knowledge became the main worries of education. This means that as an object of the process, the learner is, a mere passive and indifferent element with no responsibility for the process of education. The implementing of art may turn him into a subject, an active manager of process of education that is responsible for everything.

Modern education is inevitably based on the **competence for independent thinking**. So, does the art. Self-correction and self-education need an ability to decide independently, the ability to test their own theories and verify assumptions, falsify own attitudes and ideas. This is the reason why in the teaching and learning process a specially introduced, visible, controlled and intentional *distance* is so important: the same as in the process of reflection of the piece of art. The process of education and the process of reflecting of the art needs and offers the possibility of continual reflection of the situation under analysis with the introduction of a constant complimentary point of meta-analysis, when one not only observes and discusses what and how it is going on, but also raises the question about the meaning of this specific situation, and about the meaning of the analysis of this question, about the effectiveness of the methods and methodologies used.



As much as the education the reflection of art supposes the idea of the creativity and inevitable presence of the principles of dialog, interactivity and communication. Uniqueness of the art may help students to get the unique experience.

The art in the school curriculum:

1. Gives the sense of identity through knowledge and understanding of the spiritual, moral, social and cultural heritages of diverse societies.
2. Gives the knowledge and understanding necessary for the interpreting of local, national, European, commonwealth and global dimensions of students' lives.
3. Reflects the enduring values that contribute to the social justice, respecting differences and human rights.
4. Challenges stereotypical images of other places and cultures.
5. Develops skills that will help students to combat prejudices and prejudgements.

Of a great importance in modern education are "unpractical", meta-practical, theoretical, especially meta-theoretical disciplines, that provide not only with specific, "pedagogical" knowledge, but also turn the subject of learning towards itself, disciplines that teach not only knowledge, but teach the ways of acquiring new knowledge, teach, how to learn discipline and how to teach oneself. "Whatever the theory, it must be one based on the concept of self-possession, it has to consist of a self-development principle and as any theory, and it has to contain methods, a methodology, an organizational structure, criteria and principles of analysis of their effectiveness, all of which should match this original principle of self-education" (Degesys, L., 2011).

If we are interested in social changes and integration of cultures the art may act as the challenge to active and responsible participation:

1. Implementing of the art in the school curriculum may help to conceive of students as active actors and make their experience of learning very personal and active.
2. The art while *proposing linguistic and non-linguistic activities*, such as drawing, drama, happenings, games, simulations and so on, may help students to learn from the very beginning self-confidence and socially and morally responsible behavior.
3. The art may enable students to elaborate questioning, analyze and criticize the concepts that are taken for granted.
4. The art provokes questions, the questions lead to inquiry and gives us the possibility to communicate, to discuss, to meditate, to think, to reflect upon what we do and who we are and where are we going..

The art enables every student to get the meaning of his personal experience, which is so often underestimated in the teaching process because it is considered insignificant as it is subjective, disorganized and not systematic (Dewey, 1973). It is necessary to declare that a person is precisely the one who possesses himself, he/she is the **subject** (will, intellect and soul) who sets his/her own goals, chooses the means, decides, rules, and commands. And at the same he/she is also the **object** (body, thing, person) whom he rules, directs, encourages, and the one he can possess of with absolute autonomy. There is a need for a **competence for life-long-learning**. *The self-teaching actor should be ready to learn from experience, should be ready to learn all the time and assume that learning is a never-ending process.* Therefore, he/she is the one, **who** educates and changes and perfects himself/herself, as well as the one **whom** he/she can change, perfect and educate. Evidently, these assumptions presuppose permanent, inevitable reflection and a meta-relationship with oneself. When reflecting, the individual observes him/herself as the object under analysis and then he/she determines what he/she could and would like to do with him/herself and by him/herself. So, anybody may be a person, giving the examples of different experiments of living, having different opinions and even proving practically by his life and his works that it is worth to be individual. The education as much as the art may teach that people should not copy each other, they should be different and original and thus the examples of originality should be given by themselves (Degesys L., 2011, p.52-53). The process of education itself should be revealed and explained by the very principles of social communication: as the process of permanent interpretation and re-interpretation of social reality, the reflection of what is going on and assessment of changes that should be relevant to the changeable



social reality. Thus, in the process of education the teaching and learning transforms into self-teaching and meta-learning. The process of education should be analyzed as a whole set of very effective and modern methods and principles of education,

such as the methods of mental experiment, self-analysis and self-reflection, logical alternative calculation, logical analysis and critical thinking and should be based on such thinking and ethical strategies as empathy, decentering from the self and moral imagination. „The self-learning teacher should know how to teach himself and apart the professional competencies he needs very general competencies – **competences of critical thinking**“(Degesys, L., 2011, p.52). It becomes very important to develop the possibility to raise questions and doubts, and not the necessity to find and provide univocal answers. This possibility can be realized through a meta-relationship - one's own relationship with oneself and with others. Evidently, these assumptions presuppose permanent, inevitable reflection and a meta-relationship with oneself. When reflecting, the individual observes him/herself as the object under analysis and then he/she determines what he/she could and would like to do with him/herself and by him/herself.

If we agree that life is a permanent construction and re-construction, programming and re-programming, then deconstruction is a method of vision and interpretation the world, as well as a way of living. It always implies a certain re-construction with the two meanings of this concept: the re-creation of constructions based on reality and the application of these constructions to the recycling of reality, based on the principles of reality. In the contact with culture and art the individual constantly finds him/herself in situations of uncertainty, where rationality may not help, because in the cultural context most processes cannot be just simply foreseen, planned and rationalized. “(Degesys, L., 2005). No one may be prepared to the future problems only by the knowledge, just because it is impossible to know future knowledge. Unpredictability of the future - together with the unpredictability of the past -needs the competence for tolerance to unpredictability. This **tolerance to unpredictability** or the **competence** of this kind of tolerance is the ability to act and to fit in unexpected circumstances and unforeseen coincidence.

Looking to the Greek ideal of a person we may find those: Latin - individuum or Greek athomos - undividable, unique, original - that concepts based on the principle of self-development. The principle of any member of any society may be: **Educate Yourself**. Develop your individuality and you will diversify, furnish, strengthen all the society. Individuality and originality of the member of society is valuable to himself but it is valuable to the society. It is said that public opinion rules the world. But there is very dangerous power of the "right majority" that is based on the public opinion or pretends to represent this opinion as the only right. When public opinion become a dominant power in the society it is dangerous to the freedom and even more dangerous than eccentricity of the member. The art may teach us to be eccentric – that means to be not at the center, to be aside of the collective mediocrity, of public opinion, of the “right majority”.

The main dangers of education and some chances to escape

The development and change of the society is based on the recognition of freedom. The **danger comes from the unification and assimilation** (Mill. J.S). People in the contemporary society get the same things - the same ideas, they read the same things, watch the same television programmes, go to the same places to watch the same bars, romes, paris. They get the same truths and eat the same things. Even the democracy proposes the same rights and liberties. The same education principles unify them. Thanks to the global trading, business and manufacture they get and consume the same products. Thanks to the mass media they consume the same ideas and are obsessed by the same standards of living and making love. The only different experiences may produce the cultural growth. Only the different narratives, different paradigms of thinking may produce the new European identity. We as members of European society can find our place only as an original and different thinkers and if only assume that the richness of Europe is in differences, in pluralism, in the possibility to exchange the different experiences - even if they seem unsuitable, and eccentric.

The traditions and customs, the laws and moral principles are the reflections of the experience of the reality. The experience has taught us the right modes of living and right interpretations. But an experience may be unsuitable if there is no reality this experience was based on. Traditional way of living, thinking and writing



may be correct but based on the experience of the vanished reality so unsuitable to the present reality. The mental and moral exercises may train our spiritual forces like the muscular powers may be only trained by the everyday physical exercises. All the members of society have a power not only train the beliefs, skills of critical thinking, change the attitudes of "traditional thinking and living", but train the desires, feelings and emotions - showing the practical prove of the worth of sensual life. Any member of society may prove it by the experiment of his personal life and show to the others that this model of life as an experiment fits to try it. Or - show the nonsense of the quite opposite experiment - the experiment of non-doing that leads to the crucial results.

Unification of opinion, the opinion of majority is the real danger for any society and its individuals. The mankind is imperfect and this imperfection is very useful. There is no absolute truth, all the truths are half-truths, at least because of permanent change of reality (Mill. J.S). Even if you have gotten some eternal truth via some mystical way - this truth inevitably becomes not true, because the reality changes permanently. After this change becomes obvious that your real truth speaks about non-existent reality, reality that has changed, moved and vanished. So, all the truths are imperfect, because reality is not finished. That's why we should have different opinions about reality, do not pretending to have final, absolute truth. How much resistant against the pressure of society is the member of society. How much disobedience should have somebody to be a member of this society and at the same time not become a frog. A society gives him these froggy kisses during and via the education, during the supervising care of society institutions such as school, family and government. The liberty of individual is limited by common sense and the standards of social progress. Any society kissing every member by the concepts of "true, real life and real truth", asking him to be a "true member", "a citizen", pretends to make him a frog. And afterwards – any member who became a frog, starts to kiss other members pretending to make them the same or at least – similar – frogs, teaching "the real truths and proposing their own models of "real lives".

Results, Conclusions and Recommendations

Any modern theory of education is the scientific inquiry and as such as much as the art itself is the search for meaning that consists of uncovering or creating connections and relationships of various kinds. The implementing of the art in the school curriculum may help students to reflect the enduring values that contribute to the social justice, respecting differences and human rights. The art may challenge stereotypical images of other places and cultures and develop the skills that will help students to combat prejudices and prejudgements. The art shows the student a need to get the meaning of his personal experience, which is so often underestimated in the teaching process because it is considered insignificant as it is subjective, disorganized and not systematic. It helps to conceive of students as active actors and make their experience of learning very personal and active. The art provokes questions, the questions lead to inquiry and gives us the possibility to communicate, to discuss, to meditate, to think, to reflect upon the social reality. The art while proposing linguistic and non-linguistic activities, such as drawing, drama, happenings, games, simulations and so on, may help students to learn from the very beginning self-confidence and socially and morally responsible behavior. It shows a need in the general and non-specific competencies such as: competence for independent and critical thinking, competence for life-long-learning, the competence for tolerance to unpredictability. The art may enable students to elaborate questioning, analyze and criticize the concepts that are taken for granted. The art may forewarn us against the dangers of classical education such as unification of opinion, the danger of "opinion of the right majority" and assimilation of the culture. The implementation of the art into the school curriculum may help to develop and introduce the modern principles of education.

References

- Baranova, J., Degesys, L. (2015). Philosophical Didactics: How Creativity Can be Compatible with Critical Thinking// Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy, Vol 6 No 2, S5, April 2015, p.319-327.



Degesys, L. (2011). Education as liberation of the self: principles and concepts of learning and teaching in the Pestalozzi Programme. Teacher Education for Change. The theory behind The Council of Europe

Pestalozzi Programme. Council of Europe Publishing, P.47-59.

Degèsys L. (2005). Ethics as Theory and Practice of Logical Thinking//Educational Systems Development as Development of Human Being. Frankfurt am Main: Peter Lang. Europaisher Verlag der Wissenschaften, p. 89-97.

Dewey J. (1973). My Pedagogic Creed // Mc Dermott J.J. The Philosophy of John Dewey, p. 450.

Mill, John Stuart. (1869). On Liberty. Of Individuality, as One of the Elements of Well-Being.



Importance of Local Governments' Contributions to Providing Women With Life-Long Education

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Abstract

Globalization process, effects of demographic changes and changes in workforce markets have caused compulsory education and formal education to fall short of meeting the need for training qualified workforce required by the economy in recent years. This situation has brought about the need for diversifying post-compulsory educational policies and services and lifelong education has started to become widespread via being supported as a social policy tool. While, on the one hand, thanks to life-long education, alternative works are carried out for those who have a disadvantageous position in the involvement in the compulsory education process or those who have a negative educational background, on the other hand, works are done to have people acquire professional qualities and skills. To achieve social integration and economic growth, the coverage of life-long education programs can be versatile ranging from basic education based on read-and-write, professional education, general education, general culture education to trainings developed with the aim of evaluating free times. Women's low education levels and low participation rates in the workforce as an employee and employer have led to an increase in the number of programs aiming at women in these trainings. In the education process, various programs have been developed especially for women who could not complete their educations for various reasons or for those whose educations do not fit the requirements of the day. The purpose of this study is to examine the role and importance of local governments by examining non-formal education programs for women in the case of Bursa.

Keywords: Woman Education, Life-Long Education

Introduction

Globalization process, effects of demographic changes and change in labour markets have caused to fail recent compulsory and formal education providing qualified labour the economy needs. This situation revealed to need for diversification of education, policy and services after compulsory education. Life-long education as a social policy tool began to be popularized by supported. On the one hand with life-long education, alternative works are performed for ones who have over a barrel on joining compulsory education or ones who have negative educational history, on the other hand works to gain professional qualifications and skills are performed. Equality between individuals is the most important goal that governments provide to their citizens as the indication of contemporaneity. But individuals who need to have same rights can have disadvantages either there are obstacles to access their rights or obstructive elements of accessing or using their rights. Mayer explained disadvantageousness notion that concentrated on the thought ‘being obstructed from self-sufficient tools’ and classified as obstacles that individuals face, absence of resources, inaccessibility of resources, social perspective, goverment policies, corporate applications, in-group conditions (Yıldırım, 2011, 5).

In other words, classification of individuals’ self-sufficiency with various reasons. United Nations Development Program explained the reasons of general obstacles caused disadvantageousness as economical obstacles, insufficient social services, legal and institutional discrimination, insufficient support for alternative tools, limited communication, lack of consciousness or insensitivity for specific needs, lack of trust in goverment agencies, lack of physical access (UNDP, 2005, 156).



In the other words, disadvantageousness directly relates to obstacles in front of tools providing individuals' self-sufficiency and every disadvantageous group or person cannot reach tools like health, knowledge, employment, education, capital, self-confidence and social support. Prejudices, discrimination, opportunity inequality, gender inequality and exclusions caused by individual and social attitude besides, applied government policies, the failure of equal opportunities by government, poverty and difficulties in accessing resources etc. create social obstacles. Groups with social and individual disadvantages have fewer opportunities to access resources such as education, health, employment, social and financial resources, professional careers (Yıldırım, 2011, 8).

Among the disadvantaged groups, women are one of the largest groups. Women can fall into disadvantaged positions from a wide variety of angles, and in some cases they can have multiple disadvantages. These disadvantages of women who have serious disadvantages in important areas of life, such as education, health and employment, are usually caused by social point of view, discrimination, lack of state policies, deficiency or nonexistence.

The lack of sustainable programs and policies for women, not supporting to participate in decision-making processes, the low level of participation in the labour market, the exposure to violence and discrimination are the most important problems in contemporary life. This situation plays an important role in the disadvantaged situation of women in contemporary life. As a matter of fact, the rights given in many countries at the legal level do not really make any sense. In this context, it is stated that education is still a problem as in many other regions of the world, women are less benefited from education opportunities than men, and social gender-based inequalities are going on (Turkish Republic Prime Ministry Directorate General on the Status of Women, 2008, 5). Thus traditional life style that protects its existence from urban centers to rural areas, from west to east and gender inequalities continue to constitute an obstacle to access to educational services about women's access to educational services also in Turkey. Women are not in a position to decide on benefiting from educational services, especially in rural areas and slum areas, due to the low social status and lack of economic independence. As a result, women face many obstacles in terms of education, health and employment due to reasons such as social point of view, inequalities in opportunities, discriminatory attitudes and inadequacy of government policies, which cause women to continue their disadvantaged positions in social life.

Life-long Learning Policy

Formal education is carried out by the Ministry of National Education in Turkey as it is in all countries. But life-long education is provided not only by all possible official and private institutions and organizations together with the Ministry of National Education but also non-governmental organizations to participate in the education. However, all non-formal education activities have to comply with the general objectives and basic principles of national education under the supervision of the Ministry of National Education (Article 17 of National Education Basic Law No. 1739) (Yıldırım, 1996, 57). On the other hand, the Ministry of National Education published the life-long learning strategy document in 2009 (Ministry of National Education, 2009). The document mainly sets out national priorities and duties and responsibilities for all stakeholders. In order to ensure coordination at the national level by the end of 2010, a steering committee composed of the related parties was established and its priorities were determined.

Causes Requiring Life-long Education

The rapid change created by the developments in the world in today's conditions is not able to adapt to changing labour market conditions with existing information as new demands arise. On the other hand, widespread education is needed to meet the needs of those who have left the formal education for a variety of reasons, those who did not have a vocational or artistic education in their education process, and those who have life-long learning desires. As a matter of fact, while the structure of the professions has changed over time, some professions have lost their validity and new professions have emerged. This situation causes insufficient knowledge and skills. It is possible to reduce unemployment, increase efficiency and productivity by means of



non-formal education by acquiring the professional knowledge and skills required by the labour market. In this way:

- * Reducing unemployment,
- * To make individuals have job and profession,
- * Developing and evaluating human power,
- * To complete the basic knowledge acquired through school education,
- * To develop cultural and artistic skills,
- * Helping the unemployed or employees that work on unwilling job to earn income-generating and wealth-enhancing skills is among the main economic reasons for life-long education (Bahat,2013,18). Supporting the adaptation of individuals to the development and change of the communities they live in should be among the main objectives of life-long education. The turmoil, loneliness, incompatibility, gap between generations, migrations created by social change cause social policy makers to give more importance to the planning and implementation of life-long education. Providing social harmony within the society through education is also among the targets (Bahat,2013,20). In this way:

- * To gain consciousness of collective life, helping each other, cooperative working and to adopt habits,
- * To reduce the problem of social cohesion caused by internal and external migration,
- * Protecting public health, family planning, consumer education, environment, maternal education, religious culture and morality increasing social welfare by providing productive assessment of current time is among the main social reasons of life-long education.

From another point of view, it plays an active role on learning people's literacy with life-long education, completing the integration in the cultural dimension within society, participating in artistic events to evaluate leisure time, learning the educational technology and techniques that will lead them to knowledge and manpower resources in changing conditions.

Social Policy Notion

The main objective of social policies is to provide prosperity and peace together in society (Serdar,2017,1). The most general approach in the literature is that social policy covers all social problems(Ersöz, 2006, 2). This basic approach to change causes social policies to deal with the problems of special groups outside the working relationship, on the one hand, by solving social problems existing in the society, by increasing the welfare level of the people by trying to prevent new problems and by turning to all sectors of the society. These groups are women, children with disabilities, the elderly, the poor, the unemployed, immigrants and other disadvantaged groups and policies directed at them. Especially in the recent period, social policy has become an field where all classes in need of social support in society deal with problems such as education, health, security, tax, justice, employment and claiming to produce solutions. The effective role of determining and implementing social policies belongs to the government. The state is regulating this role by producing policies in all matters covered by social policy, preparing legislation and acting on related institutions and organizations (Koyunoglu, 2002: 20).

Social Policy Practices and Lifelong Education

In the implementation of social policies, central and local administrations as well as voluntary organizations, foundations, associations, trade unions and social partnerships are involved in the private sector. As the state determines the changes that must be made nationwide for the identification and implementation of social policies, the responsibility of providing social policies is increasingly being applied by central government and democratic institutions (Ersöz, 2006, 2). In this context, local governments have also been active in recent years. The local governments provide various exhibitions, demonstrations, fairs, panels, seminars, meetings and conferences, in-service and vocational qualification training, which are organized as a whole between adult education services provided by provincial special administrations, local municipalities, development agencies,



NGOs and neighborhood mukhtar activities and these activities are seen mainly in practices regulated by local governments (Toprak-Erdoğan, 2012, 86; Köksal, 2017, 35).

Local Governments as Social Policy Practitioners

Local governments are organizations that are part of the public administration and are responsible for fulfilling the local (regional) quality of services that can be benefited by the people living within the local borders (Ersöz, 2004, 51, Kaya, 2006, 3). It is important that local governments, whose aim is to meet the common needs at the local level, fulfill these needs in accordance with the wishes and expectations of the people and the benefit of society. As a matter of fact, this situation is expressed in the Municipal Law No. 5393 (Article 3) as "Represents a public legal entity with administrative and financial autonomy, established to meet the local collective needs of local residents and elected by the decision-making body of voters." The Municipal Law No. 5393, which was enacted on 03.07.2005 within the framework of the social state principle, which the 1982 Constitution regards as the basic qualifications of the state, has become one of the basic principles of local municipalities. Thus, long-term policies such as education and health are required by the central government, while services such as food, clothing, housing, as well as support for addressing the short-term needs that need to be met quickly are given to the responsibility of local governments (Beki, 2009, 1-2). In this context, local administrations have been given responsibility for solving social problems besides other activities (Toprak and Şata, 2009, 15). If a comprehensive description is made, all social, cultural, artistic, educational and sports activities as well as social assistance and social services which will raise the living standards of the people living within the municipal boundaries can be evaluated within the scope of social municipalities (Beki, 2009). Within the scope of social municipalities, these services are carried out under the headings of public education services, cultural, artistic and sportive activities, protective services under the Municipal Law No. 5393 and Metropolitan Municipality Law No. 5216, which are intended to enable municipalities to become active in social life. They fulfill the services people need in order to meet the social expectations. For this reason, the scope and quality of these services differ according to time, space and needs, and in this case, the services provided by local governments prevent comparison with each other. The efficiency and productivity of the services can therefore be assessed, mostly directly or indirectly, in terms of their satisfaction with the service areas, their level of utilization and their contribution to the sustainability of the service's benefits.

Services Provided to Women in the Scope of Social Municipality

According to Article 14 of the Municipal Law No. 5393, metropolitan municipality with municipalities having a population exceeding 100.000 have established protection and shelter for children and women. Works related to domestic violence have started, and women's guesthouses are providing services such as accommodation, education, psycho-social support and rehabilitation. Apart from this, it is seen that the municipalities constitute sports fields, which they organize vocational and skills training courses (Pekşen, 2014, 31). In particular, the metropolitan municipalities play an important role in the economic, social and cultural development of the people in order to adopt urban culture, to meet the needs of culture and arts, to solve employment problems and to provide education services in various fields and levels (Ersöz, 2007, p.44).

Women and life-long education

Gender equality within the sustainable development goals set out by the United Nations on the basis of the "2030 Agenda for Sustainable Development" adopted on 25 September 2015 and the provision of full and productive employment and equal pay for all women and men are among the targets (Memişoğlu vd., 2016, 1075). It is emphasized that the objectives set are aimed at achieving human rights and gender equality for all, and that this perspective is an integral part of the economic, social and environmental dimensions of sustainable development (United Nations General Assembly, 2015). While the main reason behind this important decision is long-term economic crises, unemployment and gender inequality are on the Earth as well as Turkey's main problems. Male



employment in Turkey is close to nearly double the level of female employment. In 2015, the female employment rate in the world was 46%, while male employment was 72%. Moreover, when the unemployment rates are examined, it is observed that the rate is higher in women. Within the framework of the National Employment Strategy, it is targeted that the labour force participation rate of women will be increased to 41% in 2023 (Memişoğlu vd.,2016,1079).

The most advanced statistics on employment in Turkey are obtained as a result of the Household Labour Force Surveys of the Turkish Statistical Institute.

Table 1. Advanced statistics on employment in Turkey(TUIK,2017)

	Total		Man		Woman	
	2016	2017	2016	2017	2016	2017
people 15 years and over	(thous.)					
Population	58 621	59 781	28 975	29 589	29 647	30 192
Labour	30 763	31 713	21 017	21 474	9 746	10 238
Employment	27 867	28 488	19 211	19 583	8 656	8 904
Agriculture	5 540	5 577	2 996	3 012	2 544	2 565
Non-agricultural	22 327	22 911	16 216	16 572	6 112	6 339
Unemployed	2 895	3 225	1 805	1 891	1 090	1 334
Not included in the labour	27 859	28 068	7 958	8 115	19 901	19 953
	(%)					
Labour participation rate	52,5	53,0	72,5	72,6	32,9	33,9
Employment rate	47,5	47,7	66,3	66,2	29,2	29,5
Unemployment rate	9,4	10,2	8,6	8,8	11,2	13,0
Non-agricultural unemployment rate	11,3	12,2	9,8	10,0	14,9	17,2
15-64 age group						
Labour participation rate	57,5	58,2	78,2	78,3	36,7	38,0
Employment rate	52,0	52,2	71,3	71,3	32,5	32,9
Unemployment rate	9,6	10,4	8,8	9,0	11,4	13,3
Non-agricultural unemployment rate	11,3	12,2	9,8	10,1	15,0	17,3
Young population(15-24 years)	17,4	19,8	15,8	17,0	20,3	25,0
Unemployment rate						
(1)Neither in employment nor in education rate	21,6	22,0	12,1	12,4	31,1	31,8

The figures on the table may not yield because of rounding

(1)It is the ratio of young people who are not working and who are not educated (formal and non-formal) in total young population.

According to the figures of May 2016 and May 2017; It is observed that unemployment rates in women are higher than that of men and that of employment rates is about half. The determination of gender and the level of education in terms of women's participation in the labour and the problems they are facing is known to be the reason why women's problems they encounter while working are also preventing them from participating in the labour at the same time. Factors that impede women's participation in the labour are mainly examined under two headings as economic and social factors. Women in the working age sacrifice their education from triangle of education, marriage, child. That causes woman labour working on less qualified works with less price. On the other hand, the wage to be paid to the woman must also meet the family duties she undertakes during her absence. The woman uses her choice not to work unless she finds a job at a pay level that will cover expenses incurred from the household for housework, elderly and child care. The total value of the services the woman produces at home is called "reservation fee" . When the woman wants to enter the labour market, her wage is compared with the wage that is due to the income work, ie the reservation fee. In this case, it makes it even harder for women to work again in low-skilled jobs. On the other hand, low level of education of female labour, socio-cultural obstacles in the society and in the family and rural-urban migration negatively affect the labour participation of women. However, although legal arrangements have been introduced into working life and



discrimination prevention regulations, even the calculation of the pre-pregnancy periods has been a barrier to start to work in front of the female labour.

Women to take a more active role in their working lives can be possible through the creation and implementation of active employment policies. Active employment policies and the global changes, transformations and developments in the global world need to be leaded up. For this purpose, firstly policies should be made to create new job opportunities for the female labour. For this, it is necessary to take incentives and measures to open new investment areas. In addition to the industrial sector, the opening up of the development in the service sector, the arrangement of credit and incentive support for those who want to establish or develop a business can be done in this context. In particular, prioritization of women labour is needed to increase women's employment and important steps about that have been taken recently in Turkey. However, since it is not possible for a woman to start a new activity without a certain knowledge, the introduction of vocational and entrepreneurship education will be the starting point of the work.

However, each investment has to be at a certain level of productivity and the goods and services produced must be demandable. In this case, the main subject to be aware of is quality and efficiency works. It is obligatory to increase productivity because of competition with today's market conditions. On the other hand, quality of produced goods and service is prerequisite to compete in the market. To do so, it is necessary to provide consultancy services for businesses, information technology and technology transfer, and to provide quality education for enterprises to establish and maintain quality systems. Another key issue for businesses is technology leadership. Kör et al. (2016) argue that technology leadership is directly proportional to seniority and age in research conducted by educational managers on technology leadership, so young managers and senior executives must come together at various events, and technology leadership can be widespread.

Due to the change in the current globalization process, there is a lack of qualified labour. In order for the female labour to remain in the labour market for a long period of time, vocational education and renewal education should be given as well as vocational training. For this purpose, increasing the number of practical education, the disappearance of some professions and the emergence of new occupational groups in the face of rapidly advancing technology and the changing of the forms of production in the existing professions caused the knowledge and skills that individuals possess are lost and reeducating of people gained necessity. For these reasons, "life-long education" is the most important educational policy of our day.

All these precautions can be taken on the one hand by directing legislation and policies towards the labour market and on the other hand by actively taking part in the work of all the actors in the country in order to spread the applications. In particular, the main objective of the social municipality, which is enforced in accordance with the Municipal Law No. 5393 and the Metropolitan Municipality Law No. 5216 and other laws is not to give every request and demand but to rescue the residents of the town from needing help and to decrease the value-behavior difference emerged in individuals and groups by interfering with social tissue. That is to provide rehabilitation of social touch. The concept of social municipalities in this framework allows women to be stakeholders who will play an active role in entering the labour market as an entrepreneur or as an employee. As a matter of fact, in recent years, many municipalities throughout the country have been cooperating with public education centers, KOSGEB and Turkish Employment Organization, institutions and organizations in their life-long education activities.

In this study, only municipalities, especially the Metropolitan Municipality in Bursa, were examined and a generalization was not made. The main reason for the lack of generalization is the fact that the work carried out by the municipalities is shaped by the needs of the local elements and the possibility of being active only in this condition is high.



Vocational Education Courses organized by local governments in Bursa

Education programs organized by local governments in the context of lifelong education are usually provided by the metropolitan municipalities, but the municipal municipalities also open courses. Especially in recent years, although the numbers have increased, it is observed that this ratio is far behind the European countries.

Table 2. Participation Rate in Life-long Learning,(%)

	Man		Woman		Total	
	2006	2011	2006	2011	2006	2011
EC27	8,4	8,2	10,1	9,6	9,3	8,9
Turkey	2,1	3,0	1,5	2,7	1,8	2,9

Source: The Ministry of Labour and Social Security, which transfers from Eurostat,2015,24.

In recent years, the number of social municipalities has rapidly increased with the work of "National Employment Strategy 2014-2023 and Action Plans 2014-2016". Bursa Metropolitan Municipality has been continuing its education for 12 years since it started with BMMAVEC (Bursa Metropolitan Municipality Arts and Vocational Education Courses) and Local Agenda 21.

With life-long education:

* BURSA ART AND PROFESSIONAL EDUCATION INSTRUCTIONS (BMMAVEC) A total of 25,000 courses a year in 220 branches, in 34 different venues (including 26 courses, 4 cultural centers, 3 sales offices and 1 management center),

*BURSA MOBILE EDUCATION PROJECT (BMEP) in 10 districts by 10 education vehicles going around the neighborhood with educated and experienced in their own branches, all women for 16 years old and over,

*BURSA UNOBSTRUCTED MOBILE EDUCATION PROJECT(BUMEP) Private computer classroom, the designs are spacious and useful, in two education vehicles, with educated and experienced educators in their own branch, free of charge for disabled citizens "Graphic Design and Computerized Accounting Basic Educations" in 7 districts, free education services are provided in 3 different structures. One of these education groups is open only to the disabled, one of them is open only to women and the other is open to everyone, mostly women.

Giving Education in the places that the disabled and women can easily reach has increased the attendance and demand rates of education.

BMMAVEC's 2 missions that is explained is " sustainable education" and "qualified non-formal education".For this purpose;

* To develop professional arts and skills and to increase personal accumulation,

* Helping them to become producers from being consumers,

* Strengthening local development with a structure that increases employability and contributing to the realization of public welfare are expressions in it's vision (BUSMEK,2016,3-4).

In this context, 166.222 people have been educated in the courses opened since 2005 and 108.450 people have certified their professional knowledge in different fields. Courses that continue their activities depending on Bursa Metropolitan Municipality Department of Social Services Directorate of Social Affairs and Education Services Department act in cooperation with the Ministry of National Education and Public Education Directorates. Besides Turkish Employment Organization and KOSGEB, employment-guaranteed courses can be opened in cooperation with non-governmental organizations. Horticulture, computer technology, office management and secretarial services, child development and education, handicrafts and clothing technology, sick and elderly care services, machinery technology, food and beverage services are courses for direct regional needs and mainly occupational areas preferred by women. Only the educations of industrial kitchen groups opened a



way to acquire a profession for 1506 persons in 8 different branches in 2014-2016 period, such as preparation of home meals, pastry apprenticeship, making macaroni and sauces. 13 groups gave education and 375 people have obtained certificates and 111 of them opened their own business in KOSGEB-supported entrepreneurship educations. Education and production activities for the production of silk carpets and fabrics started with the women sitting in the mountain regions under the guidance of Bursa Koza Agriculture Sales Coop. Communities by placing 115 carpets, 26 fabric weaving looms. Coverage of life education programs can be versatile as basic education based on reading and writing, vocational education, general education, general culture education and educations developed to evaluate leisure time with the education programs BMMAVEC has prepared for ensuring social integration and economic growth. The low participation rates of women, both in terms of education levels and in the labour as employees and employers caused an increase in women's special programs in these educations. Special programs were developed for women who did not completed education especially for a variety of reasons or whose education did not comply with the requirements of the day. While these programs were being developed, the city's labour supply as well as responding to the demands of the labour were included in the mission.

Conclusions and Recommendations

Beside the classical municipality as of the 21st century; Social services and aids as well as cultural and artistic and educational services continue in line with the understanding of social municipalities. The goal in social municipalities is not to give aid, but to relieve from needing help and providing social touch rehabilitation. In this way, correcting the disadvantageous position of people resulting from various reasons is the main goal. That makes it possible for people to get a healthy grip on demand and expectations from the city administration, to prevent social explosions, to provide urban integrity, to facilitate the adaptation of city life and social life especially in cities such as Bursa that have intensive internal and external migration. However, special attention should be paid to not over-specializing in vocational education. It is necessary to give importance to occupational development, vocational renewal education as well as vocational education especially in areas such as Bursa that are rapidly developing and have a high chance of competing in global markets. The annual average of 25,000 people getting education is relatively small in the city with a population of 2.5 million. Although vocational education courses are organized by the municipal municipalities, the coordination between these courses and the provision of job sharing will increase the effectiveness of the courses. Providing boarding education opportunities for young women can provide positive contributions in terms of the productivity of education especially in mountain regions where transportation is difficult. Good monitoring of the relationship between life-long education and employability, diversification of education in line with the changing needs of the market and maintenance of the flexible management model in which differentiation can be made are the key to increasing productivity. Life-long employability is that someone is productive throughout his working life. Continuously changing knowledge and skill need educations need to be provided for people who are not only for the first time in the labour market, but also who need to renew their professional knowledge and skills and that should not be ignored.

References

- Altan, Ömer Zühtü.(2007). *Sosyal Politika*, Anadolu Üniversitesi Yayını, No:2628, Eskişehir.
- Bahat, İsa. (2013). *Halk Eğitimi Merkezi Yöneticilerinin Hayat Boyu Öğrenme Algısı*, T.C. Marmara Üniversitesi Eğitim Bilimleri Enstitüsü Eğitim Bilimleri Anabilim Dalı Eğitim Yönetimi Ve Denetimi Bilim Dalı, yayınlanmamış Yüksek Lisans Tezi, İstanbul
- Beki, Abdülhakim. (2009). *“Türkiye’de Sosyal Belediyecilik (Ümraniye Belediyesi Örneği)*, Sena Ofset, İstanbul.
- Bursa Büyükşehir Belediyesi.(2017). *Faaliyet Raporu 2016*,
http://www.bursa.bel.tr/dosyalar/birimek/strateji/faaliyet_raporlari/2016-2.pdf Erişim Tarihi:10.6.2017.



- Bursa Büyükşehir Belediyesi.(2016). *Faaliyet Raporu 2015*,
http://www.bursa.bel.tr/dosyalar/birimek/strateji/faaliyet_raporlari/2015.pdf, Erişim Tarihi:10.6.2017.
- Bursa Büyükşehir Belediyesi (2017) *Bursa Büyükşehir Belediyesi Performans Programı*
http://www.bursa.bel.tr/dosyalar//PERFORMANS_PROGRAMI_2017.pdf Erişim Tarihi:10.6.2017.
- Bursa Büyükşehir Belediyesi (2016) *Bursa Büyükşehir Belediyesi Performans Programı*
http://www.bursa.bel.tr/dosyalar/birimek/strateji/performans_programi/2016.pdf Erişim Tarihi:10.6.2017.
- Bursa Büyükşehir Belediyesi (2015) *Bursa Büyükşehir Belediyesi Performans Programı*
http://www.bursa.bel.tr/dosyalar/birimek/strateji/performans_programi/2015.pdf Erişim Tarihi:10.6.2017.
- Bursa Büyükşehir Belediyesi (2015) *Bursa Büyükşehir Belediyesi Stratejik Plan 2015-2019*,
http://www.bursa.bel.tr/dosyalar/birimek/strateji/stratejik_plan/2015-2019.pdf Erişim Tarihi:10.6.2017.
- BUSMEK. (2016) *Bursa Büyükşehir Belediyesi Sanat ve Meslek Eğitimi Kursları, Bursa*,
<http://busmek.bursa.bel.tr/busmek-faaliyet-raporu.html> Erişim Tarihi:10.6.2017.
- Ersöz, Halis Y. (2006). Sosyal Politika – Refah Devleti – Yerel Yönetimler İlişkisi, *İktisat Fakültesi Mecmuası*, (Prof. Dr. Toker Dereliye Armağan Özel Sayısı),Cilt: 55, Sayı: 1, İstanbul, İ.Ü. İktisat Fakültesi Yayını,(s.760) <http://iibf.kou.edu.tr/ceko/armaganlar/tokerdereli/35.pdf>
- Ersöz, Halis Y. (2007). Yerel Yönetimlerin sosyal Politika Alanındaki Rolü, *Sosyal Politikalar Derneği Sosyal Politikalar Dergisi*, S. 30-34.
- International Labor Organization (ILO). (2016). *Women at Work-Trends 2016*, ILO Publications, Geneva, 10 Ekim 2016,
http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/publ/documents/publication/wcms_457317.pdf Erişim Tarihi:10.6.2017.
- Koyunoğlu, H. Hüsnü. (2002). *Sosyal Politika Açısından Vakıflar – XVII. Yüzyıl İstanbul Örneği*, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü.
- Köksal, Sahre. (2017). *Yerel Yönetimlerde Halkın Eğitimi Ve Hayat Boyu Öğrenme Faaliyetleri*, İstanbul Aydın Üniversitesi, Sosyal Bilimler Enstitüsü, Siyaset Bilimi Ve Uluslararası İlişkiler Ana Bilim Dalı Mahalli İdareler Ve Yerinden Yönetim Bilim Dalı Yayınlanmamış YL Tezi.
- Kör, H., Erbay, H., Engin, M. (2016). Technology Leadership of Education Administers and Innovative Technologies in Education: A Case Study of Çorum City. *Universal Journal of Educational Research* 4(12A): 140-150. DOI: 10.13189/ujer.2016.041318.
- Memişoğlu, Dilek, Sedef Eylemer, Evrim Mayatürk Akyol. (2016). Avrupa Birliği'ne Giriş Süreci Bağlamında Yerel Yönetimler Tarafından Düzenlenen Mesleki Kurslara Ve Kadın İstihdamının Artırılmasına İlişkin Bir Değerlendirme: İzmir-Türkiye Örneği, *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* Yıl: 2016 Sayı: Ciep Özel Sayısı,S1072-1090.
- Önder, Nurcan. (2013). Türkiye’de Kadın İşgücünün Görünümü *ÇSGB Çalışma Dünyası Dergisi*, Cilt: 1, Sayı: 1, Temmuz-Eylül 2013, Sayfa: 35-61
- Pekşen, S. Nilüfer. (2014). *Sosyal Belediyecilik Çerçevesinde Engellilere Sunulan Hizmetler: Ankara Büyükşehir Belediyesi*, TC Sakarya Üniversitesi, Sosyal Bilimler Enstitüsü Yayınlanmamış Yüksek Lisans Tezi,
- PEKTAŞ, Ethem Kadri. (2010), Türkiye’de Sosyal Belediyecilik Uygulamaları ve Temel Sorunlar, *Akademik İncelemeler Dergisi*, Cilt:5, Sayı:1, www.sbe.sakarya.edu.tr/dosyalar/sbe_dergi_cilt5_sayi1.pdf, Erişim Tarihi:10.6.2017.
- Serdar, Aysu Bozkır.(2017). Sosyal Politika Kavramı, Tarihsel Gelişimi ve Türkiye’de Sosyal Politika, *Sosyal Politika*, Genişletilmiş 8. Baskı, Bursa.
- T.C. Başbakanlık Kadın Statüsü Genel Müdürlüğü. (2008). *Politika Dokümanı: Kadın ve Eğitim*, Ankara, KSGM Yay.
- T.C. Çalışma Ve Sosyal Güvenlik Bakanlığı. (2015). “Ulusal İstihdam Stratejisi 2014-2023 ve Eylem Planları 2014-2016”, Aralık 2015,<http://www.uis.gov.tr/media/1370/uis-2014-2023.pdf>. Erişim Tarihi:10.6.2017
- Toprak Düriye ve Şata Ceyda. (2009). Türkiye’de Yerel Yönetimler Reformu Çerçevesinde Sosyal Belediyecilik Yaklaşımı, *Sosyal ve Beşeri Bilimler Dergisi*, Cilt: 1, Sayı: 1.



- Toprak, Metin, Armağan Erdoğan. (2012) Yaşamboyu Öğrenme: Kavram, Politika, Araçlar ve Uygulama, *Yükseköğretim ve Bilim Dergisi/Journal of Higher Education and Science Cilt/Volume 2, Sayı/Number 2, Ağustos/August 2012, Pages 69-91*
- TUIK,2017. İşgücü İstatistikleri, Mayıs 2017. <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=24630> (10.6.2017).
- UNDP. (2005) *Programing for Justice : Access for All*, Bangkok, United Nations Development Programme.
- United Nations General Assembly. (2015) *Resolution Adopted by the General Assembly on 25 September 2015 – Transforming Our World: the 2030 Agenda for Sustainable Development*, http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E (10.6.2017).
- Yıldırım, Nuran. (1996). *İstanbul Darülaceze Müessesesi Tarihi*, İstanbul, Darülaceze Vakfı.
- Yıldırım, Yusuf Ziya (2011). *Dezavantajlı Bir Grup Olarak Engellilere Yönelik Eğitim Faaliyetleri: İsmek Örneği*, Yayınlanmamış Yüksek Lisans Tezi, T.C. İstanbul Üniversitesi, Sosyal Bilimler Enstitüsü Çalışma Ekonomisi ve Endüstri İlişkileri Ana Bilim Dalı Endüstri İlişkileri ve İnsan Kaynakları Bilim Dalı, İstanbul.



Social Media In Higher Education For Marketing

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Abstract

Internet marketing is to reach the existing and potential customers, to sell and advertise the products and services via the internet networks. Social media which has emerged along with the development of the internet technologies and effective social communication methods on the internet is a new way of marketing activities. Marketing activities which are committed via the internet networks can also be called social media marketing. In Turkey, as well as in the world, colleges and universities are beginning to embrace the social media, to realize the potential power of it and to use it as a component of their overall marketing mix. This paper will review the existing literature available in this subject area by introducing some popular social media tools such as Facebook, MySpace, YouTube, Flickr, Twitter and Instagram, express what the advantages and disadvantages of using social media in advertising and promotion activities of universities and colleges and suggest some ideas about these implements by giving advice for the marketers. Keywords: Internet, Education, Social Media Marketing

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Introduction

Social media consists of activities that involve socializing through words, pictures and videos, and creating an online network. Social media redefines how we relate to each other as people and how we relate to organizations serving us as people. Social media is concerned with the dialogues that comprise of bilateral discussions bringing people together to explore and share knowledge (Solis, 2008).

Jason Falls, one of the founders of the Social Media Clubs, has asked Twitter followers to explain social media with two words or less, and has found that they have the terms "relationship", "interaction" and "community" (Falls, 2008) in common. "Social networking is an umbrella term that refers to web-based software and services that allow users to come together online, communicate, discuss, exchange, and engage in any form of social interaction" (Ryan & Jones, 2009:152).

Social media marketing aims to develop brand awareness, define opinion leaders, analyze consumer behavior and external sources of crowded communities, develop ideas for new marketing strategies, direct the traffic to the company's website, spread specific messages as viral, enhance site visibility, extend brand exposure, (through organic links), support the brand's reputation and image enhancement and internalization, increase product sales, achieve marketing objectives effectively and initiate and maintain mutual talks (Weinberg, 2009: 6).

Until recently, instruments such as newspapers, magazines, radio, television and billboards have come to the fore as the means by which marketers can promote their products and services on the market. However, the emerging Web 2.0 technology and the advantages offered by it have made the marketers slip into this new media. Social media is made up of online networks based on a very comprehensive and bi-directional interaction including blogs, company discussion boards, chat rooms, e-mails between consumers, consumer product and service assessment websites, internet discussion boards and forums (Mangold ve Faulds, 2009: 358). Although some studies show that social media and Web 2.0 are used in the same sense, the most important difference between them is that Web 2.0 symbolizes the technological dimension of change in information and communication technologies while social media symbolizes the social dimension and usage (Akar, 2010: 17).



Nowadays, experienced marketers have realized that things that have been functioning in the past are not currently functioning accurately or properly. There has been a need for a new approach (Weber, 2009: 9-10). Developing marketing requires marketers to focus on social networking and other new techniques. The New World offers new media, new channels and new markets. Social media marketing can be defined as using social media sites to increase visibility on the internet and to promote goods and services. Social media sites provide the exchange of ideas and information by creating social networks (Akar, 2010: 33-52).

Weinberg (2009: 3) defines social media marketing as a process that empowers individuals to promote their websites, products or services through online social channels and to communicate and connect with a wide range of communities that are not possible with traditional advertising channels. In another definition, social media marketing is expressed as an online advertising form in which social communities, including social networks, virtual worlds, social news sites, and social opinion sharing sites, are used in cultural context to fulfill branding and communication purposes (Tuten, 2008: 19). Social networks are a dimension of social media in which people share their ideas and interests or they meet with other people who have the common ideas or benefits. The two most popular social networking communities are Facebook and MySpace currently. This study will focus on the use of Facebook, MySpace, YouTube, Flickr, blogs, Twitter in higher education marketing. According to the Pew Center research on online social networks among American teenagers, 55% of all young people online use social networks like MySpace or Facebook, and 64% of children in the 15-17 age group are creating online profiles on these networks (Noel-Levitz, 2007). In this section, the social media tools that make up the subject of work and their forms of use in higher education will be examined.

Social Media Tools and Their Use In Higher Education

Facebook is a social service that connects people with their friends and with other people in the place where they work or live. People use Facebook to take care of their friends, upload an unlimited number of photos, share links and videos, and learn more about the people they meet. Facebook consists of six main components: personal profiles, status updates, networks (geographical regions, schools, companies), groups, applications and fan pages. When Facebook launched the concept of fan pages in November 2007, many universities immediately took the advantage of the opportunity to create a formal Facebook presence for themselves. By January 2008, there were 420 universities that made use of this new feature (Cheater, 2008). Fan pages are similar to personal profiles but they can be used by businesses also. These pages include wallpapers, discussion boards, photos, videos, and more. Users viewing the page can choose to be "fans" of your organization, which is shown on their personal profile pages for their friends to see. This creates a viral marketing effect, those who see that one of their friends is a "fan" of another organization that is also interesting for them will be the "fan" of that page. Facebook pages also provide organizations with the ability to communicate with their "fans" through targeted and direct messages (such as "fans" in a particular network or age group) and view "content" with detailed statistics about the use of the organization page.

MySpace is an online community that allows you to meet your friends' friends, share photos, magazines, and interests. Because of the way Facebook is started, MySpace has developed an "exclusive" image and it is more attractive for colleges and universities to express themselves through MySpace. The numbers also support this attraction, 85% of students in 4-year universities have a Facebook profile, and in areas such as higher education and discretionary income, Facebook users' demographic information is often higher than that of MySpace (Qualman, 2007). In April 2008, Facebook passed MySpace as the world's most popular social network (Stevens 2008). This can lead to the formation of unprofessional, amateur-looking pages which, if not done well, can damage the image of a company. Other organizations with poor-looking pages affect the overall perception of a person about MySpace, which negatively affects this "not so exclusive" image. Unlike Facebook, MySpace allows users to fully customize their profiles by changing the appearance, background, and format of their pages (Solis, 2008).



YouTube is a leader in online video and a first-rate goal to share original videos worldwide on the web. YouTube makes it easy for people to upload and share video clips via the Internet sites, mobile devices, blogs, and email. Universities have been making videos for more than 20 years to help recruitment efforts. YouTube has provided them with a platform that will easily distribute these videos to a wider audience and not cost to write to CD / DVD or mail to a smaller audience. For example, Dove spent two and a half million dollars on a 30-second ad at the 2006 Super Bowl. Later, the famous "Evolution" video was only broadcast on YouTube, which led to an increase in the flow of web sites without any expense (Li and Bernoff, 2008).

Flickr is an online photo site where users upload photos that can be edited with sets and collections. Public photos can be seen and commented on by others (Consortium, 2007). Universities see Flickr as a perfect tool for easily sharing photos with students, alumni, faculty, and staff. It is the perfect tool for uploading photos, adding titles and tags, and converting organized collections with slide shows without any manual web code.

Blogs are an form of online journal. They can have a single author or several. Most blogs allow readers to write comments in order to promote conversation in response to an article or a post (Consortium, 2007). The most popular use of blogs for marketing in higher education is having currently enrolled students blog about their lives on campus as a recruiting initiative in conjunction with admissions. One quarter of all college admissions offices use blogs by students or campus personnel (Noel-Levitz, 2007). Karen Sines Rudolph wrote a thesis on the topic of using official admission blogs to recruit millennials, from a public relations perspective. In this research, she found it was key that the selected bloggers represented a full spectrum of intrests and status, and they have a clear understanding of the purpose of recruitment through their blog posts. She also found it important that the institution's brand practitioners stay involved with the project, actively guiding bloggers so their posts can meet established goals, namely to provide prospective students with the clearest picture or life at the institution (Rudolph, 2007). Blogs are also being used by some colleges to post news articles in order to facilitate conversation. Faculty blog about their teaching, travel and research. Admissions counselors blog about their travel and recruitment cycle.

Twitter is a mix of instant messages and blog posting that allows users to send short (140 character) updates. Users can also keep track of their friends' updates, send direct messages to them, reply publicly to their friends, or send comments to their current status (Consortium, 2007). Anyone who is suspicious of Twitter and its benefits should read a comprehensive list of fifteen reasons to use Twitter (Puiu, 2008). These include reasons such as awareness and creating brand awareness, content promotion, quick feedback, new audience finding and marketing, and higher education marketers should show great interest in all these areas. Some have suggested it can be used in conjunction with other social media tools, such as student bloggers also having Twitter accounts they update more often than their blogs, to serve as another tool to promote their new blog entries. Others have suggested it can be used in emergency situations, such as the shootings that happened at Virginia Tech (Swartzfager, 2007), or using it in place of a live chat service for recruitment (Wilburn, 2008).

With **Instagram** becoming increasingly popular and the infographic and visual use increasing in marketing applications in social gatherings, brands have begun to show interest in Instagram. It has been proven by investigations that people forget the objects that they have seen later and brands have begun to concentrate on visual-based posts rather than writing-based posts. From this perspective, Instagram, which has a great advantage in marketing the goods and services through visual elements, has become an important channel with many potentials for marketing higher education institutions when it is supported by special campaigns and a multichannel communication work is carried out with other social media accounts of the brand. According to social media theories, communication is bidirectional because they attach importance to consumers' thoughts and opinions while creating brand values of businesses. The Instagram users find this value in the content and



inspiration shared by the brand and do not need to enter into too many dialogues through this channel. They are marketing their content that they see worth talking about through tags first and then by communicating with their relatives through word of mouth communication (Wallsbeck & Johansson, 2014: 65).

Conclusions and Recommendations

The social media economy is the fastest growing and changing phenomenon of our time. The reason for this is undoubtedly the rapid increase in the usage of internet and social networks by individuals. Social networks require participation of these entrepreneurial enterprises in these networks. Today, social networks provide opportunities for small businesses as well as large businesses. Social media is much easier to use for businesses because it does not require large budgets, such as in traditional media, in promoting products and services. But what is important here is that businesses can bring out original and creative ideas that they can draw attention to in social media.

Research has shown that visual messages are more noteworthy than written messages in social networks. It has not taken long for businesses and marketers to realize this. The visual content used in social networks is carefully prepared and aims to transmit the desired message directly. Currently, Facebook, Twitter and LinkedIn are the most widely used social networks around the world. The marketers are not indifferent to Instagram and use this visual based network with social networks like Facebook and Twitter. The campaigns that are being prepared are planned to cover all social networks used.

The power of social media has not reached the desired depths. Many people think that the transition of the use of social media into higher education is controversial. For example, what if we had lectures for student reviews on our site? New students would also be able to see assessments of the courses, especially as they tried to make choices for general education courses. Courses that have good grades would probably be chosen at a higher rate without paying any additional fees. Administrators would be worried about the courses that received negative evaluations, however, whether this feature exists or not, these conversations would occur elsewhere.

Social media offers excellent opportunities to stay in touch with alumni later on. Facebook is one of the popular tools for it. Alumni or individuals who are in more contact with their schools are those who are more likely to donate more to their colleges in the future. Noel-Levitz stated that the social network could be an excellent resource for recruitment efforts and that your program could be very useful. Noel-Levitz stated that the social network could be an excellent resource for recruitment efforts and that your program could be very useful. Nevertheless, it is still believed that the vast majority of target audience should strengthen the experience perspective (Noel-Levitz, 2007).

Social media offers the opportunity to humanize the stories of students and graduates who are committed and can gain future jobs. Those who are willing to "participate in the conversation" and social media in a way should create strong and effective policies for its use and provide specific monitoring and contribution functions to the staff members. Sites and tools should be created for the employees that they can really devote themselves to (Solis, 2008).

References:

- Akar, E. (2010). *Sosyal Medya Pazarlaması, Sosyal Webde Pazarlama Stratejileri*°. 1. Baskı. Ankara: Efil Yayınevi.
- Campbell, D. (2008). *Reaching Students Where They Live*. BizEd. 7: 60-61.
- Cheater, M. (2008). *How Higher Ed is Using Facebook Pages*. 6 August 2008, <http://www.academicagroup.com/node/4598>.
- Consortium, T. N. M. (2007). *Social Networking, The "Third Place," and The Evolution of Communication*. The New Media Consortium.



- Facebook. (2007). *Facebook Privacy Policy*. 6 August 2008, <http://www.facebook.com/policy.php>.
- Falls, J. (2008). *Social Media in Two Words or Less*. 6 August 2008 <http://www.socialmediaexplorer.com/2008/07/31/social-media-in-twowords-or-less/>.
- Johnson, B. (2007). *39 College & University Presidents Who Blog*. 6 August 2008, http://bobjohnsonconsulting.com/blog1/2007/07/15_presidents_who_blog_saint_v.html.
- JuniperResearch. (2007). *Social Networking Sites: Defining Advertising Opportunities in a Competitive Landscape*. 7 August 2008, <http://www.jupiterresearch.com/bin/item.pl/research:vision/1231/id=98881/>.
- LeFever, L. S. (2008). *Video: Social Media in Plain English*. 6 August 2008, <http://www.commoncraft.com/socialmedia>.
- Li, C. and J. Bernoff (2008). *Groundswell: winning in a world transformed by social technologies*. Boston, Harvard Business School Publishing.
- Mangold, W., Faulds, D., (2009). *Social Media: The New Hybrid Element of The Promotion Mix*. *Business Horizons*, 52(4): 357-365.
- Noel-Levitz, I. (2007). *E-Expectations Class of 2007 Report: Building an E-Recruitment Network*: 7.
- Puiiu, T. (2008). *Twitter: Why It's So Great and How to Effectively Use It*. 7 August 2008, <http://www.lostartofblogging.com/twitter-guide>.
- Qualman, E. (2007). *Social Search Engine Face-off: Facebook vs. MySpace*. *SearchEngineWatch.com* 6 August 2008, <http://searchenginewatch.com/showPage.html?page=3627975>.
- Rudolph, K. S. (2007). *Recruiting Millennials: How Official Admission Blogs Depict Colleges and Universities From a Public Relations Perspective*. Athens, The University of Georgia. Master of Arts: 122.
- Ryan, D. ve Jones, C. (2009). *Understanding digital marketing*. (1. Press). Philadelphia: Kogan Page.
- Solis, B. (2008). *Introducing The Conversation Prism*. 6 August 2008, <http://www.briansolis.com/2008/08/introducing-conversationprism.html>.
- Solis, B. (2008). *Customer Service: The Art of Listening and Engagement Through Social Media*: 32
- Solis, B. (2008). *The Essential Guide to Social Media*. 9 June 2008, <http://www.briansolis.com/2008/06/essential-guide-to-social-media-free/>
- Stevens, T. (2008). "Facebook Surpasses MySpace as World's Most Popular Social Network.", 6 August 2008, <http://www.switched.com/2008/06/14/facebook-surpasses-myspace-as-worldsmost-popular-social-network/>.
- Swartzfager, B. (2007). *Twitter as Alert System?*, 7 August 2008, <http://www.swartzfager.org/blog/index.cfm/2007/4/17/Twitter-as-AlertSystem>.
- Tuten, T. L. (2008). *Social Media Marketing in A Web 2.0 World*, London: Praeger Publishers.
- Wallsbeck, F.E. & Johansson, U. (2014). *Instagram marketing: when brands want to reach generation Y with their communication*. Unpublished master's thesis, Halmstad University
- Weber, L. (2009). *Twitter Marketing: Promote Yourself and Your Business on Earth's Hottest*, USA: Weber Books.
- Weinberg, T. (2009). *The New Community Rules: Marketing on the Social Web*, San Francisco: O'reilly Media.
- Weinberg, T. (2009). *The New Community Rules: Marketing on The Social Web*, O'Reilly: California.
- Wilburn, J. (2008). "Using Twitter for Higher Ed. 6 August 2008. <http://jeremywilburn.wordpress.com/2008/03/04/using-twitter-for-higher-ed/>.



Factors In Building Adolescent Self-esteem At School

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Abstract

For teacher who is seeking to implement modern education goals, it is important to create prosperity educational and learning environments, which were not relevant to the traditional paradigm. The learning environment is one of the most important factors influencing the successful formation of adolescent self-esteem, their self-expression and creative autonomy. The concept of learning environment includes – the school's tradition, domestic regulations, pupil and teacher relationship, the psychological climate, school management and teacher's work style. It is typical for the autocratic teacher work style to stereotype and depersonalise the pupils, this weakens the adolescent self-esteem. Meanwhile, democratic procedure, learner's participation in decision making, respectful relationship, honesty and self-discipline promotes learners self-confidence and enhances self-esteem. Well organized learning environment is a good atmosphere to motivate pupils and encourages them to become a proactive, independent and responsible persons.

Keywords: Adolescent, Self-esteem, Educational process

1. Introduction

The issues of self-evaluation and the construct of self-esteem have been thoroughly discussed in psychology. The psychologists Rogers (1994), Baummeister (1999), Maslow (2011), Mruk (2006) emphasized that self-esteem is one of the fundamental human needs, essentially significant for the individual's development, the individual's psychic and physical welfare and behaviour. James (1991), Lemme (2003) defined self-esteem as the relationship between the ideal 'I' and the actual 'I'. The afore-mentioned authors treat self-esteem as the individual's self-concept comprising a system of self-knowledge as well as the knowledge about other individuals and the surrounding world; and this system enables the individual to identify own needs and abilities, and to foresee ways for self-realization. Lemme (2003) defines self-esteem as a multi-layered construct, in which individuals may perceive their self-esteem as being of lower or higher degree in different areas of activity. Lemme (2003), Atchley (1991) share the view that the degree of self-esteem depends on how individuals value their achievements in the area of activity that is vitally important to them.

The psychologists and educationalists, who studied the construct of self-esteem, agree on the opinion that the individual's self-esteem can be enhanced on condition that certain conditions are provided. O'Dea, Abraham (2000), Wild, Flisher, Bhana, Lombard (2008), who studied the peculiarities of building self-esteem at different age groups, assert that self-esteem, as a personality trait, can be modified by certain factors. Zuffiano, Alessandri, Luengo, Kanacari, Pastorelli, Milioni (2008), who studied the relationship between low self-esteem and unsocial behavior, established that self-esteem can be modified on the basis of the observation how the changing degree of self-esteem leads to behavioural changes. Pepi, Faria, Alesi (2006) claim that learning motivation is closely related to the learner's self-esteem, which, in turn, adds self-confidence and self-actualisation and leads to better academic proficiency. In the opinion of the afore-mentioned authors, the learners with higher self-esteem are more outgoing, they are ready to make independent decisions, have more belief in successful outcomes of activity, and do not suffer that much in case of failure. Mruk (2006), who acknowledges the significance of introspection, also points out the importance of social factors in building individual's self-esteem and claims that, on the basis of mutual interaction and feedback, the individual is able to carry out comparative self-evaluation within the framework of social relationships network. Psychologists emphasize that high self-esteem is influenced by positive evaluations, especially when they come from the people whose opinion the individual appreciates and respects. Bednar, Wells, Peterson (1989) point out that self-esteem of an individual to a large degree is pre-conditioned by the evaluations given by the surrounding people; the



researchers maintain that self-esteem is the feedback to the individual about whether their behavior is adequate or not. Myers, Willse, Villalba (2011) studied the impact of self-esteem on adolescent psychic condition, and they found that higher self-esteem helps in overcoming stress, despair, anxiety. The researchers believe that self-esteem provides emotional and spiritual resilience, on the basis of own self-perception and acknowledgement of the individual's worthiness, coming from other individuals.

Carlo, Hausmann, Christiansen, Randall (2003) studied the significance of prosocial behavior in enhancing self-esteem. The authors defined prosocial behavior as volunteer help and support of other individuals. In the researchers' opinion, a high degree of self-esteem is essentially significant in displaying altruism and trust. Adolescents that demonstrate prosocial behavior tend to be more considerate and good-wishing; they tend to follow higher moral standards, have a stronger sense of responsibility, are more independent, which, in turn, has positive effect on their self-esteem. Allison, Schultz (1994), on the basis of research findings, claim that it is of utmost importance to insistently encourage learners' self-esteem. The researchers assert that self-esteem facilitates the processes of becoming a community member. Allison, Schultz (1994) made an attempt to compare the understanding of self-esteem as displayed by adolescents and adults. In their answers, adults tended to focus on how self-esteem can increase the opportunities of employment, facilitate decision-making on the job, allows to better respect other individuals' rights. In the opinion of adolescents, self-esteem is decisive in handling difficult situations, in becoming an independent and responsible person; it provides the individual with positive self-concept and support, helps to feel psychologically secure, including stress-related situations.

USA National Centre for Self-esteem carried out research in 2001, the findings of which speak for the fact that, with years, the child's self-esteem tends to diminish. Purkey (1970), Amundson (1991) found that at the age when children start school their self-concept is already shaped, mainly due to the family influence. Stipek (1984) investigated learning motivation in children, and noticed the tendency for fairly high self-esteem in primary learners as the learners at primary level are more interested in the learning process itself, not in the learning outcomes. But in later years at school, learners become more concerned about their academic performance and that results in a lot of negative emotions. According to Stipek, because of the growing importance of academic achievement and different social roles that learners have to accept, students face the necessity of re-evaluating their knowledge and skills, and they do that on the comparative basis, in respect to their peers, as they feel obliged to justify their parents' and teachers' expectations. Stipek asserts that the students' self-esteem is continuously affected by the school environment, peers, and family members. West, Fish, Stevens (1980) point out the family is the decisive factor in enhancing the child's self-esteem although the role of school should by no means be underestimated. In the opinion of Hoge, Smit, Hanson (cit. Scott, Murray, Mertens, Dustin (2005)), the key factors in enhancing school students' self-esteem are school, family, and inborn cognitive abilities. The researchers Cai, Wu, Luo, Yang (2014), Swinson (2008), on the grounds of research findings about the degree of self-esteem in learners of different age groups, assert that the degree of adolescent self-esteem, when compared to primary learner self-esteem, diminishes considerably. Myers, Willse, Villalba (2011) tend to relate the lower or higher adolescent self-esteem to the immediate environment, in which the adolescent goes through the processes of maturing. A number of psychological studies have been carried out (Hasagi, Okada, Fuji, Noguchi, Watanabe, 2012) on the immediate constituents of the structure of self-esteem, with implicit or explicit manifestation of self-esteem revealed, as well mechanisms for enhancing self-esteem identified, and major decisive factors described, with academic achievement, physical appearance, family relations, and social everyday contacts within and outside school dominant among some others.

Having surveyed the major issues in enhancing self-esteem, it is legitimate to assert that the very idea of enhancing self-esteem that originated at the end of 20th century has not lost its relevance. The movement for learner self-esteem that sprang in the USA several decades ago in protest at autocratic forms of discipline and unconditional obedience at school was meant to fight against the teaching practices that involved learner embarrassment and humiliation means. As a result of the movement, a number of theories have been developed



that focused on the role that self-esteem plays in the learner's well-being; alongside, research has been carried out about ways of building learner self-esteem, and programmes have been devised and put into practice on how to enhance learner self-esteem at school. There has been research done on the assessment of exclusively self-esteem-focused programme effectiveness. (Helping Children to Build Self-esteem; Enhancing Self-esteem in the Classroom, Life Routes, etc.). The data of the research revealed the main shortcomings of those programmes, namely, their fragmentary character, inconsistency, lack of continuity. The researchers (Babu, 2005; Allison, Schultz, 1994) established that the self-esteem-focused programmes embraced merely superficial activities which, to a large extent, were individual teacher initiative-driven. Babu (2005), Allison, Schultz (1994) point out the need for long-term impact on self-esteem enhancement, constituted by purposeful and consistent activities, directed towards systemic self-esteem building.

It could be stated with certainty that researchers who investigated the construct of self-esteem have emphasised the significance of self-esteem for the individual's personal development, psychic condition, learning motivation and interpersonal relationships. However, the research focused on the analysis of adolescent self-esteem building within the schooling system is very scarce. More research is needed to disclose the impact of factors like educator personality, teaching methods and styles, the role of assessment and self-assessment as well as of overall learning environment on enhancing adolescent self-esteem.

The following problem statements are addressed in the present study with the aim of establishing factors in adolescent self-esteem building at school of general education:

- What factors of the educational process, in adolescents' view, act as enhancing their self-esteem and what factors lower adolescents' self-esteem?
- What are specific emotional reactions and forms of behaviour that adolescents refer to while responding to the factors that either increase or diminish their self-esteem?
- What factors, in teachers' view, add up to both enhancement and diminishing of adolescent self-esteem?

The afore-mentioned questions lie at the basis of the research problem that requires a consistent study, which has been carried out in the present work. The object of the research is the investigation of factors that enhance and diminish adolescent self-esteem in the natural process of education. The aim of the research is to identify the factors of the process of education, which both enhance and diminish adolescent self-esteem.

2. Methods

The questionnaire served as an instrument to empirically prove the forms of manifestation of adolescent self-esteem enhancing factors, also to identify groups of individuals related to adolescent self-esteem enhancement or diminishing, and to highlight the qualities of teacher personality that precondition positive and professional interaction of the teacher with the learner.

The partially-structured interview was used to reveal the in-depth experiences of the two major agents of education, teachers and learners, with the focus on teenagers' experiences that can disclose their self-esteem enhancing or diminishing factors in the process of education, and also revealing teachers' attitudes towards specific factors that increase or lower teenagers' self-esteem in the process of education.

Methods of data analysis of the research

Statistical methods of the research data processing were the methods for quantitative data processing, namely, the SPSS (Statistical Package for the Social Sciences) with the help of Programme 17.0 for Windows. Descriptive statistical methods were also employed (for calculating frequency in percentage). The reliability of frequency difference in respondent answers was checked by applying the non-parametric chi (χ^2) criterion,



applicable to numerical categorical (both nominal and rank-type) variables that are used to verify the responses of the whole sample section (Bitinas, 2006). The χ^2 compatibility criterion was used to verify the hypotheses about the section of the variable within the population. The χ^2 criterion reveals whether the difference between the empirical and theoretical sections is significant, i.e., whether the selected empirical section is compatible with the theoretical model (Čekanaivičius, Murauskas, 2001). Correlative analysis was done by applying Spearman coefficient since it is generally applied to bigger samples and also to analyse variables that are measured according to the ranking scale. *Factorial analysis* helped to explain the mutual correlations of a big number of variables by the influence of certain common factors. The transition from variables to factors makes the information more condensed, and it is easier to handle it, thus the aim of factorial analysis is, with minimal losses of information, to replace the unlimited number of indicators of the phenomenon under investigation by a selected group of a few factors (Čekanaivičius, Murauskas, 2001). The factorial analysis provides meaningful interpretations of statistically significant results, and the identified factors characterised essential qualities of teacher personality. The factorial analysis was used in the present research to condense the initial variables of the study by joining them around factors. The data applicability to factorial analysis was verified by using the measurement Kaiser-Meyer-Olkin (KMO).

The accumulated qualitative data were analysed by applying the method of *content analysis*, based on multiple readings of the text and dividing it into sections directly related to the object of study. Statements of closely related meanings were grouped into categories and subcategories. Subcategories were established with the help of heuristic approach, namely, “while reading the answer of the respondent, its abstracted informational content was identified and placed under a certain subcategory” <...> different subcategories were united under the same category when there could be recognized a unifying common idea, worded in the category; several categories made up a common topic group” (Bubnys, Žydžiūnaitė, 2012, 31). While grouping the statements that illustrate separate subcategories, the most typical and originally-sounding statements of the respondents were selected.

The basis of the empirical research and its sample

In the quantitative research, the representational characteristics of the sample was guaranteed by the nest-based sampling. The respondents, both teachers and learners, that took part in the questionnaire, were from schools in Vilnius, Panevėžys, Šiauliai, and Ukmergė. With the aim of getting a multilayered character of the research, both teacher and learner groups of respondents were selected: the general line of the respondents was made up from learners in forms 6 to 9 of schools of general education and of teachers – of different age groups and subjects taught, of different job experience and professional qualification. The overall sample involved 299 learners and 140 teachers from schools of general education in Lithuania. The answers from 439 respondents were received in the process of the research.

The sampling of respondents for the qualitative research was preconditioned by the aim of the study, namely, to investigate the immediately relevant phenomenon in the broad perspective and rather intensive but not extensive way. The informativeness of the respondents in terms of the aim of the study preconditioned their selection. It is not generally indicated in research literature how the sufficient sample of the qualitative research should be selected. In the process of study, it is usually relied on the concept of saturation (the number of ‘saturated opinions’), which states that the sample is big enough if the information obtained from respondents starts repeating itself, and the additionally received opinions of the respondents do not influence the results of the study (Punch, 2000). In the process of qualitative research, the sample of learners was modified, i.e., the study was limited to the respondents from forms 7 to 9, and the participants from form 6 were left out. The decision to limit the population of respondents to forms 7 to 9 was based on the assumption that adolescents of this particular age group best represent their age group-specific characteristics, with the greatest number of physical and psychic changes taking place exactly at this period. The overall sample was made up of 136 learners in forms 7 to 9 and 86 teachers.



3. Findings, Results and Conclusions

On the grounds of the analysed research literature, it is possible to assert that self-esteem is one of the most important personality constructs, preconditioning positive development of individual, providing coherent social integration, and guaranteeing quality of living. The need for self-esteem gets actualized in the early stages of personal development when the individual is able to perceive the meaning of 'self'. Self-esteem is decided by the degree of adequacy between self-perception and the ideal 'self'; in the case of incongruity, inadequacy results in low self-esteem. One of the ways of enhancing one's self-esteem is to find a realistic match between one's aspirations and possibilities, between one's desires and the real state of things, and to set one's aims in realistic proportion to one's abilities and possibilities. *Another option is to strive for self-discovery, to uncover and develop one's abilities, and to widen the spectrum by pushing the boundaries.*

The findings of the quantitative study make it possible to state that nearly half of all teenagers treat their teachers as the most important people in terms of enhancing their self-esteem at school, and so do two fifths of teenagers with reference to their peers; in turn, nearly one third of teenagers indicated teachers and two thirds of teenagers mentioned their peers as related to diminishing their self-esteem at school. In teenagers' opinion, certain personal qualities of teachers are important in enhancing adolescent self-esteem, and those qualities can be grouped into categories under three latent factors: positive and professional interaction with learners *sáveika* (learner support, consideration of learner opinions, fairness of judgement, etc.), teacher professional qualities (sincerity, optimism, creativity, etc.), responsiveness and empathy (friendliness, sensitivity to learners and mutually-built relationships, frankness, etc.).

The qualitative study allowed to establish that adolescent self-esteem enhancing and diminishing experiences at school are related to two most significant factors: positive or negative relationships with teachers and peers. Other factors did not have such a significant impact on adolescent self-esteem enhancing or diminishing. The teacher's supportive behaviour, encouraging the learner to treat oneself as a worthy person, (teacher-demonstrated trust, respect, approval, public appreciation, acknowledgement of learner's abilities) – all these act as adolescent self-esteem enhancing factors. Teenagers' experiences of teacher's power-dominant relationships (ignoring, public humiliation, 'sticking labels') diminish learner self-esteem. A sense of comradeship among learners, leadership, cooperative self-realisation, independent decision-making, responsibility for oneself and others (a sense of belonging to the same group of peers, leadership, realising one's ideas in jointly-carried out activities, providing support for others) enhance adolescent self-esteem. Teenagers' experiences of exclusion, lack of trustworthy relationships, cases of bullying (ignoring on the part of peers, rejection of ideas, blaming, bullying for reasons of physical appearance, or academic failure, or cultural differences) all act as diminishing adolescent self-esteem.

Teenagers' emotional reactions to self-esteem enhancing factors are in principle positive – learners feel value-oriented, emotional and cognitive enabling (they are proud of themselves, feel upgraded, encouraged, worthy, important, responsible, independent, clever). Teenagers' emotional reactions to self-esteem diminishing factors are in principle negative -- only a small part of teenagers manage, with their power of will, to restrict oneself from self-esteem diminishing factors, other teenagers experience heavy feelings (a sense of being unaccepted, of guilt, shame, humiliation, hatred, disappointment in oneself, sadness), they feel confused, embarrassed, and even think of dying. When teenagers experience the overall diminishing of their self-esteem and not a specifically-focused reaction, directed to a particular act of behaviour, they go through a number of negative emotions and do not consider themselves worthy people. Teenagers' self-esteem grows when they receive positive responses from their teachers and peers, when they are guaranteed respect, unconditional acceptance, and can feel their significance. Teenagers' self-esteem is affected more severely by demonstrated disrespect towards them, by distrust, intolerance, non-constructive and offensive criticism spoken out in public than by academic failure, lack of abilities, communication problems or physical appearance. If the conditions to experience positive self-esteem



are absent, a sense of unworthiness develops, and there is a risk of encountering serious psychological and social problems hindering coherent cognitive, psychological, and social development in the period of adolescence. Teenagers' behavioural reactions to their self-esteem enhancing factors in essence are constructive, their major forms of expression being increased motivation to learn, more effort invested in studying, better attendance of school, seeking higher academic achievement; also greater general activity and resolution to demonstrate one's abilities, to speak up one's mind, willingness to communicate and help other people; improved behaviour (they became friendlier, more polite, and more respectful towards others). Teenagers' behavioural reactions to self-esteem diminishing factors is non-constructive by its essence – in the majority of cases, the teenagers' reactions were passive (they did not try hard to study, did not care to behave well, their motivation to learn was weak), they closed inside, ignored other people, doubted their abilities, experienced heavy feelings; part of the teenagers displayed hostile reactions, became more aggressive (got angry with their peers, were planning revenge). Only a small part of teenagers pointed out that their wish to achieve higher academic results increased, that they became more active (they tried to defend their point of view), sought help.

The teachers who took part in the research distinguished four factors as having significant effect on adolescent self-esteem in the process of education:

- qualities of teacher personality;
- methods and techniques of teaching;
- assessment and self-assessment of the progress made by the learner;
- support provided for learners with low self-esteem and for those suffering from bullying.

The teachers acknowledged as enhancing adolescent self-esteem the qualities that facilitate establishing partnership-based interaction with learners (respect, sincerity, trust, tolerance, support); the teachers pointed out as self-esteem diminishing qualities the ones that make the interaction a mere formality, that allow the teacher to dominate, to demonstrate destruction and stereotyped thinking. The teachers' responses give sufficient grounds to assert that the efficiency of study methods depends on the roles of the teacher and learners and on the type of activity. The teachers acknowledged the following methods as adolescent self-esteem enhancing factors: learner-centred teaching, ways and techniques of activating learner self-realization, independence, responsibility, cooperation, encouraging creativity; similarly, the methods of assessment favoured by the teachers were the ones that can reveal the learner's potential strengths and abilities. The methods pointed out by the teachers as the ones that diminish adolescent self-esteem were constant control, refusal to admit individual learner differences, distrust, focus on learner mistakes and cases of failure. Adolescent self-esteem enhancement can take place in the environment, which encourages self-discovery and adequate self-evaluation, which fosters self-realisation, develops independence and responsibility.

On the grounds of the teachers' responses in the qualitative study, it is legitimate to assert that the problem of bullying must be viewed as a problem of school and class community and not as a problem of an individual; a teenager with low self-esteem and suffering from bullying can be best helped by activities educating a sense of responsibility within school and class community (by educating empathy, tolerance, paying appropriate attention to human rights, by creating the atmosphere of discontent to the culture of bullying, by organising self-and-peer-support groups), also, the learner support should be built upon the personal responsibility of all professionals who communicate with teenagers having low self-esteem and suffering from bullying (form tutor, social pedagogue, school psychologist, etc.).

4. Recommendations

To teachers at institutions of higher education, to educational programme developers:

Research in the identification of factors in self-esteem enhancement and diminishing at school of general education should not be limited exclusively to the middle period of adolescence. With the aim of achieving long-term, purposeful and systemic process of building self-esteem at school of general education, it is of utmost



importance to study the peculiarities of self-esteem formation in different school age periods. Further research of factors preconditioning learner self-esteem building would reveal general tendencies and would provide more in-depth conceptual information about self-esteem enhancing and diminishing factors at school of general education.

The subject of *Pedagogical Ethics* is recommended to be included into programmes of educational science, with focus on the issues of value-oriented, moral, and self-esteem building aspects and strategies in the study modules of the teaching profession.

To head-teachers and other pedagogues at schools of general education:

Learner self-esteem building strategies should be included into long-term planning at schools of general education. Practical realization of self-esteem enhancing factors in the process of education could serve as an efficient means in solving problems of adolescent poor attendance, low academic achievement/underachievement, destructive behaviour, bullying. Appropriate attention to learner self-esteem enhancing factors could facilitate creating the kind of school environment that is favourable for teacher and learner self-realisation, readily-establishing the organizational culture and upgrading the teaching profession.

Specific-focus seminars for teachers on the issues of self-esteem building would enable teachers to better perceive the significance of self-esteem building processes for the positive development of teenage personality, for the learner welfare, academic achievement and behaviour. Teacher newly-obtained knowledge about learner self-esteem building factors would expand the possibilities of putting into practice self-esteem building strategies and would enable to guarantee forms of support for learners with low self-esteem and for those suffering from bullying.

It is essential to establish a closer cooperation between family and school while initiating jointly-organized events for teachers, social pedagogues, school psychologists and parents to unite their effort in fighting teenager low self-esteem. Close contacts between school and family add better understanding of teenagers and their needs which, in turn, allows to apply self-esteem building strategies at school more successfully.

Teenager self-esteem is enhanced by different forms of participation in non-formal activities, in art and sport hobby groups and competitions. School should find ways of providing more opportunities to learners to get involved in varied activities and to gain useful life skills, including volunteer activities that encourage prosocial behavior and generates a feeling of self-pride.

Teachers should give learners an opportunity to experience a sense of active partnership in building interpersonal relationships at school, and to become full-right participants in establishing standards of behavior. Active personal involvement and participation of every teacher and learner in creating the respectful atmosphere for communication and cooperation helps to guarantee safe and friendly environment that motivates to learn. School standards of behavior should clearly demonstrate school values and principles, what kind of behavior is favoured and what kind of behavior is unacceptable as it violates the agreed upon norms.

References

- Allison B. N., Schultz, J. B. (2004). Parent-adolescent Conflict in Early Adolescence. *Adolescence*, 39 (153), 101-119.
- Amundson, K. J. (1991). *Building self-esteem: A guide for parents, schools, and communities*. Arlington, VA: American Association of school Administrators.
- Atchley, R. C. (2001). Continuity and Adaptation in Aging: Creating Positive Experiences. *Contemporary Sociology*, Vol. 30, No. 5, pp. 472-474.
- Babu, M. S. (2009). Why Curriculum for self-esteem? A Comparative Sketch on Self-esteem Among Rural School Goings. *The Journal of Progressive Education*, 2, 46-55.
- Baumeister, R. (1993). *Self-esteem: the puzzle of low self regard*. New York: Plenum Press.
- Bednar, R. L., Wells, M., Peterson, S. R. (1989). Self-esteem: Paradoxes and innovations in clinical theory and practice. From: <http://psycnet.apa.org/index.cfm?fa=browsePB.chapters&pbid=100068>, viewed: 9.09.2015.
- Bitinas, B. (2006). *Edukologinis tyrimas: sistema ir procesas*. Vilnius: Kronta.



- Bubnys, R., Žydzūnaitė, V. (2012). *Refleksyvusis mokymas(is) aukštosios mokyklos edukacinėje aplinkoje: dėstytojų mokymo patirtys*. Šiauliai: Lucilijus.
- Cai H., Wu M., Luo Y. L. L., Yang J. (2014). Implicit Self-Esteem Decreases in Adolescence: A Cross Sectional Study. *PLOS ONE*. From www.plosone.org, viewed: 14.09.2014.
- Carlo, G., Hausmann, A., Christiansen, S., Randall, B. (2003). Sociocognitive and Behavioral Correlates of a Measure of prosocial Tendencies for Adolescents. From: <http://digitalcommons.unl.edu>, viewed: 15.12.2014.
- Čekanavičius, V., Murauskas, G. (2002). *Statistika ir jos taikymai. II dalis*. Vilnius: TEV.
- Hasagi M., Okada A., Fuji Ch., Nogguchi K., Watanabe K. (2012). Importance and usefulness of evaluating self-esteem in children. From: <http://www.bpsmedicine.com/content/6/1/9>, viewed: 21.06.2016.
- Lemme, B.H. (2003) *Suaugusiojo raaida*. Kaunas: Poligrafija ir informatika.
- Myers, J.E., Willse, J.T., Villalba, J. (2011). Promoting Self-Esteem in Adolescents: The Influence of Wellness Factors. *Journal of Counseling & Development*. From: http://libres.uncg.edu/ir/uncg/f/J_Myers_Promoting_2011.pdf, viewed: 24.08.2015.
- Mruk, Ch. J. (2006). *Self-esteem Research, Theory, and Practice. Toward a Positive Psychology of Self-esteem*. New York: Springer Publishing Company.
- O'Dea, J.A., Abraham, S. (2000). Improving the body image, eating attitudes, and behaviors of young male and female adolescents: a new educational approach that focuses on self-esteem. From: <http://www.ncbi.nlm.nih.gov/pubmed/10800013>, viewed: 05.12.2014.
- Pepi, Annamaria, Faria Luisa, L., Alesi, Mariana. (2006). Personal Conceptions of Intelligence, Self-Esteem, and school Achievement in Italian and Portuguese Students. *Adolescenc*, 41(164), 615-31.
- Punch, S. (2002). Interviewing strategies with young people: The secret box, stimulus material and task-based activities. *Children & Society*, 16 (1), 45-56.
- Purkey, W.W. (1970). *Self-concept and school achievement*. Engewood Cliffs, NJ: Prentice-Hall.
- Scott, C. G., Murray G. C., Mertens, C. E., Dustin, R. (2005). Student Self-Esteem and the School System: Perceptions and Implications. *The Journal of Educational research*, 89, 286-293.
- Stipek, D. J (1984). *The development of achievement motivation and education*. (Vol.1), Orlando, FL, Academic Press.
- Swinson, J. (2008). The self esteem of pupils in schools for pupils with social, emotional and behavioral difficulties: myth and reality. *British Journal of Special Education*, 3. From: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8578.2008.00389.x/pdf>, viewed: 07.05.2014.
- West, C.K., Fish, J.A., Stevens, R. J. (1980). General self-concept of academic ability and school achievement: Implications for "causes" of self-concept. *Australian Journal of Education* 24, 194-213.
- Wild, L.G., Flisher, A.J., Bhana A, Lombard C. (2008). Associations among adolescent risk behaviours and self-esteem in six domains. From: <http://www.ncbi.nlm.nih.gov/pubmed/15482505>, viewed: 11.02.2012.
- Zuffiano, A., Alessandri, G., Kanacari, B. P. L., Pastorelli, C., Milioni, M. (2014). *The relation between prosociality and self-esteem from middle adolescence to young adulthood*. Personality and Individual Differences. From: <http://www.sciencedirect.com.ezproxy.vpu.lt/science/article/pii>, viewed: 09.10.2016.
- Джемс, У. (1991). *Психология*. Москва: Педагогика.
- Маслоу, А. (2011). *Мотивация и личность*. Москва: Московский психолого-социальный университет.
- Роджерс, К. (1994). *Становление личностью*. Москва: Прогресс.



Cluster performance: evaluation attempts

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Abstract.

Authors raise a question about possibility to measure of clusters' performance. The research is performed within a framework of EU project 'Cluster Development Med' (Horizon 2020). Authors suggest a model, which allows to make comparisons of clusters and to identify the better performing ones. The model embraces three dimensions of cluster activity, i.e., "Resources, Activities, and Processes". The dimensions are suggested by the Lithuanian association "Knowledge Economy Forum", in their work "Cluster Analysis". Authors in their turn collect data and employ one of multi-criteria method to integrate indicators employed into one composite indicator for each cluster. Data for practical evaluation purposes were obtained, an interview on site with the coordinators of the Lithuanian clusters. Then Simple Additive Weighting method was used to estimate the efficiency of the clusters' performance. The results were compared through suggested benchmarking. Suggested model can be used for evaluation of wide range aspects of cluster performance.

Introduction

According to Nuur (2005) clusters have long been part of the industrial framework, with geographic agglomerations of business and enterprises in specific industries existing since centuries. Agglomeration economies had been first developed by Marshall (1920) and further by Arrow (1962), Romer (1986) and many other scholars (OECD, 2007). Over the last decades, cluster policy has been widely analyzed by Porter (1990, 1998), who claims that clusters are composed by firms and industries linked through vertical (buyer/supplier) and/or horizontal (common customers, technology, etc.) relationships with the main players located in a single nation/state. This definition was further analyzed by several scholars (Rosenthal and Strange, 2004; Delgado, Porter, and Stern, 2014; Ellison and Glaeser, 1997; Kerr and Kominers, 2015; Krugman, 1991).

Several governments and industry organizations all over the world have made use of this concept in recent years as a mean to encourage urban and rural economic growth. As a result, a high level of cluster initiative organizations started during the 1990s, and the trend continues (Bevilacqua, 2011). An analysis of cluster initiatives around the globe, covered more than 1400 cluster initiative organizations, was carried out in the "Cluster Initiative Greenbook" published by Orjan Solvell, Christian Ketels and Goran Lindqvist, with a foreword by Michael Porter (Andersson, 2004). The attempt of the work is to use benchmarking to measure the cluster performance of the clusters. Benchmarking is a good practice in business among organizations to improve performance and competitiveness, but it is rarely used to check cluster parameters in Lithuania (Tvaronaviciene, 2015). Some scholars as Rodriguez-Pose (2017) claim about cluster performance that firms in small regions may suffer because of shortages of skills and limited externalities. These limitations can be partially overcome by potentially higher levels of social capital and interpersonal trust (Maskell and Malmberg, 1999), although greater collaboration and embeddedness may both facilitate the generation and transformation of skills and knowledge into industrial performance (Fitjar and Rodríguez-Pose, 2017) or, conversely, lead to lock-in and stifle the capacity of local firms to remain competitive and productive (Boschma, 2005; Rodríguez-Pose and Crescenzi, 2008).

Approaches towards cluster perception. Clusters and their literature to study them are various and multidimensional. They require a wide variety of tools to be deeply understood and appreciated. Even though there are several studies carried out in different countries, there is not a common compromise of the cluster concept has



not been generally accepted yet. “Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure” (Porter, 1998, pp.11). One of the main characteristics of clusters is to support the economic growth of enterprises in specific working sectors or create new businesses in larger industries of a geographic area. Industrial clusters perform as instruments in strengthening the innovative capabilities of firms, industries and even nations. “The phenomenon of cluster appears as an evolution of the traditional industrial districts. It reveals factors in common such as cultural approach, knowledge transfer, social capital and institutions” (Monni and Spaventa, 2007, pp.175). According to Porter, “clusters also often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs” (Porter, 1998, pp.78). Moreover, most of the clusters embrace governmental and other institution supporting for specialized training, education, technical aid, research and information. Clusters involve a disposition of interconnected industries and other entities important to competition (Porter, 1998). However, talking about clusters does not concern only geographic and physical relation, but it specially focus on the social and human relation between a wide array of members such as institutions, universities, research centers and enterprises, where the synergy gets even more importance between public and private sector (Monni and Spaventa 2007, 2009; Zemlickiene et al. 2017; Fuschi, Tvatonavičienė 2016; Ahmed et al. 2017; Razminienė et al. 2016).

We aim at claiming that clusters develop and therefore strengthen their competitiveness, through the “combination of inter-firm rivalry and collaboration (so called “co-opetition”), innovation and the rapid transmission and adoption of ideas, and the generation of important local externalities, such as a skilled labour pool, the availability of specialized inputs” (FAO, 2010, pp.3). Cluster are in continuous evolution, facing the challenge of the stakeholders and the only solution is the cooperation between companies within and between clusters. Reduced input costs of the manufacturers, development of common suppliers, training of professional labor and a technical knowledge spillover effect can be achieved through the formation of clustering (Hsu, 2014; Morrison et al., 2013; Prause, Atari 2017; Hilkevics, Hilkevics, 2017).

The strategic role of Small and Medium Enterprises. According to Karaev (2007), clusters are identifiable as an essential mean for improving SMEs productivity, innovativeness and overall competitiveness through overcoming their size limitations (Kljucnikov and Popesko, 2017). The knowledge of clusters represents an opportunity for small and medium enterprises to improve their market position. The purpose is to encourage the cooperation as well the competition between them, in such a way to accelerate the processes of innovation. “Numerous examples, in both industrialized and developing countries, demonstrate that SME cluster have established themselves as important and dynamic players within the international market responding to global competition challenges by capitalizing on local opportunities and collective competitive advantage” (UNIDO Programme, 2001, pp. 10).

Cluster competitiveness aims at enhancing SMEs’ size, performance, innovation and employment; therefore it is used to assessing their outcomes in terms of capital invested and equity returns. The findings from a difference-in-differences analysis reveal that sales, employment, R&D investments, and value added all increase in relative terms, but financial returns exhibit significant relative decreases for the smallest companies, whereas larger firms record strong increases (Broekel et al., 2015; Kozubikova et al., 2017). The ineptitude of the least modest SMEs to take advantage from their cluster membership should be more discussed for both companies and policy-makers (Braune et al., 2016).

“It is characteristic to clusters to sustain productivity growth of firms in specific regions or create new businesses in larger sectors of a particular nation. Industrial clusters perform as instruments in strengthening the innovative capabilities of firms, industries and even nations. The main feature of the cluster, which exposes itself in the long run is that companies within cluster increase their competence of an organization and achieve a competitive



advantage in global markets” (Tvaronavičienė et al., 2015b pp.120). Therefore, identifying the dominant problem groups facing the company can enable an estimate of the level of knowledge available in the enterprise. Classifying micro, small and medium enterprises (M-SME) based on their available levels of knowledge, specific problems that dominate a company's operations are considered. “About half of the M-SME shows a lower level of available knowledge, and only 10% are categorized with the highest level. There should be not wide differences between the size and the level of available knowledge of the company. Thus, employment and sales’ level of M-SMEs is not followed as a logical consequence by an accumulation of knowledge which firms can benefit to improve their operations” (Lopez-Ortega et al., 2016, pp 1). SMEs have an essential role in the cluster framework. By funds they get, they can invest in R&D, enhance knowledge, increase innovation and improve quality of life (Rodríguez-Pose and Crescenzi, 2008). Here it is also aimed at examining “how technology transfer is being approached in the latest scientific literature, and whether interrelations of technology transfer and sustainable development are being elaborated. Clusters in this context are perceived as networks (not necessarily proximate in geographic terms), which serve as technology transmitters” (Tvaronavičienė, 2015b, pp. 87).

ClusDevMed: a Horizon 2020 project for cluster The ‘Cluster Development Med’ (ClusdevMED) is a project funded by the European Union, MarieSkłodowska-Curie Actions under the Research and Innovation Staff Exchange scheme (RISE) -Horizon 2020 Programme. CusdevMed Project’s areas of interest are those that concern the implementation of research and innovation about the sustainable development field: e-learning, educational technology, green technology, affordable and healthy food, energy efficiency and renewable energy, water reuse and wastewater treatment. It aims at improving the sustainable development through the secure access to food and energy worldwide, relying on win-win share of sectoral use of constrained natural resources, such as land and water, taking also in account the crucial role of ecosystems and their services (Karabulut, 2017).

The project lies within priority research and innovation topics in EU cooperation, as highlighted in several past projects and policies recommendations, i.e. within the MOCO - Monitoring Committee for European Cooperation in RTD. International Cluster Cooperation offers opportunities to scale up research and technological potential, enhance competitiveness, support the regional socio-economic development and reinforce the market placement of new, innovative products. These cooperation approaches often fail due to constraints on resources, capabilities, instruments and funding. On the other hand, over two-thousands clusters only in the European Union covering all sectors and able to realize an inter-sectoral framework, as well as related clusters and networks in the southern Mediterranean countries, form a great potential for transnational clustering (European Commission, 2014)

Method

Below we provide object, approach to data collection and methods used, what is embraced by methodology of research. Object. Concerning the research and innovation about the sustainable development field for the ClusDevMed project, it is interesting to focus on the Baltic regions’ experience and to analyze in depth the Lithuanian case. Recently there are less than fifty clusters initiatives in Lithuania. Some of them are still at the initial formation, or is a group of companies that gathered together seeking only for EU SF aid. From all the identified clusters in Lithuania only a forth is formed naturally, by common work aiming at bigger part of market and increasing competitiveness of cluster companies, in a long-term co-operation perspective to develop of new products or services (Tvaronavičienė, 2015b). Seven successful clusters have been selected according to the following criteria: “they have been operating for longer than two years, receive funding either from EU funds or private institutions and the results of cluster activity are satisfactory” (Tvaronavičienė, 2015a, 122). Because of the strong partnership and trade connections, of the similar characteristics showed and, specially, because of the same working business area, that is food and agriculture, it was decided to include even the cluster from Latvia (Food Products Quality Cluster), also for the reason why it produces a wide contribution to the analysis. The research concerns different fields of cluster: the aim is to compare clusters through every kind of field and then focus on cluster of the Lithuanian agricultural sector. The following clusters are the one being interviewed: the Latvian ‘Food Products Quality Cluster’ (Cluster A), of which the main target is to promote cooperation between



Latvian food enterprises and increase their export potential; the ‘Smart Food Cluster’ (Cluster B) aims at helping companies from Lithuanian Food Exporters Association to increase competitiveness in foreign markets by uniting the capabilities, expertise and contacts; the ‘Uzupis Creative Cluster’ (Cluster C), that wants to establish and build a strong, international simulation game development community, to develop educational simulation games cluster, which in the design of products and competence would be able to compete in international markets, create and implement innovative new technologies and solutions in the field of educational simulation games, combining and developing the potential of Lithuania; the ‘iVita Wellness Cluster’ (Cluster D) purpose is to develop high quality and added value wellness products and services which increase people’s safety, their performance efficiency, contribute to prevention, education of society and development of healthy lifestyle habits; the ‘Vilnius Film Cluster’ (Cluster E) not only provides top-quality services, but also actively cooperates with Lithuanian and foreign partners, supports young creators, organizes professional development events and mastery courses for film industry specialists; the ‘Baltic Automotive Components Cluster’ (Cluster F), aims at uniting the Lithuanian (Baltic) companies involved in the manufacturing of automotive and farm equipment; the ‘Laser and Engineering Technology Cluster’ (Cluster G), of which the first goal is to create a dynamic activity center with a fully integrated supply chain of suppliers, manufacturers, and sellers, which would enhance the international competitive ability of the sector of laser and related technologies as well as knowledge and material well-being of its individual members¹.

Clusters’ performance in Lithuania: approach to data collection. Studies related to performance of clusters are widely discussed in scientific literature: scholars debate such aspects as measuring of innovations (Rezk at al. 2015), approaches and methods (Maffioli, Pietrobelli, Stucchi, 2016) of cluster analysis, technology transfer processes and driving forces; composition and governance specifics; participation of start-ups. Hence, spectrum of questions related to clustering phenomena is wide (Razminiene, 2016). At the initial stage an interview with the coordinators of the seven clusters selected in Lithuania was arranged. The main aim of the meeting was to get information from a person who has been participating in the life of cluster from the beginning of it about the successful clusters in Lithuania. “As it is complicated to measure how successful cluster is some features were named as obligatory which characterize cluster and show how good it is at accomplishing goals, if the companies are working together for a common purpose. Measurements such as cluster activity, resources and processes must be taken into account” (Tvaronaviciene, 2015a). Successively, the managers were asked to give evaluations for indicators of cluster efficiency according to their importance so that a multi-criteria analysis could be carried out. A multi-criteria analysis was chosen for it serves in making a comparative assessment among heterogeneous measures. At the last stage the data was structured and a multi-criteria analysis carried out to prove the efficiency of the clusters. The results were compared through benchmarking.

Multicriteria SAW method. Multi-criteria methods are used for both theoretical and practical tasks since they are universal and enable to carry out a quantitative study for any complex phenomenon with many indices (Ginevičius, 2008). The multicriteria SAW (Simple Additive Weighting) method was applied to process the results. The adopted model embraces three dimensions of cluster activity, so called, “Resources, Activities, Processes” (Ziniu Ekonomikos Forumas, 2012). The work suggests an approach for cluster performance assessment, based on the multi-evaluation, which covers a wide range of indicators. We assume, that cluster effectiveness should be evaluated according to the suggested indicators. Let us explain the steps through which it was possible to get these values. First, as mentioned above, a questionnaire survey was delivered to clusters’ managers that decided to participate at the analysis. The questionnaire has been developed in collaboration with the ‘Science, Innovation and Technology Agency’ (MITA) of the Lithuanian Government. It is composed by two principal parts: in the first one, the managers were asked to give some data (for each indicator of Resources and Processes dimension) and an evaluation from 1 to 10 (for each indicator of Activities); while in the second one they were asked to attribute

¹ For further information about the clusters analysed, please refer to the European Cluster Collaboration Platform webpage, <https://www.clustercollaboration.eu/cluster-list>



a number of Importance to these indicators, still from 1 to 10 (Ziniu Ekonomikos Forumas, 2012). The next step was to sum the seven different evaluations up (since the interviewed managers were seven) of each indicator of the first part (Table 1).

Table 1. Data and respective Sum

	cluster A	cluster B	cluster C	cluster D	cluster E	cluster F	cluster G	Sum
units	1	1	1	3	2	1	10	19
units	52	18	13	11	22	17	13	146
units	0	2	18	0	3	0	8	31
units	0	20	9	0	0	0	0	29
units	25	14	20	20	1	9	2	91
units	25	7	12	2	0	0	2	48
Eur	212000	200000	1000000	96319	1000000	0	1448100	3956419
Eur	38000	400000	1000000	192637.9	1000000	60000	2896200	5586838

Source: Authors' elaboration

Later on, we passed to the normalization: it was obtained dividing each number of the evaluations by the value of the indicator that refers to the evaluation. These values are included between 0 and 1 (Table 2).

Table 2. Normalization

	cluster A	cluster B	cluster C	cluster D	cluster E	cluster F	cluster G
units	0.052632	0.052632	0.052632	0.157895	0.105263	0.052632	0.526316
units	0.356164	0.123288	0.089041	0.075342	0.150685	0.116438	0.089041
units	0	0.064516	0.580645	0	0.096774	0	0.258065
units	0	0.689655	0.310345	0	0	0	0
units	0.274725	0.153846	0.21978	0.21978	0.010989	0.098901	0.021978
units	0.520833	0.145833	0.25	0.041667	0	0	0.041667
Eur	0.053584	0.050551	0.252754	0.024345	0.252754	0	0.366013
Eur	0.006802	0.071597	0.178992	0.034481	0.178992	0.01074	0.518397

Source: Authors' elaboration

Then, the same process was carried out for the second part: first, the levels of satisfaction (from one to ten) attributed by the managers (still seven, because of the seven different managers) of the same indicators were summed. Therefore, to get the final weight, each of these numbers (numbers of importance) was divided by the respective sum that refers to the indicator (Table 3).

Table 3. Level of satisfaction and respective weight

cluster A	cluster B	cluster C	cluster D	cluster E	cluster F	cluster G	Sum	Weight
7	8	8	8	7	7	7	52	0.138298
5	7	6	8	6	8	8	48	0.12766
5	7	6	6	6	7	6	43	0.114362
6	6	7	6	5	7	6	43	0.114362
8	6	6	7	6	7	7	47	0.125
7	6	7	7	6	7	7	47	0.125
6	6	7	7	7	5	7	45	0.119681
7	7	8	8	7	7	7	51	0.135638
							376	1

Source: Authors' elaboration



Finally, the last step was to multiply this weight by the respective final value (always seven final values for each indicator) obtained in the first part (Table 4). The values that refer to each cluster, obtained by this last multiplication, were summed up to get seven final results of each category (Table 5).

Table 4. Results of each indicator

cluster A	cluster B	cluster C	cluster D	cluster E	cluster F	cluster G
0.007221	0.007221	0.007221	0.021664	0.014442	0.007221	0.072212
0.047927	0.01659	0.011982	0.010138	0.020277	0.015668	0.011982
0	0.00732	0.065878	0	0.01098	0	0.029279
0	0.078246	0.035211	0	0	0	0
0.034069	0.019079	0.027255	0.027255	0.001363	0.012265	0.002726
0.064589	0.018085	0.031003	0.005167	0	0	0.005167
0.006362	0.006002	0.03001	0.002891	0.03001	0	0.043458
0.000915	0.009634	0.024086	0.00464	0.024086	0.001445	0.069758

Source: Authors' elaboration

Table 5. Final results given by the sum of each indicator of each dimension

	A	B	C	D	E	F	G
Resources	0.161083	0.162177	0.232646	0.071755	0.101158	0.0366	0.234582
Activities	0.115136	0.17156	0.185494	0.172831	0.107213	0.13342	0.114345
Processes	0.110547	0.123034	0.169496	0.154892	0.252739	0.056116	0.133176
Total	0.386767	0.45677	0.587636	0.399478	0.461111	0.226136	0.482103

Source: Authors' elaboration

Benchmarking was chosen as the most reasonable method of data analysis to serve the purpose of this article. As a process benchmarking, this method serves to compare the three main dimensions which reveal cluster efficiency: activity, resources and processes (Carpinetti, 2008). Based on this methodology, there must be a continuous monitoring performance of clusters. These indicators must be assessed at least once every two years, to verify the collection of relevant data clusters and interview survey methods. In order to increase cluster performance, it should be based on cluster performance assessment results, establishing appropriate incentive measures to ensure the changes in values and simultaneously ensuring the efficiency of the whole cluster.

Findings

Looking at 'Final results' table (Table 5), it is possible to compare clusters between them. Concerning the 'Resources' dimension, Cluster C and G perform high values specially for the reason why they have been receiving lots of financings and making wide investments. As it concerns 'Activities' dimension, Cluster C stands out again because it shows a clear satisfaction in the organization and logistic of the cluster. Then, with reference to the 'Processes' dimension, Cluster E demonstrates the highest value because it especially invests in training for developing the personnel. The aim of the research is to focus on Cluster B, Smart Food Cluster. We aim at analyzing Smart Food Cluster because it takes place in the agribusiness and agricultural sector and it is the most relevant to the ClusdevMed topic that is Sustainable Development. It is positioned in the middle cluster group with the E and G ones. By taking a look at each value of B, it is still in the middle level for 'Resources' and 'Processes', while it gets a relative higher value for Activities, taking part to the top of performance cluster ranking. What does it need to do to improve its performance? For instance, to develop the resources, it has to increase the skilled personnel (having a highest education) and raise the financing level, while to improve the activities it needs



to focus on the visual identification (i.e. logo, brand, image) and specially on the cooperation and technology transfer; then to show a better performance in processes, there must be an increase of the expenses in Research and Development and of the level of internalization of the cluster, that means a launch to import and export business. Cluster resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness. Thus, in the language of traditional strategic analysis firm resources are strengths that firms can use to conceive of and implement their strategies. Here resources regard human resources and know-how, financial resources, infrastructure resources (Barney, 1991). Cluster activities regard the value chain that a firm operating in a specific industry performs in order to deliver a valuable product or service for the market. The idea of the value chain is based on the process view of organizations, the idea of seeing a manufacturing (or service) organization as a system, made up of subsystems each with inputs, transformation processes and outputs. Inputs, transformation processes, and outputs involve the acquisition and consumption of resources – money, labour, materials, equipment, buildings, land, administration and management. How value chain activities are carried out determines costs and affects profits human resources development, Cluster competitive situation changes, cluster innovation changes, Cluster internationality level (Jurevicius, 2013). Cluster processes are a collection of related, structured activities or tasks that produce a specific service or product (serve a particular goal) for a particular customer or customers. It may often be visualized as a flowchart of a sequence of activities with interleaving decision points or as a process matrix of a sequence of activities with relevance rules based on data in the process. They include Market activity, Marketing and public relations communications, internal communication, External communication (Competitiveness and Innovation Framework Programme, 2011). The clusters were selected paying attention to their performance regardless of the industry sector as for generic benchmarking. “As to agree with the principles for benchmarking (Carpinetti 2008), some restrictions were applied to this article”. In order to verify legal aspects of the study, statistical data are given in the normalized. All the benchmarking partners will receive the same type of information for perceiving mutual benefits. Benchmarking data will be communicated outside for study purpose as it was prior agreed with benchmarking partners. To sum up, after comprising all the steps that have been taken moving towards the results of this study, generic benchmarking process has been followed. At first cluster efficiency was determined as a subject of this benchmarking study. Then a coordinator of cluster development in Lithuania as a consultant for choosing the partners was approached. Later seven clusters were identified as the partners of the study four of which participated in the process of benchmarking. Further step was to collect and analyze data using questionnaire survey and multi-criteria analysis methods to serve the purpose. Finally, the results were implemented and monitored.

Results, Conclusions and Recommendations

This article aims at comparing the most successful clusters, in the given conditions, in Lithuania. After comprising all the steps that have been taken moving towards the results of this study, generic process has been followed. Cooperation and competition are factors that encourage the growth of clusters, both within and between them. Thus, Smart Food Cluster, that regards ‘Agriculture products’ and ‘Processed Food’, mainly arises in the Activities category where it has one of the highest values while in the Resources category shows medium-high values. By analyzing the cluster framework, we can say most of the clusters could perform better learning from some areas such as the Agriculture and Food one. They can adopt the same strategies or start a collaboration with it. For instance, they can improve in Resources on hiring more graduated people or increasing investments for cluster initiatives. While for Activities, they can show a better performance focusing on the image of the cluster in mass media or, even, sharing more knowledge and experience. On the other hand, Smart Food Cluster and the respective Agriculture and Food sector needs to improve in the Processes category: their values are between the medium-lowest of the analysis, for instance they can increase the R&D expense or the number of official agreements with foreign entities.



References

- Ahmed, A.; McGough, D.; Mateo-Garcia, M. 2017. Testing innovative technologies for retrofitting: Coventry University as a living lab, *Entrepreneurship and Sustainability Issues* 4(3): 257-270. [https://doi.org/10.9770/jesi.2017.4.3S\(2\)](https://doi.org/10.9770/jesi.2017.4.3S(2))
- Andersson, T. 2004. The Cluster Policies Whitebook. International Organisation for Knowledge Economy and Enterprise Development <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.197.4531&rep=rep1&type=pdf>
- Arrighetti, A.; Seravalli, G. 1999. *Istituzioni Intermedie E Sviluppo Locale*. Roma: Published by Donzelli.
- Arrow, K. 1962. Economic Welfare and the Allocation of Resources for Invention, in R. Nelson (ed.). *The Rate and Direction of Inventive Activity*. Princeton, NJ: Princeton University Press, 609-626.
- Barney, J. 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management* 17(1): 99-120. <http://www.bms.lk/download/PGD/slides/Strategic-Planning-Materials/Barney-1991-strategy.pdf>
- Bevilacqua, C. 2011. A new paradigm to conciliate neo-liberal economy and sustainable urban regeneration https://www.unido.org/fileadmin/user_media/Services/PSD/Clusters_and_Networks/publications/sme brochure_EN.pdf
- Boschma, R.A. 2005. Proximity and innovation: a critical assessment. *Regional Studies* 39, 61–74. <http://dx.doi.org/10.1080/0034340052000320887>
- Bosworth, B.; Broun, D. 1996. Connect the Dots: Using Cluster-Based Strategies to Create Urban Employment. *Firm Connections* 4(2): 1–6.
- Braune et al. 2016. The Performance of Independent Active SMEs in French Competitiveness Clusters. *Industry and Innovation* 4(23): 313-330. <http://dx.doi.org/10.1080/13662716.2016.1145574>
- Broekel, Tom, Fornahl, Dirk, Morrison, Andrea, 2015. *Another cluster premium: Innovation subsidies and R&D collaboration networks. Research Policy*, Elsevier 44(8): 1431-1444. <https://doi.org/10.1016/j.respol.2015.05.002>
- Carpinetti, L.C.R.; Oiko, O.T. 2008. Development and application of a benchmarking information system in clusters of SMEs, *Benchmarking: An International Journal* 15 (3): 292 – 306. <https://doi.org/10.1108/14635770810876601>
- Cerezo, Y. et al. 2015. The UVF adapted Quintuple Helix Model “CICLIA” a New Globalized Educational Proposal.
- Commercial Local Urban Districts. SIU (*The Society of Italian Urban Planners*) – XIV Conference. Selected papers, Ed. By Costa, E.; Bevilacqua, C.; Trillo, C.; Trupiano, G. March, 24-25-26, Turin, Italy. file:///C:/Users/Manuela/Downloads/costa_et al.pdf
- Competitiveness and Innovation Framework Programme. 2011. *Cassandra: a multivariate platform for assessing the impact of strategic decisions in electrical power systems*.
- Delgado, M.; Porter, M.; Stern, S. 2014. Clusters, Convergence, and Economic Performance. *Research Policy* 43(10): 1785–1799. <https://doi.org/10.3386/w18250>
- Ellison, G.; Glaeser, E. 1997. Geographic Concentration in U.S. Manufacturing Industries: A Dartboard Approach. *The Journal of Political Economy* 105(5): 889–927. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.548.1673&rep=rep1&type=pdf>
- Ellison, G.; Glaeser, E.L.; Kerr, W. R. 2010. *American Economic Review* (100): 1195–1213. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.100.3.1195>
- European Commission, 2014. European Commission: CORDIS: Projects 6 Results Service: Cluster Development Med http://cordis.europa.eu/project/rcn/196630_it.html
- FAO, 2010. Agricultural Management, Marketing and Finance Occasional Paper: Agro-based clusters in developing countries: staying competitive in a globalized economy. *Research Paper No. 25/10*. <http://www.fao.org/docrep/012/i1560e/i1560e.pdf>
- Fitjar, R.D., Rodríguez-Pose, A., 2017. Nothing is in the air. *Growth Change* 48: 22–39. <https://doi.org/10.1111/grow.12161>
- Fuschi, D. L.; Tvaronavičienė, M. 2016. A network based business partnership model for SMEs management, *Entrepreneurship and Sustainability Issues* 3(3): 282-289. [https://doi.org/10.9770/jesi.2016.3.3\(5\)](https://doi.org/10.9770/jesi.2016.3.3(5))
- Ginevičius, R., Podvezko, V. 2008. Daugiakriterinio vertinimo taikymo galimybės kiekybiniam socialinių reiškinių vertinimui, *Verslas: Teorija ir praktika* (Possibilities of multi-criteria methods for evaluation of social phenomena quantitative evaluation, Business: Theory and Practice) 9 (2): 81 – 87. <https://doi.org/10.3846/1648-0627.2008.9.81-87>



- Hilkevics, S.; Hilkevics, A. 2017. The comparative analysis of technology transfer models, *Entrepreneurship and Sustainability Issues* 4(4): 540-558. [https://doi.org/10.9770/jesi.2017.4.4\(11\)](https://doi.org/10.9770/jesi.2017.4.4(11))
- Hsu, M.; Lai, Y.; Lin, F. 2014. The impact of industrial clusters on human resource and firms performance, *Journal of Modelling in Management* 9(2): 141–159. <https://doi.org/10.1108/JM2-11-2012-0038>
- Jurevicius, O. 2013. Value Chain Analysis. *Strategic Management Insights*. Available on the internet <https://www.strategicmanagementinsight.com/tools/value-chain-analysis.html>
- Karaev A.; Lenny Koh, S.C.; Szamosi, L.S. 2007. The cluster approach and SME competitiveness: a review, *Journal of Manufacturing Technology Management* 18(7): 818–835. www.emeraldinsight.com/doi/abs/10.1108/17410380710817273
- Kerr, W. R.; Kominers, S.D. 2015. Agglomerative Forces and Cluster Shapes, *The Review of Economics and Statistics* 97(4): 877–899. https://doi.org/10.1162/REST_a_00471
- Kljucnikov, A., Popesko, B. (2017). Export and its Financing in The SME Segment. Case Study From Slovakia. *Journal of Competitiveness* 9(1): 20-35. <https://doi.org/10.7441/joc.2017.01.02>
- Kozubikova, L., Homolka, L., Kristalas, D. (2017). The Effect of Business Environment and Entrepreneurs': Gender on perception of financial risk in the SMEs sector. *Journal of Competitiveness* 9(10): 36 – 50. <https://doi.org/10.7441/joc.2017.01.03>
- Krugman, P. 1991. *Geography and Trade*. Cambridge, MA: Published by MIT Press.
- Lin, J.Y.; Nugent, J.B. 1996. Institutions and Economic Development, in Chenery H. - Srinivasan T.N. - Behrman J. (eds.), *Handbook of Development Economics*, North Holland: 2301-2370. <https://doi.org/10.1016/j.respol.2015.05.002>
- Lopez-Ortega, E. et al. 2016. Classification of micro, small and medium enterprises (M-SME) based on their available levels of knowledge. *Technovation* 47: 59-69. <https://doi.org/10.1016/j.technovation.2015.10.001>
- Maffioli, A.; Pietrobelli, C.; Stucchi, R. 2016. *The impact Evaluation of Cluster Development Programs: Method and Practices*. New York: Published by Inter-American Development Bank. <file:///C:/Users/Manuela/Downloads/The-Impact-Evaluation-of-Cluster-Development-Programs-Methods-and-Practice.pdf>
- Marshall A. 2000. *Principles of Economics*. London: Published by Macmillan.
- Maskell, P.; Malmberg, A. 1999. Localised learning and industrial competitiveness. *Camb. J. Econ.* 23: 167–185. <https://doi.org/10.1093/cje/23.2.167>
- Monni, S.; Spaventa, A. 2007. What Next? How the Internationalisation Process Might Lead to the Dissolution of Veneto's Low-Technology Industrial Districts. *Rivista di Politica Economica*: 171-217. <http://hdl.handle.net/11590/148372>
- Monni, S.; Spaventa, A. 2009. *Cluster e distretti tecnologici: modelli e politiche*, in *Argomenti* 26: 71-98. <https://doi.org/10.3280/ARG2009-026004>
- Morrison, A.; Rabellotti, R.; Zirulia, L. 2013. *When Do Global Pipelines Enhance the Diffusion of Knowledge in Clusters?*, *Economic Geography* 89(1): 77-96.
- Nuur, C. 2005. *Cluster dynamics and industrial policy in peripheral regions: a study of cluster formation as a local development process*. Stockholm: Published by Universitetsservice US AB. <https://www.divaportal.org/smash/get/diva2:13761/FULLTEXT01.pdf>
- OECD (Organisation of Economic Co-Operation and Development). 2007. *Competitive Regional Clusters. National Policy Approaches*. Paris: Published by OECD. <http://www.oecd.org/cfe/regional-policy/competitiveregionalclustersnationalpolicyapproaches.htm>
- Pietrobelli, C.; Rabellotti, R. 2007. *Upgrading to Compete: Clusters and Value Chains in Latin America*. Cambridge, MA: Published by Harvard University Press.
- Porter, M. 2000. Location, Competition, and Economic Development: Local Clusters in a Global Economy, *Economic Development Quarterly* 14(1): 15-34. <https://doi.org/10.1177/089124240001400105>
- Porter, M. 1998. Clusters and the New Economics of Competition, *Harvard Business Review*, 76(6): 77-90 <https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition>
- Prause, G.; Atari, S. 2017. On sustainable production networks for Industry 4.0, *Entrepreneurship and Sustainability Issues* 4(4): 421-431. [https://doi.org/10.9770/jesi.2017.4.4\(2\)](https://doi.org/10.9770/jesi.2017.4.4(2))
- Putnam R. 1993. *Making Democracy Work: Civic Traditions In Modern Italy*. Princeton: Published by Princeton University Press. https://books.google.it/books?hl=it&lr=&id=gKZP8_Tp27UC&oi=fnd&pg=PP1&dq=Putnam+R.+1993.+Making+Democracy+Work:+Civic+Traditions+In+Modern+Italy.+Princeton:+Published+by+Princeton+University+Press&ots=5p4BpIeE_O&sig=F1Cx1z2SnzA_eav7E_uW2asqW0g&redir_esc=y#v=onepage&q=Putnam%20R.%201993.%20Making%20Democracy%20Work%3A%20Civic%20Traditions%20In



- [%20Modern%20Italy.%20Princeton%3A%20Published%20by%20Princeton%20University%20Press&f=false](#)
- Razminienė, Kristina; Tvaronavičienė, Manuela; Zemlickienė, Vaida. 2016. Evaluation of cluster efficiency tool, *Terra Economicus* 14(3): 101-111. DOI: <http://dx.doi.org/10.18522/2073-6606-2016-14-3-101-111>
- Rezk, M.R.A.; Ibrahim, H.H.; Tvaronavičienė, M.; Sakr, M.M; Piccinetti, L. (2015). Measuring of innovation activities in Egypt: the case of industry, *Entrepreneurship and sustainability issues* 3(1): 47–55. [http://dx.doi.org/10.9770/jesi.2016.3.4\(1\)](http://dx.doi.org/10.9770/jesi.2016.3.4(1))
- Rodríguez-Pose, A., Crescenzi, R., 2008. Research and development, spillovers, innovation systems, and the genesis of regional growth in Europe. *Regional Studies* 42: 51–67. <https://doi.org/10.1080/00343400701654186>
- Romer, P. 1986. Increasing Returns and Long Run Growth, *Journal of Political Economy* 94: 1002–1037.
- Rosenthal, S., and W. Strange. 2004. Evidence on the Nature and Sources of Agglomeration Economies, *Handbook of Regional and Urban Economics* 4: 2119–2171. <http://www.econ.brown.edu/Faculty/henderson/WillAndStuart.pdf>
- Tvaronavičienė M.; Razminienė, K.; Piccinetti, L. 2015a. Cluster efficiency study through benchmarking, *Entrepreneurship and Sustainability Issues* 3(2):120-128. [http://dx.doi.org/10.9770/jesi.2015.3.2\(0\)](http://dx.doi.org/10.9770/jesi.2015.3.2(0))
- Tvaronavičienė, M.; Černevičiūtė, J. 2015b. Technology transfer phenomenon and its impact on sustainable development, *Journal of Security and Sustainability Issues* 5(1): 87–97. DOI: [http://dx.doi.org/10.9770/jssi.2015.5.1\(7\)](http://dx.doi.org/10.9770/jssi.2015.5.1(7))
- [UNIDO Programme, 2001.](#) Development of Clusters and Networks of SMEs. Available on the Internet
- Zemlickienė, V.; Mačiulis, A.; Tvaronavičienė, M. 2017. Factors impacting the commercial potential of technologies: expert approach, *Technological and Economic Development of Economy* 23(2): 410-427 <http://dx.doi.org/10.3846/20294913.2016.1271061>
- Ziniu Ekonomikos Forumas, 2012. Klaster Studija, Vilnius. Available on the internet http://www.mita.lt/uploads/documents/teisine_informacija/zef_klasteriu_studija.pdf



Understanding Electricity in Daily-life Objects: An Approach to Empower Lifelong Problem Solving

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Abstract

The aim of this study was to understand how practical activities combined with exploration of digital simulators would allow the construction of basic concepts of electricity. By developing these concepts with children, we also wanted to potentiate the problem solving on this matter and contribute to lifelong learning. The qualitative research was developed in a fourth year class, with the participation of 16 students, aged between 9 and 10 years. Was organized in the following stages: initial assessment of knowledge, application of the teaching sequence and final evaluation. The data analysis revealed a significant improvement in students' understanding of the concepts. The use of the simulator allowed the students to test their ideas, and the actual assembly of the circuit with laboratory material allowed real verification of the hypotheses, creating new problematic situations. Besides, developing problem solving skills in learning, related to real contexts, enhances predisposition to lifelong learning.

Keywords: electricity, education, lifelong learning, technology

Introduction

According to Jaakola and Nurmi (2008), computer simulators and laboratory material have been used as substitutes, or as competing methods, in science teaching. The authors refer to studies carried out over the last 30 years, which have shown that students hold informal conceptions that sometimes differ from those scientifically accepted. More specifically, in the field of electricity, before any formal education takes place, students have difficulties and misconceptions regarding electricity and electrical circuit concepts at all levels of schooling (ibid.). This idea is also defended by Silva (1999, p.9): "In addition, electricity is a domain that many students consider difficult and in which often intuitive and scientifically inadequate ideas persist."

Also Arnold & Millar (1987), who developed and applied electrical circuit classes based on a constructivist model of curricular teaching and development, argue that it is generally accepted by teachers that electricity is a difficult topic to teach in the early years of teaching, because the concepts correspond to properties that can not be observed directly and sometimes the equipment used can break the visual correspondence to the design of the circuit. They also point out that the students construct their learning from the ideas they already have on the subject and as such, it is important to think about the lessons taking into account what the children already know. According to Jaakola & Nurmi (2008), concepts of electricity often require conceptual change, and as such, the school must cause students to experience the phenomenon, as this can help them to organize the conflict between knowledge and new concepts. The main purpose of laboratory activities is to provide students tools to investigate the phenomenon using material to be manipulated. Although the use of laboratory material has a long history and an important role in science teaching, some authors have questioned the efficiency of laboratory material work, such as (Hofstein & Lunetta 1982, 2004, Kirschner & Huisman 1998, cit. Jaakola & Nurmi, 2008). They argued that understanding complex phenomena such as electricity through the manipulation of laboratory materials can be problematic because in some cases students can only see what happens on a superficial level and do not perceive the invisible mechanisms that are essential for understanding some concepts. Resnick (1998, cit. In Jaakola & Nurmi, 2008) argues that the most important is "active manipulation," rather than the manipulation of palpable things. This may indicate that the laboratory equipment can be replaced by the virtual one. The use of virtual simulators in physics teaching can make the content more understandable.

With the simulator, students can experiment by constructing different circuits, changing circuit variables and observing the consequences of what they do. In addition, the simulator can be a "cleaned-up idealized version of the complex messy real word" (ibid. p.272). This makes the simulator to be seen as a promising tool for



conceptual change. Also Lima & Takahashi, developed and applied a teaching methodology for students of the 4th elementary school year with the objective of starting the construction of some concepts of electricity through the use of a virtual simulator. The analysis and development of students conceptions, during the activities carried out, showed that virtual experimentation allowed the development of some cognitive abilities and showed signs of formation of concepts at the formal level. (2013, p.1).

However, according to Jaakola & Nurmi (2008), students learn in a completely different environment from the scientists environment, that can simplify complex systems too. Students do not always believe that the principles used in virtual simulation will work in real life. In this case, simulations are not enough and as such more concrete experiments are needed. As a solution, combining activities with virtual simulator with laboratory material can improve learning. And it is for these reasons that we should not see simulator activities and the use of laboratory material as competing or substitutable activities, but rather as complementary. In the study developed by these authors, the results highlight the benefits of using the simulator with the laboratory material to promote students understanding of electricity concepts. The simulator helps students in understanding the theoretical principles of electricity, however, to promote conceptual evolution, it is necessary to challenge students to apply conceptions using laboratory material.

Problem statement: the main problem issue that arises in this study was to understand how practical activities combined with the exploration of digital simulators allow the construction of basic concepts of electricity, namely: the nature of electricity, the notion of electric circuit and the conductivity of materials.

Method

The research was developed in a fourth year class of elementary school, with the participation of 16 students, aged between 9 and 10 years. As Almeida & Freire (2008, p. 24) point out, "The complexity of psychological and educational phenomena is much greater than the phenomena, which are regular and transposable to the laboratory, which we find in the natural sciences. In fact, observe and understand the process of construction of the concepts is a complex process, dependent on multiple variables (environmental, psychological, social, emotional) that can not be isolated from one another in the real context. Moreover, it's not the aim of this study to prove the effectiveness of the approach or to measure any of its variables, but rather to try to describe and understand the processes, considering and assuming the complexity that characterizes them. So, this is a qualitative research, Bodgan & Bilken (1994, p.16) says that we use the term qualitative research as a generic term that groups several research strategies that share certain characteristics. The data collected are referred to qualitatively, meaning rich in descriptive details about people, places and conversations, and complex statistical treatment.

Throughout the investigation, a number of methods of data collection were used, namely the application of questionnaires of knowledge verification and the direct observation. De Ketele & Roegiers (1999, pp. 22-23) define observation as "a process that includes voluntary attention and intelligence, driven by an ultimate or organizing goal and directed towards an object to gather information about it." In this sense, it is vital for the researcher to embark on research with a clear idea of the object, modes and purposes of observation.

Table 1 summarizes the data collection methods and instruments used at each stage of the study.

Table 1. Research steps and data collection

Research steps	Method of data collection	Instruments of data collection
Prior knowledge assessment Application (lessons)	Knowledge verification questionnaire Observation of the children's interactions with each other, with the teachers and with the materials available	Pre-test Audio recordings of teacher-student interactions; field notes;
Final assessment	Knowledge verification questionnaire	Post-test



Pre-test: The first step of the study corresponded to the application of a pre-test to the students in order to evaluate their prior knowledge. This test had the dual objective of establishing the initial state of the conceptions of the children and of allowing the collection of data necessary for planning the lessons in order to adjust the teaching-learning process to the context. The questionnaire was validated by three specialists, after that it was applied a pilot test with 4 children of the same age. The final version, applied individually to each participant, was organized into 3 questions corresponding to different levels of complexity.

The first question aimed, through the placement of a problem, to verify if the students were able to point out possible causes of failure of an electric circuit. The second question aimed to understand which concept of nature of electricity the students have. In the third question they were asked to draw the electric circuit of a lamp and name its components. The main objective of this question was to understand the concept of electrical circuit that students have. This question was divided into three parts: identification of materials, concept of electrical circuit and function of the components.

The answers obtained through the application of these questionnaires were the subject of a content analysis, for which the analysis categories described in table 2 were created.

Table 2. Detailed category analysis

	Identification of materials	Code
able	Correctly identifies the materials of the components, including the internal components.	30
almost able	Correctly identifies the external materials of the components.	21
	Correctly identifies the internal materials of the components.	22
has difficulty	Correctly identifies some component materials, including some internal component materials.	11
	Correctly identifies some external materials of the components.	12
	Correctly identifies some internal components materials.	13
not able	Does not identify any of the component materials.	0
Concept of electrical circuit		
able	Correctly represents all the components, connects in the correct order and represents all the conductors.	20
almost able	Correctly represents all the components, connects in the correct order, representing only the electric cable.	11
	Correctly represents all the components, connecting them in the wrong order.	12
	Correctly represents all the components, except the switch, connects in the correct order and represents all the conductors.	13
	Correctly represents all the components, except the switch, connects in the correct order, representing only the electric cable.	14
not able	Only represents a few components.	0
Function of components		
able	Correctly identifies the function of all components.	20
almost able	Correctly identifies the function of some components.	10
not able	Does not identify the function of any of the components.	0

Application: It was divided into two sessions of 120' each. In the first session the students were challenge to turn a shoebox into a classroom exit light. Some teachers use a "traffic light" as an instrument for regulating the trips to the bathroom, which, when indicating the exit of a student, signals to others that they should wait for their return to go as well. The device the students were challenge to create intended to perform a similar function because in the classroom where the research was done it can only leave the room, one student at a time.



The whole class discussed what they would need to make the classroom exit light: how can we build it? what do we need? In the next moment, the students worked in groups (of 4 elements), to respond to the proposed challenge. In order to plan the construction of the simulator they had a script, in which they designed, drawing, how they could transform the shoe into the classroom exit light, also schematizing the electrical circuit of the equipment. During the group work the students contacted with some electrical material (lamp, wires, battery) to familiarize themselves with them. When they had already planned and schematized the circuit the groups the groups tested the hypothesis created using a virtual simulator (<https://phet.colorado.edu/en/simulation/legacy/circuit-construction-kit-dc-virtual-lab>). The exploration of the simulator allowed to create and test different circuits. Through the exploration of the tool resources, they could also experiment the behavior of materials with different levels of conductivity. After testing their ideas through the virtual simulator, the groups were able to make adjustments to what they had designed and make the list of materials they would need at the next session. In the second session, the students, organized in the same groups, received the kits with the laboratory material to begin the construction of the circuit, according to what they had requested. All groups would have at least one lamp, one lamp holder, one 9v battery connector, power cords, and a switch. The groups were supported during the circuit construction, since the handling of the materials could be difficult for some students.

Post-test: The post-test was applied one week after the described activities. A questionnaire survey of similar structure and questions that corresponded to the same cognitive levels were made, in the same way as the pre-test, although they were different from the latter in the context.

Findings

In the pre-test, in the first question, most of the students pointed out as reason for the lamp not to work the lack of electricity, with answers such as: lack of light, the wire is not plugged in, electricity is not working, three students said that the lamp was fused, only one pointed to a problem with the wire and two others pointed out other reasons (the lamp does not turn on because it is not pressing the right button; it is damaged).

In the second question, most students (11) said that the knot would have influence on the workings of the lamp, which leads one to think that most students could see electricity as a fluid and that the knot blocks the passage, with answers As "the node can ignite the lamp", "with the knot the electricity does not pass" and "the knot holds the connection". Only four students reported that the knot had no influence, one of these students justified his answer with an experience lived in the daily "I already had a knot in my lamp and it was working" and a student gave another reason: "No, the lamp may be in bad contact, so the lamp does not turn on".

In the third question (identification of the materials), four were able to identify the external materials of the components and the others did not identify any material. Regarding the configuration of the circuit, only one correctly represented all the components, connecting them to each other in the correct order, two represented all the components except the switch, two represented all the components except the switch representing only the electrical cable and 11 could not represent the electrical circuit, representing only some of the components.

Concerning, the function of the components, only three students correctly indicated the function of some components, even though they themselves were drawing them. It is possible that the lack of answers in this item is due to forgetfulness or deficient understanding of the statement of the question, Since it is unlikely that the vast majority of pupils would not be able to identify, for example, the lamp they drew, so it would be prudent not to draw conclusions from the results.

In the first session of the application, when students were challenged to turn a shoebox into a classroom exit sign, some students said that it was not going to be possible because the box did not connect to the electricity.

teacher: Could we use this box to make a classroom exit light?



student: No ... because there is no electricity.

The teacher told the students that they were not going to have only the box and questioned them about other materials that could be useful for building the classroom exit light. They said they needed a lamp and wires and were asked about the type of wires to choose. They said that the wires could be plastic, external material of the electrical wires they have contact with. Another student said that the charger of his mobile phone had already been damaged and inside the wires were not plastic. Teacher showed the electrical wires he took with him.

teacher: you see, on the outside this is a plastic but inside ...

student: it's wire

student: my mobile phone charger has cut a bit and inside it is like this

teacher: so they can not be any cables, right?

student: yes, they have to be metal.

The teacher also questioned the students about the function of the cables and, following the discussion, the students ended up thinking about the battery as a power source, coming at a notion of circuit.

teacher: we already have, a lamp, wires ... but how many wires?

students: 2,3...

teacher: why 2? Why 3? What are the wires going to do?

students: connect the electricity to the lamp

teacher: so the electricity has to come from somewhere... for our classroom exit light, where could electricity come from?

students: from the electrical switchboard or the jack.

teacher: what if we wanted portable electricity? Is there any device that works without being connected?

student: computer...when it has battery.

teacher: So what could we have in our classroom exit light to give energy?

students: a battery!

teacher: so we already have: a battery, a lamp, wires...

Then, they began to work in groups of 4 students, each group has at least one student that, by the results of the pre-test, had shown a good notion of electric circuit. The constitution of heterogeneous groups was a deliberate strategy to stimulate peer learning.

In this session, the groups planned to construct the classroom exit light using a script. The teacher circulated with the material (a lamp, two wires and a pile) by the groups so that they had contact with the material. All groups were able to make light up the lamp. Some students reported being afraid of working on electricity.

teacher: to try we can only pull the wires to the lamp.

students: and if I put the finger there, does it shock?

teacher: No ... we always have to be careful but there is no problem here.

teacher: Here, do you have any idea to build the classroom exit light?

students: yes! we'll need two lamps. And we have to have a button or we take the wires off the plug

Also in this session, the groups experimented with the virtual simulator, tested the circuit hypothesis they had built and did other tests, using the simulator tools. For example, they tried to connect the two wires to the same lamp pole and questioned whether the actual battery would actually burn, as it did in the simulator. They realized the need to put the switch on and did a test to see where they could put it. The exploration of the possibilities of the simulator also allowed to test the levels of conductivity of different materials, making important conclusions from this observation:

teacher: We can experiment with other things ... instead of a thread we can connect...

student: a pencil! An eraser ... can we experiment with the pencil?

students: the pencil did not turn on the light...

teacher: want to try something else?



students: yes, the note... but it will not work.

students: let's try the coin!

teacher: the coin is made of a material that conducts electricity well.

student: so the clip also works.

student: because the clip is made of metal is almost like a wire.

It quickly became apparent that the enthusiasm of each discovery encouraged them to test more ideas. The same students who were just afraid to touch the wires were now experiencing ideas freely without fear of possible consequences (after all it was just simulation). One group said two switches were required: one to turn on and one to turn off. They also wanted to test with more than one battery and as the lamp gave more light, they wanted to order more batteries for the classroom exit light. Two groups wanted to use two lamps and explored the simulator to see how they could do it.

teacher Now let's build the circuit you design!

students: Ok. So we want two lamps and one battery maybe if we put two batteries was easier.

student: Is it possible that a battery can connect the two lamps? Let's try.

students: we connect the battery and the wires to the lamp

students: And the other lamp? It's next to the other lamp.

students: It Works... but it has low light...

students: and is missing the switch!

teacher: And where are we going to put it?

students: we have to connect to a wire...

After the activities with the simulator, the groups had time to design again the circuit and to make the list of materials that they would need for the construction of the circuit.

The second session began with a brief review of what had been done in the first one, since there were students who had not been present at the first moment. The other students of the groups in which they were working also endeavored to help them to understand, when working in the groups, which corresponded to the expectations they had created when creating heterogeneous groups.

Then the groups received the kit with the material they requested. Two groups received, in addition to a screwdriver, a lamp, electrical wires, switch, battery connector and the other two received two lamps, electrical wires, switch, battery connector and a screwdriver. During this session the teacher followed each group because they needed a lot of support in handling the materials. The screws of the lamp holder and the switch and make the connections were very meticulous. Concerning the construction of the circuit, there was little doubt when confronted with the selected materials, since some issues had arisen in the first session during the design of the circuit. However, the doubts that arose were related to the placement of the switch in the circuit.

The real assembly of the circuit implies, to a certain extent, a reconfiguration of the same. Although the topology is maintained, the arrangement of the components and, consequently, the spatial relationships between them is changed. It is not a transposition of the scheme into the circuit, it stimulates the students to mobilize in the task the thought built up during the previous session. Moreover, the appearance of small problems such as a poorly stripped wire that does not let the circuit work, again requires the ability to mobilize the concepts at a higher cognitive level to create and test hypotheses for resolution.

teacher: Something is badly connected, it should not be making contact

students: what a fright! (the light came on)

teacher: Don't worry, press the switch! Why was it not working at first?

students: Because it was touching the plastic and not the screw and so the electricity doesn't flow.

teacher: well done!



All groups were able, at about the same time, to reach the end of the session with their built-in classroom exit light. Although the circuits were identical, the exit lights were a construction of each group and as such the class had 4 different end products that will be used in the class for weeks. In one week, one group, the next week another group, and so on.

After the application of the post-test, the answers were categorized and compared with the analysis of the pre-test answers. Regarding the first question, figure 1, shows that the number of valid answers increased between the application of the two tests. In the post-test, no student provided an incorrect answer to the operation of the circuit, which seems to indicate that the strategy applied improved the understanding of circuit operation.

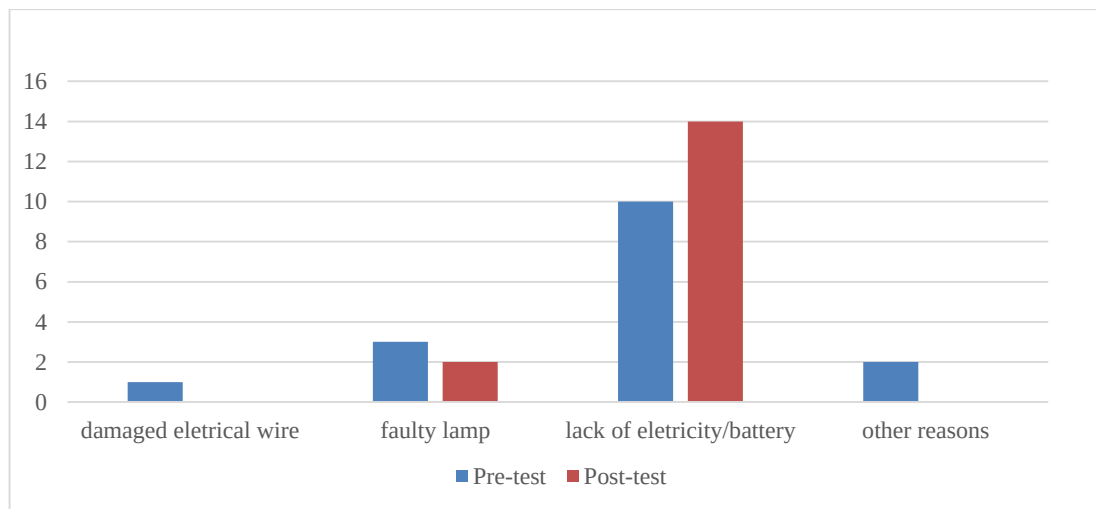


Figure 1. Data analysis of question 1

In question 2, figure 2 also shows a very marked evolution, with only three of the answers still showing some misunderstanding of the concept. It may be said that the fact that the students had had the experience of knotting and the current flows, made them understand this question.

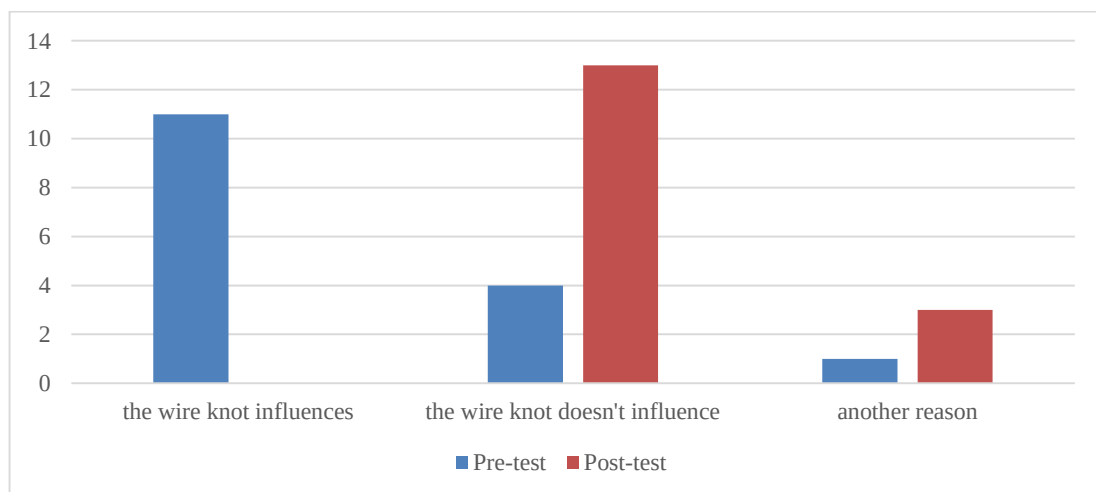
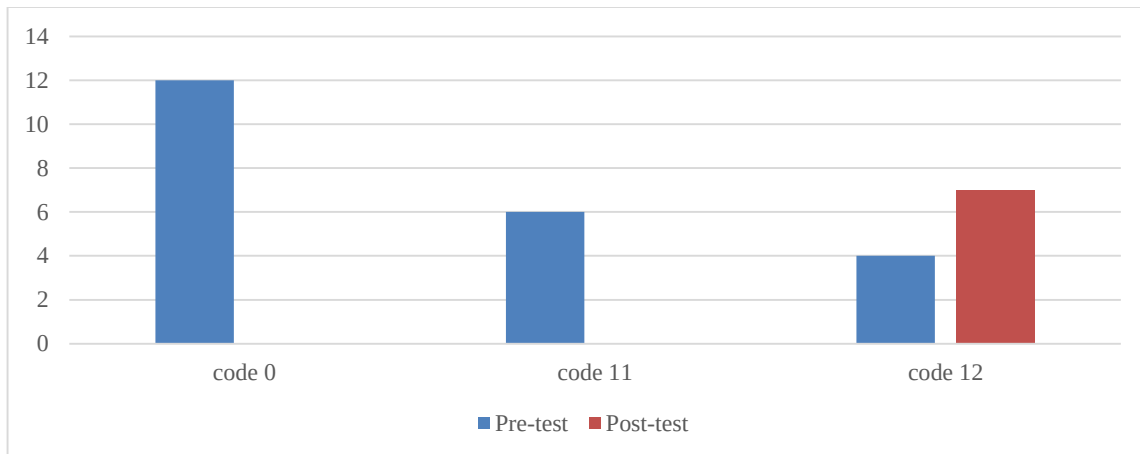


Figure 2. Data analysis of question 2



Concerning question 3, identification of the materials, (graph 4) 6 correctly identified some component materials, including those of which they are internally constituted, 7 correctly identified some external materials of the components and 3 did not identify any of the components materials. Here, it is possible to also verify a large difference between the pre-test and the post-test, in pre-test 12 they did not identify any material and 4 identified only some external materials.



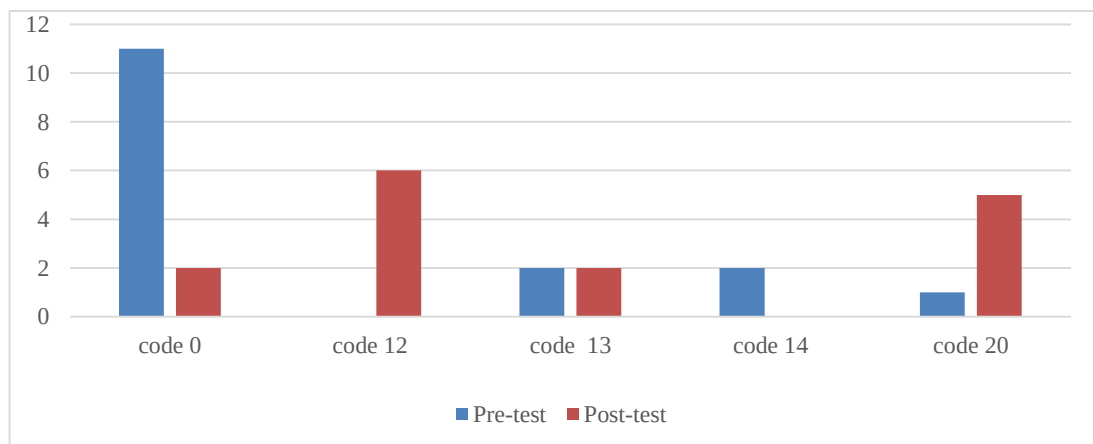
code 0: Does not identify any of the component materials.

code 11: Correctly identifies some component materials, including some internal component materials.

code 12: Correctly identifies some external materials of the components.

Figure 3. Data analysis of question 3 – identification of the materials

In relation to the concept of electrical circuit, it is possible to observe in graph 5 a transfer of the number of responses in the lower levels of performance to the highest ones, evidencing clearly an evolution in the capacity to idealize and represent the electric circuit. The number of students who correctly represented all components connecting them to each other in the correct order (code 20 + code 12) increased from 2 in the pre-test to 11 in the post-test.



code 0: Only represents a few components.

code 12: Correctly represents all the components, connecting them in the wrong order.

code 13: Correctly represents all the components, except the switch, connects in the correct order and represents all the conductors.



code 14: Correctly represents all the components, except the switch, connects in the correct order, representing only the electric cable.

code 20: Correctly represents all the components, connects in the correct order and represents all the conductors.

Figure 4. Data analysis of question 3 – Concept of electrical circuit

Conclusions

1. Overall, the comparison of pre and post-test results reveals a significant improvement in students' understanding of the concepts analyzed.
2. The observation of the learning process has highlighted some of the advantages of this intervention methodology, namely:
 - a. The use of the simulator allowed the students to test their ideas, as well as different types of materials in a simpler way than using the laboratory material and without fear of manipulation;
 - b. The possibility of rapid testing (and immediate feedback) and no risk on the simulator encouraged students to experiment beyond what they had initially been asked for;
 - c- The real assembly of the circuit with laboratory material allowed the real verification of the hypotheses and created new problematic situations that required the mobilization of the previously constructed concepts, in real situations.

The data presented allow us to consider that day-to-day problem solving by children, in context, is essential for the development of scientific skills and enhances predisposition to lifelong learning.

References

- Almeida, L.S. & Freire, T. (2008). *Metodologia da investigação em psicologia e educação*. Braga: Psiquilíbrios edições.
- Bogdan, R., & Biklen, S. (1994). *Investigação qualitativa em educação - uma introdução à teoria e aos métodos*. Porto: Porto Editora.
- Jaakkola, T. & Nurmi, S. (2007). Fostering elementary school students' understanding of simple electricity by combining simulation and laboratory activities. *Journal of Computer Assisted Learning*, 24, 271-283.
- Ketele, J.M. & Roegiers, X. (1999). *Metodologia de Recolha de dados*. Lisboa: Instituto Piaget.
- Lima, S. & Takahashi, E. (2013). *Construção de conceitos de eletricidade nos anos iniciais do Ensino Fundamental com uso de experimentação virtual*. Revista Brasileira do Ensino de Física, v.35, n.2, 3501.
- Silva, A. (1999). *Conversas de Física*. Lisboa: Edições ASA.
- Whetley, M. & Millar, R. (1987). *Being constructive: An alternative approach to the teaching of introductory ideas in eletricity*. Int. J. SCI. Educ. vol.9, no.5, 553- 563.



Teachers' Value Perception of the Formal Education*

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Abstract

This study is focused on the analysis of the subjective and objective values of the teachers who extend their formal education in the process of lifelong learning in the Czech Republic. Formal education of the teachers is mostly organized by the Lifelong Learning Centers as parts of the Universities, that react on the current norms and laws issued by the Ministry of Education, Youth and Sports of the Czech Republic. Objective values of the teachers who attempt to extend their formal education in the Lifelong Learning Centers are actually discussed in the form of the norms, laws and other legislative documents. The educational system of the Czech Republic opens an issue of a new career system and a standard of a teacher, that would in a close future legalize the universal (objective) perception of the teacher's role and status. The new career system is expected to support the teachers' motivation, which would increase the quality of the educational process of the whole society. Moreover, we cannot miss the fact, that the new career system pushes the teachers to continue in their own formal education, which might cause the devaluation of the values that are natural to the teachers work. The vision of the financial stability seems to motivate the individual in the short-term, but at the expense of this value the implemented change in the expected career system loses its added value, i.e. historically embedded concept of teaching as a mission, not only an exhaustible resource based on the short-term financial motivation of an individual at the expense of the society. Subjective value orientation refers to the intrapersonal value system of the teachers extending their formal education and to their perception of values in connection to their future career. Sub aim analyses the teachers' specific limitations, which they usually have during the process of their formal education and preparation for their future career of the teachers. The most common limitations of the teachers are reflected by the qualitative research results of the students in the formal educational process and describe the typical obstacles which are connected with their study. The methodological part is focused on the presentation of the research results and the obtained data. The questionnaire includes the questions regarding the perception of the general values in the society, the values closely related to the teacher's profession and the factors influencing the perception of the individual. The results of the research reflect the current personal (subjective) values of the teachers in the process of formal education in comparison with the legislation of the new Education Act as the objective value system regulated by the state. The recommendations reflect the ways how to solve the implementation of these attitudes into the Czech school system with its close connection to the teachers' comments on the career system as the main methodological support of the novelization of the future formal educational system.

Keywords: Formal education, Attitudes, Values, Career system, Limitations

Introduction

The current situation of a teacher in the Czech Republic is an open and widely discussed issue because of the forthcoming application of a new career system to practice, which should result in a motivation increase of the current and future teachers not only from the standpoint of existential conception of social status, which is today quite devalued. The teachers feel overlooked by the society and many of them lose basic human values due to the increasing pressure of the contemporary society of the 21st century. The teachers are irreplaceable among the advocates of positive values in a moral context. According to Lind (2003), moral values can be seen as an inherent part of the educational process. We recognize a variety of values in the society where we can rank the most acceptable and traditional values, such as solidarity, legal recognition and love. (Honneth, 1996: 34). These values are conceptually based on social pressures and are passed on from generation to generation and can be considered as a key in the initial value education because we transfer them from family circles to the next phases



of our lives. Material values have been a measure of luxury and prestige from the beginning of mankind. Traditional values have been oppressed and leave teachers in opposition to the situation of current society. The teachers are consequently forced to become the erudite experts on ethical factors and work with the value based components of teaching that are conditioned by the subjectivity of each of us.

The support for teaching is organized in the Czech Republic by the institutions of the Ministry of Education, Youth and Sports and National Institute for Further Education, which are the creators of all legislation with the participation of the professional public and academic consultants. Currently, the support for teaching and teachers is anchored by the concept of the Education Policy Strategy for 2020 which broadly defines the bases of lifelong learning necessary for the curricular concept of all the pedagogical workers who are currently forced into further professional development. The situation gradually led to a forming of a more sophisticated form of the implementation of the application of the career system. This document was approved by the government at the beginning of the year 2017, but its validity is still in a state of uncertainty as the implementation date of this document has been postponed indefinitely. Basically, the situation is currently in a vicious circle, and teachers are the victims of this step. The career system is also linked to the need for change in teaching for the future teacher's generations. These changes are necessary to be conceptually elaborated not only from the cognitive perspective, but they also need to internally prepare for the affective teaching components that are required in the teaching position. This radical change will not only be faced by primary or secondary teachers but also by the university teachers because they will have to be able to react more flexibly to the legislative big bang, which will affect settled systems of values in already quite demanding teacher's profession.

The universities are strongly aware of the fact that an unprepared system that only supports career growth motivation would not be suitable to those teachers who even now respect the essence and necessity of the continuous improvement of work with pupils. This new system can fundamentally influence the inner attitude towards the teacher's profession and might push the essence of the teacher professional growth on the blind track. (Janík et al., 2014).

The current system of further teachers' education and its legal support

The OECD report on the key data on teachers in Europe (2013) shows that most countries consider further professional development as a professional duty of teachers. In addition, in some countries, participation in the further professional development is a necessary part of the career and financial growth. In many European countries, schools have a duty to provide employees with a further career development plan, but less than one third of the countries require teachers to have their own educational plans.

The area of further teachers' education (DVPP) is defined in the Czech Republic by several legal regulations. Among the most important are Act No. 563/2004 Coll., On Further Education of Pedagogical Staff and Implementing Decree of the Ministry of Education, Youth and Sports and the Act No. 317/2005 Coll., On Further Education of Pedagogical Staff, the Accreditation Commission and the Career System of Teachers.

Act No. 563/2004 Coll., On Further Education of Pedagogical Staff regulates the prerequisites for the activity performance of the pedagogical worker, performance prerequisites for the function of the school headmaster and establishes a system of further teachers' education including the general principles of their career system. The Amendment to the Act on Pedagogical Staff introduces changes in the acquisition of professional qualifications and proposes a solution of the unskilled teachers problem.

According to the Program Declaration of the Government, the Ministry of Education, Youth and Sports prepared a draft amendment to Act No. 563/2004 Coll., which supplements the existing career system of teachers by the new career path - the path of the development of professional competencies. Until now, teachers can only choose career paths to perform specialized activities at school (e.g. specialization of school prevention methodist, educational counselor, etc.) or to go for the leading position in the school.



The Decree of the Ministry of Education, Youth and Sports of the Czech Republic no. 317/2005 Coll., On Further Education of Pedagogical Staff, the Accreditation Commission and the Career System of Teachers provides a comprehensive overview and division of the individual types of further education and subsequently sets out the brief characteristics of the training. An important part includes a framework definition of the content of individual types of further teachers' education (DVPP), resp. setting of their minimum duration in the number of lessons. The specific conditions for the content of individual study programs to obtain accreditation under DVPP are mentioned in so-called Standards of Further Education.

Lifelong learning providers are very diverse institutions, which include universities, technical institutes, secondary schools, primary schools, private institutions, non-profit organizations and others. In general, an applicant for accreditation of an educational institution providing DVPP may be any individual or legal person fulfilling the conditions set in paragraphs 1 to 3 of § 26 of Act No. 563/2004 Coll. In simple terms, it is an institution that applies for accreditation of an educational institution. Beside others, institution must also prove its level and guarantee the quality of the provided education services (e.g. authorization to provide training, overview of the applicant's personal, material and technical equipment, overview of the applicant's current activities in education, references, etc.).

List of all accredited institutions and programs is reported by the Ministry of Education, Youth and Sports through, and published at the beginning of the school year in the Ministry Bulletin and on the Ministry's website. The accreditation of the institution and the DVPP programs is granted by the Ministry on the recommendation of the Accreditation Commission, which is established as its advisory body.

Among the major institutions providing teachers' further education is the National Institute for Further Education (NIFE), which prepares and offers lectures, courses and seminars for the further education of teaching staff. NIFE has a national competence and focuses primarily on those topics in the education of pedagogical staff, which need to be addressed flexibly and on a nation-wide basis. At present, NIFE priorities include, for example, curriculum reform education, school management education, or language learning, the need of which is linked to the increasing demands on language skills of teachers. In addition to the practical preparation and implementation of educational programs, the NIFE also focuses on the analysis of needs in the further education of teachers and its concept formation.

An important institute for the further teachers' education of is also the Faculty of Education of the Palacký University in Olomouc, which, through its department "Lifelong Learning Center", satisfies the educational needs for approximately 1500 applicants per year.

Proposed career system Concept for the Czech Republic in relation to the teachers' value orientation

The realization of a comprehensive concept of teacher and career guidance was launched in March 2012 under the auspices of the National Institute for Further Education within the framework of the *Career Regulation* project in cooperation with the working groups of the Accreditation Commission, the Association of the Teaching Profession, deans of faculties of education, etc. The aim was to develop a career system that promotes the teachers' lifelong professional development and links it with a remuneration system.

The core of a new teachers' career system is supposed to be a three-level teacher's standard, which should support teachers' professional competencies and increase the quality of their work. The standard is designed as a tool for achieving, maintaining and enhancing the quality of the teacher's work, and also affects the extent of the teacher's work at school.

The proposed standard has three areas:

- the area of personal professional development (formerly the Teacher and his/her Professional Self)
- the area of teachers' pedagogical activity (formerly the Teacher and his pupils)
- the area of cooperation and participation in the school development (formerly Teacher and his/her Surroundings)



Part of the development of teachers' professional competencies is also an adaptation period for a novice teacher. The incoming teacher would be supported by his/her employer for two years of mentoring (MŠMT, 2017).

According to project organizers, the introduction of a career system should increase the quality of the teaching profession and of teaching as a whole. The teachers' career system aims to increase the quality of schools, to change the priorities of their management, to improve the work of teachers and ultimately to improve pupils' results.

In spite of some critical responses, the new concept of the teachers' career system reinforces the value of motivation for further education, as well as supporting the professional prestige confidence and legal framing of the image of a teacher in the form of an objective standard. The reinforced values cannot be understood individually or separately as they are interrelated. The personal hierarchy of values and goals may change over time, for example, with age or in lifelong learning process. The personal hierarchy of values is often consistent with the system of values and goals of the society in which the individual lives.

According to Horák (1996, p. 12), *"The value system is defined by some authors as a set of values that the individual recognizes and value orientation as a complementary process, which is a condition for the formation of human individuality. It is a process of mutual conditioning and intermingling of the values and value orientation. Therefore, we can define the value orientation as the individual selective focus on the creation and use of values. The value system and value orientation are complex systems of different kinds of beliefs and attitudes that the individual takes in relation to the reality."*

O'Connor (2008) develops the concept of identity that can influence the individual value orientation. He argues that differentiating one person from another is linked to how the person is individually perceived by other people. In this case, the (professional) identity is defined by how the personality is perceived by its environment. In Czech conditions, teaching is still considered to be a prestigious profession and, according to sociological research, it occupies immediately after the doctors the highest places on the prestigious professional rankings (Vašutová, 2011). However, Vašutová (2011) further notes that the teachers themselves evaluate their professions far lower than it is evaluated by the general public in comparison with other professions.

Problem statement and sub-problems (hypotheses)

The core research problem was the hypothesis whether teachers attending formal education at Faculty of Education of Palacký University perceive values in a comprehensive approach to the current pressures of planned conceptual changes and society. The partial aim was to identify the most frequent limitations and factors faced by teachers in the process of further formal education.

Methodology

The research (March, 2017 – Kropáč, Koribská: Research on Value Orientation of Teachers in Formal Education Process) was quantitatively focused on the objectivity of the survey. The data collection tool was a questionnaire focusing on values and their subjective reflection in relation to the teacher's profession. The questionnaire contained open and closed questions, the Likert type scale.

The research sample consisted of formal education participants in combined study at Faculty of Education, Olomouc. A total of 700 respondents (deliberately selected for the purposes of this research) participated in the survey. The research sample included teachers who were subsequently categorized into age groups according to the range from 22 to 37 years and 38 years old teachers and more. The age range is also connected with the length of the professional practice, which was selected on a scale of 1 to 7 years. The workers, who are not qualified teachers, but belong to the legislative framing of a pedagogical worker without direct pedagogical activity according to the Education Act of the Ministry of Education.

The research question was how the teachers in formal education process perceive the values needed for the teacher's work and whether the traditional values disappear from the present school replaced by material values



in relation to financial resources and other commodities. The partial objective was to identify the most frequent factors that represent limitations in achieving the goal during the formal education. Another partial objective was to identify the needs of formal education in the context of the current formal education courses offer following the current amendment of the career system.

Findings

The formal offer of the educational programs in the framework of lifelong learning is considered by more than 81% of respondents to be sufficient, 74% of the surveyed respondents were satisfied with the offer of given branches. In relation to the career system, it is necessary for the organizers of the educational programs to respond flexibly enough to the needs of the educational offer covering all the aspects of the individual development. If the offer is not sufficient enough, it would not make sense for participants in lifelong learning to complete these courses.

The next part of the research was focused on the perception of the value concept of the pedagogical workers. In a reflection of the measured values, 98% of respondents perceive values as a necessity for carrying out their pedagogical mission. The perception of values in today's society is not a matter of course, so we also asked the respondents about the most frequent values from the interpersonal perspective. Respondents most often chose the value of life as the primary element for mental transcendence and the reflection of their own values towards the others in the society. Furthermore, the respondent chose sociologically-oriented characteristics of values, such as cultural, ethical and religious roots that significantly shapes the image of the teacher. In the next part of our findings, we investigated the transformation of mental values towards the demands of today's socially stratified phenomena and the views of the teaching profession. Here we talk about the economic values and values that reflect the current state of affairs. Over 75% of respondents do not find values as something that can be measured in our globalized society. The value of money is only an indicator of well-being, not the ultimate value of a participant in lifelong learning and the aim of the further education. The career system primarily motivates teachers to improve the economic situation and more than 65% of respondents perceive their motivation as sufficient and fulfilled at the moment. The most frequent reasons for motivation include professional beliefs, religious reasons, and fulfillment of life's mission, meaning of life and the pressure from the employer.

Last but not least, it is necessary to mention the perceived limitations experienced by the teachers in the process of the further formal education. As a key limit, 80% of respondents see the formal education as time-consuming and perceive this phenomenon as a main obstruction. It is also necessary to take into account the catchment area / availability of the area in which these courses for pedagogical staff are located. Last but not least, it is necessary to highlight the budget limitations on the part of the educational participants and their employers, who partly pay the costs. Many respondents state that budget limitation forms a great barrier between a satisfactory and high quality offer of formal education offerings, which results in giving preference to low-cost education offers.

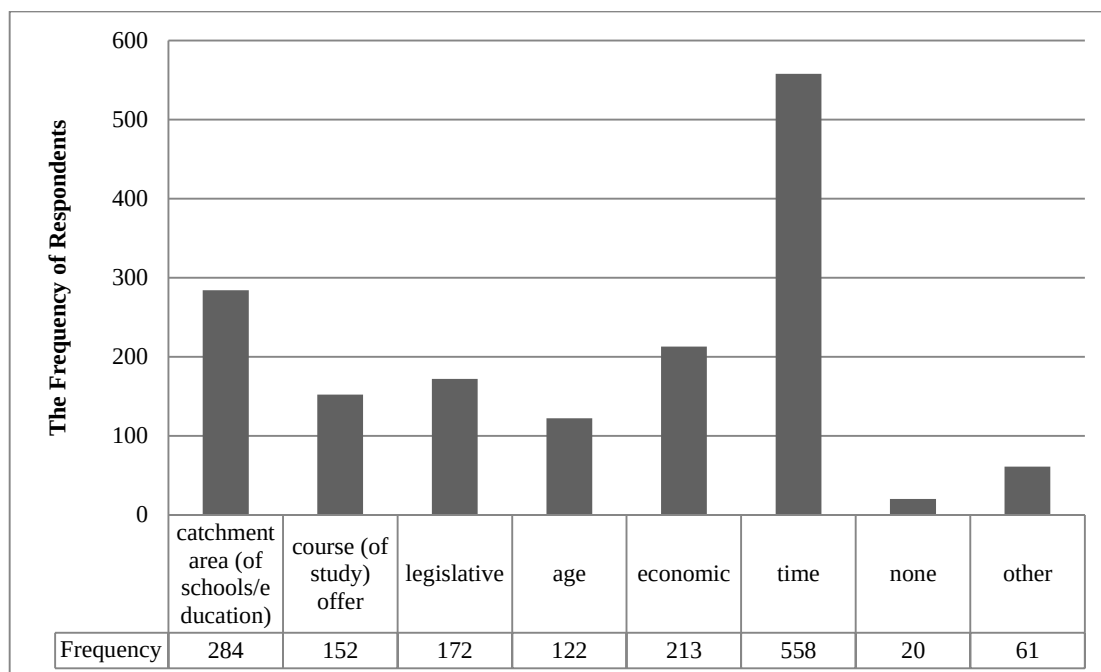


Figure 1. The Survey Answers on Limitation During Formal Education

Among the most frequent limitations, the teachers in the process of further formal education rank time demands, location availability, economic burdens and legislative barriers from the perspective of the dynamic change of the curriculum documents. Other limitations include employer obstructions, personal and family barriers and health problems.

Results, Conclusions and Recommendations

Traditional formal concepts of values in the pedagogical practice of the teacher have not disappeared, they only have shifted from secondary values to the primary values. If teachers see the economic values and financial values of motivation as a secondary factors of their value system, this is only good. Primary values embedded in culture, which under the pressure of legislative amendments disappear from the teacher's main content, can now be regarded as an anachronism. The system of values that the teacher forms, does not persist in the short term for reasons of legislative amendments but on the basis of his/her own conviction and self-efficacy. If the educational offer for teachers sufficiently extends these attributes of educational values that are primarily focused on the benefits of society, not in relation to the egoistic concept of an individual, the future of the concept of formal education can be considered to be value-based. However, it is necessary to remember the constant anti-valuation (counter-value) pressure, which brings only parasitism on the current system without reflecting the present values that make us what we are - people and teachers.

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References

Adults in Formal Education: Policies and Practice in Europe. (2011) Retrieved from: http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/128EN.pdf



- Honneth, A. (1996). Meze liberalism. K politicko-etické diskusi o komunitarismu. In Spor o liberalismus a komunitarismus. Praha : Filosofický ústav AV ČR, 1996.
- Horák, J. (1996). Kapitoly z teorie výchovy. Problematika hodnot a hodnotové orientace. 2. Díl. Liberec: Technická univerzita v Liberci.
- Janík, T. (2014). Standard a karierní systém učitele: problémy předložené koncepcí v širších souvislostech. In Pedagogická orientace. Brno : Masarykova Univerzita ČR, MUNI.
- Klíčové údaje o učitelích a ředitelích škol v Evropě, zpráva OECD. (2013). Retrieved from: http://eacea.ec.europa.eu/education/eurydice/documents/key_data_series/151CS_HI.pdf
- Kropáč, J., Koribská, I. (2017). REFLECTION OF THE ACQUIRED FORMAL EDUCATION OF TEACHERS FROM THE PERSPECTIVE OF THEIR VALUE ORIENTATION. SOCIETY. INTEGRATION. EDUCATION. Proceedings of the International Scientific Conference. 2. 435. 10.17770/sie2017vol2.2334. Retrieved from: https://www.researchgate.net/publication/317169407_REFLECTION_OF_THE_ACQUIRED_FORMAL_EDUCATION_OF_TEACHERS_FROM_THE_PERSPECTIVE_OF_THEIR_VALUE_ORIENTATION
- Lind, G. (2003). *Moral is lehrbar: Handbuch zur Theorie und Praxis moralischer und demokratischer Bildung*. Munchen : Oldenburg, 2003.
- MŠMT (2017). Karierní řád – profesní rozvoj pedagogických pracovníků. Retrieved from: <http://www.msmt.cz/o-webu-msmt/karierni-rad>
- O'Connor, K.E. (2008). You choose to care: Teachers, emotions and professional identity. *Teaching and Teacher Education*, 24(1), 117-126.
- Spilková, V. Tomková, A et.col. (2010). Kvalita učitele a profesní standard. Praha: Univerzita Karlova, Pedagogická fakulta.
- Strategie vzdělávací politiky 2020. (2014). Retrieved from: <http://www.msmt.cz> › Vzdělávání › Školství v ČR › Strategické a koncepční dokumenty
- Vašutová, J. (2011) Proměny profese učitele v rekapitulaci posledních dvaceti let. *Pozdní sběr* (Lazarová et. col.), 45-57.
- Veteška, J. (2016). *Přehled andragogiky*. Praha: Portál.
- Vyhláška MŠMT ČR č. 317/2005 Sb., o DVPP, akreditační komisi a karierním systému pedagogických pracovníků (ve znění pozdějších novel).
- Zákon č. 563/2004 Sb., o pedagogických pracovnících a o změně některých zákonů.
- Zákon č. 561/2004 Sb., o předškolním, základním, středním, vyšším odborném a jiném vzdělávání (školský zákon).
- Zpráva z průzkumu vzdělávání dospělých v ČR. (2008). Retrieved from: <http://www.msmt.cz/vzdelavani/dalsi-vzdelavani/zprava-z-pruzkumu-vzdelavani-dospelych-v-cr>



Possibilities of Leadership and Tactical Training Evaluation

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Abstract

The article is focused on description of outputs of experimental exercise utilizing the tactical virtual simulator Virtual Battle Space (VBS) as the suitable tool for evaluation of cadets' (military students) leadership skills, which were divided into three areas. This experimental exercise was organized as the part of Visegrad Fund research project "Better cooperation for better operation of the future Visegrad EU Battle Group". Furthermore the article is focused on possible proposals to use virtual simulation technology as experimental tools for evaluation of cadets' leadership and tactical training including part of theory, indoor (lab) exercise; computer aided (assisted) exercise and finished by field exercise and the seminar at the end of training cycles.

Keywords: Leadership, Skills, Simulation, Evaluation, Experiment

1 Visegrad Group Scientific Project

The education of new officers should comply with the intellectual development of a professional who is deployable in contemporary multinational operations. Thus, the educational integrating element should become a commonly accepted standard of knowledge and competence that would allow cooperation within the international staff/unit environment. (Pikner, Galatik 2016: 419).

The Czech Republic as the Visegrad Group (also called the Visegrad Four, or V4) member participated in international scientific project "Better cooperation for better operation of the future Visegrad EU Battle Group" granted by Visegrad Fund. The project was oriented in research area of Security and Defence. The lead nation of the project was Poland. Each V4 country contributed in the project by team of academic workers from military academies and universities. The Czech Republic was represented by University of Defence in Brno, Poland by The General Tadeusz Kosciuszko Military Academy of Land Forces in Wroclaw, Hungary by National University of Public Service in Budapest and Slovakia by Armed forces Academy of The General Milan Rastislav Štefánik in Liptovsky Mikulas.

1.1 Project introduction

The aim of the project was to compare the systems of V4 countries officers' education and to present recommendations in the context of V4 Battle Group formed in close future. The project outcomes were oriented to enhance cooperation among officers of V4 countries in the future peace support and crisis response operations and to provide valuable cognitive knowledge for improving and enhance the actual study programs in order to prepare cadets as future officers for operating within multinational military structures.

The project working group decided to:

- Divide project into three phases:
 - a) **Workshop** in order to establish all necessary conditions for experiment;
 - b) **Experiment** in order to check cadets' skills and get relevant outputs;
 - c) **Conference** in order to present project outputs and recommendations.



- Create Observer and rating team:
 - two academic workers from each institution,
 - well experienced in area of planning process and NATO Peace Support Operations,
 - in rank of higher officers.
- Select appropriate group of cadets for evaluation:
 - four cadets from each institution,
 - cadets has to finish second year of study,
 - English language proficiency at minimum level of STANAG 6001 SLP2222,
 - Field of study has to be similar and focused on leadership.
- Write up and issue Study book;
- Create Evaluation report working group;
- Elaborate financial calculation to cover all costs.

The most significant and crucial part of the project was computer based experiment which was organized as the experimental exercise (EXPEX). Article will describe the EXPEX as the method of research work.

1.2 Experimental exercise

In military point of view the EXPEX was designed as the category of Computer Assisted Exercise (CAX) and the training method was considered as the Synthetic Exercise (SYNEX) where the enemy and selected friendly forces were generated, displayed and moved on virtual simulator by both artificial intelligent and administrator commands. The cadets who were verified could operate their own forces directly by commands via keyboard and mouse or remotely by verbal orders via simulated tactical radio networks (Combat Net Radio, CNR).

EXPEX was designed to create as similar as possible operation conditions to adequately verify/evaluate cadets in three categories of knowledge and skills which are essential for their future officer's career. The chosen categories of knowledge and skills allow Observer and rating team to evaluate cadets during both planning process and leading assigned tactical missions in multinational environment. Tactically there were executed most often tactical missions within the scope of NATO Peace Support Operation (PSO).

1.2.1 Simulation tool for experimental exercise

As the most appropriate simulation tool for EXPEX was chosen tactical virtual simulator Virtual Battlespace (VBS). The VBS is fully interactive, three-dimensional, game-based platform designed for tactical training, mission rehearsal, experimentation, visualization, and much more. As the virtual simulation tool provides great level of scenarios development, modification of initial and running conditions and operator and players interaction.

VBS is capable of simulating a wide range of situations at lower tactical level. It can be connected with other HLA compliant simulations to meet specific training outcomes, for example connecting the dismounted infantry in VBS with a high fidelity combat vehicle simulator, or simulating a Fire support team conducting a Call For Fire mission while the overall campaign is controlled by a higher level constructive simulation.

The main benefit of VBS is its capability to model and simulate such a whole military tactical activities within the spectrum of conflict spans from stable peace through unstable peace, insurgency to general war. The spectrum of conflict is the backdrop for army operations. It places levels of violence on an ascending scale marked by graduated steps.

The modeling criteria of tactical activities can be seen as a set of factors, which will take into account the master unit in the planning and implementation of the specified task (combat task). It will be about a wide range of factors, while in individual cases will be this or that the criteria be given more weight than criteria, significance. In the preparation and implementation of another task may be the criteria laid down in a different order to the individual criteria will be given a different priority (Kozúbek, Flasar 2012: 232).

For the purpose of fulfilling the determined tasks (missions) an advanced artificial intelligence (AI) could be used fully accepting basic and enhanced military methods and procedures. VBS may be launched on almost any



Commercial off-the-shelf (COTS) PC or power notebook which is connected to data network through either intranet or internet. It is possible to connect along about 256 trainees (human participants) in one networked scenario which represent more than company level forces. Depending on scenario and organization of roles even battalion task force or similar battle task force can be trained.

1.2.2 Evaluation criteria

Throughout the entire exercise the Observer and Rating team evaluated participants according to set objectives of the experiment using evaluation sheets. The achieved evaluation results were compared with the assumed results. This procedure was base for the evaluation report and the effects of the experiment are presented at the following of part of this article.

The evaluation was performed according to the evaluation sheet prepared during the workshop (project's first event). It was agreed that each knowledge, skill, and competence would be graded according to five-point-scale, where 1 is the highest grade - the level of presented skill is the strongest, and 5 the lowest grade - the level of presented skill is the weakest (Kozûbek, Bielewicz 2013: 75).

As it was mentioned in 1.2 there were created following three categories of knowledge and skills which was considered as evaluation criteria:

1. **Communication Skills:**

- Language proficiency,
- Knows and applies proper radio procedure,
- Team worker,
- Accepts suggestions from peers and subordinates,
- Openly discussed his doubts and ideas,
- Uses well thought arguments in discussion,
- During discussions or negotiations is ready for compromise (consensus),
- Is willing to learn new skills and absorb new knowledge (if the lacks them).

2. **Leadership Skills:**

- Feels confident while issuing orders,
- Takes initiative during operation,
- Makes timely decision,
- Is ready to take calculated risk (personal courage) to achieve aim of operation,
- Treats his subordinates with respect,
- Respects humanitarian law and International Law of Armed Conflicts.

3. **Decision Making Skills:**

- Knows and applies Troops Leading Procedures (TLP's),
- Properly manage time given to him and his subordinates,
- Takes under consideration available data while preparing plan for operation (Operation Order),
- Supports his subordinates in their operation preparation phase,
- Clearly and understandably formulates orders and tasks,
- Checks understanding of the orders and tasks by his subordinates,
- Ensure situational awareness among his subordinates (information dissemination among subordinates and reporting to superiors),
- Is able to manage and allocate available resources.

The objectives were stated clearly and precisely, describing actions that was observed and measured. Using the SMART system ensured that objectives were:

- **Simple.**
- **Measurable.**
- **Achievable.**
- **Realistic.**
- **Task-oriented.**

Each evaluation sheet contains all factors for the collection of data, including objectives and points of review, checklists or other evaluation forms, and observation techniques.



1.2.3 Organization of evaluated cadets and experiment

Each participating institution chose four cadets; altogether there were sixteen cadets for evaluation. The cadets were positioned only for command positions of each platoon. The individual members of subordinated squads were not generated.

The highest level of unit was task organized motorized company which was commanded by officer from University of Defense in Brno. There were four motorized platoons within task organized company. During each lap of EXPEX each platoon was led by cadet from different institution, and each squad of platoon (there were three squads in platoon) was again led by cadets from different institutions. Therefore, each exercising platoon consisted of one cadet from each partner institution.

During the planning part of each lap of EXPEX there four cadets act as a platoon leader and twelve cadets act as a squad leader. Totally there were organized and run four laps of EXPEC scenarios to evaluate each cadet in position as platoon leaders and three times as squad leaders.

During the running scenario there was evaluated only one platoon with one platoon leader and three squad leaders. According to purpose of each assigned mission other cadets were positioned to special roles as the top gunner, driver, machine gunner, antitank specialist or sniper.

During the each mission there were generated and controlled entities representing own supporting forces (operator of Unmanned Aerial Vehicles), coalition forces and local governmental forces (army and police units), enemy (groups of insurgents) and civilian population,.

The EXPEX in the whole range was divided into four parts:

- I. Part: Intro briefing in order to put cadets into situation
- II. Part: Basic training to operate VBS in order to get skills to operate entities
- III. Part: Practical part – Evaluation
- IV. Part: After action review

The practical part of EXPEX was organized as the permanent 36 hours exercise. The aim of this exercise length was to get cadets into a state of fatigue and exhaustion similar to working in real battle conditions.

There were executed four missions during the evaluation:

- VIP Escort,
- Convoy Logistics Supplies Force Protection,
- Foot Patrolling,
- Cordon and Search Operation.

To evaluate all requested criteria each mission was divided into two parts. The first part was focused on evaluation of planning process which could be expressed as the Troops Leading Procedure (TLP) and the second part was focused on evaluation of execution of assigned mission which could be expressed as the control of subordinated units. Each part took about 3 to 4 hours.

At the beginning of each mission the company commander issued Operation Order (OPORD) in order to assign each subordinated platoon leader their specific mission. The cadets in role of platoon leaders received their mission statement and start own planning process. During the planning process was allowed joint work of platoon leader and his subordinated three squad leaders. So there was created conditions for cooperation where **the main communication language was English**. Main purpose of planning process was to find optimal solution of assigned mission and elaborate Combat Order for assignment of specific mission for each subordinated squad. At the end of planning process each platoon leader issue his Combat Order in front of whole auditorium.

1.2.4 Experimental exercise outputs

Throughout EXPEX the Observer and rating team evaluated participants according to set of objectives. The achieved evaluation results were compared with the assumed results (see Figure 1.,2. and 3.) In the rating, the significant differences were not registered, and therefore were globally acceptable and applicable to the final assessment.



According to all grades, there were small differences among the whole group of cadets. There is different way of leadership and cadets played a good example for that. All of them were highly motivated, excited, focused and most importantly they improved themselves time after time. Cadets have learned from their former mistakes, and they worked together and not against each other.

As could be seen from the results of the evaluation sheets, each participating country have reached different average values of the evaluated areas although not particularly significant, suggesting different levels of experience, knowledge and skills of cadets.

Every cadet should be able to receive and deliver orders, plan, organize, manage and evaluate activities on platoon level, to be able to work in teams and manage their work, demonstrate critical thinking and therefore must have a professional, tactical and leadership skills and knowledge for the performance for the platoon leader.

Figure 1. Results of cadets' Communication skills evaluation

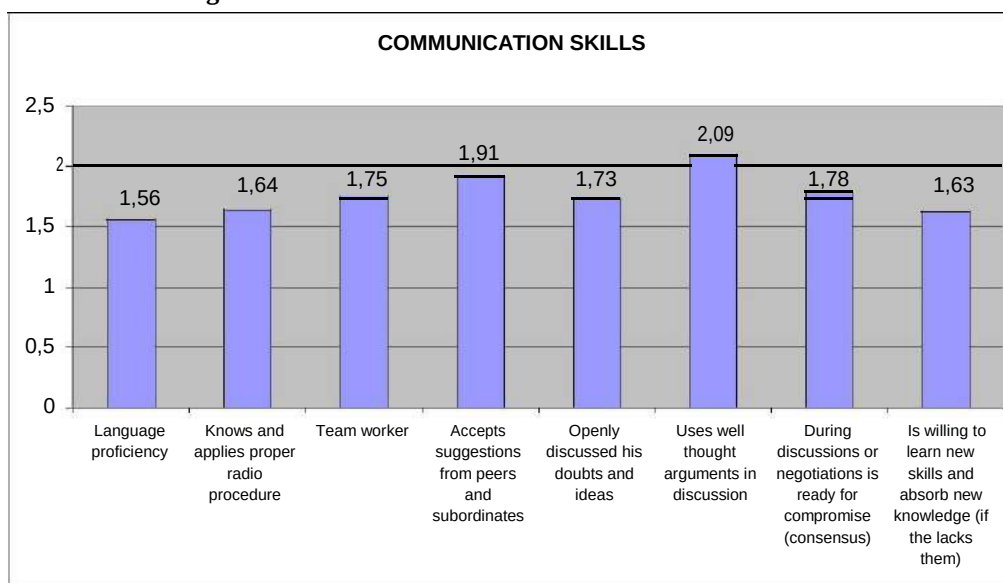


Figure 2. Results of cadets' Leadership skills evaluation

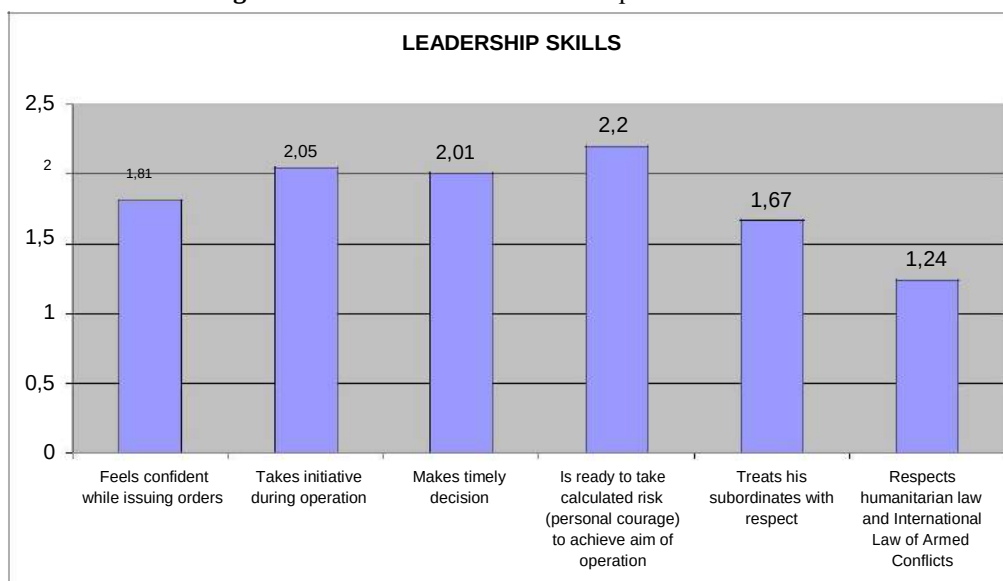
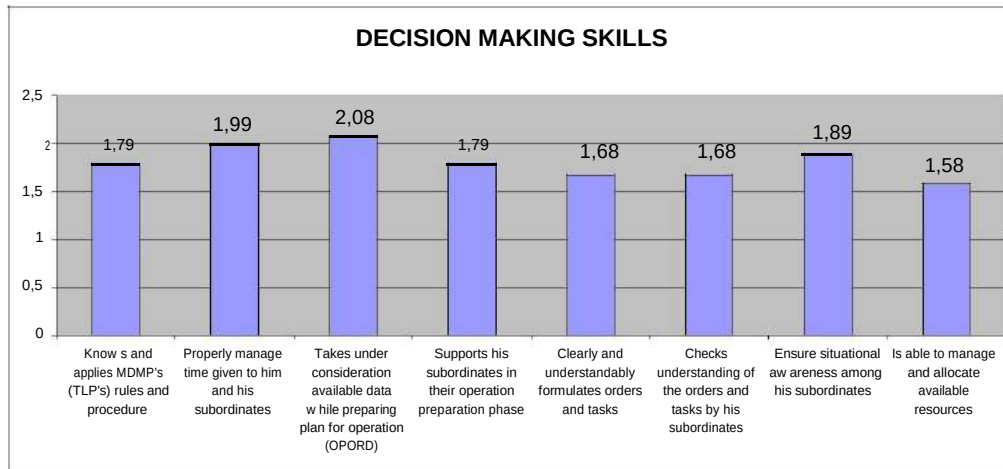




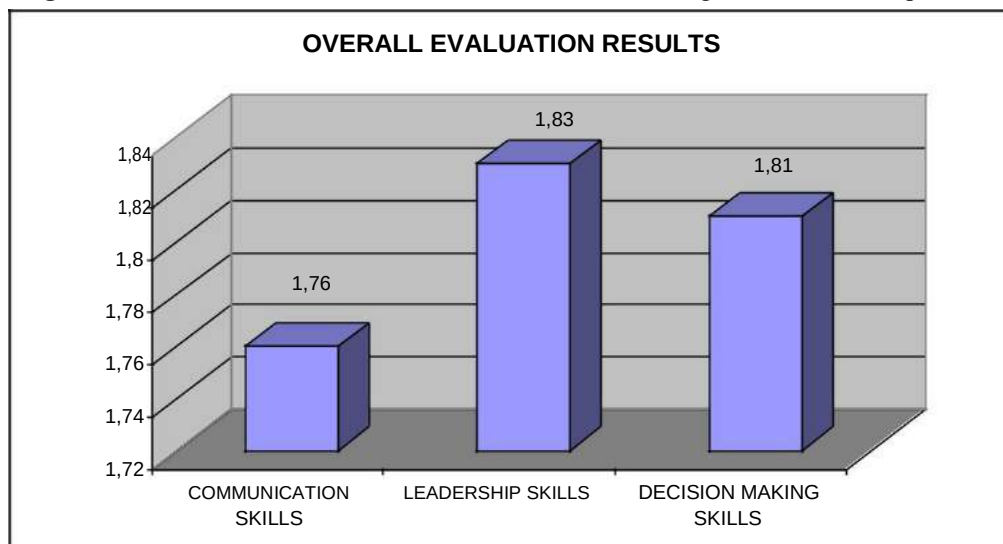
Figure 3. Results of cadets' Decision making process skills evaluation



The overall result of the cadets' evaluation shows (see Figure 4.) that the Communication skills were graded highest and Leadership skills the lowest. It is mostly logical that to gain Leadership skills is much harder and more complicated because it depends primarily on the personality (character) of each person.

Average result below 2 points, considering the five-point-scale, gives the impression that the cadets from all Visegrad Group countries may be well prepared for future challenges created by international operations conducted by multinational military or civil-military structures. It might prove true, but the observations made during exercise and various international events by this paper authors, presents a different picture. An important lesson learned for the team of researchers is to select randomly participants. Although, it was not a competition or test, the each institutions chose their best cadets.

Figure 4. Overall evaluation of the cadet's skills assessed during entire exercise/experiment



One of many important observations outputs was that the more experience with multinational environment, the more confident cadets were. Therefore it is paramount for all military academies and universities decision makers to enable their cadets to participate in international cooperation and training as soon as possible, and as many times as possible during their study.



On the other hand, the cadets' self-confidence was hampered by language barrier. When they had realized that communication skill is based more on the willing to understand each other than on language proficiency and weaker vocabulary, they performed better in the operations. They were focused more on the task, than on the grammar. It needs training and experience, thus more opportunities in this regard must be created for cadets.

1.3 Final statement

The general knowledge and level of training of participants' cadets from 4 countries was not so much different.

The representatives of all participating institutions received agreement to continue in mutual cooperation with education of young officers.

The Faculty of Military Leadership of the University of Defence in Brno took seriously the results of the research and from academic year 2014/2015 accredited new study program significantly oriented to leadership. Primarily in military sector, the preparation of the future leading officers has to be oriented in to leadership which is vital part of complex officer's preparation.

2 Usage of simulation tools for research, education and tactical training

In years 2011 – 2012 the Faculty of Military Leadership built up special laboratory with virtual simulation tools. The laboratory is named as SIMLab (Simulation Laboratory).

There were three reasons to build up the SIMLab:

- to support the Faculty of Military Leadership Research Programme,
- to enhancement and qualify education of Military Master Degree Study Programme,
- to provide support the Army of the Czech Republic commanders for preparation of their combat and combat support units to abroad missions and for full spectrum of operations.

To fulfill all intended goals the SIMLab is equipped by two tactical virtual simulators. The more extensively is used simulator Virtual Battlespace (VBS). The second one and newly purchased is Steel Beast (StBt).

Description of VBS

Simulator VBS can be described:

- as tool for tactical training and mission rehearsal up to the combat team level (up to company) and closely integrated with constructive simulation,
- can provide a generic simulation of all weapon platforms for combined arms training,
- is based on a first person computer game, to provide extremely high fidelity virtual environments (important for immersion),
- includes immersive communications system (VBS Radio) which enables radio and direct voice communications between users in exercises and filterable voice playback for After Action Review,
- has open architecture to allow extension by the customer or the contractor, supporting military formats whenever possible for rapid import of terrain and 3D content.

The simulator StBt is similar to simulator VBS but it is not so much oriented at small tactical units as teams and squads but it enhances capability to train forces up to battalion level within complex tactical scenarios.

Using of VBS to support faculty activities

For supporting the faculty research programme the VBS is used to:

- verify propounded methodology of various tactical activities carried out in both contemporary and future operations,
- generate as real as possible operational conditions to both verify and modify the actual battle drills applied by small tactics unit leaders,
- conduct the Synthetic exercises (SYNEX) for our combat tactical units to gain relevant inputs for our research – immersive using of the After Action Review capabilities,
- evaluate cadets skills in many areas of intent by organizing EXPEXs'.



For supporting the faculty educational process the VBS is used to:

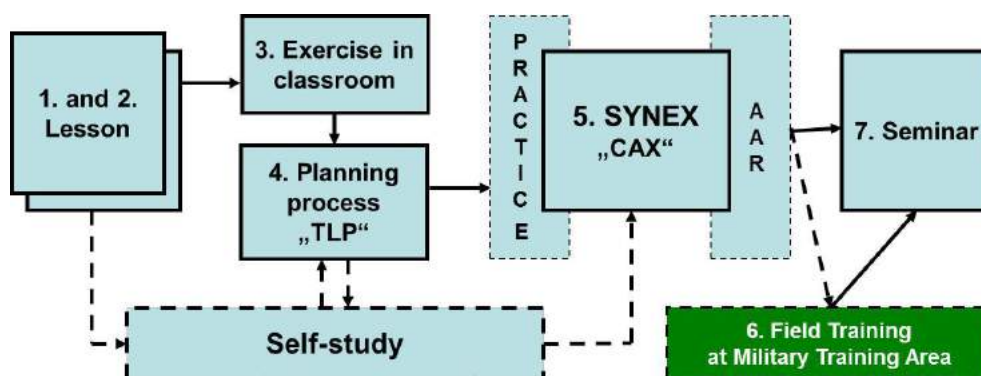
- strengthen student's acquired knowledge and develop their experience and skills,
- support the education by implementation of Synthetic Exercise (SYNEX) directly into chosen subjects,
- implicate cadets for programming VBS in order to enhance VBS capabilities and to adapt VBS to meet our needs by:
 - working out Master Degree Thesis oriented to generate and set 3D world real terrain (e.g. the real military training areas, future abroad operational areas etc.),
 - working out SYNEX guidelines for planning, organizing and mentoring (leading) exercises,
 - verification of actual battle drills (IED, SAF, CPX, VIP FP, MEDEVAC, etc.) and preparation the new possible drill schemes.

There was designed new methodical scheme to efficiently educate and train cadets to gain knowledge, skills and competences requested by the Army of the Czech Republic General Staff. The methodical scheme is part of subject teaching content.

There is example for one selected theme of subject teaching content e.g. „Mechanized platoon in Attack“ (see Figure 5.):

1. Lesson (theory by interactive PPT presentation)	90' (length in minutes)
2. Lesson and Preview (training films, YouTube battle videos)	90'
3. Exercise in classroom (test and work with maps)	90'
4. Planning process – mission analysis (Preparation for SYNEX)	90'
5. SYNEX (Computer Assisted Exercise using VBS)	270'
6. Field Training (Training with real equipment in terrain)	270'
7. Seminar (bilateral discussion, evaluation of SYNEX outputs)	90'

Figure 5. Methodological scheme of education utilizing virtual simulator VBS



For supporting the Army of the Czech Republic commander the VBS is used to:

- strengthen cooperation and mutual understanding between university teachers and battle forces commanders,
- directly involve university teachers (academic workers) as HICON and students as OPFOR into SYNEXs',
- collect of suitable data as the results of the SYNEX with trained soldiers and commanders – valuable inputs for comparing analysis in research work,
- ensure the database of knowledge (Lessons Learned) from After Action Reviews to improve the quality of education and to teach in accordance with General Staff requirements,

For this purpose the simulator VBS is installed on the COTS power notebooks to be whole system portable and there is temporarily established so called “Mobile Simulation Training Team” (MSTT).



Recommendations for VBS utilization

VBS has to be the backbone university platform to use simulation and modeling capabilities for student education and practical training.

Planning, organizing, and conducting of combined SYNEX with cadets according to their specialization e.g. Mechanized Infantry, Armor, Reconnaissance, Engineers, Artillery, Air Defence, Pilots, Logistics, etc.

Preparation and conducting of distributed SYNEX with our partners within NATO and PfP (e.g. with Military Academy of the Land Forces in Wrocław, National University of Public Service in Budapest and others).

References

- Kozůbek, J., Flasar, Z. (2012). Quantifiable Criteria of Simulated Combat Activities. *The 18th International Conference The Knowledge-Based Organisation, Conference Proceedings*, 2012, vol. 2012, no. 3, p. 230-233. ISSN 1843-6722.
- Kozůbek, J., Bielewicz, M. (2013). Assumptions, Execution and outcomes of the V4 Experiment – Computer Assisted Exercise “WHITE EAGLE”. In: *Better Cooperation for Better Operation of the Future Visegrad EU Battle Group*. Wrocław, Polsko: CHROMA Drukarnia, p. 72-95. ISBN 978-83-61315-68-1.
- Pikner, I., Galatik, V. (2016). Lifelong military education in the field of Military Art. In: *2nd International Conference on Lifelong Education and Leadership for ALL - ICLEL 2016*. Sakarya, Turkey: ICLEL CONFERENCES, Sakarya University, Faculty of Education, Turkey, 2016, p. 419-423. ISBN 978-605-66495-1-6.



An Evaluation of Courses and Fine Arts Activities Organized by the Municipality of Istanbul, Turkey, during the Lifelong Learning Process

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Abstract

This paper aims to evaluate the courses and art education activities during the lifelong learning process organized by the Municipality of Istanbul for adults. Turkey's Ministry of National Education, local governances and private establishments work on and develop projects for the lifelong learning process, which was added to objectives of the Bologna Process intended to create a European Higher Education Area. The projects are generally in parallel with the needs of the society and organizations. Two million six hundred people have benefited from the Istanbul Art and Vocation Training Courses (ISMEK) provided by the Metropolitan Municipality of Istanbul between the years of 1996 and 2017. Courses were offered in 540 branches of 35 main branches in 1714 classrooms in 235 course centers of the Metropolitan Municipality of Istanbul. This paper analyzes documents in a qualitative research pattern. In conclusion, the Metropolitan Municipality of Istanbul performs an important function in adult education.

Keywords: ISMEK, Lifelong Learning, Fine Arts Education, Proficiency in Art.

Introduction

It is impossible to provide all the information, skills and customs people need in their lifetime through formal education alone. Therefore, according to Article 18 of Turkey's Basic Law of National Education (1973), which aims at lifelong learning, the system of education was built on two main categories: *formal and non-formal education*. Formal education covers preschool education, elementary, secondary and higher education institutions. Non-formal education includes all educational activities organized along with or outside of formal education (The Ministry of National Education [MEB], 1973).

Article 4 of the MEB's Non-formal Education Institutions Regulation published in the Official Gazette in 2010 designates "*execution of non-formal education activities in coherence according to the Constitution, general objectives and basic principles of Turkish national education and Atatürk's principles and reforms in conformity with universal law, democracy and human rights.*" It also aims at "*facilitating scientific, enterprising, technological, financial, social and cultural development of individuals, accustoming individuals to use their free time productively and provide them with the means to develop their talents through non-formal education*" (MEB, 2010). Legally, the General Directorate of Apprenticeship and Non-formal Education of the Ministry of National Education organizes the adult education activities in Turkey. A rapidly urbanizing country, Turkey needs various educational activities to adapt to city life, at which stage ISMEK gains importance. As the closest basic governance unit to public, municipalities are in direct contact with the public in terms of education and culture and they offer individual and social benefits (Geray, 2007).

Modular Program of the Art Education in Painting, prepared by the MEB's General Directorate of Apprenticeship and Non-formal Education, states, "*The current process of change in branches of art, which are developing into a more complex structure, makes it necessary to base proficiency in art on a broad foundation of information, skills and attitudes and design educational programs accordingly*" (MEB, 2011). Non-formal education stands for on-the-job training, pre-service training, in-service training, human resources development, skills training and nonconventional education (Akcabol, 2006). Educational institutions that provide adult education are Nation's Schools, Community Centers and Chambers, Evening Art Schools, Public Education



Centers, Maturity Institutes, Evening High Schools, Apprenticeship Training Centers as well as nongovernmental organizations like associations and foundations, universities and municipality courses (Celik, 2011).

Lifelong learning includes formal education and all types of non-formal education, and contributes to the development of knowledge and skills of individuals, making it easier for them to find a place for themselves in the information society (Selcuk and Uzunboyly, 2016: 273-319). In this context, lifelong learning can be defined as all activities of lifelong development of personal information, skills and proficiencies (Gunuc, Odabasi and Kuzu, 2012). Lifelong learning targets cooperation in all education and learning fields, establish awareness of constant learning among individuals, supporting citizens in renewing and developing themselves and training active, participating individuals (Guler, 2004). Although this concept is commonly associated with educational activities outside of formal education, there is no consensus on its meaning and content. Even EU member countries have discrepancies (Beycioglu, Konan, 2008). Lifelong learning was first introduced in a conference organized by UNESCO in 1960. Soon afterwards, the concept was discussed one more time and developed by the UNESCO Education Institute in Hamburg. Many researches performed theoretical and practical studies on lifelong learning in the 1970s and 1980s (Óhidy, 2008; ad quoted by: Gunuc et al., 2012; UNESCO, 2009). Society develops with lifelong learning perception, attitude and customs of individuals and offers lifelong learning opportunities (Odabasi and Kuzu, 2012). Lifelong learning and education projects a general plan in order to restructure and realize the potential in people outside the existing system of education. According to this plan, men and women are the agents of their own education, through continual interaction between their thoughts and actions (UNESCO, 2009).

The EU Commission aims to help all young people to improve their basic skills to a reasonable level in elementary education and learning and offer fundamental tools for business life in more advanced stages of lifelong learning. There are also recommendations in lifelong learning for countries to integrate young people into society if they cannot fulfill their educational potential due to personal, social, cultural or financial disadvantages. However, employment policies, social policies, cultural policies, innovation and other policies that involve young people must be developed in order to establish consistency in adult education and learning services (EU Commission, 2006). To that end, in compliance with the recommendations of the EU Commission, it was decided in the 17th National Education Council to support, develop and popularize lifelong learning and assist nongovernmental organizations in designing national education policies. Main objectives also include harmonize formal and non-formal education programs with international standards and employ mass media to raise awareness among individuals (Celebi, 2006: 129-181). Countries face the problem of educating people as societies tend to adapt to the process of change rapidly and want to keep up with science and technology. Therefore, all countries have acknowledged the importance and necessity of education in training qualified human resources (Cetin, 1999). Even though lifelong learning is associated with adult education, it is involved in every moment of life as it encompasses non-formal education, including in daily life. It requires constant access to learning, enhancement of information and proficiency level, new skills as well as updating of information and skills (Ayaz and Unal, 2016).

Art education

Art education in formal and non-formal education can be defined as "all educational activities intended to develop aesthetic sense in order for the individual to be able to express emotions, thoughts and impressions and exhibit talents and creativity." Therefore, creative people are highly motivated to succeed and sensitive to their environment. Creativity is to have qualities that encourage compliance to rules, a sense of duty and independent adaptability (Marion, 2012). Essentially, creativity is the skill of finding different and fast solutions to problems. The behavior of finding authentic responses to problems is creativity (Celebierol, 2016). Therefore, the goal of art education is not to train artists but guide each student towards creativity and provide for the student's informational, cognitive and emotional education needs. Art education endeavors to educate creative power and



potential, and organize aesthetic thinking and conscious. It develops handcraft and helps the individual synthesize (Artut, 2004, p. 91). Theoretical studies that examine all arts and their interrelation on an intellectual level in terms of the artist, the audience, the society, culture and education are called "Fine Arts Education." The goal of art education in painting is to help individuals gain the skills to paint by making preparations for patterns, implementing techniques and using colors. Visual arts constitute a broad domain that covers painting, sculpting, architecture, graphic arts, industrial design, applied arts, cinematography, photography, textile, fashion design, ceramics and computer art. Theoretical and applied studies in art education and training in each of these branches, starting from preschool education to higher education, is called "Visual Arts Education" or, more plainly, "Art Education." Education and training activities in music, literature, ballet, theater and opera are defined as music education, ballet education, etc. (Guler, B., 2004: 2). Contemporary art education essentially intends to sensitize individuals and the society to their environment and meet their aesthetic needs through artistic activities. It aims at revealing creativity in individuals, help them create products and add meaning to their lives, and integrating constructive, creative and productive people into the society (Aral, 1999; Buyurgan and Buyurgan, 2002). The Art and Education certification program includes goals of Painting and Art Education, proficiencies, course periods for each module, implementation of practices in the modules, rules of evaluation and employment fields (MEB, 2011). As is seen, Painting Education has its own place in the lifelong learning framework of the Ministry of National Education. Considering the schooling rate and the number of illiterate people in our country, the importance of non-formal education is evident in the need for general and vocational technical education programs and educational activities for various purposes (Aslangiray, 2016).

Lifelong learning activities in Turkey

Lifelong learning activities in our country are coordinated by the state, provincial and county municipalities and the national agency. A municipality is "the best organized unit of the local governance and the closest to individuals of the society." Upon the development of "social municipalism" in our country, local governances focused on training services after mid-1990s, and organized various activities (Erol, 2007, p. 70). Lifelong learning activities organized by municipalities include various lifelong learning centers like Istanbul Metropolitan Municipality Art and Vocation Training Courses (ISMEK), Ankara Metropolitan Municipality Training Courses (BELTEK and BELMEK), Bursa Art and Vocation Training Courses (BUSMEK), Kocaeli Vocation and Art Training Courses (KOMEK), Kayseri Vocational Courses (KAYMEK), Antalya Vocational Courses (ASMEK), Gaziantep Vocational Courses (GAMEK), and Eskisehir Art and Vocation Training Courses (ESMEK).

Metropolitan Municipalities of Istanbul and Ankara were the first to open art and vocation training courses. Art, vocation and skill courses of these two municipalities have institutional identities. Other metropolitan municipalities are putting effort into institutionalizing their courses (Cetin, 1999). The Metropolitan Municipality of Istanbul pioneered the courses with non-formal education organization ISMEK, which was founded in 1996. Qualified instructors commissioned in course centers are selected in special talent tests of ISMEK and instructors with academic education are assigned to the courses. ISMEK does not charge fees from trainees in exchange for the service it provides. This paper reports the courses organized for adults as part of the lifelong learning process and the art education activities within the courses.

Method

This descriptive study is based on theoretical analytical research and examines documents. The study was done in late May 2017, when the courses ended, and interviews with trainees or surveys could not be employed. The data used in the study was obtained from the Metropolitan Municipality of Istanbul.



Studies on the Metropolitan Municipality of Istanbul

ISMEK is a non-formal education organization, supplementary to formal education, founded with the purposes of improving Istanbul residents, enhancing their vocational and artistic knowledge, instructing residents on urban culture and living in a metropolis, assisting residents in generating income, increasing their employability, etc.

274,979 trainees participated in the ISMEK courses organized in the academic year of 2016-2017. 2829 instructors are employed in the courses. 86% of the public has knowledge of ISMEK. 2,605,992 people have participated in the courses since 1996. Along with adult education courses, ISMEK organizes summer training programs for children at the age of 9 and above. Children's summer programs include 33 branches, including music, painting, handcrafts and diction. Summer courses were initiated in 2015 and are gaining popularity. 32 thousand children participated in the courses in the academic year of 2016-2017. Courses for children in the age group of 12-16 were introduced in 2016 in branches of information technologies, child development, music and performance arts, art and design, ceramics, glasswork, sports, foreign languages, and food-beverages. Adult course periods vary between 70 hours and 900 hours, depending on the branch. The longest courses are: wood painting and varnishing (480 hours), wood shaping (536 hours), model ship making (520 hours), authentic printing (engraving, screen printing, calligraphy, painting-art education (368 hours), painting-art theory (256 hours), artistic mosaic-1 (438 hours), artistic mosaic-2 (512 hours), illuminated manuscript (640 hours), oil painting (384 hours), miniature (784 hours), assistant cook (896 hours) (ISMEK, 2017, www.ismek.ist).

A research conducted by the Public Relations Directorate of the Metropolitan Municipality of Istanbul revealed that 86% of trainees are satisfied with the courses and the majority of the trainees are between the ages of 26 and 40. The majority of research participants regards ISMEK as a "Public University" and finds the training sufficient and beneficial (ISMEK, May 2017). Trainees are presented with certificates approved by the Ministry of National Education at the end of each course. However, trainees do not obtain a certificate if they have been absent from the courses for one fifth of the course duration.

The tables below show the most popular branches, Istanbul Regional Employment Centers, Specialist Schools, Course Fields and Branches, Painting and Art Education Centers and branches.

Table 1. Course centers opened by ISMEK and their branches numbers

Course Centers	Number of Branches	Course Centers	Number of Branches
Atasehir- Ornek District	79	Kagithane-Hurriyet	77
Atasehir- Kucuk Bakkalkoy	78	Kagithane-Sultanselim	109
Bahcelievler	77	Kartal -Kordonboyu	87
Bakirkoy-Cevizli	99	K.cekmece-Sefakoy	119
Basaksehir 5.Etap	104	K.cekmece Yesilova	106
Basaksehir- Bahcesehir	89	Maltepe Altaycesme	126
Besiktas-Dikilitas	90	Maltepe Cevizli	77
Besiktas Ortakoy	114	Pendik- Yenimahalle	88
Besiktas Dikilitas	90	Silivri	90
Beykoz Gumussuyu	82	Tuzla-Yayla	79
Beykoz-Kavacik	75	Ümraniye Atatürk Mahal.	89
Beylikduzu Semerkant	82	Umraniye Mithatpasa	83
Buyukcekmece- Fatih	74	Uskudar Aziz Mahmut	81
Esenyurt	113	Uskudar - Cengelkoy	82
Eyup	94	Zeytinburnu Gokalp District	83



Gaziosmanpasa -500 Evler	132	Zeytinburnu Seyyid Nizam	95
Gaziosmanpasa - Kucukkoy	79	Zeytinburnu Telsizler	91
Kadikoy Rasim Pasa	110	Beylikduzu-Beykent	78
Kagithane-Hurriyet	77		

Table 1 shows courses held in 235 centers in 38 counties of Istanbul. The table includes centers that organize courses in 75 or more branches. Centers that organize courses in more than 100 branches are Basaksehir 5. Etap (104), Besiktas Ortakoy (114), Kagithane (109), Gaziosmanpasa (132), Kucukcekmece- Sefakoy (106), Maltepe-Altaycesme (126), Esenyurt (113), and Kadikoy-Rasim Pasa (110). Most of these centers are located in developing, immigrant-receiving areas of Istanbul (ismek.ist/tr/branslar3.aspx).

Among women trained at ISMEK (1996) until 2017, 473,462 are university graduates, 685,409 are high school graduates, 658,270 are elementary education graduates, and 25,301 are literate. Among 234 thousand graduates, 6,884 have master's degree and 600 have doctoral degree. In the academic year of 2016-2017, 4,619 master's degree graduates and 422 doctoral degree graduates enrolled in ISMEK. The most popular branches among these trainees are personal growth, sports, handicraft technology, foreign languages and music. Twenty years after its establishment, ISMEK offers training in 317 vocations as part of International Standard Classification of Occupations (ISCO 08). Groups from Nigeria, Afghanistan, the UK and Ukraine were briefed. The Nigerian group was trained in wood painting, wood decoration, jewelry design and jewelry making, furnishing, cosmetics, hair care and clothing (ISMEK Haber, 2017). No significant difference was observed in terms of gender among participants. We do not have data on the subject. Officials state women are more interested in the courses than men. The study by Ayaz and Unal shows that there is no significant difference in the lifelong learning tendencies of genders. This finding appears consistent with results of several studies (Ayaz and Unal, 2016).

Regional Employment Offices of the Metropolitan Municipality of Istanbul are located in 20 centers: Sultangazi, Bahcelievler, Bakirkoy, Besiktas, Beykoz, Buyukcekmece, Bagcilar, Esenler, Esenyurt, Eyup, Fatih, Kadikoy, Kartal, Kucukcekmece, Pendik, Sancaktepe, Sisli, Tuzla, Umraniye and Uskudar. ISMEK cooperates with the Ministry of National Education, the Small and Medium Enterprises Development Organization (KOSGEB), the Turkish Employment Agency, Istanbul Chamber of Trade (ITO), Istanbul Chamber of Industry (ISO), the Union of All Kind of Metallic Goods Craftsmen of Istanbul (IMESOB), the Union of Istanbul Chambers of Tradesmen and Artisans (ISTESOB) and the Association of Turkish Travel Agencies (TURSAB). The project aims at training young people between the ages of 19 and 30 without a job or occupation that reside in Istanbul and provide them with jobs. The Employment Guidance department functions as a bridge between jobseekers and companies that need personnel, and cooperates with a large number of firms in various sectors. ISMEK trains personnel for industries and directly contribute to employment (ISMEK, 2017).

Table 2. ISMEK Specialist Schools

Regional Employment Centers	Number of Branches	Regional Employment Centers	District
Bahcelievler/Culinary Arts School	17 Branches, 3 Classrooms	Kadikoy Music and Performance Arts School	70 Branches, 9 Classrooms
Bahcelievler Yenibosna Graphic Design School	Bahcelievler	ISMEK Colpan Ilhan Fashion School	Kadikoy
Bahcelievler Yenibosna Accounting and Finance	40 Branches, 14 Classrooms	Retail School	46 Branches, 9 Classrooms
	Bahcelievler		Sisli
	16 Branches, 5 Classrooms		21 Branches, 6 Classrooms
	Bahcelievler		Sisli



School			
Culinary Arts School / Bahcelievler	17 Branches, 3 Classrooms Bahcelievler	Sisli - Mecidiyekoy Child Development School	17 Branches, 5 Classrooms Sisli
Bakirkoy Hair Care and Services School	28 Branches, 6 Classrooms Bakirkoy	Sisli - Mecidiyekoy Personal Development School	26 Branches, 5 Classrooms Sisli
Bakery and Pastry School	23 Branches, 6 Classrooms Esenler.	Culinary Arts School	11 Branches, 4 Classrooms Uskudar
Fatih Language School	51Branches, 15 Classrooms Fatih	Baglarbasi Turkish-Islamic Arts Postgraduate School	17 Branches, 24 Classrooms Uskudar
Fatih Music and Performance Arts School	64 Branches, 10 Classrooms Fatih		

Table 3 shows branches with the largest participation in the 15 Specialist Schools opened by ISMEK: Bahcelievler Yenibosna Graphic Design School (40 branches), Fatih Language School (51 branches), Fatih Music and Performance Arts School (64 branches), Kadikoy Music and Performance Arts School (74 branches), and ISMEK Colpan Ilhan Fashion School (46 branches). The number of classrooms in training centers is inadequate. Trainees of these specialist schools either set up their own business or are employed by private companies. Schools like the Retail School, the Bakery and Pastry School, the Culinary Arts School train the personnel in demand in various sectors. Moreover, the works of ISMEK trainees are on sale in the Sanat Sokagi Street in Sultanahmet, Istanbul. Apart from these schools, ISMEK also has Sports Training Centers (19), Education Centers for People with Disabilities (3), and Social Life Centers (2). Every year, ISMEK organizes exhibitions and festivals, stages plays, provides aid in poor areas and training for professional agencies (such as hygiene training).

Table 3. Distribution of trainees in ISMEK education fields and branches in courses with 800 or more participants

Main Fields	Branches	Number of Trainees
Sciences of Family and Consumer	Consumer Rights	4447
Gardening	Beekeeping	837
	Garden Maintenance	876
Information Technologies	Office Software Usage	1715
	Computer Operator	8207
	Web Design	1537
	Advanced Office Programs	764
Child Growth and Training	4-6 Age Child Education and Activities	851
	Activities for children aged 4-6	1829
Personal Development and Education	Leadership	1911
	Ottoman Turkish	985
	Easy Texts in Ottoman Turkish	800
Personal Growth	Reading Quran (Tajweed)	3262
	Reading Quran (Elifba)	3359
	Elocution	11714
	Work Organization	1205



	Sign Language	1528
	Communication in Business Life	3936
	Leadership	1911
	Dictation of Ottoman Turkish	985
	Easy Texts in Ottoman	795
	Communication in Social Life	2754
Accounting-Finance	Basic Accounting	2617
Beauty-Hair Care Services	Basic Makeup	890
Nursing of Old and Ill Persons	Patient Admission Affairs	1767
Marketing-Retail	Real Estate Consultancy	3263
Health	Hygiene Training for the Staff Working in Food-Water Sector	1077
Sports	Fitness (Women)	11595
	Fitness (Men)	11117
	Pilates	9943
	Aerobics	8684
Foreign Language	English. Level A1	11432
	Turkish for Foreigners Level A1	2006
	Turkish for Foreigners Level A3	1214
	English Level A2	6935
	English Level B1	1700
	Arabic Level A1	4810
	Arabic Level A2	2002
	German Level A1	1548
	French A1	842
	Russian A1	846
Clothing Manufacturing Technology	Sewing Woman Clothing	3733
	Woman Clothes Artistic Drawing	885
	Woman Clothing Pattern Preparation	2182
	Skirt Sewing	2189
	Pants Sewing	1856
	Dress Sewing	2033
	Topcoat-Trenchcoat Sewing	1014
Food-Beverage Services	Chocolate Making and Presentation	2722
	Special Cookie Making	1568
	Cupcake, Muffin Making	3475
	Macaron Production and Presentation	1862
	Sugar Paste, Cake Making	1655
	Making Milky Desserts	1412
	Olive Oil Dish-Salad Making	1496
	Ottoman Sherbet Making	894



Apprentice Pastry Cook	2298
Home Cooking	1345
Apprentice Cook	1922

Table 3 lists course fields and branches. The most popular branches are Consumer Rights (4447), Reading Quran (Tajweed) (3262), Reading Quran (Elifba) (3359), Communication in Business Life (3936), Fitness (Women) (11594), Fitness (Men) (11117), Pilates (9943), Aerobics (8684), English Level A1 (11432), English Level A2 (6935), Arabic Level A1 (4810), Sewing Woman Clothing (83733), and Cupcake-Muffin Making (3475).

Painting and Art Education Centers:

16 centers in Avcilar, Bakirkoy, Besiktas, Beykoz, Beylikduzu, Kucukcekmece, Kadikoy, Merdivenkoy, Rasimpaşa, Buyukcekmece, Kadikoy, Sahrayicedid, Kartal, Kucukcekmece, Pendik and Uskudar organize painting and art education courses.

Table 4. Main fields and branches of fine arts education in courses with 800 or more participants in the academic year of 2016-2017

Fields	Branches	Number of Trainees
Handicraft Technology	Wedding candy embroidering	1858
	Dowry preparation	1888
	Lacework	6111
	Decorative wood painting	1470
	Dowry preparation	1888
	Handmade ribbon work	2343
	Wire wrapping	997
	Knitting needle for cardigan	1469
	Accessories	1864
	Decorative cover and case sewing	965
	Lace anglaise	1056
	Bedcloth sewing	1696
	Bed linen sewing	2238
	Making flowers by needle lace stitch	965
	Doll making	800
Graphic Photography	Photo shooting	3118
	Computer supported advertisement and designing	1195
Art and Design	Charcoal drawing 1	1171
	Painting in gouache	2571
	Calligraphy	1014
	Illumination	884
	Marbling	1182
Music-Performance Arts	Bağlama training (irregular method) Level 1	1204
	Bağlama training (Bağlama method) Level 1	1112
	Classical guitar level 1	1640



Table 5 lists main fields and branches of Fine Arts. However, not all branches of main fields were listed as only courses with 750 or more trainees were included for brevity. In the academic year of 2016-2017, training programs were offered in 278 branches, including Wood Technology (4), Handicrafts (57), Handicraft Technologies (100), Graphics and Photography (18), Art and Design (24), Ceramics and Glass (5), and Music and Performance Arts (70) (ISMEK document, www.ismek.com).

Results, Conclusions and Recommendations

This paper examines adult education activities of the Metropolitan Municipality of Istanbul Art and Vocation Training Courses (ISMEK) as part of the non-formal education project in Turkey. Currently, the Municipality of Istanbul organizes courses in 540 branches within 35 main fields in 235 training centers. These centers offer training in fields like information technologies, clothing and textile technologies, personal growth, food technologies, and food and beverage services. Painting and art education courses are organized in main fields including art and design, wood technology, handicraft technologies, ceramics and glass, graphic and photography, music and performance arts, and textile technologies.

According to study results, the Metropolitan Municipality of Istanbul has opened a large number of courses for people at and above the age of 12 as part of the lifelong learning process to help people improve their skills, find employment in certain fields and utilize their spare time. 86% of participants are satisfied with the training. The training courses provide vocational and artistic training for residents of Istanbul and also serve as a type of rehabilitation center for urban dwellers (Topbas, 2017). The selection of courses depends on requirements of training center locations. Course centers that receive the highest level of participation are Bahcesehir, Besiktas, Kagithane, Kucukcekmece, Esenyurt, Kadikoy and Maltepe centers. Regional Employment centers of ISMEK operate in 20 areas, including developing areas like Sultangazi, Fatih, Bakirkoy, Esenyurt, Kucukcekmece and Umraniye. ISMEK also has 20 sports centers, 15 specialist schools, 3 centers for persons with disabilities, and 2 social life centers. However, the number of course centers and classrooms is inadequate. Several centers lack the classrooms they need.

Celik's (2011) study on ISMEK shows that instructors and trainees are accepted regardless of their religion, language, race and political opinions. However, it is stated that the art education offered by ISMEK incomparable with academic art education. It is argued in the study that the education does not have the characteristics of true art education but it is sufficient for individuals to have a good time and take up a hobby (Celik, 2011).

ISMEK organizes monthly art events (art talks, exhibitions, contests, etc.) and publishes a magazine and a newsletter. Materials required in the courses are mostly procured by instructors and trainees. As there is a large number of course centers across the city and courses are organized in several other branches than art, ISMEK does not contribute in this aspect. A study has revealed that the painting training offered by ISMEK fails to achieve its goals, classrooms and workshops are not adequate for art education, art education is not in conformity with the rules, adults only enroll in the courses as a recreational activity or a hobby, and the art and vocation training courses for adults does not provide a vocation for individuals or train artists (Celik 2011). Efforts must be given to establish cooperation between the courses and universities for higher quality education. In-service education programs must be initiated for instructors in human relations, adult psychology, teaching principles and methods. Art education courses must be designed to give the necessary information and develop the necessary skills for proficiency in art.



References

- Akçabol, R. (2006). *Halk eğitim (Yetişkin eğitimi)*. Ankara. Ütopya yayınevi.
- Aral, N. (1999). Sanat eğitimi yaratıcılık etkileşimi. 15, 11-17.
- Artut, K. (2004). *Sanat eğitimi kuramları ve yöntemleri*, Ankara: Anı yayıncılık.
- Aslangiray, A. (2016). Yaygın eğitim merkezlerinde kursiyer beklentisi:Antalya Büyükşehir Belediyesi sanat ve kültür merkezi (Asmek) örneği. *International Multidisciplinary Conference (IMUCO). April 21-22, 2016 Antalya, TURKEY*. 902-926.
- European Commission (2006). *Proposal for a recommendation of the European Parliament and of the Council on key competences for lifelong learning*. Brussels, 18 December 2006.
- Ayaz, C., & Ünal, F. (2016). Öğretmenlerin yaşam boyu öğrenme eğilimlerinin bazı değişkenler açısından incelenmesi. *The Journal of International Social Research*, 9 (44), 847-856.
- Beycioğlu, K., & Konan, N. (2008).Yaşamboyu öğrenme ve Avrupa eğitim politikaları. *Electronic Journal of Social Sciences*,7 (24).
- Buyurgan, S., & Buyurgan, U. (2002). *Sanat eğitimi ve öğretimi eğitimin her kademesine yönelik yöntem ve teknikler*, Ankara: Pegem A.
- Çelebi, N. (2016). Avrupa Birliği ve eğitim. 4. Bölüm. Edited by N.Çelebi. *Küreselleşme ve Eğitime Yansımaları*, Ankara: Nobel
- Çelebierol, C. (2016).Sanat eğitimi ortamlarında yaratıcı düşünce olanakları. *The Journal of International Social Research*, 9 (43),1418-1422.
- Çelik,E.F. (2011). Yerel yönetimlerin sanat eğitimindeki yeri ve önemi (İstanbul Büyükşehir Belediyesi İsmek Örneği).Unpublished postgraduate thesis. Selçuk University Institute of Educational Sciences. Konya.
- Çetin, Ş. (1999). Halk eğitim merkezlerinde görevli öğretmenlerin birer yetişkin eğitimcisi olarak eğitim ihtiyaçları. *National Education Magazine*, 142, Ankara.
- Geray, C. (2008). ISMEK. Belediyelerin eğitim ve kültür işlevleri. 2. *Yetişkin Eğitimi Sempozyumu Bildileri.*, May 10, 2008, İstanbul, the Metropolitan Municipality of Istanbul Art and Vocation Training Courses (ISMEK) Publications.
- Günüç, S., Odabaşı, H.F., & Kuzu, A. (2012).Yaşam boyu öğrenmeyi etkileyen faktörler. *Gaziantep Üniversitesi Sosyal Bilimler Dergisi*, 11(2), 309-325.
- ISMEK (2016). *İSMEK istihdam rehberliği*. İstanbul.
- ISMEK (2017). *2016-17 Eğitim- öğretim dönemi branş rehberi*. İstanbul
- ISMEK (2017). Kadın ve adalet zirvesinde İSMEK konuşuldu. *İSMEK Haber Bülteni*.17, 13
- ISMEK (2016). Tüm branşlar ve verilen kurs merkezleri ismek.ist/tr/branşlar3.aspx
- ISMEK (2016). Preface (K.Topbaş). ISMEK’le değişen hayatlar. *ISMEK Hayat Boyu Öğrenme Merkezi Yayınları*. İstanbul.
- ISMEK (2017). General Directorate of Public Relations Public Research Unit. Satisfaction Survey
- Kırıçoğlu, O. (2002). *Sanatta eğitim. görmek-öğrenmek-yaratmak*. Ankara: Pegem A.
- Marion, R. (2012). Leadership of creativity, entity, based relational and complexity perspectives. Chapter: 18. In *Handbook of organizational creativity*. Edited by M.D.Mumford. 457-479.
- MEB (2010). *Ministry of National Education regulation for non-formal education institutions*. June 2010/ 27587. Ankara
- MEB (2011). *Art and design. Painting-art education modular program. (based on proficiency)* . MEB General Directorate of Apprenticeship and Non-formal Education. Ankara.
- MEB (1976). Turkish Basic Law of National Education. *The Official Gazette* 24/6/1973. Issue: 2342. Ministry of National Education Regulation for Non-formal Education Institutions (2010, June),
- Selçuk, G., & Uzunboylu, H. (2016). Yaşam boyu öğrenme, küreselleşme ve Türkiye. Chapter 7. Edited by N. Çelebi. *Küreselleşme ve Eğitime Yansımaları*. Ankara:Nobel.
- UNESCO (2009). *Global report on adult learning and education*. UNESCO Institute for Lifelong Learning, Hamburg, Germany.



Space Weather in the Context of Education in Cyber Security and Physical Economics

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Abstract

This work examines applications of physics in economics that document the gradual rise of physical economics in the Czech Republic beginning in the early 1970s. The established facts show a direct connection between basic economic research in the Czech Republic and current research abroad in the field of physical economics.

Keywords: Cyberspace, Physical economics, Space economics, Space geodesy, Space weather

Introduction

The term space weather refers to various phenomena that physically involve the transfer of mass, momentum, jerk, energy and charge in heliospheric magnetized plasma that interacts with the geosphere and its sub-spheres. In addition to phenomena involving transfers between individual parts of the geosphere, space weather also affects technological systems found both in the heliosphere and below the Kármán line, as well as technological systems on the ground. At any given time, the immediate position of the Kármán line with respect to the Earth's surface depends primarily on the space-time distribution of the Earth's mass density, the meteorological processes of the given season, as well as solar and geomagnetic activity. As the boundary of outer space (or simply space) changes over time relative to the Earth's surface, to simplify matters professor Kármán defined the boundary of outer space to be a distance of 100 km from the Earth's surface (Kármán, 1967).

By analyzing the analytical structures of microeconomic and macroeconomic systems and comparing these to the analytical structures of theoretical physics, we have established a principle of correspondence between classical non-relativistic mechanics and new economic variables that were derived from the theory of immediate commodity price. (Zeithamer, 2013, 2014 a, 2014 b, 2015 a, 2015 b), (Zeithamer & Pospíšil, 2015, 2016 a, 2016 b). The newly introduced economic variables describing future price development over space and time are as follows: price jerk $\leftrightarrow$ third derivative of path over time, price jounce (price shake) $\leftrightarrow$ fourth derivative of path over time and price crackle $\leftrightarrow$ fifth derivative of path over time (here $\leftrightarrow$ means "corresponds to"). Methods for forecasting space weather also employ the principle of correspondence between applications of classical relativistic mechanics of continuum in meteorology and applications of classical relativistic magnetohydrodynamics in solar physics, physics of magnetized plasma in interplanetary space, and physics of the Earth's magnetosphere.

Quantifying future states of magnetized heliospheric plasma sub-systems in space weather is analogous to developing methods for meteorological forecasts (Siscoe, 2007). One approach to quantifying the size of storm systems in terrestrial meteorology is to classify them into three basic categories in descending order based on the extent of the Earth's surface that is affected: extratropic cyclones, hurricanes and tornadoes. Storms in cosmic weather can also be classified in descending order into three basic sizes: M-region storm, coronal mass ejection,



super auroral electrojet. The correspondence principle for forecasting space weather and terrestrial weather can be formulated as follows: extratropical cyclone ↔ M-region storm; hurricane ↔ coronal mass ejection; tornado ↔ super auroral electrojet (Siscoe, 2007).

The principle of correspondence that for two different scientific fields may also be called the binary principle of correspondence is a simple representation that assigns quantifiable variables from one scientific field to a quantifiable variable of a second scientific field based on the same qualitative importance of mechanisms of transfer of mass, momentum, jerk, energy and charge describing the development of systems states in two different scientific fields. Finding a principle of correspondence requires a high degree of understanding of the two different scientific fields. If a principle of correspondence is derived between n scientific fields, then this principle of correspondence is called the n – ary principle of correspondence.

Similar to meteorology, economics and other scientific fields, phenomena and processes of space weather are transformed into cybernetic space and transmitted at a speed less than or equal to the speed of electromagnetic signals in the universe, which numerically is $c = 299,792.758 \text{ km.s}^{-1} \doteq 300,000 \text{ km.s}^{-1}$. In this work, cyberspace is a physical environment through which electromagnetic and gravitational signals are transmitted at the speed of light in a vacuum or a speed slower than the speed of light in a vacuum but close to $299,792.758 \text{ km.s}^{-1}$.

To this definition of cyberspace we must add that at the current stage of development of physics and biophysics, the transmission of a gravitational signal is detected by terrestrial detectors that transform it to an electromagnetic signal, and the generation of this electromagnetic signal is recorded as evidence of the passage of a gravitational signal through cybernetic space. In many cases, the detector (located on planet Earth or in its direct proximity) records an electromagnetic signal that was generated directly in the area of space where the gravitational signal was generated.

Cyberspace defined as a physical environment also affords the opportunity to compare and transfer to this environment knowledge from other scientific fields, in particular physical economics, biophysics, cybernetics, informatics, physiology, neuroeconomics, sociology, psychology, criminology and criminal justice, theoretical politics including international relations, national security policy, law, economics and other sciences. The speed of transmission of electromagnetic and gravitational signals in cyberspace is finite and equal or less than the speed of light in a vacuum. Then it is possible to define the position of a point and distances between points in cyberspace.

But what time intervals are necessary for an electromagnetic signal and a fast solar wind proton moving at a speed of 800 km.h^{-1} to travel a distance equal to 1 AU? Electromagnetic and gravitational signals require approximately 8.5 minutes to travel a distance of 1 AU while a fast solar wind proton approaching the Earth at a speed of 800 km.h^{-1} takes approximately 2.2 days to travel 1 AU. A cosmic ray proton with 10^{20} eV of energy ($1 \text{ eV} = 1,602 \cdot 10^{-19} \text{ J}$) will travel 1AU in 9.2 minutes. To travel a distance equal to the length of the Earth's equator, modelled on a sphere 12,742 km in diameter, an electromagnetic signal will need only 0.13 s.

Methods and results of physical economics

Introductory notes

The Lausanne School of Economics and the Cambridge School of Economics were among the first schools of economics to systematically describe and analyze economic processes using methods and models of non-relativistic theoretical physics, especially those of mechanics and thermodynamics (Marshall, 1890), (Jaffé,



1965), (Walras, 2003), (Holman, 2005), (Zeithamer 2012, a), (Zeithamer 2012, b). Both of these schools of economics laid the foundations for a new field of science that incorporates the current state of knowledge of basic research in the areas of physics, economics, sociology, neurophysiology and biophysics and is known as physical economics. The term physical economics is used in the book title “Econophysics and Physical Economics”, authored by Peter Richmond, Jürgen Mimkes and Stefan Hutzler (Richmond, Mimkes & Hutzler, 2013).

Another significant cornerstone of physical economics was laid in the late 1930s in the United States with the discovery of the empirical law of retail gravitation, formulated by prof. John William Reilly and inspired by Newton’s law of gravity (Reilly, 1929), (Reilly, 1931). In conjunction with the law of retail gravitation, we should note that it was also used in a heuristic manner to formulate the law of demographic gravitation (Zipf 1946), (Zipf 1949), (Stewart, 1948).

A major milestone in the historical development of physical economics is econophysics, the first theses of which were based on the physics of the early twentieth century. At the turn of the millennium, this research crystallized into a comprehensive set of applications of statistical physics in economics, laying the foundation for the new scientific field, i.e. econophysics (Mantegna & Stanley, 1999), (Zeithamer, 2012 a), (Zeithamer, 2012 b), (Stanley, 2013).

The latter twentieth and early twenty-first centuries are periods in which several Czech economists made significant contributions to the advancement of physical economics. This group of authors includes, for example, prof. Pavel Hrubý and Ing. Jaromír Kálal (Hrubý & Kálal, 1974) and prof. František Drožen (Drožen, 2008).

Axiomatic theory of a stationary field of retail gravitation

Reilly’s discovery of the phenomenon of retail gravitation at the turn of thirties and forties poses a fundamental question for physics: Is it possible to theoretically derive the law of retail gravitation from Newton’s law of gravitation? An affirmative answer to this question is given in references (Zeithamer, 2015 b) and (Zeithamer, 2016 a), (Zeithamer, 2016 b). This response not only demonstrates the importance of Reilly’s discovery for economics and physics, but also with respect to consilience.

This work assumes that preferences exhibit the characteristics given by the following axioms:

- I. 1. Axiom of reflexivity;
- I. 2. Axiom of completeness;
- I. 3. Axiom of transitivity;
- I. 4. Axiom of continuity;
- I. 5. Axiom of convexity;
- II. 1. Axiom of non-satiation (Never Get Enough).

This work uses an ECEF Cartesian frame of reference Σ , the origin of which is located at the gravitational center of the Earth with axes fixed to the geoid (Earth-Centered, Earth-Fixed frame of reference). For the description of retail gravitation this coordinate system is a sufficiently accurate approximation of the inertial coordinate system (see references (Votruba, 1977), (Kuchař, 1968), (Burša & Kostecký, 1999), (Leick, 2004)).

Let A be a city on the geoid with population P_a . Because retail flows are realized in three-dimensional space and time, we define the stationary potential of retail gravitation of city A by the relation

$$\varphi(x, y, z) = \varphi(D_a) = \varphi(A, E_A) \frac{N_a}{D_a}, \quad (1)$$



where D_a is the distance of the observation point from city A measured along the geoid. If the distance measured along the geoid is such that the geoid curvature can be neglected, then the distance of the observation point from city A is given by the relation $D_a = \sqrt{(x - x_A)^2 + (y - y_A)^2 + (z - z_A)^2}$, where x, y, z are the coordinates of the observation point and x_A, y_A, z_A are the coordinates of city A;

$\vec{r} = (x - x_A)\vec{i} + (y - y_A)\vec{j} + (z - z_A)\vec{k}$ is the position vector of the observation point, from which retail trade is attracted along the geoid in the direction of city A, or to mass point A; $\vec{i}, \vec{j}$ and $\vec{k}$ are orthogonal unit vectors. Proportionality constant $K_a(A, E_A)$ is expressed in units $\frac{\text{c.u.}}{\text{pers.} \cdot \text{m}^2}$, where c.u. = currency unit, m^2 = square meter, pers. = person; A is mass point with coordinates x_A, y_A and z_A , i.e. mass point A depicts city A; E_A – is an economic facility of city A; N_a – is the number of long-term economically active adult inhabitants in city A at time t . Vector field $\vec{K}_a$ of the intensity of retail gravitation is determined by the negative gradient of potential of retail gravitation Φ_a , i.e. $\vec{K}_a = -\text{grad} \Phi_a$. This means that the magnitude K_a of the intensity vector of retail gravitation is given by the relation $K_a = \left| \text{grad} \Phi_a \right| = \frac{N_a}{D_a^2} K_a(A, E_A)$.

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retail gravitation is given by the relation $K_a = \left| \text{grad} \Phi_a \right| = \frac{N_a}{D_a^2} K_a(A, E_A)$.

For the intensity vector of retail gravitation the following relations apply

$$\text{div} \vec{K}_a = 0, \quad (2)$$

$$\text{rot} \vec{K}_a = 0, \quad (3)$$

and the potential of retail gravitation is obtained by solving the Laplace homogeneous partial differential equation

$$\Delta \Phi_a = 0. \quad (4)$$

Any vector field of retail gravitation $\vec{M}_a$ can be considered the superposition of two fields, one of which is

determined by scalar potential while the second is determined by vector potential $\vec{A}$. Let us designate the field of retail gravitation determined by scalar potential Φ_a as $\vec{K}_a$ and the field of retail gravitation determined by vector potential $\vec{A}$ as $\vec{L}_a$, then

$$\vec{M}_a = \vec{K}_a + \vec{L}_a, \quad (5)$$

this means that the vector of retail gravitation at the observation point is expressed by the relation

$$\vec{M}_a = -\text{grad} \Phi_a - \text{grad} \vec{A}$$



rot

$$\vec{A} . \quad (6)$$

The first summand in relation (6) determines the amount of retail trade that can be attracted to city $\vec{A}$ by a single inhabitant who is at the observation point. The second summand in relation (6) determines the amount of retail trade that can be relocated from city $\vec{A}$ to the observation point per single inhabitant found at the observation point. The presented theory of a stationary field of retail gravitation implicitly contains axiom III: 1, which concerns the continuity of the field of retail gravitation, i.e. the scalar and vector stationary potentials are continuous functions of spatial coordinates.



Binary principle of correspondence

A comparison of the analytical structure of economics and the analytical structure of non-relativistic theoretical mechanics has led to the following conclusion: path s traveled by a body over time t corresponds with price n of the commodity at time t , i.e. $n(t) \leftrightarrow s(t)$ for $t \in [0, \infty)$. There is a fundamental difference between the real functions of real variable t “commodity price” $n(t)$ and “the path traveled by the body” $s(t)$. The path traveled by the body is a non-decreasing real function of time, but the commodity price may over certain time intervals increase or decrease as a function of time. The first derivative of path s according to time t , i.e. $\frac{ds}{dt}(t)$, is the path traveled by the body over a unit of time, called the instantaneous magnitude of velocity of the body. A change in commodity price over a unit of time is the first derivative of commodity price n over time t , i.e. $\frac{dn}{dt}(t)$. For the time being in this work, a change in commodity price over a unit of time is called the “tempo of commodity price change” or “price tempo”. The change in commodity price over a unit of time may be positive, zero or negative, while a change in the path per unit of time is nonnegative (positive or zero). The second derivative of the path of the body over time means the first derivative of the velocity of the body is a change in the velocity of the body over a unit of time, called the acceleration of the body. The second derivative of commodity price over time means the first derivative of price tempo over time and in this work is called “acceleration of commodity price”, or price acceleration, or “velocity of price tempo”. The third derivative of the path of the body over time, i.e. the first derivative of the acceleration of the body over time is the instantaneous magnitude of jerk of the body (body jerk). The third derivative of the commodity price over time means the first derivative of the price acceleration, or price jerk (Zeithamer, 2015 a). The economic significance of price jerk is the change of price acceleration over a unit of time. The fourth derivative of the path of the body over time is, from a physical perspective, the change in magnitude of jerk of the body over a unit of time (i.e. also the speed with which body jerk changes). There is no established Czech term for this, but in electrical engineering the fourth derivative of a signal is often called the signal vibration. The fourth derivative of commodity price over time, $\frac{d^4n}{dt^4}(t)$, that

expresses the change in commodity price jerk over a unit of time is the tempo of price jerk, or price vibration (quake) or commodity pricequake. The fifth derivative of the path of the body over time means the physical change in speed of body jerk over a unit of time, or the acceleration of the body jerk. The fifth derivative of commodity price over time is the economic change in tempo of commodity price jerk over a unit of time, or price crackle.

In this section of the work it is necessary to mention the following notes:

- 1) In theoretical physics and applied physics the physical quantities of speed, acceleration and jerk are vector quantities. This pertains to railway engineering, construction of machinery, civil engineering and aviation engineering.
- 2) This work uses the scalar meaning of price. An article devoted to the vector meaning of price is being prepared for publication.
- 3) Two of the first physicists to introduce the term jerk into Czech professional terminology were professors Šindelář and Smrž (Šindelář, Smrž & Beřák, 1977).

Conclusion

Basic Czech research into the principle of correspondence between physics and economics began in the early 1970s. Pioneers of this basic research in the Czech school of economics included prof. Dr. Ing. Pavel Hrubý and his co-worker Ing. Jaromír Kálal. With periodic breaks of varying length, the research have continued to the present day and is steadily incorporating current findings obtained in the field of Sun-Earth relations. The experimental work has resulting in numerous studies, the most important of which are cited in this work;



study authors are prof. Dr. Ing. Pavel Hrubý, Ing. Jaromír Kálal doc. Ing. František Drozen, CSc. (VŠE in Prague), prof. Ing. Jiří Pospíšil, CSc. (ČVUT in Prague), Ing. Tomáš Zeithamer, Ph.D. (VŠE in Prague). (Hrubý & Kálal, 1974), (Drozen, 2008), (Pospíšil, 2013), (Zeithamer, 1986, 1988, 1990, 2012 a, 2012 b, 2013, 2014 a, 2014 b, 2015 a, 2015 b, 2016 a, 2016 b), (Zeithamer & Pospíšil, 2015, 2016 a, 2016 b).

The transfer of mass, momentum, jerk, energy and charge in Sun-Earth relations is the fundamental process that affects the majority of communication technologies we encounter on dynamically changing markets. Therefore, it is essential for the scientific community to understand the axioms of market dynamics in its basic research, and based on this understanding play an active and independent role in the changing business environment.

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References

- [1] Burša, M. & Kostecký, J. (1999). *Space Geodesy and Space Geodynamics*. Prague: Czech Republic, Ministry of Defence of the Czech Republic.
- [2] Drozen, F. (2008). Modelling of price dynamics and appreciation. *Ekonomický časopis (Journal of Economics)*, 56(1), 1033 – 1044.
- [3] Holman, R. at al. (2005). *Dějiny ekonomického myšlení*. 3rd ed., Prague: Czech Republic, C. H. Beck. (in Czech)
- [4] Hrubý, P. & Kálal, J. (1974). *Methods of Economic Time*. 1st ed., Prague: Czech Republic Institute of the Czech Committee for Scientific Management. (in Czech)
- [5] Jaffé, W (Ed.) (1965). *Correspondence of Léon Walras and Related Papers*. Vol. I, Amsterdam: North-Holland Publishing Company.
- [6] Kármán von, T. (1967). *The Wind and Beyond*. Boston: Little, Brown and Co.
- [7] Kuchař, K. (1968). *Principles of General Relativity Theory*. Prague: Czech Republic, Academia (in Czech).
- [8] Leick, A. (2004). *GPS Satellite Surveying*. New York: Wiley.
- [9] Marshall, A. (1961). *Principles of Economics*. Vol. 1, Vol 2 (notes), 1st ed., London: UK, Macmillan.
- [10] Mantegna, R. N. & Stanley, E. N. (2000). *Introduction to Econophysics: Correlations and Complexity in Finance*. Cambridge: UK, Cambridge University Press.
- [11] Pospíšil, J. (2013). Possible Uses of Newton's laws of Motion in Commodity Price Theory and the Training of Expert Appraisers at Universities. *Procedia – Social and Behavioral Sciences*, 106, 2071 – 2079.
- [12] Reilly, W. J. (1929). Methods for the Study of Retail Relationships. *University of Texas Bulletin*, No. 2944, Nov.
- [13] Reilly, W. J. (1931). *The Law of Retail Gravitation*. 1st ed., New York: USA, Knickerbocker Press.
- [14] Richmond, P., Mimkes, J. & Hutzler, S. (2013). *Econophysics and Physical Economics*. Oxford: UK, Oxford University Press.
- [15] Siscoe, G. (2007). Space Weather Forecasting Historically Viewed through the Lens of Meteorology. In: V. Bothmer, I. A. Daglis (Eds.) *Space Weather – Physics and Effects*, Berlin: Springer.
- [16] Stanley, E. N. (2013). Interview of H. E. Stanley on Econophysics. *IIM Kozhikode Society & Management Review*, Sage publication (USA), 2(2), 135-146.
- [17] Stewart, J. Q. (1948). Demographic Gravitation: Evidence and Applications. *Sociometry*, 11(1-2), 31-58.
- [18] Šindelář, V. Smrž, L. & Beťák, Z. (1977). *Nová soustava jednotek*. 2nd ed., Prague: Czech Republic, SPN, p. 108. (in Czech)



- [19] Votruba, V. (1977). *Principles of Special Relativity Theory*. 2nd ed., Prague: Czech Republic, Academia Publishing House (in Czech).
- [20] Walras, L. (2003). *Elements of Pure Economics, or, the Theory of Social Wealth*. 2nd ed., London: UK, Routledge.
- [21] Zeithamer, T. (1986). Úloha fyziky vztahů Slunce – Země ve světové ekonomii. In: V. Mlejnek (Ed.) *Člověk ve svém pozemském a kosmickém prostředí*. Úpice: Czech Republic, Observatory of Úpice. (in Czech)
- [22] Zeithamer, T. (1988). Dynamics of synergetic systems in solar – terrestrial relationships. In: *Proc. of the Symp. on Human Biometeorology*. Štrbské pleso: Slovak Republic, pp.452- 456.
- [23] Zeithamer, T. (1990). Structural stability of the Earth magnetosphere. In: *Proc. Int. Cong. on Geo – cosmic Relations*, 19 – 22 April 1989, Amsterdam. Wageningen: The Netherlands, PUOC, pp. 321 – 326.
- [24] Zeithamer, T. (2012 a). Economic Phenomena from the Viewpoint of the Mechanics of Materials. *Procedia – Social and Behavioral Sciences*, 55, 547–553.
- [25] Zeithamer, T. (2012 b). Analytical Theory of Monotone Commodity State Development with Inflexion. *Procedia – Social and Behavioral Sciences*, 55, 445–450.
- [26] Zeithamer, T. (2013). Possible Uses of Deterministic Equations of Motion in Commodity Price Theory and for Training Appraisers. *Procedia – Social and Behavioral Sciences*, 106, 2063 – 2070.
- [27] Zeithamer, T. (2014 a). Methodology of Theoretical Physics in Economics: The Principle of Correspondence between Economic Variables and Kinematic Variables of Nonrelativistic Mechanics. In: *Proceedings from IX International Conference on Applied Business Research, ICABR 2014*. 06. 10. 2014 – 10. 10. 2014, Talca [online]. Brno: Czech Republic, Mendel University in Brno, pp. 1138–1146.
- [28] Zeithamer, T. (2014 b). The Correspondence Principle in Theoretical Regional Economics. In: *Sborník příspěvků z mezinárodní vědecké konference Region v rozvoji společnosti 2014*. 23. 10. 2014, Brno [online]. Brno: Czech Republic, Mendelova univerzita v Brně, pp. 1016–1023.
- [29] Zeithamer, T. (2015 a). Methodology of Theoretical Physics in Economics: Examining Price Jerk. *Procedia – Social and Behavioral Sciences*, 176, 933–939.
- [30] Zeithamer, T. (2015 b). Methodology of Theoretical Physics in Economics: Vector Theory of Retail Gravitation Law. In: *Proceedings of The International Scientific Conference INPROFORUM 2015*. 05. 11. 2015 – 06. 11. 2015, České Budějovice [online]. České Budějovice: Czech Republic, University of South Bohemia, pp. 199–203.
- [31] Zeithamer, T. (2016 a). Methodology of Theoretical Physics in Economics: Non-relativistic Physics as rediscovered approach to economics. In: *1st International Conference on Lifelong Learning and Leadership for All*. 29. 10. 2015 – 31. 10. 2015, Olomouc [online]. Sakarya: Turkey, Sakarya University, pp. 160 – 167.
- [32] Zeithamer, T. (2016 b). Theoretical Background for the Globalization of Retail Gravitation. In: T. Klieštík (Ed.) *Proceedings of the 16th International Scientific Conference on Globalization and Its Socio-Economic Consequences*, 05 – 06 October 2016, Rajecské Teplice. Žilina: Slovak Republic, University of Žilina, pp. 2482 – 2489.
- [33] Zeithamer, T. & Pospíšil, J. (2015). Newton's Laws of Motion in Commodity Price Theory. In: *Proceedings of the 2nd International Conference on Finance and Economics 2015 – (ICFE 2015)*. 04. 06. 2015 – 06. 06. 2015, Ho Chi Minh City, [online]. Prague: Czech Republic, Melandrium, pp. 265–274.
- [34] Zeithamer, T. & Pospíšil, J. (2016 a). Newton's Laws of Motion in Economics. In: *The 10th International Conference on Applied Business Research (ICABR 2015)*. 14. 09. 2015 – 18. 09. 2015, Madrid [online]. Brno: Czech Republic, Mendel University in Brno, pp. 1165 – 1178.
- [35] Zeithamer, T. R. & Pospíšil, J. (2016 b). Theoretical Background for the Law of Retail Gravitation. In: *1st International Conference on Lifelong Learning and Leadership for All*. 29. 10. 2015 – 31. 10. 2015, Olomouc, [online]. Sakarya: Turkey, Sakarya University, pp. 160 – 167.

- [36] Zipf, G. K. (1946). The P1 P2/D Hypothesis: On the Intercity Movement of Persons. *American Sociological Review*, 11(6), 677 - 686.
- [37] Zipf, G. K. (1949). *Human Behaviour and the Principle of Least Effort: An introduction to human ecology*. Cambridge, Massachusetts, Addison-Wesley Press.



The Management of Student's Virtual Money – Sensibilisation and Learning for Life

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Abstract

The advanced technological age, marketing and society of the abundance in which we live, have a strong influence on the consumption and eating habits of the children. Every day in schools, these little human beings make autonomous choices and their parents, despite seeking to control and know their actions, cannot do it entirely for many reasons. The study was carried out in a group of the fifth grade and their results were subjected to a descriptive and inferential analysis, in which the purpose was to study the relation of some of the variables in question. The conclusions point for example to the parents' lack of knowledge in what concerns the type of consumption and on how their students spend their money. So it can be said that the role of the school in raising responsible citizens in managing their money is a necessary and continuous learning throughout the school life.

Key words: citizenship, consumption, money, health.

Introduction

The development of educational programs for citizenship can prevent phenomena that may have a negative impact on society. It is expected that learning and education for citizenship become a priority. The Charter on Education for Democratic Citizenship and Human Rights Education (2010) points out objectives and guiding lines to the member states in formulating their policies, legislation and practices. In this document it is stated that "every person living on their territory should have access to education for citizenship" (p. 3) and also that "the effectiveness of this learning involves mobilizing numerous agents, including those responsible for policy development, educational professionals, learners, parents, educational institutions, educational authorities, officials, youth organizations, media and communities" (p. 3).

The Somosaguas Institute for Educational Studies refers to education for citizenship as "the need to significantly intervene in the socialization process of children and adolescents to enable the development of their ability to perceive, understand, interpret, and act in society" (Aguilar et al., 2002, p. 12). Afonso (2005) also states that "school must be an organization and a space where you build and live daily citizenship" (p. 16).



At school, students are challenged to discover new skills, new experiences, to overcome limits and to confront risks. Physical, mental and social well-being can only be ensured with proper education. Machado (2015) emphasizes the importance of education of young students as:

a shared responsibility that requires the effort of the whole society represented by those who live with him in the family, at school and in the community and should be seen as an investment in the physical, cognitive and socioemotional of young people and in the future of the country (p. 61).

This author believes that although the basic responsibility is the family, this also applies to school and teachers that, in specific circumstances, may even play a leading role in this.

There is no single way to operationalize it together young people, but there is one aspect in which most theorists and researchers agree: it is needed and more than being a trend or novelty, it is a priority of education. In this study we wanted to cover three dimensions of citizenship: consumer education, financial education and health education.

We are all citizens. We are all consumers and school, as a citizenship space, is also a place of consumption. Associated with consumption comes money. Contemporary societies show a high degree of monetization as satisfying a large part of our needs involves the use of a monetary system and access to money. Santos (2015) states that:

life is influenced by money (or by the lack of money). And, as stated in the popular saying that suggests that 'if you cannot beat it ... join it, it is not possible to escape it. It's better to learn to live with (and without) it (p. 16).

The European Central Bank (ECB) (2009) in a publication about money stated that "money is what money does" (p. 17). That is, money is not what is but what it does. Money is therefore defined by what it does, not by what intrinsically it can be. At school students manage their money becoming themselves economic agents. Regardless of whether or not they have access to the School Social Action (socio-educational support measures for students in households with an unfavorable economic situation), the way students manage their money can have a direct interference with their health. At school they acquire goods and services in most cases without the supervision of an adult.

In the Ottawa Charter (1986) it is stated that "health is built when we simultaneous care for ourselves and for the others, having the ability to make decisions and have control over the circumstances of life itself" (p. 4). We believe that having knowledgeable and economically enlightened students, they are more sensitive to the issue of healthy consumption, and this should be the ultimate goal of all countries. We cannot forget that in our country

the major health problems, in terms of population and public health, are related to inadequate habits and lifestyles, and its prevention or correction depends on changing attitudes and behaviors. We can only achieve this goal if we negotiate and present alternatives, and create habits and options for healthy lifestyles, which are an added value and promote an ethical and socially correct attitude (Cordeiro, 2015, p. 100).

Researching on what young people (children and teenagers) know about money and what they do with it is clearly important, as they have an increasing purchasing power. Furnham and Argyle (2000) report that at this level "schools also play a key role in directly educating and shaping economic behavior" (p. 174) so that young people are informed consumers and responsible users of money.

Method

This study combines quantitative and qualitative techniques. The participating class consisted of 14 students of the 5th grade (nine females and five males). Ten students in the class had School Social



Action (ASE) benefit: six with level A benefit (higher financial support) and four with level B benefit. They all used the schools' card that allows them to enter and exit the school gate and to purchase products in the cafeteria, stationery and reprographics. Throughout the school year, we developed 19 awareness sessions with these students, each lasting 50 minutes. In these sessions we held a set of nine tasks. Data collection in this study was made in the school context and it was based on direct observation of sessions and respective tasks performed in class, as well as other classroom documents. At the beginning and at the end of the investigation, a detailed and quantitative data collection was made regarding all the students' individual expenses. These data were imported from GIAE program (School Administration Integrated Management). For all the materials that were made, and so that we could distinguish them, we've created an identification for each student (ID) that consisted of the letter "s" followed by the number that corresponded to the student's position in the class list, for example a1 is the first student in the class list. There were no s9, s11 and s16.

Findings

From the data collected, it was possible to perceive some of the students' trends in terms of money expenditures and parental monitoring that were fundamental to the preparation of the awareness sessions. Thus, with respect to the money spent by the students, we found that most of the money spent by the class was at the school bar, followed by the cafeteria, stationery and reprography (see Figure 1).

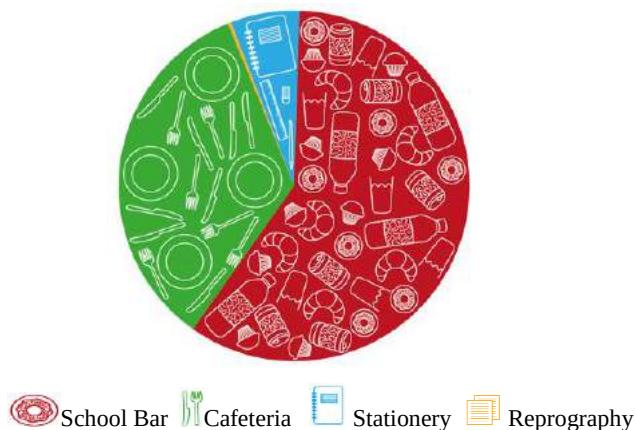


Figure 1. Distribution of student expenditures by sectors

At the school bar, the snack choices that students make are not very healthy and water consumption is low. In Figure 2 are represented the foods consumed by a student over the first term (September to December – 13 weeks) by color. With red color are entirely unhealthy foods (stuffed croissants, cakes, chocolates, sweets, ice cream), with yellow color are less healthy foods (croissant with cheese, butter, ham or mixed, snacks, juices) and with green color are healthy foods (ham and cheese sandwich, milk, yogurt and plain bread, with butter, cheese or ham). The color blue represents the water consumed. This representation has 13 lines, corresponding to the 13 weeks of the first term. Thus the first line corresponds to week 1, the second to week 2 and so on, from the top down to the last line to which week 13 corresponds. As we can see in the picture, this student in the second week (second line) consumed 24 foods. Of these, 11 were entirely unhealthy, seven were less healthy and five were healthy. There is only record of one bottle of water consumed during this week. By the thirteenth week, he had only consumed five foods. In a total of 198 foods consumed, 102 were entirely unhealthy (51.51%), 57 were less healthy (28.79%), 21 were healthy (10.61%) and 18 bottles of water (9.09%) were consumed. The red and yellow colors occupy approximately 80% of the students' consumption, which is a worrying result.

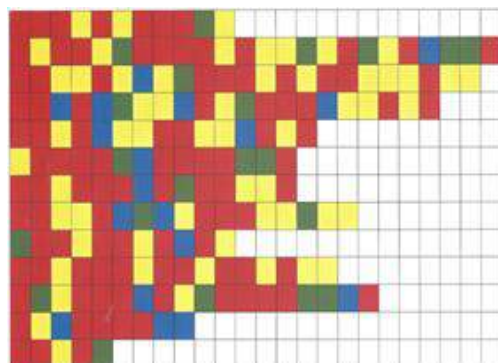


Figure 2. Representation of the foods consumed by a student of the class at the school bar

Another interesting fact that could be observed was the absence of a positive correlation between the financial possibilities of the students' families and their money management. It was expected that students with more financial possibilities would have more expenses, which was not the case. In Figure 3 we present a more detailed analysis of the expenditure performed at the school bar, through which we wanted to understand if there was any relationship between the ASE benefit and the consumption made at the bar. By analyzing the Figure 3 box plot regarding the expenditures of families with or without ASE benefit at the bar, we can see that: (1) the minimum spending values of students with level A benefit are higher than those of students without any ASE benefit, as also the maximum spending values are much higher than those who have level B benefit or no ASE benefit; (2) 25% of students with a level A benefit spends on average more than 25% compared to students without ASE benefit; and (3) 25% of students with level A benefit spend more than any of the students with level B benefit or no ASE benefit.

Given that the ASE benefit is assigned to students from deprived households, it was expected a reduction in terms of spending by these students, but the mismanagement of money is also undoubtedly a matter of family culture.

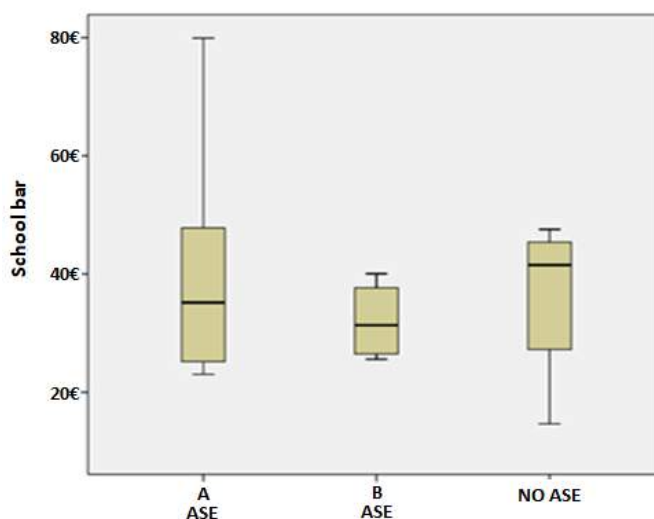


Figure 3. Analysis of students' expenses with and without ASE benefit

After analyzing the data collected with the students, the development of this project was started. The students accepted the challenge of reflecting on their consumption, recognizing the benefits that it would bring them: more health and less expenses. As it can be seen in Figure 4, from the moment the project



began at week 9, the consumption of the class began to decrease. This decrease was more abrupt between week 9 and week 10 than in the following ones, involving a rate of decrease of about 20€ in the first week mentioned and of 11€ in the following ones.

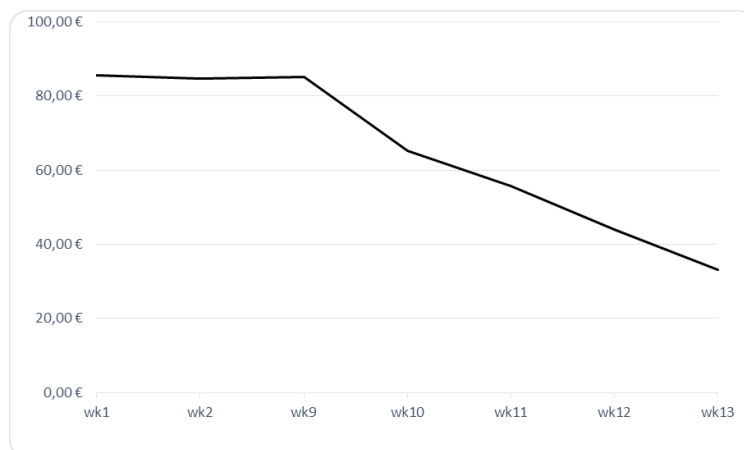


Figure 4. Money spent weekly by the class

In fact students began to consume less and better and also to spend less. Table 1 shows the percentages of foods consumed of each of the colours: red (Red), yellow (Ye), green (Gr) and Blue (Bl), by students in the first term of the school year (named with a 0, for example, Red0 is food with a red colour in the first term) and then third term (named with a 1, for example, Red1 is food with a red colour in the third term). The students are identified by s1, s2, ... For example by observing the first line of the Table 1, we found that the student s1 consumed too much unhealthy foods (45%) in the first term (Red0) but in the third term (Red1) the consumption of the same kind of food dropped significantly rising to 11%.

Table 1. Type of food consumed

ID	% Red0	% Red1	% Ye0	% Ye1	% Gr0	% Gr1	% Bl0	% Bl1
s1	45	11	31	52	16	22	8	15
s2	15	15	18	15	58	60	10	10
s3	11	0	10	10	73	90	6	0
s4	14	34	23	21	58	28	5	17
s5	23	25	29	25	44	25	5	25
s6	38	0	38	33	5	67	19	0
s7	35	25	9	0	33	50	23	25
s8	21	14	34	71	38	14	8	0
s10	39	0	32	20	19	60	10	20
s12	22	0	13	0	35	60	31	40
s13	43	11	46	33	8	56	3	0
s14	52	44	29	28	11	17	9	11
s15	24	7	29	20	30	67	17	7
s17	33	6	20	6	36	81	11	6
Average	29	14	26	24	33	50	12	13

In average the consumption of unhealthy foods by the students decreased 16% (Red) and the consumption of less healthy foods (Yellow) also decreased by 2%. The consumption of healthy food (Green) increased from 33% to 50% and water consumption (Blue) increased by 1%.



In what concerns the students' average daily expenses, Figure 5 shows the variation of the same ones during the school year: on the first term (september to december), second term (january to april) and third term (may and june). As we can see, all the students spent less on the second term comparing to the first term, excepting one student (s2) who increased his daily expenses and another student (s5) that maintained the same expenses. Comparing the second and the third term, we noticed a slight rise within five students, one of them maintained the same expenses, and eight of the students kept spending even less money. The five students who increased their expenses, three of them (s7, s10, s14), kept their expenses lower regarding the first term, one of the students equalled the average spending of the first term (s15) and only the student s1 who, in the second term, had managed to reduce expenses, in the third term spent more money with an average higher value comparing the first term. In general, we considered these results to be very satisfactory and they reflect the positive effect of the tasks developed among the students throughout the school year.

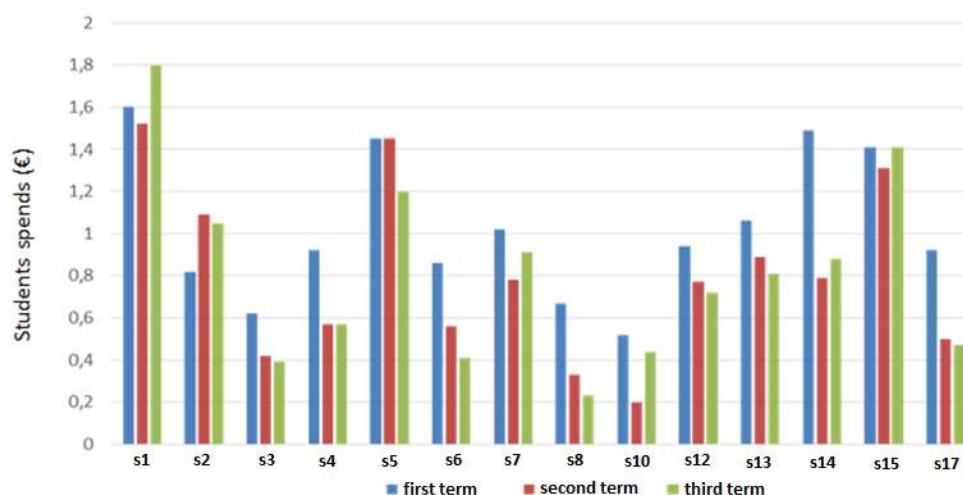


Figure 5. Students' average daily expenses

Regarding the loading of students' cards¹, we tried to understand if there was any relation between the money the students had on the card and their expenses, that is, if towards any of the types of loading categorized, the students showed a better money management. We named by category 1, all the loadings less than 5€; Category 2 the loadings with the exact amount of 5€; Category 3 for loadings of values higher than 5€ and less than 10€; Category 4 exact amounts of 10€ and lastly category 5 for loadings higher than 10€. Table 2 shows the average amount of money spent by days in each category.

Table 2. Average amount of money spent by categories

	Categories				
	1	2	3	4	5
Average €/d	0.61	1.01	2.46	1.44	1.46

The most efficient loading category, until week 13, for the students, that is the week in which they spent less, was the first week showing amounts below 5€. In this category the students spent an average of 0.61€ per day (see Table 2). Category 1 follows category 2 and then category 4. Finally, in this order

¹ In school students have a student card that is like a bank card with money for purchases in school.



comes category 5 with loadings higher than € 10 and category 3, with loadings between 5€ and 10€ with a daily average of 2.46€.

Conclusions and Recommendations

In view of the characteristics and mainly all the weaknesses presented, we conclude that all the concerns about citizenship education made in the literature review are justified. Education for consumption, health and the use of money by pupils in schools is required. Younger people need to learn to use money, to possess it, to spend it and to spare it.

In this regard educators should promote awareness and reflection on the use of money with their students. These are able to change students' behavior and attitudes towards consumption, saving money and health. Knowing how to think about your consumption, your health, your expenses, knowing the reasons for them and getting them to know your needs and those of others, it's crucial.

It is recommended that children do not have a lot of money on virtual cards to avoid getting accustomed to spending it unreasonably. When they have more than they need, they easily spend it on superfluous consumptions.

It is good to get the student to plan and to know what they eat and what they spend in school. Knowing how to choose what they need, what is healthier. Teach them to take care of their health, to prepare for the future, for life.

Helping them to live with daily self-discipline is essential.

The capacity for self-control allows the human being to own himself, but in order to achieve it he has to train, to learn in the most ordinary things of daily-life, including his expenses in school.

It is imperative that parents, guardians (primary caregivers) develop criteria to support their learners to use money properly and to save it.

Getting children to think about why they spend and getting them to know their real needs is critical for the younger ones. Students have to learn how to manage the small amounts they receive. Knowledge implies practice. If we want the younger ones to know how to manage money, they have to practice it, this knowledge has to be taught through experience.

It is advisable to take every opportunity so that the student understands the value of money, what is the money for, how much it costs parents and caregivers to earn it.

Thus, from an early age, parents have to involve their children in the family budget and request their collaboration in their management. Money does not fall from the sky, and realizing that your gain implies effort and work is critical for the young. At school, students should not have too much money to avoid getting used to wasting it. It is vital to save the money that parents give them.

References

- Afonso, M. R. (2005). *Construir e viver a cidadania em contexto escolar*. Braga: Porto Editora.
- Afonso, N. (2005). *Investigação naturalista em educação: Um guia prático e crítico*. Lisboa: Asa Editores.
- Aguilar, T., Callejo, M., Chacón, I., Juarros, O., Molina, E., & Velasco, C. (2002). Educación para la ciudadanía - Un enfoque basado en el desarrollo de competencias transversales. *Instituto de Estudios Pedagógicos Somosaguas*, 67. Madrid: Editorial Narcea.
- Carta de Ottawa (1986). In *Primeira Conferência Internacional sobre Promoção da Saúde*. Accessed on <http://cmdss2011.org/site/wp-content/uploads/2011/07/Ottawa.pdf>
- Conselho da Europa (2002). *Recomendação 12 do Comité de Ministros aos Estados-Membros do Conselho da Europa sobre educação para a Cidadania Democrática*. Accessed on <https://infoeuropa.eu/rocid.pt/files/database/000034001-000035000/000034745.pdf>



- Conselho da Europa (2010). *Carta do Conselho da Europa sobre a Educação para a Cidadania Democrática e a Educação para os Direitos Humanos*. Accessed on http://www.dge.mec.pt/sites/default/files/ficheiros/edc_charter2_pt.pdf
- Cordeiro, M. (2015). *Crianças e famílias num Portugal em mudança*. Lisboa: Fundação Francisco Manuel dos Santos
- Furnham, A. & Argyle, M. (2000). *A psicologia do dinheiro*. Lisboa: Sinais de Fogo.
- Gerdesneier, D. (2009). *A estabilidade de preços é importante porquê?* Frankfurt: Banco Central Europeu.
- Machado, M. (2015). *Adolescentes*. Lisboa: Fundação Francisco Manuel dos Santos.
- Santos, M. (2015). *O Dinheiro*. Lisboa: Fundação Francisco Manuel dos Santos.



An Investigation Into Gamification as Employee Training Tool: Engagement and Game Components

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Abstract

The use of games with a serious purpose, also called gamification, is a new approach to employee training and adult education. This paper explores gamification as a modern approach to adult education which can increase engagement in training process and thus ensure better learning. The research reveals a relationship between the usage of gamification as employee training tool and the performance results as well as employee engagement in training and organisation simultaneously looking at components of effective games. This research is based on case study strategy and is based on data from participants survey and sales results before and after the training. The results show that sales results are not related to gamified training, however, use of gamification elements significantly increase employee engagement in both - training and organisation. The most effective game components for sales training games are the exchange of experiences, possibility to earn points and feedback.

Keywords: Adult education, Gamification, Employee engagement

Introduction

In the light of technological progress, globalisation and generational shift, when people account for much of differences in performance among firms (Mollick, 2012), companies are looking for new solutions to engage employees and ensure that they work with greater enthusiasm and contribute to the achievement of business goals. Human capital is widely recognised as a potential source of competitive advantage (Campbell, et al., 2012), therefore employee training and development seem to be one of the keys to improve the performance of the firms. Recently, more and more companies are using different gaming technologies, thereby involving both customers and employees and changing their behaviour (Roberts, 2014). The use of games with a serious purpose is a new approach to training and development which can be used to generate learning and new insights in adult education.

Why gaming and game elements are so popular nowadays? Video games have gained enormous popularity all over the world. Video game industry revenue has surpassed the Hollywood. Looking at the statistics, the average age of the player is 37 years, 42% of players are women (Brownhill, 2013). According to 2013, "State of Online Gaming Report" data, the number of people playing games on computers reaches 1.2 billion, which is approximately 17% of all the people of the world. Also surprising are facts related to time people spend playing video or computer games: more than half a billion people play at least 1 hours a day. While in the US, 5 million people are spending more than 40 hours a week playing games that can be likened to a full-time working week (Kim, 2015). We live in a society which is becoming increasingly obsessed with games. To attract new audience and engage employees, business is thinking about new reward system, positive reinforcement and feedback received through mechanisms such as points, badges, levels, and in the creation of competition and challenge (Zichermann & Cunningham, 2011). The game industry has found a way to make the game a commodity and variety of platforms and channels are made available (Egenfeldt-Nielsen, et al., 2011). Data shows that there is a significant relationship between the following: the more people play games outside of working hours, the greater the likelihood that they engage in games and while work (Mollick & Rothbard, 2014). Furthermore, Millennium



generation has entered the labour market and this generation is used to spend part of their free time playing digital football or participating in battles (Kastner, 2013), so it can be expected that gamification will engage them in their working life as well as in education.

Several authors mention employee training and adult education as area where gamification can be successfully implemented (Huckabee & Bisette, 2014; DuVernet & Popp, 2014). American Society for Training & Development research showed that 23% of organisations use gamification in employee training and 99% of them are confident about the effectiveness of the method (Oakes, 2014). The number of organisations using gamification in the training of employees is increasing. For example, use of gamification in sales training has increased from ~ 8% in 2012 to ~ 18% in 2013 (DuVernet & Popp, 2014).

Negative aspects of gamification as training and education tool should be considered as well. Side effects can occur due to simplified game design, unattractiveness of rewards, un-relatedness with organisation's aims and poor execution of the training project (Callan, et al., 2015; Kastner, 2013). Despite growing popularity and application, the research on effects of gamification are still scarce, moreover, it is not clear which components of serious games have impact on training and learning process and end results. What is the impact of the use of gamification as an employee training tool on performance differentials and employee engagement? How impactful games should be designed? What should be the components of serious games? The aim of this research is threefold. First it aims to reveal relationship between the usage of gamification as employee training tool and performance results, second it assesses the impact on employees' engagement in organisation and training process. Finally, the components of sales game as training tool are assessed and the most important ones identified.

The paper is designed as follows. First theoretical background of this research is presented and three hypotheses and one research question formulated. Then methodology is described and results presented, followed by conclusions and recommendations.

Employee training– gamification as a new tendency

One of the most important keys to organisational success are competent, knowledgeable and developmental employees. One of the main objectives of human resource management is to ensure that the organisation have the necessary talent, with the appropriate skills and knowledge (Armstrong & Taylor, 2013). The process of staff training is a critical aspect of successful HR management and the main task is to ensure the efficiency and effectiveness of staff (SHRM, 2013). Harrison claim that the main objective of learning and development is to help achieve common progress and to promote the learning and knowledge that helps the organisation to realize its business goals through developing the potential of the individuals (Harrison, 2009).

Harward (2015) mentions the following hot tendencies for training and development: story building – the use of improvisation skills helps participants to play roles and prepare them to face job situations; use of data – to analyse the data as part of training programmes; use of Games to reinforce the learning experience; smaller size of the training groups to make them available for various ages and generations of participants (Harward, 2015). Burton among 2016. actual trends mention elasticity, e-learning, and diversity of elements (Burton, 2016). Similarly, Whyte suggest that organisations should look for new trends to ensure training effectiveness and among future tendencies mention the following: small group size, e-learning and mobile learning, and gamification (Whyte, 2016). All the above-mentioned authors mention gamification among emerging trends available for organisations in employee training and development.

The most important challenge for trainers and organisations is to ensure that the new knowledge and skills are put in use in work situations. Dale (1946) states that the best effect from learning occurs when several methods are combined and participants have possibility to obtain real experience and use the skills immediately. Collins



(2016) mentions emotional involvement as one of the most useful tools. In emotionally safe environment training participants will experience the positive feelings, which will create the memories, and will help to learn the lessons better (McGinty, et al., 2013). Several studies have been conducted that suggests that playing fosters the flexibility of mind leading to revealing several potential solutions to achieve the desired results.

For the first time, the concept of “*gamification*” was used only in 2002, but in 2010 it became widely popular. There are several similarities with gamification and games, but this is not the same. Gamification is about transformation of game related elements, such as aims, rules, competition and feedback system, and voluntary participation, to organisational environment. Kim (2015) explains that games create imaginary word which is different from real one, however, gamification add imaginary element to real world. Gamification is more than a game, it is application of game design elements in unrelated to the game context (Brownhill, 2013). Gamification means using such elements as challenge, excitement, competition and rewards to make ordinary events more interesting (Sarangi & Shan, 2015). According to Kapp (2014), gamification is a process of using game elements, mechanisms and thinking to motivate people and to promote learning or problem solving.

Gamification is used in many different human resource management areas, including talent management, training and development process and performance management (Sarangi & Shan, 2015). Meister (2015) suggests that gamification is 75% psychology and 25% technology and can be applied to real processes in organisations like selection, learning and development (Meister, 2015). Brownhill see future of gamification as more related to development of soft skills and behaviour (Brownhill, 2013). Gamification is widely applied in education to create inspiration (Holmes & Gee, 2016). Gamification can be used in any person related process to involve and improve experience (Callan, et al., 2015). Still research on effectiveness of gamified training and learning sessions is contradictory and there is a need for more research related to the assessment of use of gamification in training programmes. Therefore, further the methods traditionally used for the assessment of training programmes are described.

Assessment of training and development programmes

Assessment of training and development programmes can be done through observation or translated to numbers (Armstrong & Taylor, 2013). The assessment can be performed in four levels: employee reaction - did they like the training; knowledge - did they acquired the necessary knowledge, usually done through tests; behaviour - did they change their behaviour, it is recommended to measure before and after the training; and result - the impact on employee performance and organisational performance (Kirkpatrick & Kirkpatrick, 2006). Brinkerhoff recommend measuring number of employees who apply the gained knowledge either fully, partly or not at all (Brinkerhoff, 2006). Several researchers come to conclusion that there is no direct link between employee feedback on training and after training job results. Moreover, Willyerd and Leone observed that training environment and afterwards working environment impact the results more (Willyerd, et al., 2014; Leone, 2015). This was supported by Brinkerhoff and Mooney who found that such environmental aspects as management support, daily routine, and organisational culture has significant impact on applicability of training results (Brinkerhoff & Mooney, 2008).

However, measuring the impact of training on employee performance is still one of the most frequently used assessment methods for training programmes. Thus, the first hypothesis is formulated as follows:

Hypothesis 1: Use of gamification in sales employee training programme is positively related to sales results.

Still it should be noted that training is not a remedy for all performance problems, for employees who already have the necessary skills, but are not motivated to apply them in full, training is not a solution (Mager, 2008). Alongside with direct impact on performance results, other gains from good training programmes include increased engagement and changing behaviour.



Gamification and employee engagement

According to Kapp (2014), the main fundamental principle of the game is to increase engagement and motivation of the participants. No doubt that employee engagement is desired outcome of any training and development programme, since engagement has significant impact on organisational results (Harter, et al., 2013). Engaged employees exhibit positive behaviour and attitude towards work, they remain loyal to the organisation and work effectively for it (Harter, et al., 2002). Engaged employees feel part of work and organisation, as well as are motivated to achieve high results of the work (Armstrong & Taylor, 2013). Similarly, Reilly suggest that engaged employees are working with passion and feel closely linked to the company, they are the ones that generate innovation and drive organizations forward (Reilly, 2014).

A challenge for businesses today is to find innovative and effective ways to engage employees. Gamification has drawn attention due to a different approach. It helps to create and maintain relationships with employees, as well as interest and enhance learning. Gamification helps workers to be inspired and maintain confidence that the results achieved and the performance is their own merit and responsibility. Innovative and well implemented gamification process may reduce the burn-out syndrome and to promote work engagement (Sarangi & Shan, 2015). From a psychological point of view, the involvement of participants in gamification is achieved through internal motivation and goal-setting and mutual competition (DuVernet & Popp, 2014). When participants are involved in training and the sharing of experience, they feel good and, if trainers respects the ability to think and to share their thoughts, as well as let employees to apply the experience, players are full of energy, they have fun and they are at the same time involved (Pike, 2008). Given arguments lead to the second and third hypotheses:

Hypothesis 2: Use of gamification in employee training programme is positively related to employee` engagement in training.

Hypothesis 3: Use of gamification in employee training programme is positively related to employee work engagement.

Elements of the effective game

In relation to employee training and development, “game” means structured and specially developed training methodology which is designed to help participants to change their behaviour (Hughes & McCoy, 2015). Story, feedback, mystique are game elements which help to capture attention, remember and foster application of knowledge (Kapp, 2014). Gamification can help to avoid routine and foster creativity and ability to look at complicated problems from different angle (Oravec, 2015). Jensen (2012) consider that there can be no unified form of a good game, but there are several common characteristics: feedback motivate players to make informed decisions; focus on cooperation in setting common objectives of the game; rituals; sound games shall consider the difficulties the players face and challenge, when players are ready; user friendly; all good Games give rewards, however only some include fun (Jensen, 2012).

Collins (2014) pinpoint that six basic principles ensure effectiveness of gamification in training and development: *mission, environment, challenge, choice, consequences and competition*. The motivation to learn new skills in the full amount is based on the condition that it will be useful for the fulfilment of the mission. Game environment shall be so filled that participants can learn by doing. Participants learn new skills due to experiencing the results of their actions. New skills are acquired because of overcoming various challenges. These challenges must be proportionated with increasing difficulty, not getting bored to participants. In any good play, participants learn from mistakes, so it is important learning environments include numerous false choices. The analysis of the consequences enables the participants to create knowledge how to do better and why the choice didn't work. Competition is important as participants feel proud about received awards and points, it is increasing motivation to build new skills (Collins, 2014).

Brownhil (2013) in turn found four game components which help to strengthen the involvement of the employees: 1) continuous feedback and progress assessment; 2) clear success criteria, award and even public



recognition, which is achieved using the badges and points of remuneration; 3) permission to make mistakes, which is the traditional taboo in corporate culture, but allowed in the context of game; 4) the opportunity to collect and analyse performance data (Brownhill, 2013).

Jensen (2012) see gamification as the next “big hope”, however, warns that too often it is used only to serve the system without any value for employee engagement. To truly engage, the participants’ experience should be in the first place, achievements must be personally significant (Jensen, 2012).

Thus, the following Research Question is proposed: *Which game components are better associated with engagement into training process and work engagement?*

A confirmation of the first three hypotheses would favour the application of gamification as strategic HR tool for employee training and development. Whereas, the answer to the research question would provide useful insights for game design.

Method

To achieve the aims of this research a case study strategy and mixed methodology was chosen. Organisation from banking sector in Latvia which implement gamification in sales employee training since final quarter of 2014 was selected. Total amount of sales people employed in the organisation is 500. Since introduction of gamification until March 2016 the gamified training sessions were delivered to 441 employees.

Quantitative data include secondary data on sales results months before and two months after the training. Complete data were available on 25 groups which included 332 employees. Primary data were gathered through observations and survey in two rounds.

The first round was immediate feedback and took place between February 2015 and April 2016 - after each training session participants are sent out a questionnaire to receive immediate feedback and possible suggestions for improvement of training. According to Kirkpatrick, it is important to measure the immediate result including how participants liked the training programme or trainer (Kirkpatrick & Kirkpatrick, 2006). The feedback questionnaire included questions measuring participants’ assessment of training atmosphere, trainer and personal gain. The responses were measured in 6-point scale where 1 means very poor, and 6 – excellent. In addition, open ended questions about positive and negative experience during the training session were included, which provided qualitative data.

The second round aimed to explore the relationships of game elements with engagement in the training and organisation. The second questionnaire was sent to all 332 employees in March 2016, however only 181 completed responses were returned. The questionnaire was designed to measure the employee engagement in job and organisation, engagement in the training and evaluation of different game components, and the clarity of the rules, aims and processes of the game. The questionnaire was developed in 4 sections: demographic questions, components of the gamified training, clarity of game rules and procedures, and engagement.

Demographic provided control variables for analysis and part included questions related to gender, age, and tenure. Gender has a long history of being examined as control variable. Research by Spires and Lester (2016) shows that there are no statistically significant differences between gender in perception of knowledge through gamification. Taking into consideration that younger employees, millennials for example, might be more involved in games (Kastner, 2013), age was added as control variable. Tenure was measured as number of years employed in the organisation and was added as control as it also may influence the perception of training.

Second section of the questionnaire measure the respondents’ attitude towards the value and contribution of the game elements in knowledge acquisition and training result. The game elements were chosen according to Kapp (2014), Collins (2014) and Brownhill (2013) and the following seven components were assessed: winner selection,



additional choice options, competition, exchange of experiences, role play, collection of points, and feedback. Evaluation was based on 6-point Likert scale, where 1 was very poor and 6 was excellent.

The third section included three statements measuring clarity of the game including aims, rules and point accumulation system. Sample statement is “The rules of the game were clear”. The final section of the questionnaire measured employee engagement with 4 statements. The sample statement is “After the training I performed my duties with higher level of enthusiasm”. The internal consistency reliability of the scale was assessed with Cronbach’s Alpha coefficient - .81 proved good reliability of the scale.

In addition, one statement was designed to find out whether the training method (game) contributed to the involvement of participants in the training process. Questionnaire included the statement “The method (training as a game) contributed to my involvement in training”. All the statement in section three and four were measured in 6-point Likert scale where 1 is completely disagree and 6 – completely agree.

Quantitative data were analysed with SPSS software using OLS regression and Friedman test. Qualitative content analysis was used to analyse open ended questions and

Findings and Results

To test the first hypothesis, the sales results 1 month before and 2 months after the training sessions were analysed.

Sales results were measured as number of products sold. Respondents were divided into 25 groups according to the date of their training. To test for differences between groups before and after training Friedman test was used which is nonparametric method for testing differences in related samples. Only four groups out of 25 indicated statistically significant differences in sales results. For 21 group Chi-Square values were in range between .04 – 5.73; $p > .5$. Two of four groups indicated statistically significant increase in sales results (Chi-Square 7.75 and 9.77; $p < .05$), however, two groups showed decrease in sales results (7.54 and 9.25; $p < .05$).

Thus, the first hypothesis should be rejected. This is in line with other researches which concluded that sales results can be influenced by complex variables and there are several adjacent variables, which this study did not consider, but, with reference to the theory can affect employees’ behaviour after training. Leone (2015), Brinkerhoff and Mooney (2008) concluded that environment in which trainee is put after the training has the most significant effect.

The second round of the survey resulted in 181 completed responses and respondents included 90% females and 10% males what is representative for this job category in the organisation. This data was used to test the hypotheses No2 and No3. Table 1 reports the results of ordinary least squares regression analysis for testing hypotheses two and three and answering the research question.

Hypothesis two predicted a positive effect of gamification on employee` engagement in training process. Hypothesis three predicted a positive effect of gamification on employee` work engagement. Positive and statistically significant relationship was found in respect to both, thus both hypotheses should be accepted.

Table 1. Descriptive statistics and OLS regression results

	Descriptive statistics		Hypothesis 2 (DV Engagement in training)		Hypothesis 3 (DV work engagement)	
	Mean	Standard Deviation (n=181)	B Coefficient	SE	B Coefficient	SE
Elements of the game:						
winner selection,	5.17	1.05	-.037	.053	.109	.074
additional choice	5.04	1.18	.076*	.042	.062	.059



options,						
competition,	4.97	1.06	.088*	.047	.061	.065
exchange of			.182***	.063	.163*	.087
	5.49	0.74				
experiences,						
role play,	5.02	1.12	.046	.045	.041	.062
collection of points,	5.10	0.93	.091	.056	.158**	.078
and feedback	5.13	0.89	-.009	.060	.199**	.083
Clarity of game rules and procedures:						
points	4.25	1.95	-.016	.020	-.035	.028
rules	5.43	0.73	.279***	.067	.145***	.094
aims	5.60	0.61	.227***	.075	.047***	.107
Gender	0.10	0.30	-.219	.134	.059	.189
Age	2.44	0.65	-.070	.068		
Tenure	2.98	1.08	-.043	.042		
R Square			.543		.479	
Adjusted R Square			.507		.439	

* p < 0.10; ** p < 0.05; ***p < 0.01

Research question was developed to identify the most effective game components. Exchange of experiences appeared to be better associated with engagement into training process ($b = .18$, $p < .05$) and work engagement ($b = .16$, $p < .1$).

This result is in line with Goldsmith (2014) who found that exchange of experiences as one of important components of adult education, and Pike (2008) linked exchange of experiences with overall atmosphere of the training, since it creates energy and joyful atmosphere. Clarity of game rules and aims appeared to have positive and significant effect on engagement in the training ($b = .15$, $p < .01$; $b = .05$, $p < .01$). Collection of points and feedback showed positive and significant effect on work engagement. This result is in line with Brownhill (2013) who connected engagement with the following elements: feedback, clear success criteria for the award, and the opportunity to see the performance. DuVernet and Popp (2014) mutual competition mentioned as one of the factors leading to participant engagement, however, this research did not support this finding since the effect of competition is not significant.

In addition to the results from quantitative analysis, content analysis of qualitative data from open-ended questions was performed. As positive experience of the respondents, participants mentioned game as a method (mentioned

63 times), for example “during the game it was easier to perceive the information than it is during the lecture”; “learning during the game lead to change in my behaviour sooner than learning during the lecture”. The second was atmosphere of the training session (mentioned 60 times), as example, “positive and friendly environment which facilitated exchange of experiences”, “game encouraged me to be open and do not to be afraid of taking risks”. As the most important component of an effective game was mentioned exchange of experience (65 times). Employees stated the following: “exchange of experiences during the game was more valuable than a seminar” and “fantastic opportunity to exchange experiences”. Thus, the results from qualitative data appeared to be in line with the results of quantitative analysis.

Conclusions and Recommendations

This study tested the use of gamification as training method in training and development of sales employees in banking sector organisation. Significant effect of gamified sales training on performance results was not identified, however, the positive effect on employee engagement in training and work was significant. The results are in line with previous research by Brinkerhoff and Mooney (2008), Leone (2015), Willyerd and colleagues (2014), Radovan and Makovec (2015), and Pike (2008). Thus, gamification can be recommended as method for training and development of sales staff.



As the most effective game components for training of sales staff exchange of experiences, collection of points and feedback were identified. For managers who want to implement gamification in organisational training and development the following can be advised. Ensure the clarity of game rules – for example, main rules should be placed on the walls so that participants can recall them any time they need. Trainer's support explaining the rules is essential. Training aims should be introduced before the training session, for example, by e-mail, so that employees see the link between their job aims and the aims of the training.

When designing or choosing the game for training session, it is important to ensure that the participants have the opportunity to exchange of experiences. For example, during the game when employees play role plays, they should be encouraged to exchange experiences. Feedback should be provided not only at the end of the training, but also during it. For example, after each round, the winners should be announced and then final winner at the end of the game.

It should be acknowledged that this research has certain limitations. In relation to the finding that Gamification did not have significant relationship with performance, there are several variables which were not considered in this research. For example, when analysing the impact of gamified training on performance results, such possible causes of performance deviations as sick leaves, seasonality, sales promotions, market conditions and economic situation, cultural differences between branches were not accounted for. To address this limitation future research should add more variables to the model and/or choose samples for comparison with identical side effects. The generalisability of the results is limited since the research is done in banking sector organisation and related to sales training. Future research should look at different sectors and different training needs, since the components of effective games could be context specific. Different employee training and development aims could be related to different game components. However, the finding reported here could spur future researches to identify the components of effective games in different settings and test their effect on performance outcomes and engagement.

References

- Armstrong, M., & Taylor, S. (2013). *Armstrong's Handbook of Human Resource Management Practice*. London: Kogan Page.
- Brinkerhoff, R. (2006). *Telling Training's Story: Evaluation Made Simple, Credible, and Effective*. San Francisco: Berrett-Koehler Publishers .
- Brinkerhoff, R. O., & Mooney, T. P. (2008). Level 3 Evaluation. E. Biech (ed.), *ASTD Handbook for Workplace Learning Professionals* (pp. 523-538). Alexandria: ASTD Press.
- Brownhill, I. (2013). Does gaming have a role to play in employee engagement? *Strategic HR review*, 12(1), 5-8.
- Burton, M. (2016). *Are you prepared for the changes in L&D in 2016?* [www.linkedin.com: https://www.linkedin.com/pulse/you-prepared-changes-ld-2016-michelle-burton-fitol](https://www.linkedin.com/pulse/you-prepared-changes-ld-2016-michelle-burton-fitol)
- Callan, R. C., Bauer, K. N., & Landers, R. N. (2015). How to Avoid the Dark Side of Gamification: Ten Business Scenarios and Their Unintended Consequences. T. Reiners, & L. C. Wood (ed.), *Gamification in Education and Business* (pp. 553-568). New York: Springer International Publishing.
- Campbell, B. A., Ganco, M., & Franco, A. M. (2012). Who leaves, where to, and why worry? Employee mobility, entrepreneurship and effects on source firm performance. *Strategic Management Journal*, 33(1), 65-87.
- Collins, S. (2016). *Neuroscience for Learning and Development*. London: KoganPage.
- Dale, E. (1946). *Audio-Visual Methods in Teaching*. New York: Dryden Press.
- DuVernet, A. M., & Popp, E. (2014). Gamification of Workplace Practices. *TIP: The Industrial-Organizational Psychologist*, 52(1), 39-44.
- Egenfeldt-Nielsen, S., Meyer, B., & Soerensen, B. H. (2011). *Serious Games in Education: A Global*



Perspective. Aarhus: Aarhus Universitetsforlag.

- Goldsmith, J. J. (2014). Revisiting the Lecture. *T+D*, 30-32.
- Harrison, R. (2009). *Learning and Development*. London: Chartered Institute of Personnel and Development.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-Unit-Level Relationship Between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta-Analysis. *Journal of Applied Psychology*, 87(2), 268-279.
- Harter, J. K., Schmidt, F. L., Agrawal, S., & Plowman, S. K. (2013). *The relationship between engagement at work and organizational outcomes*. <https://www.gallup.com>
- Harward, D. (2015). Key trends for 2015: Transforming the Training Function. *Training Industry Magazine*, Winter, 30-31.
- Holmes, J. B., & Gee, E. R. (2016). A framework for understanding game-based teaching and learning. *On the horizon*, 24(1), 1-16.
- Huckabee, I., & Bissette, T. (2014). Learning made fun. *Training Industry magazine*, Spring, 32-35.
- Hughes, A., & McCoy, K. (2015). Planning, Developing, Implementing Serious Game. *Training Industry Magazine*, Fall, 16-19.
- Jensen, M. (2012). Engaging the Learner: Gamification Strives to Keep the Users Interest. *T+D*, 66(1), 41-44.
- Kapp, K. (2014). *Gamification of Learning*. <http://www.lynda.com/Higher-Education-tutorials/Gamification-Learning/173211-2.html>
- Kastner, N. (2013). Gamification: from the arcade to the bank. *ABA Bank Marketing*, 45(10), 20-23.
- Kim, B. (2015). The Popularity of Gamification in the Mobile and Social Era. *Library Technology Reports*, 5-9.
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating Training Programms: The Four Level* (3rd ed.). San Francisco: Berrett-Koehler Publishers.
- Leone, P. (2015). It's all about climate change. *Training Industry Magazine*, Winter 2015, 52-53.
- Mager, R. F. (2008). Designing and Developing Effective Learning. E. Biech (Ed.), *ASTD Handbook for Workplace Learning Professionals* (pp. 173-178). Alexandria: ASTD Press.
- McGinty, J., Radin, J., & Kaminski, K. (2013). Brain -Friendly Teaching Supports Learning Transfer. *New Directions for Adult Continuing Education*, 49-59.
- Meister, J. (2015). *Future Of Work: Using Gamification For Human Resources*. <http://www.forbes.com>
- Mollick, E. R., & Rothbard, N. (2014). *Mandatory Fun: Consent, Gamification and the Impact of Games at Work*. Philadelphia: The Wharton School Research Paper Series.
- Mollick, E. (2012). People and Process, suits and innovators: the role of individuals in firm performance. *Strategic Management Journal*, 33(9), 1001-1015.
- Oakes, K. (2014). The Evolution of the Training Profession. E. Biech (Red.), *ASTD Handbook: The Definitive Reference for Training & Development* (lpp. 40-56). Alexandria: ASTD Press.
- Oravec, A. (2015). Gamification and multigamification in the workplace: Expanding the ludic dimensions of work and challenging the work/play dichotomy. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 9(3), 6-18.
- Pike, R. W. (2008). The 10 Most Important Lessons I've Learned About Effective Classroom Presentations. E. Biech (Red.), *ASTD Handbook for Workplace Learning Professionals* (pp. 301-308). Alexandria: ASTD Press.
- Radovan, M., & Makovec, D. (2015). Adult Learner's Learning Environment Perception and Satisfaction in Formal Education - Case Study of Four East-European Countries. *International Education Studies*, 8(2), 101-112.
- Reilly, R. (2014). *Five Ways to Improve Employee Engagement Now*. <https://www.gallup.com>
- Roberts, B. (2014). Gamification: Win, Lose or Draw? *HR magazine*, 29-35.
- Saran, C. (2013). A business case for gameplay at work. *Computerweekly.com*, 19, 19-22.
- Sarangi, S., & Shan, S. (2015). Individuals, teams and organizations score with gamification. *Human Resource Management Internation Digest*, 23(4), 24-27.
- SHRM. (2013). *SHRM Essentials of HR Management*. Chicago: Society for Human Resource Management.



- Spires, H. A., & Lester, J. C. (2016). Game-based learning: creating a multidisciplinary community of inquiry. *On the Horizon*, 24(1), 88-93.
- Whyte, D. (2016). *Training trends for 2016* . . <https://www.trainingjournal.com>
- Willyerd, K., Dearborn, J., & Sur, S. (2014). Results-Based Evaluation: Keeping the End in Mind. E. Biech (Red.), *ASTD Handbook: The Definitive Reference for Training & Development* lpp. 730-745). Alexandria: ASTD Press.
- Zichermann, G., & Cunningham, C. (2011). *Gamification by Design*. Canada: O'Reilly Media.



Local and Global Career Building Challenges in Lifelong Learning: Possibilities and Risks of Youth Self-realization

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Abstract

One of the values of democratic society is free career choices for youth. Looking from economic, social and cultural perspective there are also other actors besides youth interested in youth career choices: state and community representatives, employers, family members and others. Youth self-realization possibilities are actual topic. These possibilities are determined by competitive education at corresponding educational level in order to continue the process of education and to achieve set goals of self-development. Study was carried out in 2011 and 2017, and it is focusing on career possibilities of youth, lower secondary school and secondary school students in Kurzeme region (Latvia), and it is based on a comparative analysis of the quantitative and qualitative research data of self-assessments. Aim of this article is to analyze such resources necessary for youth career building as key competences of lifelong learning, health, social tension, which are based in understanding of values related to career and reflect youth self-assessment dynamics in correlation with future plans, identifying possibilities and risks of youth self-realization.

Keywords: Youth, Career, Key Competences, Self-assessment, Self-realization

Introduction

Prerequisite for development of any territory is its inhabitants: number and content according to age, education, professional training, health etc. Education that meets long-term market requirements is very important. It is stressed out in development strategy of Liepaja (the biggest city in Kurzeme region), taking into consideration the importance of Liepaja at local, national and regional scale. Strategy was developed for period from 2008 till 2014, and it was relevant at 2011 when study was carried out. Development strategy stipulated that sustainable development, competitiveness of city, its European integration will be provided, as well as diversified economic development will be promoted, thus creating healthy and favorable work and living environment for all inhabitants of Liepaja area and Kurzeme region (Liepaja City social economic development program 2008 – 2014, 2007). In addition to set priorities of increased welfare and life quality of each inhabitant of Liepaja and its area accessibility of qualitative education was also stressed out.

Hypothetical assumption of 2011 study shall be updated in 2017: *If priority stressed out in strategy about development of favorable living and work environment in Liepaja (which is possible with active involvement of whole society) will fulfill, it will increase the possibility that after graduation youth will take advantage of possibilities for education and work available in Liepaja and region. Therefore study on student success at school, skills, health, professional orientation, life values, and opinion may give additional information about possible changes of number of inhabitants, and possible supplement of work resources as precondition for development of city and its area of influence* (Markausa et al., 2011, 5).

Updating of said assumption is important also in 2017, as mentioned in latest Liepaja city development strategy (Liepaja City Council. Liepaja 2030. Liepaja City sustainable development strategy 2030, 2015), which is coordinated with strategic development documents of Kurzeme Planning Region, National development plan of Latvia and European Union strategic development.

In Liepaja long-term development strategy “Liepaja 2030” it is declared: *Liepaja is the centre of education, science and research! Liepaja higher education institutions provide competitive, internationally recognized study programs, promote innovative research, and represent important knowledge economy cornerstone. Thus Liepaja professional education institutions provide highly qualified specialists for modern industrial companies*



in Latvia. Young people educated in Liepaja are competitive and creative in labor market; they are demanded specialists and active employers (Liepaja City Council. Liepaja 2030. Liepaja City sustainable development strategy 2030, 2015). Realization of strategy is possible, if appropriate program of action has been developed, where interests and possibilities for self-realization of school graduates has been taken into consideration, and school graduates are able to develop and improve knowledge and competence necessary for personal growth, in order to be competitive in ever changing social, economic and cultural conditions and open to challenges of chosen career.

Understanding of career has changed over the times due to social, political and ideological conditions. For instance, soviet ideology marked person with career goals and “careerist” and this title was used disdainfully, while in Western culture this term was used for intentional rising at work or in different field, which was directed towards success accompanied by fame and popularity, or it is related with individual work, self-expression and leisure time, that has socially important role. Explanation of term “career” in Psychology is analyzed as, for instance, profession with possibilities for individual growth that has positive impact on organization and society as whole (Shepard, 1984). In Sociology career is understood both as relationship between individual and social groups and as social mobility that provide possibilities for growth or transition to another status, linking it to improvement of life quality: *Function of mobility is to provide access to education, work, social contacts, healthcare, culture ect. resources, that are essential for well-being* (Šūmane 2010, 347). In Economy career of individual is being related to employment, which is viewed as readiness of human capital to react on market demands (Becker, 1975) Mentioned and also other career defining aspects as continuity cycle in relationship between individual – career development subject and external factors that influence career development process, can be viewed within system theoretical aspect. System theory approach allows questions related to career to view through interconnection of several theories and sciences, while respecting competence, talents and choices of individual. Defining career as education, interaction between work and private life within one’s life time (Education Law, 2017), student understanding about future perspectives is based on conclusions, that have developed within social experience. In socialization process family, school and circle of agents involved in interaction are very significant. For instance, virtual environment mass culture information sources become significant shapers of opinion and values. It means that possibilities of self-realization related with further career choices depend on not only the self-evaluation of own possibilities, but also on many factors that can essentially impact young person’s life.

As significant risk factor can be considered personal growth that depends on personal life-style. Personal growth can be affected by obtained education, competences, healthy life-style habits etc. However external factors are significant, too, since they don’t depend on persons will, for instance, professions, that cease to exist or transform into new quality during person’s life-time. Therefore, profession, that seems to be acquired for life-time, can vanish and transform dynamically. Youth integration in society and marginalization risks related, among others, with unemployment, which is based on both lack of necessary human capital (Bourdieu, 1986), and structural unemployment, which is related with professions demanded in economy and other forms of youth education, that is acquired according to ones interests and abilities, or insufficient education (Goldmanis, Mierina, 2009). Therefore education process must be continuous, aligning with 21st century education structure that consists of 4 dimensions:

- knowledge, emphasizing interdisciplinary, traditional, modern and thematic;
- skill, emphasizing creativity, critical thinking, communication and cooperation;
- character, emphasizing confidentiality, curiosity, courage, steadiness, ethicalness and leadership;
- meta-learning, emphasizing growth thinking and meta cognitive abilities (Fadel et al., 2017).

In the context of educational content reform in Latvia, when competence based education is being introduced in secondary education, emphasis is on such competences as readiness of individual to perform in ever changing world, ability to make use of knowledge, skills and to express the attitude, solve problems in changing real life



situations, ability to use appropriately learning results in defined context (education, work, personal or social political) (Catlaks, 2015). Emphasis is also being put on character education, which is much more effective student success progress factor in further education, productive work and successful career (Poropat, 2014; Tough, 2013), and meta learning that promotes social responsibility, growth mindset, ability to improve knowledge, and use of skills and character outside direct context (Schraw, Moshman, 1995), in order to successfully overcome 21st century global challenges in solving environment problems, as well as to diminish corruption, terrorisms and income inequality (Glenn et al., 2007).

Aim of study is to analyze in comparative study the self-realization possibilities and risks of last class students of lower secondary school and secondary school in Kurzeme region, as well as career plans and possible influence of different factors on realization of plans for future.

Method

Parallel nested mixed methods design was chosen for this study (Mārtinsone et al., 2016, 199-200). Within this design during data collection stage quantitative and qualitative data is being collected simultaneously, where questionnaire is used for collection of priority data – questioning students of 9th and 12th grades.

Study was carried out in two stages. At the first stage data was collected during 2008/2009 school year and summarization and analysis of data was carried out in 2011, which was the third phase of longitudinal study: Future plans and their realization possibilities of Kurzeme and Liepaja youth. Study on reproduction of population in Kurzeme and Liepaja (Markausa et. al., 2011). During the first stage of study, using nested selection principle, schools from towns in Kurzeme region where chosen randomly. In these schools questioning of students of 9th and 12th grades were carried out proportionally to their numbers, therefore selection with total number of respondents (N 337) was created. This number was acquired after dismissing invalid questionnaires. 179 respondents at 9th grade make part of the selection, where 158 respondents at 12th grade make other part. At the second stage data was collected during 2016/2017 school year according to analogy, using the same data collection methods as during 2011 study, which provides believable data comparing possibilities, providing appropriate representation of respondents at particular age groups (N 169), proportionally to number of students at schools chosen in previous study – 103 students in 9th grade, 66 students in 12th grade. This time there were no questionnaires carried out in parallel classes, instead 2 focus group interviews with 9 informants in each were carried out in order to provide strong and reliable data.

In this study according to rating classification students self-evaluation is being used and analyzed on Likert scale as effective evaluation learning strategy (McNamee, Jie-Qi, 2005; Burns, 2005; Thawabieh, 2017), evaluation of personal performance and identification of personal strong and weak sides for the improvement of learning results and for conferment of value to learning experience (Klenowski, 1995; Wegner, Beumann, 2017).

To process primary data in order to acquire secondary data cross tabulation and Chi-Square test relationship was used for defining statistic significance between criteria depending on respondent profile within SPSS quantitative data processing program, but secondary qualitative data was acquired with content analysis.

Findings

According to 2011 study data most of the 9th grade and 12th grade students plan to continue their professional and academic education. In 9th grade respondent group one third of students plan to obtain higher professional education, and 2017 study shows similar tendency, where interest in higher professional education increase by 3%. In 12th grade respondent group plans to acquire higher professional education dominate both in the first and in the second phase, 38,6% in 2011 and 39,0% in 2017, respectively. 19% plan to obtain masters degree in 2011,



and there is a downward trend in this position with only 17,9% in 2017. Similar decrease is related also with doctoral studies: 8,2% during first phase, and 6% during second phase of study.

Most of the students plan to continue their education after graduation, however both 2011 and 2017 study show that at 9th grade part of the students consider working during studies; 12th grade students have similar understanding about their future. In 2011 27,4% 9th grade students plan working while studying in higher educational establishment, and 65,6% of 12th grade respondents, respectively. Similar tendency is visible in 2017 where 30% on 9th grade students and 66,0% of respondents in 12th grade plan working while studying.

Prospective mobility of Kurzeme region, including Liepaja youth after graduation from secondary school shows that big part of students plan to study in higher educational institutions in capital city of Latvia – Riga. 39,9% of all respondents gave such answer, while 27,2% respondents plan their future studies in Liepaja. 10,1% see study possibilities in other European higher educational institutions outside Latvia. In 2017 desire to study abroad increased by 1,5%. In 85% of cases students plan to work in profession they plan to acquire.

In 2011 both 9th grade and 12th grade students consider good salary and publicly recognized profession as prestigious. In 2017 growth possibilities dominate, but also good salary and demand for profession are considered as important. In 2011 students consider doctor, pharmacist, teacher and builder as demanded professions; in 2017 next to doctor proportion of engineering sciences has increased, including computer science engineer, IT specialist, programmer, which can be explained with purposeful dissemination of information about labor market demand and offer, using mass media and promoting state supported study programs.

In 2011 in 9th grade student group profession choices were influenced mainly by salary (20,1%), interesting profession (15,1%), self-evaluation of personal talents (10,1%), career possibilities (8,4%). In 12th grade well paid profession dominates (16,3%), interesting profession (14,8%), demanded in labor market (14,5%). In 2017 motives of profession choices are similar, however both in 9th and 12th grade demand in labor market ranks as the first. Significance of salary is better visible at 9th grade.

In 2011 students show more interest in doctor/pharmacist and economist profession. Part of respondents at 9th grade show practical orientation, they choose builder (9,5%), as well as lawyer/notary and economist (8,4%) and engineer (7,3%), followed by mechanic and other professions with practical orientation. But in secondary school economist take the first place (9,5%), doctor/pharmacist (8,9%), lawyer/notary (8 %), engineer (7,4%). 2017 study shows that students tend to choose IT, however other science capacious professions, doctors and engineers, keep their positions.

In 2011 both 9th and 12th grade students hold the view that work must be interesting. As very important this aspect is recognized among 32,4% of 9th grade students and 43,0% of 12th grade students; as quite important: 52,0% at 9th grade and 45,4% at 12th grade. In 2017 study tendency in 9th grade group stays the same; however in 12th grade student group almost 60% of respondents consider that work must be interesting. 2011 study data show that 48,6% of 9th grade respondents, as well as 50,6% of 12th grade students prefer interesting but not that well paid work, and with small differences 46,4 % of 9th graders and 46,2% of 12th graders prefer well paid but not interesting job. In 2017 study the results are vice versa – there is a small tendency in favor to well paid, but not that interesting job. This tendency can be explained with possible value shift in favor to processes in market economy and transformation of ethical believes.

In 2011 in more than 70 % cases both 9th graders and 12th graders evaluate their health as good and very good, however 23,5 % at 9th grade and 25,2 % at 12th grade students evaluate their health as satisfactory which is alarming result, since it may impose difficulties in labor market and on career choices. In 2017 study self-evaluation of health in both groups is similar.



In 2011 study answers of respondent show symptoms of depression in both groups, which match with tiredness in the end of semester or school year. In 2017 study there are no significant differences in physical well-beings, however there is an increase by few percent points of those students who note depression and tiredness in their psychological health self-evaluation, that rise significantly during final exams in 12th grade (by 5,0%). Besides physical tiredness that is promoted by physical and mental load, as well as physiological changes in human body and other factors, also excessive stress causing irritants and misbalanced study load during school year are important factors that influence well-being.

In 2011 as most important obstacles for reaching life goals students pointed out bad health, lack of money, insufficient knowledge and laziness. More concerned about their laziness are students at 12th grade (one third). Also lack of initiative, parental rejection, weak character, also too wide interests were pointed out. On average 8,6% of students see no obstacles (10,6% at 9th grade and 6,3% at 12th grade). 2017 study data show that lack of money and knowledge are considered as main obstacles for reaching life goals. 35,0% of 9th grade students and 56% of 12th grade students emphasized the lack of money. Laziness factor keeps the significance and is similar to 2011 study data, where one fourth of students at both groups pointed it out as significant obstacle.

More important for students are values related with family, education, work, material wealth, health, friends; they consider less significant everything that is related with activities outside work and family.

Data obtained in 2011 study is noteworthy for career consultants; they show that in 9th grade mothers standpoint is dominant (29,6%), followed by student's own choice (21,8%), fathers standpoint (19,0%), and smaller that others is teachers influence only 5,6%. In 12th grade group students own choice dominate – 36,1%. In 2017 study there is an increase of importance of student's own choice.

In order to promote skills and competences students in both groups pointed out the importance of foreign language skills: 19,2% at 9th grade and 17,1% at 12th grade.

In 2011 study 48,0% of 9th grade respondents believe that it is very important to acquire and to improve one's knowledge during a life time, 45,8% consider this to be quite important; similar situation at 12th grade group: 48,1% as very important, 48,7% as quite important. In 2017 study respondents in both groups consider this to be very important: 53,1% in 9th grade and 54,3% in 12th grade, respectively. Option not important wasn't pointed out at all, but in 9th grade 3,4% of cases option insignificant shows up.

Knowledge classification model fit in many theory systems; there are four dimensions emphasized in these models: interdisciplinary, traditional, modern, thematic.

Interdisciplinary knowledge has integrative character. Problem of interdisciplinary comes in the foreground in knowledge dimension. In Latvian context, when decline of good results at mathematics exam can be observed in whole country by comparing the results of centralized exams of 2016 and 2017, it was set in this study the self-evaluation of mathematics knowledge to be analyzed in the group of traditional knowledge. Data summarized in 2011 study show that more than a half of 9th graders (54,2%) and more than a half of 12th graders (53,8%) evaluate their knowledge at mathematics as average. 12th graders are even more critical – statistically significant differences were established ($p=0.000$) in self-evaluation of mathematics knowledge depending on respondent group – at 12th grade more students (25,3%) evaluate their knowledge as bad, while at 9th grade only 14,0% respondents make the same evaluation. Whereas more students at 9th grade (22,3%) evaluate their mathematics knowledge as good, comparing to 12th grade, where only 14,6 % give the same evaluation. Data of 2017 study show that there is a decline of number of respondents who consider their mathematics knowledge good: at 9th grade there are 19,5%, but at 12th grade – 12,3%. Similarly, number of respondents at 9th grade and 12th grade, who evaluate their mathematics knowledge as bad, have grown: 16,3 % and 27,2% respectively. Traditional learning approach and mathematics knowledge does become worse within time in all respondent groups; the



dynamics of their evaluation is negative. Descending progress tendency might be influenced by offered possibility to choose school subjects and final exams, which significantly lowered the desire of graduates to take final exams at exact science school subjects.

In modern science group self-evaluation of student's entrepreneurship knowledge was analyzed. 2011 study data shows that more than half of respondents (51,9%) recognize their entrepreneurship knowledge as good. Statistically significant differences were established ($p=0.000$) in self-evaluation of entrepreneurship knowledge depending on respondent profile – at 9th grade more respondents evaluate these knowledge as average (41,9%), but at 12th grade group there are only 29,8% respondents who evaluate their entrepreneurship knowledge as average. Whereas at 12th grade respondent group students more often evaluate their entrepreneurship knowledge as good (59,5%), while only 45,3 % at 9th grade make the same evaluation. In 2017 study the tendency of self-evaluation of entrepreneurship knowledge is similar. Student self-evaluation of entrepreneurship knowledge is probably related to lack of entrepreneurship experience at upper secondary school, as well as to lack of purposeful and systematic approach to career education.

In thematic knowledge group students self-evaluation at global literacy knowledge was tested. Global literacy is open communication channels with ability to use several languages to get to know other cultures and to critically overcome stereotypes in global community taken from perspectives of different cultures. In 2011 study big part of students both at 9th grade (61,6%) and 12th grade (72,7%) evaluate their global literacy knowledge as good or very good. In 2017 questionnaire positive changes were established. At 9th grade 85,6% students recognized their global literacy knowledge as good or very good, and 89,3% of 12th grade students made the same evaluation. Student global literacy knowledge has been promoted by student involvement in international mobility, and balanced learning of foreign language reading, speaking, listening and writing skills in school programs.

Skill dimension is related with transfer of knowledge. Knowledge alone without link to skills is short-term. This notion should be placed at the basis of process of improvement of future learning environment and learning process. In order to eliminate the gap between knowledge necessary in real life and application, it is necessary in 21st century to have creativity, critical thinking, communication skills and ability to collaborate.

Believe that creativity is related only with artistic innovation should be reconsidered. It is undeniable that it is so, but stereotypes and artisanal imitation at professional level exist also in arts. Creativity begins where new extraordinary way for usual activities or reproduction of knowledge has been found. It can be achieved with promotion of way of thinking that is problem solving oriented, with search for innovative solutions, with approach where memorizing model is replaced with creativity model – knowledge that is acquired in one field is being integrated in other fields and ability to generate new ideas, as well as to use acquired knowledge for problem solving or to achieve set goals. In 21st century creativity has become an important component of guidance quality. 2011 study concludes that both 9th and 12th grade students most often evaluate their creativity as average: 35,5% at 9th grade, but 42,0% at 12th grade. 38,4% 9th grade students evaluate their creativity as very good and good, but at 12th grade creativity potential is even smaller – 32,0% respondents evaluate their creativity as very good and good. 2017 study shows decrease of creativity self-evaluation in both groups. At 9th grade 31,5% students consider their creativity as very good or good, and 26,8% 12th grade students evaluate their creativity as very good or good.

Direct transfer of knowledge to students has become non-productive, and one of the reasons is this: information flow of 21st century offers new ideas and in emotionally effective way creates attitude towards various different values in social environment. In order for everyone to be able to orientate oneself in information flow, to distinguish objectivity of offered information and to be able to find the necessary information, critical thinking must be developed. Critical thinking is the ability to evaluate facts in reasoned manner, ability to separate facts from opinions, believes and self-evident mind habits. It can develop through interaction with different perspectives of one phenomenon; it means that sometimes one shall face different opinions on one issue.



Benefits of critical thinking – ability to analytically evaluate processes and phenomenon outside context where specific knowledge was acquired. According to indicative data of 2011 study it was established that big part of 9th grade students evaluate their critical thinking as average (56,0%); also at 12th grade 45,0% students evaluate it as average. However in secondary school compared with 9th grade bigger number of students evaluate critical thinking as good: 22,4% at 12th grade and 11,1% at 9th grade. In 2017 study it was established that there has been small increase of self-evaluation of critical thinking at 9th grade. 22,9% 9th grade students evaluate critical thinking as good and very good, therefore lower evaluation has decreased in this group. Changes in 12th grade group are smaller, however with positive tendency: 24,8 % respondents evaluate their critical thinking as good and very good. Therefore there is a small decrease in negative evaluations in this group.

Communication skills are necessary not only for those professions where everyday work is related with customer or patient service, or for employees in communication and media environment, but also for any profession. Interactive learning is becoming more and more significant in 21st century, as well as necessity for collaboration, in a result of which feedback of one's competence is obtained. There is an increase of knowledge obtained in the result of interaction, which is not the one-way transfer of knowledge, rather exchange of knowledge with possibility to evaluate offered knowledge critically. In 2011 study 27,4% of 9th graders evaluate their communication skills as very good, 48,0% as good; 19,2% of 12th graders evaluate as very good and 43,6% as good. In 2017 study 25,6% of 9th grade students evaluate their communication skills as very good, 52,4% as good; 12th grade students and more critical than 9th graders: 20,2 % consider their communication skills as very good, 57,0% as good.

In 21st century to solve topical tasks wide and deep knowledge in several fields is necessary, which is not provided by amount of knowledge, skills and competences one person possess. Thus several persons with different competences must collaborate to achieve common goals putting collaboration in foreground. In 2017 study it was established that integral part of learning process is couple and group work, as well as project work. During such collaboration each members abilities are revealed and character expressed, persons with leadership talent become visible; such persons can motivate and organize work to achieve common goals. In 2011 study 9th grade students evaluated their collaboration skills as very good (23,5%) and good (60,9%); 12th grade students evaluated their social skills similarly: 23,4% as very good and 60,8 % as good. 2017 study shows that there is no significant change in self-evaluation of collaboration skills. Evaluation “very good” has increased by few percentage points in both groups, and evaluation “average” has decreased respectively.

In 2011 study respondent evaluate their learning to learn skills as good and average: 55,3% of 9th grade students consider them as good, 25,1% as average; evaluation among 12th grader is similar: 59,5% consider them as good, but 26,6% as average. In 2017 study learning how to learn self-evaluation is similar: answers given to analogous questions at 9th grade show that 49,3 % respondents evaluate their learning to learn skills as good, but 26,6 % as average; 56,3% of 12th grade students evaluate their learning to learn skills as good, but 23,4% as average. Low evaluation of learning to learn skills can be explained by change of paradigm from training, which was expected from teachers during the previous decades, to student's personal responsibility within learning process and in collaboration with pedagogues, which is inherent to 21st century. In 21st century it is important to learn how to learn. It has been established in many studies that while preparing for tests students put different level of effort into their work, however not always results depend on amount of work invested. Without reviewing other factors it was established that success depends also on learning strategies. More successful are those who take into consideration the effectiveness of their learning. It is connected also with self-control and with reasoning about improvement of one's skills. Meta cognitive skills are not based only on knowledge; they depend on character development abilities and mental process management. The lowest level of mental process management can be seen as obvious verbalization, verbalization of non-verbal processes and observations and ability to see structures in verbalized text are attributable to other processes.



Character education can relieve decision making that is based in universal values, at the same time being careful to nature, resources, environment, people, in order to conclude that welfare is based not only on quantitative consumption of resources, but also on modesty. It is not the glorification of poverty, but creation of understanding that is based on moral and cultural values.

Leadership is a significant edge of character. Sometimes energetic, charismatic persons are considered to be leaders, but not always silent guidance leaders are being noticed; they oversee the processes and involve other participants in proactive activities, which leads to wrong conclusion that positive changes happened by themselves. Very often everyone forgets that silent leaders have motivated, have stimulated to solve problems with cooperation, to move towards success, thus giving the meaning to cooperation and transferring this notion to the consciousness of each involved individual.

In 2011 study only 8,9% 9th graders recognized very good leadership skills in themselves; more often they evaluated leadership skills as good (35,3%) and average (30,7%). 8,2% 12th graders recognized their leadership skills as very good, good – 59,1%, and average – 24,5%. In 2017 study small changes can be observed – leadership evaluation as good increases at 9th grade (47,3%), while evaluation as average and excellent decrease. In 12th grade there is a rise of evaluation as very good (9,4%) and good (60,2%), while evaluation as average decrease, respectively.

Quantitative data of study are confirmed by qualitative data, based on the claims acquired during focus group interviews:

- *I have been thinking about successful career in connection with doctor's profession that I have chosen. I know that I will have to study a lot. That is why I take advantage of Shadow day when I can get familiar with my future profession. I learn hard not just at school but also with private teachers;*
- *I think career is very important. It can be considered successful if you don't stay at lowest level at work. Possibilities for growth and related salary is necessary;*
- *If there was no good salary, I would like that it is interesting at work. But it would be better if job was both interesting and well paid. For some time I could travel to see World, and earn money at not that interesting job. I'm not sure that I would like to have the same job all the time. I would like to try myself in different jobs.*

Results, Conclusions and Recommendations

Student's career choices is a dynamic process, influenced by student's own preferences, evaluating their abilities and knowledge in relationship with economic, social and cultural processes and factors that influence them.

Every moment, new discoveries piling up and new knowledge accumulating outside the ability of individual to master them within one lifetime, we face several problems - artificial intellect, storage of information and means of its transfer, thus creating potential danger to privacy. Economic and social problems create the raise of proportion of sciences capacious technology and decline of number of providers of work functions or involved persons. Demographic changes, for instance, rise of number of global inhabitants is faster than possibility to educate them all according to demands of 21st century. Also solutions of problems of ethical character that were once acceptable among one narrow social group, facing the increased international migration, longer life spans etc. demand the necessity of new solutions. Moving towards rise of amount of knowledge in traditionally separated school subject system high information density has been reached in 21st century. However school programs do not provide place for meta learning.

In comparative studies with time distance skill dimension of 9th grade and 12th grade students is not developed enough in all directions: social skills and communication skills are relatively good developed, but they do not provide critical thinking by themselves; creativity does not compensate lack of knowledge.



Meta learning strategies improve behavior, because during this process self-effectiveness evaluation is activated, performance is increased, feedback on self-evaluation is obtained, which, if necessary, promotes corrective activities without learning model imposed by grown-ups. It is necessary in order for person itself to realize the importance of lifelong learning in career building and to get involved in this process.

Positive tendencies at leadership self-evaluation and transition from authoritarian leadership to democratic can be explained with more frequent student involvement both in activities of student councils and with growth of proportion of interactive activities in lessons and in education as whole.

In order to provide successful career educational basis must be such where person is able to learn to adapt to ever changing circumstances of 21st century, thus acquiring satisfaction with quality of life and fulfillment of life.

Mathematics, entrepreneurship and global literacy education process without the acquisition of basic knowledge must be rebuilt as meta knowledge system.

Lack of connection between knowledge dimension and gap between the necessity for new competences and education systems offer for acquisition of knowledge bring forward new challenges and tasks for education politicians and pedagogues. They are related with the evaluation of old education content and study topics, in order to provide possibilities for personality growth, orientation of intelligent understanding, which is based in competences. If practical aspect of knowledge dominates in education, its usability, then it can be projected that after some time, for instance, some knowledge can become unusable due to development of technologies, as well as cognitive process can be slowed down and emotional alienation may occur.

Acquisition of different knowledge at all education levels must be motivating and understandable for students; it must have clear message about the necessity of knowledge and possibilities of its usability.

In learning process with the aim of high level knowledge basic knowledge must be strengthened. Every component of educational process must be subjected to student self-evaluation and to analytic evaluation in collaboration with pedagogues.

Student perception of their skills are with relatively high self-evaluation, however high self-evaluation of skills partially contrast with achieved performance, which is displayed by learning results. Meta learning strategies should be improved. If brought forward the approach based in meta learning strategies, ways of progress check-ups and content must change as well.

Leadership must be developed in educational processes by changing social roles among students. Aspiring to development of non-authoritarian leadership, it must be achieved that relationships between students and teachers are based on collaboration with common goal and that these relationships are based in mutually agreed ethical principles that are obtainable with active involvement of all interested parties, hearing of all opinions and reasoned discussions.

References

- Becker, G.S. (1975). *Human Capital*. 2nd ed. New York: Columbia University Press.
- Bourdieu, P. (1986). The Forms of Capital. In: Richardson, J.G. (Ed.). *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood Press. p. 241-258.
- Burns, M. (2005). Looking at how students reason. *Educational Leadership*, 63(3), 26-31.
- Catlaks, G. (2015). Introduction of Competence based approach in general education. [accessed on 01. 08. 2017.] Available at:
https://www.daba.gov.lv/upload/File/Prezentacijas/150911_NVO_forums_Kompetences_Guntars_Catlaks.pdf



- Education Law. [accessed on 11. 08. 2017.] Available at: <https://likumi.lv/doc.php?id=50759>
- Fadel, C., Bialik, M., Trilling, B. (2017). *Four-Dimensional Education: The Competencies Learners*. Riga: Lielvards.
- Glenn, J.C., Gordon, T.J., Florescu, E. (2007). State of the Future. World Federation of United Nations Associations. [accessed on 03. 08. 2017.] Available at: http://futurestudies.az/pdf/SOF_2008_eng.pdf
- Goldmanis, M., Mierina, I. (2009). Youth employment: aligning with the market and work career. In: *Portrait of Latvian Youth: integration in society and marginalization risks*. Riga: Latvijas Universitātes Filozofijas un socioloģijas institūts, Latvijas Universitātes Vestures un filozofijas fakultāte. LU Akademiskais apgads. p. 71-128. (in Latvian)
- Klenowski, V. (1995). Student self evaluation processes in student centred teaching and learning contexts of Australia and England. *Assessment in Education 2*, p. 145–163.
- Liepāja City Council. Liepāja 2030. Liepāja City sustainable development strategy 2030. [accessed on 08. 08. 2017.] Available at: http://www.liepaja.lv/upload/attistibas_strategija/ilgtermina_attistibas_strategija_2030.pdf
- Liepāja City social economic development program 2008 – 2014. [accessed on 10. 08. 2017.] Available at: http://www.liepaja.lv/upload/Buvvalde/teritorijas_planojums/attistibas_strategija/strategija_gala_versija.pdf
- Markausa I. M., Medveckis A., Romaņuka L. (2011). *Youngsters` future plans and their implementation possibilities in Kurzeme and Liepāja. Population reproduction study in Kurzeme and Liepāja, part III*. Liepāja: Liepājas Universitātes Socioloģisko pētījumu centrs. (in Latvian)
- Martinsons, K., Pipere, A., Kamerade, D. (2016). *Research: theory and practice*. Riga: RaKa. (in Latvian)
- McNamee, G., Jie-Qi, C. (2005). Dissolving the line between assessment and teaching. *Educational Leadership*, 63(3), p. 72-77.
- Poropat, A.E. (2014). Other-Rated Personality and Academic Performance: Evidence and Implications. *Learning and Individual Differences*, 34 (8). p. 24-32.
- Schraw, G., Moshman, D. (1995). Metacognitive Theories. [accessed on 13. 07. 2017.] Available at: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1040&context=edpsychpapers>
- Shepard, H.A. (1984). On the realization human potential: The path with a heart. In: M.B. Arthur, L. Bailyn, D.J. Levinson, and H.A. Shephard (eds.), *Working with Careers*. New York: Graduate School of Business, Columbia University, p. 25-46.
- Sumane, S. (2010). Everyday conveyance and quality of life. *Sociology in Latvia*. Riga: LU Akademiskais apgads. (in Latvian)
- Wegner, S., Beumann, S. (2017). An Outlook on Self-Assessment of Homework Assignments in Higher Mathematics Education. [accessed on 17. 07. 2017.] Available at: <https://arxiv.org/pdf/1707.05688.pdf>
- Thawabieh, A.M. (2017). A Comparison between Students' Self-Assessment and Teachers' Assessment. *Journal of Curriculum and Teaching*, 6(1), p.14-20.
- Tough, P. (2013). *How Children Succeed: Grit, Curiosity, and the Hidden Power of Character*. New York: Mariner Books.



Vocational Training In Spain: Legislative and Normative Analysis as Answers to Failure and Early School Leaving

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Abstract

Currently, under the protection of Organic Law 8/2013, of 9 December for the improvement of educational quality (LOMCE), are being developed from the academic year 2014/2015 what has been called "Basic Professional Training" (FPB), are still having difficulties in achieving the objectives and competencies established by the compulsory secondary stage. This research intends to make a brief normative and pedagogical revision not only of the current Basic Professional Formation, but also of the previous laws to this one, to clarify differences and similarities as well as to evaluate the evolution of the objectives that have been marked throughout this years. Therefore, it is concluded that the new FPB establishes a greater catalogue of educational actions aimed at avoiding premature school leaving, among which the proximity and communication with the family or the acquisition of labor competences, giving students greater opportunities for social and labour insertion.

Keywords: Basic Vocational Training (FPI), Initial Professional Qualification Programs (PCPI), Social Guarantee Programs (PGS)

Introduction

Spain is one of the countries of the European Union that continues having a high number of students who do not successfully complete compulsory secondary education. According to data published in April 2017 by Eurostat - EU statistical office of the European Union - Spain is the second country with the highest dropout rate (19%), only surpassed by Malta.

For this reason, the Ministry of Education of the Government of Spain has taken various legislative measures that favor the achievement of basic skills to avoid the early leaving of these adolescents. This research carries out a detailed analysis of the similarities and similarities of the last three laws that deal with this issue to obtain a series of results that promote proposals for improvements.

Method

The methodology that has been used in this research is qualitative, through the comparative and descriptive method. We think as Sartori (1984) when in one of his books he claims that comparative studies intend to search for the differences and similarities through a rigorous and systematic work of that which can be compared. What is analyzed in this research are the last three regulations that regulate professional training in Spain, to identify dissimilarities and similarities that enrich and facilitate the perception and information of researchers in the field of education. Once it has been analyzed each of the three regulations, it is proceeded to the categorization to observe the aspects to be compared. In the following table you can consult these categories:



Table 1. Categories of research.

Name of the categories	Description of the categories
Program	Name of the educational program analysed. In this research, the comparison of the following programs has been carried out: Social Guarantee Program, Basic Professional Qualification Program and Initial Training Program.
Law	Law that regulates and protects each of the educational programs studied.
Aim	Aim of each of the programs.
Students	Profile of the students who can make access these studies.
Organization	How the educational modules are structured in academic courses.
Length	Estimated time in hours of training received.
Titles and other certifications	Degree obtained after the training.

Results

The data obtained from the comparative and descriptive analysis between the last three educational laws on vocational training in Spain are numerous and numerous. This document presents the most significant results. In the first place, the basic aspects of each of the regulations analyzed from a descriptive approach are presented.

Social Guarantee Programs (PGS)

The ORDER of January 12, 1993 was chosen to regulate what was called at the time, "Social Guarantee Programs" (PGS) under the protection of Organic Law 1/1990, October 3, General Ordinance of the Educational System (LOGSE). The purpose of these programs is to provide students who have left the stage of compulsory secondary education without achieving the corresponding objectives, basic and professional training that allows them to join the active life or continue their studies in Specific Vocational Training of Middle Degree.

This educational measure was designed for those students over the age of sixteen who, according to the order, find themselves with learning difficulties or with personal circumstances of different nature that prevent them from reaching the objectives of that stage.

This law meant to be a solution for a large number of young people with the following characteristics:

- A) Out-of-school youngsters over the age of sixteen and under twenty-one.
- B) They left the education system without a minimum professional qualification.
- C) Incomplete basic general training not having obtained the degree.
- D) Unemployed at the same time and with difficulties of labor insertion due to their lack of education and vocational training.

The Social Guarantee Programs aimed three fundamental objectives with this student body:

That they acquire the contents of basic education.

The students would receive training in jobs and occupations according to their personal capacities and expectations.

In addition, teachers would facilitate the acquisition of personal skills so that the student becomes a responsible worker and citizen.



The didactic organization of the contents was structured in five areas: specific vocational training area, training area and work orientation, basic training area, complementary activities and tutoring.

Initial Professional Qualification Programs (PCPI)

The following important change in educational legislation in Spain takes place in the ORDER of June 24, 2008, which regulates the initial professional qualification programs (PCPI), under the protection of Organic Law 2/2006, of May 3 Of Education (LOE).

The PCPI training programs were intended to be a measure of attention to diversity that avoids premature leaving and failure to obtain the title of Compulsory Secondary Education. One aim was to generate "new expectations of training giving access to a qualified working life to those young people who are out of school who are at a social-labour and educational disadvantage" (ORDER June 24, 2008).

The objectives of these were as follows:

- A) Expand the basic competences of the students to continue studies in the different teachings.
- B) Allow the students to reach the professional competences of a level 1 qualification of the current National Catalog of Professional Qualifications (CNCP).
- C) Provide students with real possibilities for a successful social-labor insertion.

Chapter 10 of Article III specifies the modules that these programs will have, dividing them into mandatory and voluntary ones:

Mandatory modules

- A) Specific modules
- B) General training modules:
 - 1.º Module of entrepreneurial project
 - 2.º Module of participation and citizenship
 - 3.º free configuration module.

Voluntary Modules

- A) Communication module.
- B) Social module.
- C) Scientific-technological module.

Those who could access such programs had to be in a series of circumstances such as being under 21 and over 16 and not having the title of ESO. In the case of students with special educational needs, this order contemplates the option to extend the studies one more year, until the 22nd and expresses another exception with those youngsters of 15 years of age who have completed 2º of ESO and have repeated once in the stage.

Basic Vocational Training.

With Organic Law 8/2013 of December 9 for the improvement of educational quality (LOMCE) another significant change is produced again, establishing the current Basic Vocational Training (FPB) programs. Preamble XIII highlights the creation of a new title of Basic Formation, making its access to the Middle Degree more flexible and from this to the Superior, and focused on expanding the competences in this Basic Vocational Training.

Article 30 of the LOMCE speaks of the proposal for access to Basic Vocational Training, which will be proposed by the teaching team to parents, or legal guardians and as long as the student does not reach the degree of acquisition of the skills that As advised, as well as in the requirements established in article 41.1 of this law and which are as follows:

- A) Be at least fifteen years old, or reach that age during the natural year, and not exceed seventeen years of age at the time of access or during the current natural year.



- B) Have completed the first cycle of compulsory secondary education or, exceptionally, have completed the second year of compulsory secondary education.
- C) The teaching team has been proposed to parents or legal guardians the incorporation of the student or student to a cycle of Basic Vocational Training, in accordance with the provisions of article 30.

The objectives on which Basic Vocational Training programs are organized are the following:

- A) Acquire or complete the competences of lifelong learning.
- B) Provide students with possibilities for socio-labour insertion.

The organizational structure would be established according to these three blocks:

Professional modules associated to units of competence of the National Catalog of Professional Qualifications (CNCP).

Professional modules associated with the Common Communication and Society and Applied Sciences blocks. These professional modules will be compulsory in the first and second courses. Communication and Society includes the subjects of Spanish Language, Foreign Language and Social Sciences, and the Applied Sciences includes Mathematics and Applied Sciences to the personal context and learning of a professional field.

Professional module of Training in work centers.

Therefore, the student who passes a Basic Professional Training cycle will obtain the Basic Professional title with academic and professional value throughout the national territory and will allow to make access to the medium-level training cycles.

Differences and similarities of the last educational programs aimed at preventing early school leaving.

After the descriptive analysis of the last three Spanish regulations about vocational training, it was decided to perform a comparative analysis. The main similarity is that the three programs are intended to avoid school leaving without the acquisition of basic skills necessary for professional and personal life.

As for the differences are more numerous and can be clearly seen in the following comparative table:

Table 2. Differences and similarities of the PGS, PCPI and FPB programs

Programs	Law	Aim	Students	Organization	Length	Titles and other certifications
Social Guarantee Programs (PGS)	LOGSE	Provide students who have left ESO with basic and vocational training for job placement or continue with the studies of medium-level training cycles.	Under 21 years Over 16 years old	Area of Specific Professional Training, Training and Labor Orientation, Basic Training, Complementary Activities and Tutoring.	Length between 720 and 1800 hours	Certificate showing the total number of hours taken and the grades obtained.



Initial Professional Qualification Programs (PCPI)	LOE	Avoid premature school leaving and failure to obtain the title of Compulsory Secondary Education	Under 21 years Over 16 years old	Mandatory modules Voluntary Modules	Minimum length of 1800 hours	Graduate Degree in Compulsory Secondary Education, or an academic certificate but has passed the voluntary modules.
Basic Vocational Training (FPB)	LOMCE	Acquire or complete the competences of lifelong learning and equip students with possibilities for social and labour insertion.	Under 17 years Over 15 years old	Professional modules associated to units of competence of the CNCP. Professional modules associated to the common blocks of Communication and Society and Applied Sciences. Professional module of Training in work centers.	Length of 2000 hours	Basic Professional Degree corresponding to the lessons taught with access to the middle degree. They can obtain the title of Graduate in Compulsory Secondary Education.

Conclusions

Academic achievement as an apex closely linked to cases of school success or failure is, at the same time, influenced by a multitude of cultural, economic and social factors, and generally suffers oscillations during the school years (Corchuelo & Cejudo, 2013).

Such variations respond to the demands of an educational system that has been forced to transform itself in parallel form with society. In this research, the following conclusions have been reached:

- A) Preventing early school leaving continues being a challenge for the public administration and the Spanish education system.
- B) The new program of Basic Vocational Training decreases the age of incorporation into this program at age 15 to prevent from dropping out of studies at this early age. Another difference with respect to the two previous legislations, is that the maximum age of access is 17 years, while in the PGS and PCPI it was 21 years. This is due to the fact that the same LOMCE contemplates special educational measures for the adults with little training like the Secondary Education for Adults (ESA).
- C) The organization and structure of the current FPB differ from its predecessors and contemplates greater diversity and intensity in the different modules.
- D) The length of training in the current legislation is also greater -2,000 hours compared to 1,800 hours of the previous laws - which guarantees the time necessary for the acquisition of professional and personal skills necessary for adult life.
- E) Obtaining an official and valid degree for the entire national territory with access to medium-level vocational training.
- F) Wider repertoire of educational activities aimed at avoiding premature abandonment, among which the proximity and communication with the family, the training demand depending on the context.



References

- Corchuelo Fernández, Celia & Cejudo Cortés, C.M.A. (2013). Una Escuela Alternativa, u na Escuela de Segunda Oportunidad. Revista digital *Res, Revista de Educación Social* 1, 16, 1-11.
- Decree 135/2016, of July 26, whi ch regulates the Basic Vocational Training in Anda lusia (BOJA No. 147, August 2, 2016).
- Eurostat, O. C. D. E. (2017). Tasa de Abandono escolar.
- Order of January 12, 1993, which r egulates social security programs during the period of early introduction of the second cycle of compulso ry secondary education (BOE No. 16, January 19, 19 93).
- Order of 24 June 2008, which regul ates the initial professional qualification programs. (B OJA No. 157 of August 7, 2008).
- Organic Law 1/1990, of October 3, of General Organization of the Educational System (L OGSE) (BOE No. 238, of October 4, 1990).
- Organic Law 10/2002, of 23 Dece mber, on Quality of Education (LOCE) (BOE No. 307, of December 24, 2002).
- Organic Law 2/2006, of May 3, on Education (LOE) (BOE No. 106, of May 4, 2006)
- Organic Law 8/2013, of December 9, for the Improvement of Educational Quality (LOM CE) (BOE No. 295, of December 10, 2013).
- Royal Decree 375/1999 of 5 March establishing the National Institute of Qualificatio ns (BOE No. 64 of 16 March 1999)
- Sartori, G. (1984). *Social scienceco ncepts: A systematicanalysis* (Vol. 1). Sage Publicatio ns, Inc.



Successful Learning to Students at Risk of Social Exclusion

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Abstract

The problems which are connected to academic failure, early school leaving, and learning difficulties make us seek other alternatives and opportunities. The main goal is to identify what type of academic and pro-social learning are being carried out by the school staff and how is the teacher profile which leads this group of disengaged and discouraged students. The methodology used is descriptive, following a multimodal view. We present our research through the qualitative method, extensive interview with teacher and we use the quantitative method to make the observation record inside the classroom. The results show with regard to the promotion of academic skills its special relevance, evaluation criteria used by the teacher staff. As for pro-social promotion skills, it is specially highlighted the intervention strategies in extreme situations of teachers. Regarding as the teacher profile, what most draws powerfully our attention is that is a teacher who combines a balance between discipline and proximity.

Keywords: Academic failure, Social Exclusion, Alternative learning, Teaching Profile.

Introduction

At present, the increase in academic failure, according to Escudero & Bolívar (2008) reflected in the non-overcoming of students of certain subjects and therefore, the failure to achieve the objectives that are raised, in addition to the lack of motivation reflected in the classroom and the lack of knowledge of the teaching staff and Specific procedures teaching (Vilchez & Bravo, 2015), makes the education system must address an effective response so that the student can integrate in an inclusive way (Escudero, González & Martínez, 2009). This failure is accompanied by a premature abandonment of compulsory schooling, linked to different personal, social, family factors and those derived from the educational system itself (González, 2006). Even aspects related to the teaching capacity of teachers and the formation of this. Noting recent studies of the difference between teachers who teach secondary education with higher qualifications and vocational training technicians who teach in professional modules, the latter achieve a higher level of motivation and permanence in the educational system of Students who tend to abandon their studies prematurely (Alegre & Benito, 2010). This abandonment leads students not to obtain the qualification in compulsory degrees, led not only by the factors mentioned above but also by the problems of adolescents, and if we focus on children at risk of social exclusion, we add others Such as substance abuse, gender and gender violence, the dependence of new technologies, among others (Melendro, De-Juanas & Rodríguez, 2017, Requena, 2010, Sternberg, 2010, Sternberg et al., 2006).

One of the causes of this premature abandonment previously mentioned is due, in part to, the teaching-learning styles taught in classrooms. Learning styles that follow Keefe's definition (1988) are those cognitive, affective and physiological traits that serve as relatively stable indicators of how students perceive interactions and respond to their learning environments.

Therefore, if the individual can perceive and respond it, depending on how he processes and transforms the information, becoming more relevant how one learns what one learns. This consideration makes us think that all learning will depend on how the information is presented, in what terms, modalities, skills and organizational form.



Authors such as Rezulli (2010) distinguish between learning by deductive or traditional method, which is carried out in a formal school, and the inductive method, which occurs in situations where there is no formal learning. To conclude, among other premises that obtains better results that learning oriented to the students that still based on the traditional methodology looks for extrapolated examples to real situations of the daily life.

It is convenient, therefore, to introduce alternative strategies of learning, to establish an effective connection between theory and practice causing obvious changes in the beliefs and future actions of teachers (Solís et al., 2012), in which the work of inquiry is one of the fronts open when it comes to getting students to work in the classroom (Vilchez & Bravo, 2015).

A task in the classroom in which the role of teachers is a determining factor. Aramendi, Arburua & Bujan (2017) claim that it is intriguing that teachers from vocational training, without specific training in education, lead more satisfactions in the students than in compulsory secondary education (ESO), and for this an assessment was made on teachers in The Basque Country (Spain), where the students expressed their opinions about their relationship with the teaching processes developed by the teacher of the Initial Professional Qualification Programs (PCPI), highlighting their more than satisfaction in comparison with ESO teachers.

Therefore, the role of this teacher has as a central element, the power to influence on the training of its students, where the aim is that any teacher to be able to change their traditional teacher role and to become a mediator, guide, facilitator and coach, among others (Harden & Crosby, 2000), depending on the mentioned aspects of their training and the availability of resources available to them (classrooms, media resources, etc.) (Huber, 2008).

A teacher who needs a series of specific skills, and according to Renzulli (2010) include the following:

Finding and facing a problem that has a personal pre-eminence for the individual or group.

To distinguish between specific problems, relevant and irrelevant information, identify obstacles, and transform information into usable knowledge in order to solve the problem.

To plan activities that address the problem, order them by dates, considering alternative courses of action and their possible consequences.

To evaluate the need to collect more information of higher level (content), methodological skills (process), and material or human resources.

To observe models, relationships and differences in the information collected and use it to improve tasks and establish comparisons to other problems.

To generate reasonable arguments and explanations for each decision and course of action.

To predict the results, grant time and resources; appreciate the contributions of others to the collective effort, and work cooperatively for the common good of the group.

These skills are necessary so that the rise of social exclusion and school failure do not thrive and become a scourge and has repercussions on a group of students. For this, among other factors, it will highlight special emphasis on action patterns, which in dynamic interaction with students and creating an adequate classroom climate may be able to awaken the interest and motivation of the latter. Becoming a necessity to motivate and to present a type of learning where the evaluation to be used, preserves the student's self-



esteem, encourages him to perform the tasks, facilitates autonomy and also lets us see the acceptance by the teacher of the student and as it is (Tapia, 1998).

Method

The research aims to identify what kind of academic and pro-social learning is being carried out by the faculty of this school and how is the profile of the teacher who leads this group of students which have a lack of motivation and disencha nted.

It intends to analyze different curricular and teaching aspects. The research has set itself the following specific objectives:

Identifying the skills that are promoted and highlighted at the academic level necessary to be developed in the school environment.

Recognising pro-social skills that help the student to develop himself socially.

Clarifying characteristic and defining features of teaching staff.

Sample

The participating students add up to 77 out of a total of 322 students enrolled. The reason for being 77 is due to that those students in particular, have been taught by the teaching staff to who had participated in the study during the process. The students have participated in an optional and voluntary way. Due to this study was optional, we are allowed to draw conclusions from the sample and infer what might happen from it in other populations with a high degree of relevance (Devore, 2008, Montgomery, 1999, Siegel, 1970).

The participating teaching staff has been chosen for its wide experience of more than ten years and for its results during their career path, given as a result that 95% of its students have been graduated.

They are teachers of recognized prestige who seek to provide educational responses that result in the integral benefit of students, using strategies and design procedures based on the deep knowledge of what is potentially the students.

The total number of teachers selected was 20 out of a total of 30, their participation was estimated, considering that they represent sufficiently the sample and in a good way.

Instrument

In the teacher interview, a category system based on the social competence model has been used for students at risk of school failure (Dumas et al., 1999), empirical corroboration of such theory adjusted to a case of educational compensation center or second chance school.

A number of issues were taken into account in order to develop the interviews. Firstly, a profound review of the literature was carried out in order to identify relevant concepts and theories.

Subsequently, we selected the model that based it, the type of interview, the validation through experts, the subsequent change of the questions, the implementation, the analysis of the data, elaboration of results and conclusions.

They conduct an in-depth interview, trying to discover the top reasons for the interviewer's attitudes and behaviors, in order to reconstruct the cultural system that gives rise to the discursive production and non-



cognitive aspects of people as their commitments, affections and emotions (Quintana y Montgomery, 2006).

As for the observation register, a total of 77 students were carried out. An observation scale based on the principles of authentic instruction is developed (Newman & Wehlage, 1993; Knapp, 1992).

With respect to reliability, it claims that the scale indices have been obtained after wiping out those elements that have corrected element-total correlation indexes below 0.150, which in turn negatively affected the values of Alfa, and increased the value of the Variance of the scale.

As for reliability, the Cronbach's Alpha, and composite reliability ranging from 0 (absence of homogeneity) to 1 (maximum homogeneity) are calculated. The alpha value is 0.457 for 6 elements and 77 observations, being composite reliability 0.796.

As for convergent validity, it is used: a) the average of the extracted variance, the minimum recommended value being 0.5.; and b) the factor load, that is, the indicators that build up the factor, being advisable that the load of each indicator in the factor exceeds 0.5. In this sense, the average of the variance extracted is 67.4%. Also, the load of the indicators in each factor, in all cases exceeds 0.65.

The data of the qualitative part were processed with a type of programs called Computer Assisted Qualitative Data Analysis Software or what is the same CAQDAS and specifically with Atlas.ti. The result of working with Atlas.ti has allowed us to have a file, which contains all the information that is produced after the analysis, which is called hermeneutic unit or Hermeneutic unit. This unit is composed in turn of a series of elements among which are: Primary Documents, Quotations, Codes Memos, Families or Networks.

With regard to the Statistical Package for the Social Sciences or SPSS, we have considered it as essential to use this research, as it allowed us to create a data file in a structured and organized way to be statistically analyzed. Also, SPSS optimizes variables by establishing different relationships between its elements or variables, as they interact with the modules or subsystems and between the commands or sub-subsystems within the modules, that is; perform a strengthening function with each other to achieve common objectives.

Results

Next, we make a description of the families of codes and specify the frequency of appearance of these in the interviews and the relationship between them. Code families refer to the nomenclature that brings together a group of categories that have been given as a result of the analysis of the interviews performed on the twenty subjects belonging to this research.

Regarding as the promotion of academic skills, it refers to the promotion, empowerment and strengthening of school-based skills based on aspects such as: connection with the experiences of others in the group, substantial conversations and thinking skills. The family that follows is made of the codes that appear in the following table.

Table 1. Family codes «academic skills promotion».
(source: self made)

Codes	Frequency	Nº of relationships
Curricular adaptation	37	1
Centre of interest	5	4
Evaluation criteria	53	0
Classroom distribution	51	0
Development of materials	9	3



Individual / personalized teaching	48	2
Classroom cleaning	11	0
Planning/organising class	34	0
Flexible schedules	23	2
Tutoring Full Stage	3	0

Within the family of promotion of academic abilities they obtain a higher score than the codes which are referring to the evaluation criteria, the distribution of the classroom and the individualized / personalized teaching.

Alternative evaluation criteria are established based on a series of judgments regarding which value judgments are made, in order to estimate students' knowledge, skills and performance. These criteria are mainly based on the progress of the daily students, giving importance to small achievements and highlighting qualitative versus quantitative aspects.

In the manner it is recorded in the interviews that for the realization of the corresponding evaluations the motivation is worked out, concretized in an individualized/personalized teaching taking into account curricular adaptations, elaboration of materials, and teaching support/reinforcement, respecting all the time, the pace of student learning.

One of the main pillars is the distribution of the room into the classroom made up on as a strategy of placement and organization of students according to their personal and academic characteristics, which partners are more in line with their needs and who or who can contribute more to their learning and progress.

Regarding as the promotion of pro-social skills, it refers to the learning and development of behaviours that help to develop socially empowered social competences, internalizing values and creating habits. The family of codes that configure the pro-social skills are presented in table 2.

Table 2. Family codes «promotion of pro-social skills».
(source: self made)

Codes	Frecuency	Nº of relationships
Strategic grouping	22	1
Competitions	8	8
Creating habits	7	6
Educating in values	54	6
Motivational Teaching	4	1
Strategies for action	61	0
Support/reinforcement groups	11	0
House Rules	11	0
Conflict prevention	10	1

The highest scores are found in the action strategy being the educational responses carried out by the teaching staff in a situation of medium or high complexity, accompanied sometimes by disruptive and even aggressive behavior of the student.

It is a conflicted student that shows having many shortcomings, they suffer an important academic delay due to different circumstances that have determined their life. This makes them get bored at class, not to be motivated and whose consequence is usually disruption. Among other things, it is evident the importance of respect towards the rules of coexistence, making it clear that all violent and aggressive acts are discarded and that these rules are recorded in the murals on the walls of classes and in the centre.

To ensure the compliance with the rules, the teacher performs strategies of action, ranging from taking the student out of his class and placing it in a different one, to be coordinated with the teacher who



receives the student. It expresses in a forceful way the rejection to the act carried out by the student, besides showing their agreement to the measure adopted by the teacher.

When they arrive at this new centre, they usually repeat the same actions, now the teachers have to help them to unlearn what they have learned and learn new attitudes, behaviors, behaviors and change their negative thoughts into positive ones. They act by committing them to carry out good actions, to experience and verify the transcendence of these and the benefits that can bring them. In this way, we also work out on educational values. They develop and teach them qualities, behavior and ethically correct actions.

Referring to the role of the teacher would be the characteristic and defining features of the centre's teaching staff, highlighting both their personality and training, as well as other singularities that make them different. This family is configured by the codes given below in Table 3.

Table 3. Codes of the family «role of the teacher»
(source: self made)

Codes	Frequency	Nº of relationships
Teaching opening	4	1
Teacher self-control	2	3
Exemplary Teaching Behavior	4	3
Knowing the population	15	2
Availability	7	0
Empathic	5	2
Balance between discipline / love	17	2
Teaching style	14	2
Training	3	0
Social skills	4	3
Humility	3	1
Vocation	13	0
Emotional / Emotional Connections	22	3

Knowing the population aims to learn about the characteristics, peculiarities and particularities of the students with whom they will work. As well as their environment, family, friends, etc. In this way he also establishes affective/emotional bonds that allow him to empathize and better understand the students. This link is mutual with what achieves on the one hand, the respect of students and on the other hand, the confidence necessary to be able to develop in those academic and social skills necessary for their socio-labor insertion.

All of the above combines with a manifestation of balance between discipline and affection, between the emotional and the requirement of responsibility.

Relative to the observation record and following the principles of authentic instruction (Newmann & Wehlage, 1993; Knapp et al., 1992). Highlight that Factor analysis identifies the underlying theoretical model defined by three factors: a) proximity, in the relationships teacher-student and between partners; b) meaningful learning, referring to the connection with the experiences of the environment, the coherence of the material and the participation of the students; and c) reinforcement, making references to the attention that the teacher puts in the strengths of the students.

Table 4. Main component analysis.
extraction method: main component analysis.

Method of rotation: standardization quartimax with kaiser. a rotation has converged in 4 iterations

Component		
Proximity	Meaningful learning	Reinforcement
Substantial conversation, noun with peers	,812	



or teachers			
Teacher / student relationship	,858		
Connection with experiences of students outside the school		,670	
Material consistency		,721	
Participation of students		,289	
Reinforcement of personal aspects		,663	,934

In this case, the categories substantial, substantive conversation with their counterparts or teachers and teacher-student relationship are strongly related. On the other hand, the variables connection with students' experiences outside of school; Consistency of material and student participation also present a positive relationship but more moderately than the previous case (they are not so close to one).

The category analyzed consistency of the material. In this case, actions included from the material is presented in superficial fragments with very little connection until actions that are concretized in concepts or key ideas are studied in depth. 70.5% of the observations reflect that teachers deal in depth with key concepts or ideas. It follows, with a 23.1%, action some concepts or ideas are treated with moderate depth. On the other hand, the less representative action, only 1.3%, is for some key concepts or ideas are addressed, but are well connected with the overall content of the topic. This means that topics are presented in an integrated, non-fragmented and offline way.

Concerning the connection with students' experiences outside of school. The scale of observation turns from actions, themes and activities that do not connect with anything beyond itself to actions that the students see connections of the treated topic with their lives. The theme allows them to improve the acquisition of values and their aspirations. It can be observed that more than 35% of class subjects and activities do not connect anything beyond themselves. It presents a similar percentage, with 33.3%, the action the students see connections of the developed issue with their lives. The issue allows them to improve the acquisition of values and their aspirations. This leads us to think that the topics studied within the classroom allow us to improve their expectations and values in a moderate way.

Conclusions

In this study about learning to obtain success in students at risk of social exclusion we have tried to know the academic and pro-social learning that is being carried out by the teachers of this school and how the profile of the teacher who leads this group of students disconnected and Of the educational field. Students enrolled in the so-called school failure and with no prospect of progress, or of obtaining a degree. Boys with enormous difficulties of adaptation to the established system, strong behavioral problems and with very negative academic records. All of them have repeated the academic year twice in the primary education stage.

It has been focused as a case study in a centre of an Andalusia capital of Spain, but whose conclusions could be extended to other centres where there are students of similar characteristics.

To achieve this, we have interviewed the teaching staff who teaches and we have made exhaustive observations within the classroom as both the teaching staff and as the students. To corroborate the information and to detect the type of learning, strategies they carry out, how they connect with their students and how the role they manifest in the class group. So we conclude, among other aspects, that in his pedagogical practice:

They deal in depth with key concepts or ideas, basic to teaching, presenting topics in an integral, non-fragmented and offline way.



In the classroom, teachers try to connect, although not always with the experiences of the "real life" of students, establishing meaningful examples and improve expectations, values and aspirations, beyond the school.

Students seem to respond to this work methodology, since when it is properly applied, they focus on the task to be developed, significantly decreasing attention loss and disruptive behaviors.

The preponderant attitude of this centre is to maintain a strong relationship of trust between the teaching staff and the majority of students. There is also often a very positive support. This is reflected in the conversations held between teachers and students, which allow to establish friendly relations and generate mutual trust.

The data on the teacher-student relationship shows that in a significant majority of teachers, they create a relationship of trust/closeness/dialogue/listening while only a small minority does not go beyond a strictly formal relationship.

And finally it is claimed that the teachers of this school use positive reinforcements, working the self-esteem/motivation and the personality characteristics of the students. At the same time, specific leadership characteristics are observed in these schools, since most of the teaching staff maintains a certain balance between authority and democratic consensus as a form of leadership.

References

- Alegre, M. A. y Benito, R. (2010). Los factores de abandono educativo temprano. España en el marco europeo. *Revista de Educación, extraordinary number*, 65-92.
- Aramendi Jauregui, P., Arburua Goienetxe, R. y Bujan Vidales, K. (2017). Los procesos de aprendizaje de los estudiantes en riesgo de exclusión educativa. *Revista Española de Pedagogía*, 75(267), 219-237.
- Callejo, J. (2002). Observación, entrevista y grupo de discusión: el silencio de tres prácticas de investigación. *Revista Española de Salud Pública*, 76, 1-17.
- Devore, J. L. (2008). *Probabilidad y estadística para ingeniería y ciencias*. EEUU: Thomson Editores.
- Dumas, J.E.; Prinz, R.J.; Smith, E.P. & Laughlin, J. (1999). The EARLY ALLIANCE Prevention Trial: An Integrated Set of Interventions to Promote Competence and Reduce Risk for Conduct Disorder, Substance Abuse, and School Failure. *Clinical Child and Family Psychology Review*, 2 (1), 37-53.
- Escudero, J. M. y Bolívar, A. (2008). Alumnos en riesgo de exclusión educativa y buenas prácticas: dos conceptos borrosos para comprender fenómenos educativos complejos. En J. Gairín y S. Antúnez (Eds.). *Organizaciones educativas al servicio de la sociedad* (Actas del X Congreso Interuniversitario de Organización de Instituciones Educativas) (pp. 287-288). Madrid: Wolters Kluwer.
- Escudero, J. M., González, M^a. T., Martínez, B. (2009). El fracaso escolar como exclusión educativa: comprensión, políticas y prácticas. *Revista Iberoamericana de Educación*, 50, 41-64.
- González González, M. T. (2006). Absentismo y abandono escolar: una situación singular de la exclusión educativa. *REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación*, 4(1), 1-15.
- Harden R.M. & Crosby J.R. (2000). AMEE Guide No 20: The good teacher is more than a lecturer: the twelve roles of the teacher. *Med Teach*, 22, 334-347.
- Huber, G. L. (2008). Aprendizaje activo y metodologías educativas. *Revista de Educación, extraordinary number*, 59-81.
- Keefe, J. (1988) *Aprendiendo Perfiles de Aprendizaje*. Asociación Nacional de Escuelas Secundarias.
- Knapp, T.R. (1992). Technical error of measurement: a methodological critique. *Am. J. Phys.*



- Melendro Estefanía, M; De-Juanas Oliva, A. & Rodríguez Bravo, A. E. (20 17). Déficit en la intervención socioeducativa con familias de adolescentes en riesgo de exclusión. *Bordón*, 69(1) , 123-138.
- Montgomery, C. D. (1999). *Probabilidad y Estadística aplicada a la Ingeniería*. México: Mc. Graw Hill.
- Newman, F. M., & Wehlage, G.G. (1993). Five standards for authentic instruction. *Educational Leadership*, 50(87), 15-19.
- Quintana, A, y Montgomery, W. (2006). *Metodología de investigación cualitativa*. Psicología: Tópicos de actualidad. Lima (Perú): UNMSM.
- Requena, M. (2010). Los cambios familiares en España y sus implicaciones. *Revista del Ministerio de Trabajo y Asuntos Sociales*, 2, 47-67
- Renzulli, J. S. (2010). El rol del profesor en el desarrollo del talento. *Revista Electrónica Interuniversitaria de Formación del Profesorado -REIFOP*, 13 (1), 33-40.
- Siegel, S. (1970). *Diseño experimental no paramétrico*. La Habana (Cuba): Revolución.
- Solís, E., Porlán, R., Rivero, A. y Martín, R. (2012). Las concepciones de los profesores de ciencias de secundaria en formación inicial sobre metodología de enseñanza. *Revista española de pedagogía*, 253, 495-514.
- Steinberg, L. (2010). *Adolescence*. New York (EEUU): McGraw-Hill Humanities.
- Sternberg, K. J., Baradaran, L. P., Abbott, C. B. Lamb, M. E., y Guterman, E. (2006). Type of violence, age, and gender differences in the effects of family violence on children's behavior problems: A meta-analysis. *Developmental Review*, 26, 89-112.
- Tapia, J. A. (1998). *Motivar para el aprendizaje*. Spain: Editorial Edebé.
- Vílchez, J. M. y Bravo, B. (2015). Percepción del profesorado de ciencias de educación primaria en formación acerca de las etapas y acciones necesarias para realizar una indagación escolar. *Enseñanza de las Ciencias: revista de investigación y experiencias didácticas*, 33 (1), 185-202



Lifelong learning as a facet of sustainable economic development

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Abstract

Our paper demonstrates how lifelong learning might increase the economic and business potential of the urban centers of both developed and less-developed countries and contributed to sustainable economic development. Rapidly growing cities (especially, but not exclusively, located in the Third World) are marked by social fragmentation and economic divisions have the potential to become learning cities that engage urban dwellers in learning activities aimed at addressing social divisions and creating opportunities for all citizens. Nevertheless, the question is whether the cities and urban hubs offer opportunities for lifelong learning to the most marginalized city dwellers and what services these might be. Lifelong learning becomes an answer to that that offers formal and non-formal educational activities. Where communities learn to engage with the realities of social exclusion, political alienation, and economic marginalization - through both public policy and private initiatives. Educational initiatives across the cities in less-developed countries might include including public policy in the slums and developed metropolises alike aimed at stabilizing communities and establishing cooperation and integration, non-formal educational initiatives to reduce marginalization, or expansion of the formal school system aimed at raising aspirations.

Keywords: lifelong learning, education, sustainable development, labour market

Introduction

Lifelong learning can be broadly described as learning which is pursued throughout the course of one's lifetime. It represents learning which is diverse, flexible and accessible at different places and times. Lifelong learning crosses sectors, enhancing learning beyond traditional education and all through adult life. The definition is founded on four pillars of learning for the future as described by International Commission on Education for the Twenty-First Century and Delors (1996): learning to know – the need to master learning tools instead of acquiring structured knowledge; learning to do – preparing individuals for the forms of work required currently and in the future such as innovation and adapting learning to future work settings; learning to stay together and with other people – peaceful resolution of conflict, discovery of other persons and their cultures, boosting community capability, personal capacity and competence, social inclusion and economic resilience; and learning to be – learning contributing to an individual's whole growth: spirituality, aesthetic appreciation, sensitivity, intelligence, body and mind.

Lifelong learning is very crucial both for the young and old: in fact, both categories might be influenced by it and both can profit from acquiring new skills and knowledge that might prove to be crucial for securing and maintaining their position on the turbulent labor market (Voogt et al., 2013). New technologies that are starting to emerge and dominate the world markets require constantly adapting and enhancing one's skills and qualifications (Giessen, 2015; Strielkowski, 2017; Čirjevskis, 2017). Sequent process of acquiring of new skills serves as precondition of sustainable economic development therefore has to be fostered by all available means, such as e.g. universities (Matetskaya, 2015; Branten, Purju, 2015; Khanagha et al., 2017) and various kinds of networks (Fuschi, Tvaronavičienė, 2016; Prause, Atari, 2017; Monni et al., 2017; Oganisjana et al., 2017), which are enablers of knowledge transfer (Tvaronavičienė, Černevičiūtė, 2015; Hilkevics, Hilkevics, 2017; Zemlickiene et al., 2017).



Lifelong learning might impart responsiveness, initiative, and creativity in people, thus facilitating them to demonstrate adaptability in post-industrial society by fostering skills for managing uncertainty, communicating within and across cultures, sub-cultures, communities and families, and negotiating conflicts. A report by Aspin and Chapman (2001) stated that lifelong learning provides a holistic outlook on the purpose of education in an individual's life cycle. It upholds that education, as a continuous life process, plays an important role in allowing people to adapt to, and address new challenges and shifts in their lives and the environments they live. Lifelong learning, taking on all kinds of educational as well as learning experiences, aids people in engaging in meaningful interactions with their society through developing their skills, knowledge and critical thinking capabilities. Implicit in the lifelong learning idea is the life wide learning concept. Despite the fact lifelong learning puts emphasis on the continuity of learning all through the human life cycle, life wide learning recognizes that individuals find it essential to engage in several learning activities at the same time, through different modalities and in diverse settings.

The goal of lifelong learning is to allow people to turn out to be active social agents – persons who have the capability of acting, reflecting, and responding properly to the developmental, social and cultural changes which they encounter both as individuals and as societal members (Aspin and Chapman, 2001). Life wide learning, therefore, relates to the parallel and multiple roles of an individual in the society, as an additional aspect of lifelong learning. Overall, in today's world in human life cycle, the traditional focus on creating the basis of basic knowledge as well as competencies and acquirement of the technical and intellectual tools of learning in the first life quarter has to be accompanied by lifelong learning in a learning society in which all take part in and contribute to education all through life.

Literature overview

One of the approaches to the conceptualization of lifelong learning is the promotion of skills and competencies required for the development of general capabilities as well as specific performance in work settings. Competencies and skills developed through policies and programs of lifelong learning would be very important for workers performance in their dealing with precise job responsibilities and the ways they could adapt their particular and general competencies and knowledge to new jobs. Therefore, a more vastly skilled and workforce in slums or third world cities would contribute to a more competitive and advanced economy in Third World countries (Auerbach, 2015). There is also a spillover effect in the form of migration of the young and skilled agents to the markets in the more developed markets where their skills might be in higher demand (Glazar and Strielkowski, 2010; Stojanov et al., 2011; Fraser, 2011).

The same, of course, applies to the developed countries of the West. As the population is aging, more and more stress is put on the "gig economy" where users have to be highly-skilled and intellectual agents that can easily adapt the working environment and to reveal their preferences for goods and services (Jenkins et al., 2003; Janda et al., 2013; Chiabai et al., 2014; Strielkowski et al., 2017).

The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines the lifelong learning along the following lines: *"Lifelong learning is less about the teaching or training of certain things or specific skills, much more a way of describing a process of empowerment and mechanisms through which local communities are exposed to varied learning opportunities that helps to prepare them for anticipating the unknown and tackling the political and social uncertainties of tomorrow. In a word, it is that that prepares them for sustainable futures"* (UNESCO, 2015).

People, especially those in the Third World nations may have their outlook of the world and ability for rational choice constantly expanded and changed through the educational experiences as well as cognitive achievements provided by lifelong learning. Besides, along with the provision of lifelong opportunities offered through traditional agencies and institutions, there is a trend for providing opportunities for lifelong learning by creating and expanding various community initiatives (Biesta, 2006). Such form of the community as an institution and



platform for lifelong learning thrives in the realization that the people who engage in lifelong learning would enjoy an array of alternatives, from which they could construct an enriching and satisfying life-enhancing activities pattern.

Moreover, according to UNESCO (2015), “*a learning city provides lifelong learning for all’ and that ‘lifelong learning lays the foundation for sustainable social, economic and environmental development’ on all of the four levels (international, regional, local and citizen)’*”. Lifelong learning would offer slum dwellers the opportunity of updating their knowledge of tasks which they had formerly laid aside or all through wished to attempt but were unable; to attempt pursuits and activities which they were previously made-believe were beyond their competence or time; or to work towards the extension of their intellectual horizons through pursuing to understand and become proficient at some of the present cognitive advances, which have transformed other parts of the world (Lee and Morris, 2016). Nevertheless, lifelong learning is not constrained to those above the education age in institutional or informal settings. Expanding cognitive repertoire and the growth of competencies and skills may continue all the way through life, as a critical part of persons’ growth and development as humans and as residents in a participative social equality, as well as being productive representatives in economic development. Community and individual wellbeing is promoted and protected through making such activities, and the resources for supporting them, accessible to the broadest range of populations. Lifelong learning is a public good – it benefits the society as a whole, and individuals also.

According to Aspin and Chapman (2001), the accessibility of learning opportunities over the entire lifespan of people is a pre-requisite for effective and informed involvement in a democratic society. People might only develop as autonomous agents with the ability of entirely taking part in society when they are adequately informed, pre-disposed and prepared; if they are well-fed and healthy; when they have the minimum domestic conditions for the perpetuation of existence; and when they could involve themselves in communication with their correspondents, enjoying similar autonomy as they have themselves, and with the people they can converse with, consider and plan for mutually beneficial means of action.

Methods

The concept of learning as a public good as well as a responsibility shared by all for the mutual benefit of all societal members are central to this form of the requirement for lifelong learning for all, particularly in developing countries. Participation in lifelong education is an essential prerequisite to an ongoing part of engagement in the organizations of democracy (Ahmed, 2014). Safeguarding the future of all citizens in slums and third world cities is secured through assuring them access to every field and form of human knowledge, understanding and collaborating in a high-quality, dynamic and comprehensive curriculum in multiple institutions committed to the learning and education of the present and future generations. Such a program offers individuals with one of the key ways of personal empowerment, clear understanding and informed decisions in performing day-to-day activities and participating in the growth of the economy of the slums or third world cities and the country as a whole.

According to Ahmed (2014), lifelong learning is critical as it helps in developing the autonomy along with a sense of responsibility of communities and people, in reinforcing the ability to tackle the transformations occurring in the society, culture and economy, and in promoting tolerance, coexistence and the creative and informed engagement of people in their communities. If communities, corporations and governments accept lifelong

learning principle it indicates that people could expect support in their attempts of acquiring and updating the latest skills and knowledge which is vital to their daily work lives, wherever and whenever they require them. Such enables the personal development of the residents, and improves their employability, social capacity and mobility to be effective in involving themselves in activities aimed at improving the quality of life in the cities (Power and Maclean, 2011).



Our paper uses an analysis of the data from Eurostat (2017) on participation rate in education and training in the age group from 18 to 64 years across the EU Member States. We analyze the adult learning patterns for males and females, as well as for all groups together. Moreover, we compare the patterns that is visible across various groups of EU Member States and two other countries that can be found in the EU proximity and have great importance for the economic and social growth of the EU, namely the Former Yugoslav Republic of Macedonia (FYROM) and Turkey.

Our methodology involves the cross-country comparison using the available data as well as graphical data visualization that portrays most common trends and shows the patterns.

Findings

As one can see from Table 1, the European Union (EU) set up an ambitious goal for itself that envisages an average of at least 15 % of adults aged 25 to 64 years old should participate in lifelong learning by 2020. Currently, the participation rate is at 10.8%.

Table 1. Education and training in the age group from 18 to 64 in the EU Member States, FYROM and Turkey (2007 and 2016), males and females (in %)

States	2007		2017	
	Males	Females	Males	Females
EU 28	14.3	16.4	15.6	17.6
EU 27	14.4	16.5	15.7	17.6
EU 15	15	17.4	17.2	19.3
FYROM	9.2	10.2	8.7	10.2
Turkey	6.8	4.7	12.2	10.8

It becomes apparent from Table 1 that the participation in lifelong learning in the EU countries is greater than in its immediate neighbours, FYROM and Turkey. However, one can see that over the past 10 years, Turkey has achieved a growth from 6.8% to 8.7% for males and from 4.7% to 10.8% for females which is similar in its dynamics to the EU countries, while FYROM recorded a slowing rate for males and did not report any increase for females.

Chart 1. Dynamics of adult learning in the EU and neighboring countries (2007-2017), in %

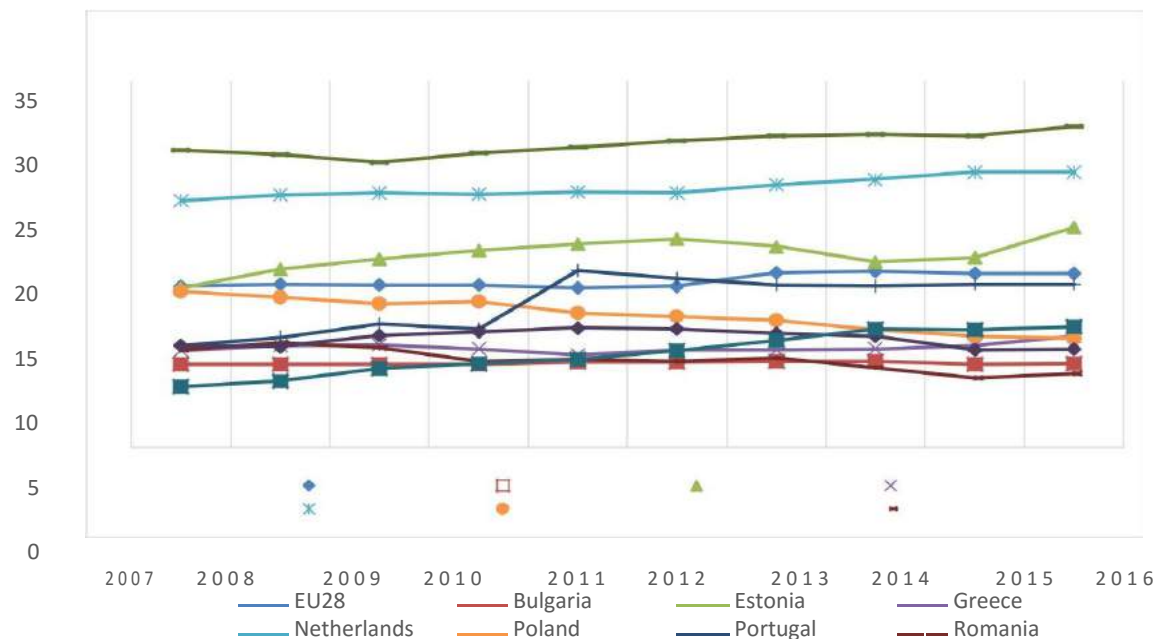




Chart 1 above shows the graphical analysis of the data using the chart form for the EU and neighbouring countries regardless of the gender. It becomes clear that the adult learning in some EU countries is greater than in the other. Moreover, one can see that Netherlands, France, Luxembourg and Estonia were the only other Member States where the participation rate in 2016 already exceeded the 15 % benchmark. By contrast, Romania, Bulgaria, Slovakia, Croatia, Poland and Greece reported adult learning rates of 4.0 % or less (Eurostat, 2017). Overall, it appears that lifelong learning differs in countries with regard to such factors as economic growth, rate of learning, labour market characteristics, social and economic specifics and a plethora of other factors. However, one thing is clear: lifelong learning represents an enormous potential that has to be exploited by the relevant stakeholders and policy-makers. It becomes clear that more dynamic countries or countries aspiring at fostering their economic growth and well-being are keener on investing into lifelong learning and related issues thus promoting sustainable economic growth and development, including, far and foremost, urban development in both slums of the Third World and modern-day smart cities.

Results, Conclusions and Recommendations

Overall, to sum up our discussions and findings, one can agree that in the advent of the global challenges facing the world, lifelong learning has developed to be among the main ways of enhancing the quality of life during the 21st century. Today, it is insufficient to have an all-encompassing initial education – one should continue acquiring new skills and knowledge for taking advantage of the new opportunities which advance technological and scientific advancements bring, and to adapt to the hardships of life in the changing world.

Evidently, investing in lifelong learning would be a payoff to both third world nations and their citizens, in terms of productivity, employment, health, income and other benefits. Furthermore, provision of opportunities to learn all through life would become a critical factor in the fight against eradicating poverty and the education of people for sustainable development. Yet, the adoption of the lifelong learning principle would require a new vision, one which will shift the focus from education to learning; one which would move to a more user-friendly and seamless system; one which would recognize the different ways through which skills and knowledge may be acquired in the digital age beyond the formal system. As pointed out by Power and Maclean (2011), particularly, for a progress to be made in the reduction of poverty and guaranteeing of sustainable development in the developing world, the international community and governments will be required to fulfill their responsibilities and take the necessary measures in making lifelong learning for everybody a reality. Lifelong learning might become a facet of economic growth, most notably sustainable economic growth in both developed and developing economies. It can alter the composition and the structure of labour force which, in turn, might lead to shifting the axis of labour and capital ratio for the local economies.

Moreover, it might promote business development through the creation and cultivation of the new business leaders who might invest into further development of the countries in question and their economies. Relevant stakeholders and policy-makers in both the developing and developed countries should think about the exploitation of the potentials of the lifelong learning. Careful and planned implementation and widespread use of lifelong learning, if applied systematically, might lead to unprecedented changes in the economy and help to create the global business leaders of tomorrow.

References

- Ahmed, M. (2014). Lifelong learning in a learning society: Are community learning centres the vehicle. *Education, learning, training: Critical issues for development*, 102-125.
- Aspin, D., & Chapman, J. (2001, July). Lifelong learning: concepts, theories and values. In *Proceedings of the 31st Annual Conference of SCUTREA* (pp. 38-41). University of East London: SCUTREA.
- Auerbach, A. M. (2015). India's urban constituencies revisited. *Contemporary South Asia*, 23(2), 136–150
- Biesta, G. (2006). What's the point of lifelong learning if lifelong learning has no point? On the democratic deficit of policies for lifelong learning. *European Educational Research Journal*, 5(3-4), 169-180.
- Branten, E.; Purju, A. (2015). Cooperation projects between university and companies: process of formation and objectives of the stakeholders, *Entrepreneurship and Sustainability Issues*, 3(2), 149-



156. [http://dx.doi.org/10.9770/jesi.2015.3.2\(3\)](http://dx.doi.org/10.9770/jesi.2015.3.2(3))
- Chiabai, A., Platt, S., & Strielkowski, W. (2014). Eliciting users' preferences for cultural heritage and tourism-related e-services: a tale of three European cities. *Tourism Economics*, 20(2), 263-277.
- Čirjevskis, A. (2017). Acquisition based dynamic capabilities and reinvention of business models: bridging two perspectives together, *Entrepreneurship and Sustainability Issues* 4(4), 516-525. [http://dx.doi.org/10.9770/jesi.2017.4.4\(9\)](http://dx.doi.org/10.9770/jesi.2017.4.4(9))
- Eurostat (2017). Adult learning statistics. Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Adult_learning_statistics
- Hilkevics, S.; Hilkevics, A. (2017). The comparative analysis of technology transfer models. *Entrepreneurship and Sustainability Issues*, 4(4), 540-558. [http://dx.doi.org/10.9770/jesi.2017.4.4\(11\)](http://dx.doi.org/10.9770/jesi.2017.4.4(11))
- International Commission on Education for the Twenty-First Century, & Delors, J. (1996). *Learning, the Treasure Within: Report to UNESCO of the International Commission on Education for the Twenty-first Century*:
- Fraser, B. (2011). Growing up in Rio's favelas. *The Lancet*, 377(9779), 1735–1736
- Fuschi, D. L.; Tvaronavičienė, M. (2016). A network based business partnership model for SMEs management, *Entrepreneurship and Sustainability Issues* 3(3), 282-289. [http://dx.doi.org/10.9770/jesi.2016.3.3\(5\)](http://dx.doi.org/10.9770/jesi.2016.3.3(5))
- Giessen, H. W. (2015). Sustainable entrepreneurship and peculiarities of media-based learning, *Entrepreneurship and Sustainability Issues*, 2(3), 154-162. [http://dx.doi.org/10.9770/jesi.2014.2.3\(4\)](http://dx.doi.org/10.9770/jesi.2014.2.3(4))
- Janda, K., Rausser, G., & Strielkowski, W. (2013). Determinants of Profitability of Polish Rural Micro-Enterprises at the Time of EU Accession. *Eastern European Countryside*, 19, 177-217
- Jenkins, A., Vignoles, A., Wolf, A., & Galindo-Rueda, F. (2003). The determinants and labour market effects of lifelong learning. *Applied economics*, 35(16), 1711-1721
- Glazar, O., & Strielkowski, W. (2010). Turkey and the European Union: possible incidence of the EU accession on migration flows. *Prague Economic Papers*, 19(3), 218-23
- Khanagha, A.; Dehkordi, A. M.; Zali, M. R.; Hejazi, S. R. 2017. Performance implications of entrepreneurial orientation at public research and technology institutions, *Entrepreneurship and Sustainability Issues*, 4(4), 601-610. [http://dx.doi.org/10.9770/jesi.2017.4.4\(15\)](http://dx.doi.org/10.9770/jesi.2017.4.4(15))
- Lee, M., & Morris, P. (2016). Lifelong learning, income inequality and social mobility in Singapore, *International Journal of Lifelong Education*, 35(3), 286-312.
- Matetskaya, M. (2015). Education programmes for entrepreneurs in the creative industries in St. Petersburg, *Entrepreneurship and Sustainability Issues*, 3(1), 66-73. [http://dx.doi.org/10.9770/jesi.2015.3.1\(6\)](http://dx.doi.org/10.9770/jesi.2015.3.1(6))
- Monni, S.; Palumbo, Tvaronavičienė, M. (2017). Cluster performance: an attempt to evaluate the Lithuanian case *Entrepreneurship and Sustainability Issues*, 5(1): 43-57. [http://doi.org/10.9770/jesi.2017.5.1\(4\)](http://doi.org/10.9770/jesi.2017.5.1(4))
- Oganisjana, K.; Svirina, A.; Surikova, S.; Grīnberga-Zālīte, G.; Kozlovskis, K. (2017). Engaging society and universities for sustainable entrepreneurship, *Entrepreneurship and Sustainability Issues*, 5(1), 9-22. [http://doi.org/10.9770/jesi.2017.5.1\(1\)](http://doi.org/10.9770/jesi.2017.5.1(1))
- Power, C., & Maclean, R. (2011, January). Lifelong learning for poverty alleviation and sustainable development. In *International symposium on lifelong learning*.
- Prause, G.; Atari, S. (2017). On sustainable production networks for Industry 4.0, *Entrepreneurship and Sustainability Issues*, 4(4), 421-431. [http://dx.doi.org/10.9770/jesi.2017.4.4\(2\)](http://dx.doi.org/10.9770/jesi.2017.4.4(2))
- Stojanov, R., Strielkowski, W., & Drbohlav, D. (2011). Labour migration and remittances: current trends in times of economic recession. *Geografie*, 116(4), 375-400
- Strielkowski, W. (2017). Social and economic implications for the smart grids of the future. *Economics & Sociology*, 10(1), 310-318
- Strielkowski, W., Lisin, E. & Astachova, E. (2017). Economic sustainability of energy systems and prices in the EU. *Entrepreneurship and Sustainability Issues*, 4(4), 591-600
- Tvaronavičienė, M.; Černevičiūtė, J. (2015). Technology transfer phenomenon and its impact on sustainable development, *Journal of Security and Sustainability Issues* 5(1), 87–97. [http://dx.doi.org/10.9770/jssi.2015.5.1\(7\)](http://dx.doi.org/10.9770/jssi.2015.5.1(7))



- Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of computer assisted learning*, 29(5), 403-413.
- UNESCO (2015). UNESCO Global Network of Learning Cities. Guiding Documents. UNESCO Institute for Lifelong Learning (UIL), Hamburg, Germany. Available at: http://uil.unesco.org/fileadmin/keydocuments/LifelongLearning/learning-cities/en-unesco-global_network-of-learning-cities-guiding-documents.pdf
- Zemlickiene, V.; Mačiulis, A.; Tvaronavičienė, M. 2017. Factors impacting the commercial potential of technologies: expert approach, *Technological and Economic Development of Economy*, 23(2), 410-427 <http://dx.doi.org/10.3846/20294913.2016.1271061>



The Question of Guilty and Moral Responsibility in the Context of World War II Considering to Subject Didactics Aspects

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Abstract:

This text deals with the problems of morality, guilty, ethics and penalty in the context of the World War II. In given regard are following choosen events and processes which characterized this the most extensive conflict in history. At the same time are also following the consenquences, which the World War II brought with an overlap to present. In the condcluding part of text is attention paid to educational aspects of given issue – namely the possibilities of application in curriculum of History and Civics (primarily on elementary and secondary schools) from the point of view subject didactics.

Keywords: World War II, Guilty, Morality, Responsibility, Subject didactics, Schools, Teachers, History, Civics

Introduction

In 1946 The Question of German Guilt, a book by Karl Jaspers, was first published in Germany; the book reacted to tormenting experience of just terminated totalitarian régime and the World War II. Despite the significant interval (more than 70 years) since its first edition, the fundamental topic of the book expressed by its title remains still alive and forces those who won and those who were defeated in the war – fortunately without bloodshed and destruction – to fight the war again in their minds and hearts. There is still the question of why is it this way. Bloody conflicts have caused a crisis of moral values in armed participants as well as defenceless victims since time immemorial, but these painful, even though invisible, wounds usually used to be “mercifully” covered with a new war in the collective memory of nations quite quickly. Moreover, those who survived could not afford the “luxury” of thinking of the tragic past due to their everyday existencial struggles, even though the traumatic war experience left a significant trace, e.g. in works of art – an example can be Goya’s fine art cycle of The Disasters of War or the novel Simplicius Simplicissimus by Hans Christoph von Grimmelhausen.

But “the cure of oblivion” is no longer effective. Since 1945, the majority of Europe has been living – for the longest period in its modern history – in peace and relative prosperity. There are repeated returns to the visible and invisible wounds caused by the war and not healed yet, which are the paradoxical penalties for it.

World War II – Guilty and Moral Responsibility

The conflict pulled civil inhabitants into war to an extent not see before. The operations in which they were not directly affected – e.g. the mutual combat of interceptors or the confrontation in the northern African desert – still bear the hallmark of “chivalry” in a “dirty war”. But generally, all commanders-in-chief who planned their battles had to count on the fact that not only the enemy’s or their own soldiers, but also civilians, woluld die during battle. In the fighting parties, moral scruples eroded very quickly and willingness to use more destructive weapons as effectively as possible increased in the interest of achieving the enemy’s defeat. While not large in terms of extent, the aerial bombings of Spanish Guernica or Chinese Shanghai in 1937 cause indignation throughout world public opinion, while the attacks of Germans air forces on London and Coventry in 1940 or the later systematic destruction of German and Japanese cities by carpet bombing were understood and accepted as militarily dilemma when he ordered the use of nuclear weapons against Hiroshima and Nagasaki with the aim of achieving the capitulation of Japan. German submarines that attacked (i.e. civil) ships unexpectedly and without



warning are often mentioned as a symbol of ruthlessness in the previous conflict – The First World War. During the World War II, however, these types of attacks, in breach of international conventions, were common to all of the states at war (Hrbek, 1999, p. 325).

Many grievous wounds made by the World War II are still (after more than 70 years) covered and waiting to be opened. Therefore, the transfer of German minorities (inhabitants) from the countries of Central Europe (primarily former Czechoslovakia and Poland) could be discussed in these states quite freely – even though with ambiguous results – as late as after the fall of the authoritarian communist regimes. It is a paradox that German society itself – except for the community of transferred people and partially their descendants – “found out” about this topic, to a considerable extent, as late as after the publishing of *Crabwalk*, a novel by Günter Grass, in 2002. The main theme of the literary work is the story of a German ship, the *Wilhelm Gustloff*, into which the rise and fall of the German nation during the Nazi regime is reflected.

The *Wilhelm Gustloff* was constructed in 1930s of the twentieth century as a holiday passenger ship – a symbol of the economic and social growth of Germany in the first years of the Nazi dictatorship. Thousands of working-class Germans got had their first holiday abroad on the ship’s cruises to Scandinavian countries. During the World War II, the ship was used as a transportation and hospital ship in the Baltic Sea, and in January 1945 it was sunk by a Soviet submarine during the evacuation of German inhabitants fleeing Eastern Prussia from the advanced Red Army. At that time, about nine thousand people – six time more than when the *Titanic* was sunk – died in the ice-cold water of the Baltic Sea. When trying to find whom to blame for these people’s death, we face almost unsolvable problem. Was the commander of the Soviet submarine who attacked the non-illuminated ship equipped with anti-aircraft guns (on the board there were, besides civil refugees, over thousand of German submarine sailors) guilty? Or were the port commanders who allowed civil refugees aboard the ship together with military persons the offenders? Although it was against war conventions, this formal scruple lost its relevance when confronting the despair of the refugees.

Discussions on the fate of the *Wilhelm Gustloff* have still not subsided. On the German side, the fate of the German ship has become, to a considerable extent, a symbol of a tragedy of the German nation during the World War II (but also among others, among them neo-Nazis), contrarily e.g. in Poland, there are voices that refuse attempts to put the suffering of the “offenders” on par with the suffering of the “victims” of the war...

For example, similar debates accompanied the creation of the Centre against Expulsion, supported by the German government, which can be also perceived as an attempt to denounce Poland and Czechoslovakia for the post-war transfer of German inhabitants (borderlands territories of the Czech Lands and today western parts of Poland).

The attempt to close the disasters of the World War II by judicial proceedings against the offenders, however, did not bring calm either. Instead, they just raised new questions. On the one hand, it was evident that those who committed unimaginable atrocities could not go free without punishment, on the other hand, the trials of German and Japanese war criminals were – and still are – often assessed as victor’s justice, as they, too, committed indefensible acts during war. Such voices cannot be ignored all the more because not only the generally known crimes of the Soviet totalitarian regime, but also the serious faults of the western allies, are concerned. An American officer participating in the Tokyo prosecution of war criminals sighed: “Even though we have defeated our enemies in the battlefield but we let their spirits win in our hearts” (Johnson, 1991, p. 417). Admiral Karl Dönitz, commander of the German war navy, was sentenced to ten years’ imprisonment by the Nuremberg tribunal, particularly for the command to his submarine Captains not to endeavour to save the crews of sunken enemy ships (Hrbek, 1995, p. 146). The problem is that allied commanders had also given similar commands. Heinz-Wilhelm Eck, commander of a German submarine, who ordered the shooting down of survivors from the Greek steamship, *Peleus*, was condemned to death after the war by the British in a war trial. But how to assess



the fact that the U.S. Navy and Air Force proceeded similarly against survivors of Japanese ships sunken in March 1943 near island New Guinea (Johnson, 1991, p. 417).

The laws of total war and escalated hatred required not only the defeat of the enemy, but total destruction. We asked one of the former Czechoslovak fighter pilot participating in the Battle of Britain whether the fighting methods of Czechoslovak and Polish pilots differed from the Englishmen's method of fighting. The answer was that at the beginning, the English pilots tried to adhere to fair-play rules in aerial encounters, which means that for example they did not attack heavily damaged German planes that were retreating from the fight. The Czechoslovaks and Poles, much more intensely involved in war events by their fate and longing for revenge for the degradation of their countries, however, shot down such planes with no hesitation. Nevertheless – as this contemporary witness added – the English also adopted this merciless way of fighting very quickly.

The fact that the Soviet Union (USSR) was on the side of the “just party” meaning the winners, and that it was a totalitarian superpower that committed, during its existence, similar crimes to those of Nazi Germany – contributed to the moral confusion at the end of the war. If the Soviet Union committed such crimes on its own people, it was – and more or less still is – understood as an internal matter in the neighbouring world, by which we can be offended, though it did not affect us. There was a problem when the terror affected places and people also outside the Soviet world. The death of thousands Polish officers who were massacred in Katyn by the Soviet NKVD troops (People's Commissariat for Internal Affairs – de facto secret police) still remains not only a painful point of Russian-Polish relations, but also a Polish internal trauma. In 2007, over 1.5 million of Poles saw Andrzej Wajda's film *Katyn* during the first three weeks after its premiere. The worst thing about the Katyn crime was the fact that it was probably committed somehow involuntarily – as a single item in mass terror ongoing in the Soviet Union at that time. Even those who ordered the massacring of Polish officers did not probably fully realize the importance of their decision. It shows illustratively words of Lavrentij Berija, the People's Commissioner of Soviet Internal Affairs and the main organizer of Stalin's terror, stated later about the fate of the massacred Poles: “We went wrong with them” (“Мы сделали с ними большую ошибку.”) (Kaiser, 2003, p. 98).

Czech society had its wounds from the period of Nazi occupation and the World War II, as well. At the first sight, it could seem that they were not as serious compared to those of the other warring nations and countries. Human losses – except for holocaust victims – did not reach to such high numbers and the territory of the Czech Lands became the direct battlefield only at very end of the war. The overall situation in the occupied Czech Lands – the Protectorate Bohemia and Moravia – externally seemed tranquil for the vast majority of the Nazi occupation, but still this period left deep internal marks on the Czech society.

The liberal environment of the First Czechoslovak Republic (between the years 1918–1938) was replaced by a totalitarian regime that liquidated all resistance by repressions. By targeted terror aimed especially at the Czech intelligence and by many gradual Germanizing measures of the Nazi occupational apparatus, preconditions for a post-war so called “final solution of the Czech question” within the sense of Germanization of the “Czech Area” had to be created. In this regard, the World War II was also a fight for the maintenance of the Czech nation and logically, in the Czech environment, it was understood not only as a collision with the Nazi totalitarian regime and its allies, but also as a culmination of the Czech-German national conflict, which thereby became violent and implacable in character (Cingelová, 2016, pp. 57–59). That is why from the Czech point of view the post-war transfer of the German minority seemed (and in the majority still seems) as a just and natural solution without any meaningful alternative.

This radical, but unfortunately in the context of world events logical and justified, end to the hundred-year-long Czech-German coexistence had, at the time, the general support of Czech Republic. The few critical voices that emerged in contemporary Czech society were against the violence committed during the expulsion, not against



its principle as such. The threat to which Nazis exposed Czech nation is still perceived so strongly in Czech historical memory that it reliably prevents any radical reassessment of the opinion of Czech society's majority concerning the expulsion.

The World War II significantly influenced Czech society in other directions, too. Facing the failure of the western allies during the Munich Conference (the end of September 1938) and endangerment of the Czech nation's existence by Nazi rule, the attraction of Soviet Union as a wartime and post-war supporter of Czechoslovaks politics significantly increased and the concerns about the change of the political situation in the Czechoslovakia in accordance with Soviet example disappeared. General Bedřich Homola, commander one of the anti-Nazi resistance organization called "Defense of the Nation", who originally participated in the fights of the Czechoslovak Legion against Bolsheviks in Russia between the years 1918–1920, stated clearly: "Moscow will take neither our language nor land from us but Berlin would take both of them. The form of government will change, there will be no communism 30 to 50 years later, however, there will be a nation, while under the governance of Germans, the nation would be destroyed during 20 years." (Benčík, Kural, 1991, p. 8)

The stormy public discussion that practically always accompanies the anniversaries conneted with Nazi occupation convincingly shows that the World War II in not only a page in a history textbooks.

Application of theme in subject didactics of History and Civics

The above-mentioned topic – The World War II, its causes and consequences in the context of moral responsibility, ethics, guilty and war crimes issues – are the subject of contemporary history teaching. There is a displacement in some cases of natural controversies that can lead (mostly unknowingly and unintentionally) to the creation of the myths and stereotypes (Krákora, Kopeček, Cingelová, Vaničková, 2016, pp. 9–13). They can be caused by the unilateral interpretation and evaluation by the history teacher, lifting the events out of the broader context or by overtaking the mind templates without any critical interpretation attempt. The aforementioned approach is, of course, negatively reflected in relation to the pupil – in the extreme form it may result in the ignorance, often accompanied by the lack of interest in the understanding of specific historical processes projected to the present and, last but not least, the pupil's easier manipulation by the media or various extremist groups (Labischová, 2013, pp. 171–173).

It is necessary to respect the fact that both the teaching of contemporary history and controversial themes always meet with the present and more or less influence the contemporary society, its form, political order, values, medial background and other aspects (economics, cultural and artistic sphere ...).

Therefore, the fundamental question in relation to the current curriculum is how to adapt these ethically complex and problematic themes for the purposes of the history education (Hubálek, 2016, pp. 120–121). The answer can be hidden in multiple perspectivity, i.e. the interpretation of historical phenomena from different points of view, which is currently widely used in history teaching, not only within the Czech Republic. Most historical phenomena can be interpreted and reconstructed from the different perspectives that reflect the information and individual interests of those who interpret and reconstruct them.

It is necessary to overcome the traditional approach to historical teaching, which emphasizes only the transfer of knowledge and political history. This approach, in the case of ethically problematic issues, is viewed as insufficient by both the teacher and the pupil (Marešová, 2016, pp. 15–17).

In the past, the teaching of national history was too tied to the largest national group history that dominates in a particular community. The answer to these constraints is "a new history", which leads to finding the balance between history learning of pupils and giving them the opportunity to think about the epoch from the historical perspective without rejecting the importance of chronology and historical knowledge.



The result should be pupils' ability to analyze, interpret and synthesize historical information. Recent development has clearly led to the research of the social groups history that has previously been ignored, e.g. women, poor people, ethnic minorities, children, etc. (Stradling, 2004, p. 7).

At the conclusion, it can be stated that it is always on the teacher (whatever the level of the educational system), his/her qualifications, abilities and skills to use the above-mentioned means and possibilities in relation to the contemporary history and its controversial themes – moral guilt, responsibility and punishment including the context of the World War II, too. These aspects influence the extent of contemporary history teaching and its effectiveness, the ability to engage the pupils and develop and shape their historical consciousness including wider context of civic education (Nováková, 2016, pp. 49–53).

References

- Benčík, A., Kural, V. (1991). *Zpravodajové generála Píky a ti druzí*. Praha: Merkur.
- Hasberg, W. (2001) *Empirische Forschung in der Geschichtsdidaktik. Nutzen und Nachteil für den Geschichtsunterricht. Band 1, 2*. Neuried: Bayerische Studien zur Geschichtsdidaktik.
- Hrbek, J., Hrbek, I. (1995). *Námořní válka vrcholí*. Praha: Naše vojsko.
- Hrbek, J., Hrbek, I. (1999). *Vítězství přichází z moře*. Praha: Naše vojsko.
- Hubálek, T. (2016). Etická výchova bez etiky – teoretický paradox či edukační realita? (Ethics Education without Ethics – Theoretical Paradox or Educational Reality?) *Civilia. Odborná revue pro didaktiku společenských věd*, 7 (2), 119–126.
- Krákora, P., Cingelová, G., Kopeček, P., Vaničková, V. (2016). *Tak trochu jiné soudobé dějiny*. Praha: Nakladatelství Epoque.
- Jaspers, K. (2006). *Otázka viny. Příspěvek k německé otázce*. Praha: Academia.
- Johnson, P. (1991). *Dějiny 20. století*. Praha: Rozmluvy.
- Kaiser, G. (2003) *Katyň (Státní zločin – státní tajemství)*. Brno: Jiří Buchal – BB/art.
- Labischová, D. (2013). *Co si uchováváme v paměti? Empirický výzkum historického vědomí*. Ostrava: Ostravská univerzita.
- Marešová, H. Rozvoj klíčových kompetencí žáků v rámci osobnostní a sociální výchovy (The Key Competencies Development within the Personal and Social Education). *Civilia. Odborná revue pro didaktiku společenských věd*, 7 (2), 13–25.
- Martens, M., Hartmann, U., Sauer, M., Hasselhorn, M. (eds.) (2009). *Interpersonal understanding in historical context*. Rotterdam: Sense Publishers.
- Nováková, Z. (2016). Legislativní aspekty dějepisného vzdělávání (Legislative Aspects of History Education). *Civilia. Odborná revue pro didaktiku společenských věd*, 7 (2), 47–59.
- Stradling, R. (2004). *Multiperspektivita ve vyučování dějepisu: příručka pro učitele*. Praha: MŠMT.



Cultural Perspectives in Postmodern Educational Framework

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Abstract:

Postmodernity is the age of thinking, not so much of fragmentation, as of plurality, even the shift from unity to plurality is a form of our existence. Values, beliefs, symbols, attitudes, mentalities, are elements of culture that distinguish people, social groups, communities and nations. Cultural diversity is no longer a prejudice but a reality that must be put into value in school. There is a continuous change in approaching the problem: every child has the individual right to use native language, traditions and habits. School has to collaborate in projecting educational strategies based on differentiate elements.

Keywords: cultural diversity, postmodernism, self-education, intercultural education, educational strategies.

1. Introduction

In postmodern, contemporary society, education gets a new profile, according to the specific aspects of the everyday life.

Postmodernism or post-modernity in education designates a distinctive pattern when approaching the activity leading to a permanent formation and development of personality, a pattern which can be implemented at a certain moment in the evolution of pedagogic theory. The definition and administration of this pattern which has a paradigmatic value is historically and axiomatically determined.

2. Content

Historically, postmodernism can be identified within that stage, conventionally called post-paradigmatic, a period characterized by numerous attempts to solve the dispute between two ways of approaching education – psychological and sociological, in relation to the evolution of pedagogy based on general theories with specific contents finally leading to the substantiation of curricular principles used and developed in the process of permanent education. This activity of (re)consideration of pedagogic theory is part of postmodern cultural evolutions. The idea was initiated in the 1950s, explained and determined in the middle of the 1970s (as a “simultaneous process of diversification and unification”) and immediately applied in the general policy when new values were promoted in order to individualize education, to make it active part of community life and to enable free expression in speech and creation.

Axiomatically speaking, postmodernism is a strategy to (re)analyze and (re)organize a reference system, a method with genealogic activities (dissociation, detachment, dissemination) or analogical ones – “compulsory for a synoptic perspective” [Bârzea C., 1996].

When speaking about education, there is a tendency to analyze in separate ways its main elements (general functions, basic structure, internal or external context) and to organize in terms of “intensive and unreduced reflexivity”. This is a potential paradigmatic line which could be found beyond the expressiveness of the term ‘postmodernism’, a word sometimes artificially applied or misused as an external sign of “conceptual violence” [Dogan M., Pahre R., 1997]

As a cultural model, postmodernism advances a new possibility to understand the relation between knowledge and experience, between theory and practice in human actions. There is a gap between postmodernism and modernism (when the two elements of any human action) and a continuity, too, as to make a synthesis of the two separate aspects asks for a preliminary understanding and control of their substance. Consequently, postmodern education shows an effective integrating goal which can be obtained when managing pedagogic theory – teaching practice; general theory of education – general theory of instruction; teaching – learning – evaluation; projecting – achievement – development, which is to be found in the phrase “teaching/learning technology” that epistemologically and methodologically rules the curricular general theory.



Postmodern culture creates “the most aspect of the paradoxical relation that exists between diversity and unification” [Dogan M., Pahre R., 1997]. Its impact is to be seen with the new social sciences born after the amalgamation of different subject and domains, either fundamental or marginal, leading to a consolidation of the epistemic core of the sciences which initiated this innovative approach.

The new perspectives of education cannot ignore the basic ideas in the social theory and postmodern thinking of the last decades:

- a) renunciation to the synoptic, general descriptions (seen as sources of totalitarianism) without “the destabilization of knowledge structures” following the idea of “a large synthesis for a continuous process of diversification” where the basic concepts of the domain are put into value;
- b) multiplication of styles as a reaction to modernism (characterized by a unique style) and a solution to the antinomies of the postindustrial/computerized society illustrated by the relations transformation – stability; homogeneity – heterogeneity; rule of science – influence of another major vector; development – ignorance of philosophic fundamentals; acceptance – refusal of unknown;
- c) utilization of the most suitable codes of communication (“a way to do the exchange”): from the compulsory, punitive method (typical for traditional education) to the imitative (as in modern education) and creative ones (as in postmodern education), in a formal, informal and non-formal open space [Lyon D., (1998)].

Post-modernity in education, as a stage in the evolution of pedagogic sciences and a necessary paradigm to integrate diverse, formative realities, makes use of the cultural pattern just described by:

- a) the stabilization of fundamental, educational concepts according to the intense, decentralized mobility of information and of its communication network existing in a post-industrial society;
- b) acceptance of diversity of educational opinions and interests, stylistically multiplied at global scale, demanding for “the creation of a common framework of consent” in point of theory and methodology, therapeutically and qualitative, only to get to “a radiant self-esteem of local pragmatism” [Connor S., 1999].
- c) assertion of the major directions in the medium and long term evolution of educational sciences, in point of curriculum projection of teaching/learning process for a permanent education, for self-education and complex use of the educational system and methods.

To define the concept of postmodernism/post-modernity in education implies a permanent analogical analysis of the progressive cultural and ethical model of the society. The cultural model of the post-industrialized/computerized society reveals new pedagogic problems, challenges or paradoxes:

- a) “amplification of social and economic inequities associated to technological development”;
- b) an increasing potential of social control over these technologies;
- c) dissolution of certain significations in a world dominated by communication networks;
- d) expansion of “the need to criticize”, a liberating and nihilist attitude at the same time [Piaget J., 1970].

Thus, the concept of post-modernity in education stands for the capacity to project education at a necessary integrative level between the objective dimension of its general functions and the subjective dimension of its finalities, both in the system in the process of education. This can be done and developed and permanently (re)constructed in a unitary and complex way regarding the space, time or pedagogic style, in an open, (self)-improvable internal or external context.

A type of analysis for postmodern education was particularly designated for a society where school has no longer the monopoly over education.

It is a model to meet the concept of “educational city” launched by UNESCO in the 1970s in order to make social organizations and human communities more responsible in doing education.

This model of post-modernity develops two distinct axes in education, differently put into practice: *the axis of rational pedagogic action* and *the axis of integration of differences in pedagogic actions*.



The axis of rational pedagogic action treats with the notions of objectivity and subjectivity. In its evolution, modern paradigm focuses on objectivity while post-modernism focuses on the correlation between objective and subjective and emphasizes the importance of all the initiatives the actors in the educational process have. The axis of integration of differences in pedagogic actions aims “to explore the possibilities to create pedagogic situations”. In its progress, modern paradigm focuses on the different contribution of certain factors (teacher, intellectual education, formal education); post-modern paradigm stresses the importance to incorporate various vectors “through similarities research activities”, by considering the possible relations, to improve them and make them more complex, more creative and flexible [D’Hainant L., 1981].

Post-modernity offers a new way to redefine every pedagogic action using “the paradigm of the 12 necessities” which can be found on four reference, interdependent levels, vertically and horizontally in the whole educational/instructive system [Malița M.,1998]. Reading this paradigm in order to reconstruct the efficient, pedagogic action gives the possibility to identify four types of demands or necessities:

- 1) *functional*, with objective character – the general functions of education(basic function-permanent formation-development of personality, main functions: cultural, political, economical);
- 2) *teleological*, with subjective character – educational finalities(as a system, as a process);
- 3) *substantial*, with objective-subjective character – general contents of education, logically defined(pedagogic objective values) according to the nature and personal experiences of those involved in education;
- 4) *contextual*, with objective-subjective character- the quality of the teaching/education system and of the educational process, expressed in objective terms (educational space and time in society, family, local community, school, group of students) and subjective ones (educational style in the society, local community, family, teacher), with organized structures (formal, non-formal) and immediate impacts (informal education, the importance of psychosocial conditions, social and pedagogic aspect).

This model of post-modernity in education represent a source of continuous (re)construction of all elements involved in any activity with formative finality. Their evolution from agents to actors and authors of instruction/education shows that education can change itself from an external agent (in connection with the environment) to an internal factor of (self)-development of human personality.

It is a condition for postmodernism in education based on two situations: a) pedagogic activity and b) reconsideration of the specific pedagogic discourse. The first element is connected to the standard of “communication activities” placed beyond the rational process of modernism. Basic concepts are inter-action and understanding, looking for balance in “the daily communication practice and experience” in a more widely area of education and informal instruction .The second element certifies the postmodern condition of pedagogy using the developed relation between *narrative knowledge and scientific one* (“*the science*” of education using “*the art*” of education), *between the denotative competence (for conceptual definition) and the prescriptive one(for social action)*, all having a “*performance/pertinence criterion*” present in academic education and research work [Dogan M., Pahre R., 1997].

For the researchers, especially for those in the domain of education, the old idea of unity in diversity is still of interest. Unity is given by a common group of rules, values, attitudes or symbols for the whole society; on the other hand, these cultural elements are transmitted from one generation to another as a common patrimony, without being necessary to be discovered or gained with the years. Mircea Malița names “civilization” that common group of knowledge, values and techniques giving the universal dimension of human existence. Whether civilization unifies and gives the necessary continuity of history, culture makes the difference and gives particulate tones [Lyotard J-F.,1993]. Culture is unique and shapes identities and otherness. There are more cultures in the same space, they coexist in time, they share influence, they accept and tolerate each other, work together to mutual progress. The



connection culture-education, as process and result, is modified according to the corresponding policies in the domain.

Modern history has two types of policies in point of cultural interrelations: assimilation and pluralism. To be more specific, assimilation means eradication of differences. It is a process to attract and occupy when the dominant culture imposes language, habits, values, mentalities and beliefs. As a public policy, assimilation is no longer in use even in those states created after emigration. “Even in the United States, the classic example of “a melting pot” together with the assimilation of the emigrants and the new identities they were given large enclaves of cultural diversity exist where people preserve their collective identity. Thus, in the USA there is a mixed model of assimilation and pluralism at the same time is a “residual multiculturalism” [Habermas J.,2001].

Pluralism is the political expression of cultural diversity. Humans project their identities according to this diversity and, as a result, modern societies become multicultural, multiethnic, multiracial, multilingual [Coyma T.,2001]. Once, intercultural education was considered as a form of education when the child was instructed for two different cultures. Literacy is made in every student’s mother language but progressive actions are to be done to learn the language of majority, too. Teachers of the same origin with the children are preferred, to give specificity to the educational action.

3. Conclusion

Cultural diversity is no longer a prejudice but a reality that must be put into value in school. There is a continuous change in approaching the problem: every child has the individual right to use native language, traditions and habits. Teachers don’t speak about abstract cultures, with no real elements or populated by folkloric ones but about vivid cultures, existing in school classes and in the dominant cultural reality around.

But this is not enough; diverse pedagogy treats differences in a separate way while those areas of common cultures are not considered. It is a risk, for this type of individuals, to stay “outside or between” cultures because they are not well set in either of the native culture or in the culture they live in.

All these analysis and approaches of the postmodern period give education a new tone and focus on the importance of some educational contents meant to combine the aims and the conditions in which an individual develops the personal system of values and the appropriate behavior of the historic life period.

4. References:

- Bârzea C., (1996), *L`éducation dans un monde en transition:entre postcomunisme et potmodernisme*,Paris
Connor S., (1999), *Cultura postmodernă. O introducere în teoriile contemporane*, Editura: Meridiane,București
Coyma T., (2001), *O nouă provocare pentru educație: interculturalitatea*,Polirom, Iasi
Cristea S. (2001), *Postmodernismul în educație*. În: Didactica Pro, nr. 1(5).
Dogan M., Pahre R., (1997), *Noile științe sociale. Interpenetrarea disciplinelor*, Editura: Alternative, Bucuresti
D`Hainant L., (1981), *Programe de învățământ și educație permanentă*, Editura Didactică și Pedagogică, Bucuresti
Habermas J.,(2001), *Conștiința morală și acțiunea comunicatională*, Editura:All,București
Malița M.,(1998), *Zece mii de culture, o singură civilizație*, Editura Nemira, Bucuresti
Lyotard J-F.,(1993), *Condiția postmodernă*, București
Lyon D., (1998), *Postmodernitatea*, Editura Dustyl, Bucuresti
Piaget J.,(1970), *Psychologie et epistemologie*, Editions Gonthier, Paris
Pourtois J.P., Desmet H., (1997), *L`education postmoderne*, Presses Universitaires de France, Paris



Paradigm, Key-Concept Of Educational Theory and Practice

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Abstract

Paradigm is a sign of the maturity of a scientific field. The paradigm dimensions determine the conceptual and framework of the educational process (theoretical and practical ones). The meaning of the educational paradigm has advanced depending on the context of pre-modern, modern and postmodern. Currently there is a tendency to attribute pedagogy a post-paradigmatic state, but most researchers demonstrate exchanging of the defining aspects of educational paradigm focused on: openness, flexibility, diversity of the patterns. This attempt to explain paradigm and model in post-modernism, we reach the conclusion that education science is one of the models due to the determinative role of ruling order and laws. If we treat the diversity of theoretical approaches and educational methods, the model is not deducted anymore and doesn't express the major notes of a dominant theory. It is the situation when reasons for post-paradigm pedagogy appear. As a key concept, it gets a traditional role based on the normative model but with a different connotation.

Keywords: postmodern education, curriculum, paradigm, educational methods, concept.

Introduction - Paradigm, major point in education

According to Cezar Birzea, any science is mature and able to solve scientific problems of a subject when it is able to operate with paradigms (Barzea C.,1998).

Because of the complexity, an approach to educational enquiry emerged, one that treated educational theory as factual, as referring to how things are rather than to how they should be. This interpretation of theory derives in large part from the influence of natural science as a model of education.

There is a plurality of interpretations and theory *paradigm* tends to be seen as a example, a model of thinking that explains the occurrence of particular types of event in particular types of circumstance – for example, by identifying the mechanisms involved where ideas, by Platon, should never be separated from the examples that support them.

In an epistemological meaning, paradigm is an instrument of scientific knowledge, and viewed by T. Kuhn, sciences do not operate with theories but with paradigms (Barzea C.,1998).The philosophical meaning is on a second plan and the dominant theories are the paradigms used by science at a certain moment.

- The scientific community adopts referential works for a domain. These works are true theoretical basis for further education.
- Each dominant theory has its own “method” accepted, together with all the applications by the scientific community and these theories are repeated in time.
- The dominant theory becomes a system of exclusion. It collects the coherent concepts of a community but rejects other explanatory cases, paradigm becoming therefore a normative action.
- Paradigm solves in a typical way typical problems.
- Theories changes more frequent but paradigms have stability and conceptual scientific agreement.
- Associating theory and practice in certain projects, paradigms could become an autonomous program of formation.
- Sciences can produce and use their own paradigms if:
 - ✓ define a referential axiomatic;
 - ✓ define in a precise way the object to be studied;
 - ✓ use scientific knowledge to find specific solutions in a domain;
 - ✓ define the criteria for a paradigm change (Barzea C.,1998).



The paradigmatic approach is of real help because it works with the relation object-subject and on a problematic field. Thus pedagogy can be named “normal” and “mature” able to find scientific solutions in a vast and complex domain- education.

Speaking about education in a functional-structural context, we can determine the role of the models in this activity. In a poly-semantic way, the determined normative meaning of the word model is:

- attitude to imitate due to its value and significance;
- person, fact, object with special qualities, representative for a whole category;
- perfect state, aspiration for something, accomplished in approximate ways;

A scientific meaning could be used, too:

- assemble of elements and variables compounding a symbolic or social system;
- logic representation of a theory (theoretical model),(Barzea C.,1998).

Pedagogy uses both definitions, but the normative one prevails as this is a normative science.

S. Cristea thinks that norms in pedagogy have to be related to the norms in socio-humanistic sciences. In a very general philosophical system, norms are associated to laws, referring to a set of values existing between the absolute ideal and an average of personal successes, expressed in various principles and operational rules (Cristea S.,2010).

The normative relation between the teacher and the student implies standards and social expectations generating and ruling the pedagogic interaction and communication (Cristea S.,2009) . The laws/norms in communication make necessary bridges among the proposed finalities, the extended project, the transmitted message, the common constructive plan and the feed back internally and externally evaluated.

The active laws in educational policy are normative laws, too, and their existence depends on the conscious will or practice of a single or a group of rational agents.

The relation paradigm –model in education has to be interpreted in a functional-structural context.

According to these statements, it is possible to determine the report between paradigm and the real historic period characterizing the dimensions of a paradigm, different from one period to another, from pre-modern, modern to post-modern years.

In pre-modern period, paradigm was defined /determined in the basic works in the domain, which become a dominant theory, a model to follow in education and practical education. The modern period keeps the relation paradigm –model, emphasizing mutual interdependence and inter-determination. “Without having a well-defined, epistemological identity, a studied domain is only a complex of contradictory processes, in search of the best methods to be used in educational theory and practice”(Cristea S.,2003). These searches follow two tendencies: psycho-centrism and socio-centrism.

The openness to other sciences makes possible the extending of the limits of traditional pedagogy, work with empiric researches, indefinite connection between a profession and scientific discipline, between education and pedagogy, the incapacity to theoretically (re)construct the domain (Cristea S.,2010).

Modern period develops in time and the diversity of theories “uses different paradigmatic circuits”, which will give particular values to the parameters to follow when defining education: marking influences, setting the connection teacher-student-educational context-methods of education, giving strictness to the model. According to the “center” of the education (which establish priorities), Y. Bertrand classifies paradigms designing three basic “centers”: person, society, content, interrelation leading to the forth “center” – interconnection.

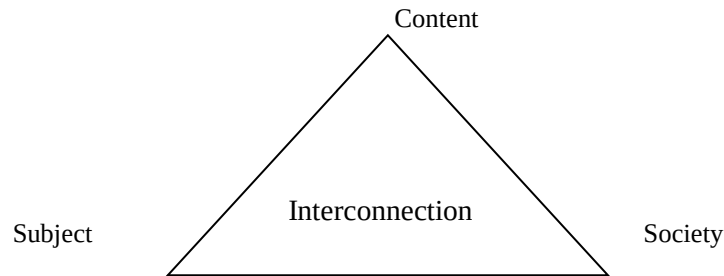


Fig.1. Four components of educational theories

Post-modernism differs from most approaches to learning, according to the conceptual/theoretic dichotomy between psycho-centrism and socio-centrism. S. Cristea evolution is done in two fundamental ways. (Cristea S.,2010).

- The first is that rationality and logic are not important to attaining knowledge.
- The second is that knowledge can be contradictory. Because of the contextual nature of knowledge, individuals can hold two completely incongruent views of one subject at the same time, intra-, inter- and trans-disciplinary views (Cristea S.,2010).

Connotation is different now and we cannot speak about referential work and about a dominant theory. A question appears: is pedagogy, as theory and practice in education, a sector of the models?

The model preserves its utility to satisfy the functional-structural and contextual dimensions of education.

The teleological character of education imposes the necessity of a model to give dynamism and show the importance of educative activity. “Education at all stages (system, process, real activity) gets the capacity to anticipate long term, medium or short term results in a determined space and time”(Cristea S.,2006).

A model is a conceptual need too, in point of its systemic, historic and national character and education is to be found in the determinative aspect. The resulting quality, educability, is the capacity to develop personality, defining education as a human virtue to continually grow in life, to get experienced, to try to have perfect abilities all these features being evaluated according to the model.

This attempt to explain paradigm and model in post-modernism, we reach the conclusion that education science is one of the models due to the determinative role of ruling order and laws. If we treat the diversity of theoretical approaches and educational methods, the model is not deducted anymore and doesn't express the major notes of a dominant theory. It is the situation when reasons for post-paradigm pedagogy appear. As a key concept, it gets a traditional role based on the normative model but with a different connotation.

The openness of education sciences using trans-disciplinary approach tries to put foundations for a conceptual educational process using a synthetic, adapted model resulting from the structural elements corresponding to various theoretical approaches and designed to give future perspective on education.

Paradigm and change

In a period of openness, diversity and changes, theory and practice in education have the same functions but in an increased complexity context. The definition/design of paradigm is based on the relation object-subject, a determinative factor for the other constitutive elements of education, as a system and a process. The teacher is specialized in human behavior and has to make extraordinary complex changes in a material, extraordinary complicated. Child's flexibility always acted pro and against education, a phenomenon more accelerate these days. The present education paradigm focuses on the object of education but doesn't leave the student to learn



independently. The tendency to make the object a “subjective” notion must use the fashionable “defensive doctrine”(Cristea S.,2009).

The teacher, as manager of changes, must be familiarized to the laws and demands of the transformations, to understand the substance of the present paradigm in education in case of:

- various theoretical approaches;
- many pedagogic trends to be accepted;
- conceptual incoherence among the elements of educational strategy, of initial formation (and continuous, too), accepted practices to be applied in real contexts;
- discrepancy between paradigmatic dimensions and the resources involved to accomplish them (human materials).

This is the moment when the teacher must be considered an agent of change, in a humanistic theory of education, with old empiric ideas, scientific manipulation of attitudes, with numerous limits but permanently working on the methodology.

Without neglecting the intentional, guiding, organized character of education, we notice the terms of spontaneous change, as result of the influence models have, that becomes more important, an organized change. Another conceptual principle is to put into value all types of education.

Curriculum, paradigm of post-modern pedagogy

As S. Cristea thinks, postmodernism, as cultural model, offers a new method to understand the relation between knowledge and experience, between theory and practice in human actions. This implies a permanent revaluation of the processes in their educative action and their individualized development in very different contexts and psycho-social situations (Cristea S.,2006).

To be functional, this paradigm imposes two basic conditions:

- ✓ a historic positioning of pedagogic theory in post-modern cultural context;
- ✓ an axiomatic synthesis of a referential system.

The curriculum paradigm, introduced by R.W.Tyler, helps to generally (referring to all educational contents) treat the learner (no matter the age) in an open, proper way (using all methodological resources)(Cristea S.,2003).

Globalization and standardization of individual tasks and performances influence the form a paradigm is created. Its substance is focused on finalities to respond both psychological and social demands.

Nevertheless, paradigm was approached in many different ways when documents of educational policy, contents and finalities were taken into account. This is not a completed process and E. Soare, citing W. Pinar (Soare E.,2010), says that “paradigm is a very symbolic concept, representing what the mature generations want to transmit to the younger ones. Therefore, curriculum has a historical, politic, racial, gender, phenomenological, autobiographic, aesthetic, theological and international character”.

The conceptual evolution of curriculum is to be noticed in the introduction of some phrases such as: “apparent curriculum”, “hidden curriculum”, “written curriculum”, “school decision curriculum”, “teaching curriculum”, “learned curriculum” etc.

S. Cristea notices the following tendencies in the evolution of curriculum:

- extension of the concept from defining the educational objectives, projecting contents, selecting models to teach-learn-evaluate, to life experiences, useful for personal evolution;
- considering the concept as a sum of efficient contents and learning situations, following a progressive sequence determined by pedagogic aims;
- managerial approach of the concept;
- integrated approach of the intra-, inter- and trans-disciplinary activity.(Cristea S.,2006).



Conclusion

Curriculum paradigm accepts and promotes a multitude of various aspects. It includes, at a global scale, all structural and functional facets of educational reality projected and existing in an open social environment and in continuous transformation. It also covers the structural finalities of the social system which deeply influence the content, teaching methodology and evaluation situations (Soare E.,2010).

Curriculum analysis has the importance of a paradigm because of its features defining the post-modern reality:

- openness;
- capacity to offer models for various educational situations;
- flexibility, permitting an “inside” evolution;
- search for the key element(landmark) of conception- the education finality is to use both formative values of the process and the functional performance of the result.

As a conclusion, it is obvious the predetermined and prospective character of the curriculum paradigm which ensure the pedagogical optimism to the process of education.

Reference

- Bertrand Z.,(1993), *Théories contemporaine de l'éducation*. Ottawa.
- Bîrzea C.,(1998), *Arta și știința educației*. București,Editura Didactică și Pedagogică.
- Cristea S.,(2010), *Fundamentele pedagogie*,București,Polirom.
- Cristea S.,(2003), *Fundamentele științelor educației. Teoria generală a educației*,Chișinău, Editura:Litera Educațional.
- Cristea S.,(2009),*Studii de pedagogie generală*,București,Editura Didactică și Pedagogică.
- Cristea S.,(2006), *Curriculum pedagogic*,București,Editura Didactică și Pedagogică.
- Soare E.,(2010), *Evoluții ale paradigmei curriculumului în societatea postmodernă*, Teză de doctorat C.Z.U.37.13(01.3.2), Chișinău,Republica Moldova.



Methodological Aspects of Integrating Ecological Education in the Romanian Education System

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Abstract

In the Romanian education system the four pedagogical steps of integrating ecological education (component of the "new education") have been recognized, and they have already been institutionalized: the infusion step, which refers to infusing traditional disciplines with educational messages that include informational contents specific to ecological education; the modular/disciplinary step, which refers to developing specific educational modules, as well as special chapters within the traditional disciplines; the disciplinary step, which means that ecological education is included as a distinct discipline in the education plan, with institutionalized pedagogical objectives at the level of school curriculum; the transdisciplinary step engages ecological education within the "new education" at the level of scientific syntheses proposed by teams of teachers on a quarterly or annual basis. The paper presents the conclusions of administering a questionnaire on the place and role of ecological education in the Romanian education system to teachers from Bihor county, Romania.

Keywords: ecological consciousness, ecological culture, ecological education, pedagogical step.

Introduction

Being informed and trained for passing on knowledge about ecological education, for developing lasting skills, convictions and behavior connected with the protection of the Biosphere is a fundamental condition required for this noble work called "education". Becoming familiar with the objectives of ecological education is a need, and maintaining a healthy living environment is, after all, the major duty and task of each inhabitant of the World.

The main goal of environmental education is to develop an ecological consciousness and behavior, which begins in the family, continues at school, university and through various forms of continued, lifelong training. Enriching their ecological culture should become a major concern of modern humans.

The four, already institutionalized, pedagogical steps of integrating ecological education (component of the "new education") are the following:

A. The infusion step, which refers to infusing traditional disciplines (Biology, Chemistry, Physics, Geography) with educational message that include informational contents specific to ecological education, but also at the level of intellectual, moral, technological, aesthetic education.

This step raised 2 methodological aspects of maximum pedagogical and social importance (Bălăsoiu, 2014: 88):

- the need to integrate the information coming from the level of ecological education in the structure of the curriculum, and doing that not by merely juxtaposing it as an addendum at the end of a chapter or a book;
- the need to actually achieve a curricular synthesis between the two informational types and trajectories.

B. The modular step. For instance, ecological education is included as a module within Biology in upper secondary education, with objectives specific to the dimension of intellectual education. This type of step raises the issue of correlation between the various modules included within certain educational disciplines. It also raises the issue of a possible unilateralism of the specific objectives within the same dimension of education.

C. The disciplinary step. For instance, ecological education is included as a distinct discipline in the education plan, with institutionalized pedagogical objectives at the level of curriculum.



D. The transdisciplinary step is probably the most interesting, most promising type of step, but also one that is hard to put into practice, which addresses topics included in the content of new education, and which reflects the ideological and psycho-social tensions of the problems faced in the contemporary world: protection of the natural environment, making the most of free time; relationships between generations; the ratio between national and international in the political life etc (Frumos, 2008, Blândul, 2017).

The methodological difficulties inherent to this type of step engage the social sensitivity and responsibility of teachers, their capacities for a global approach (intellectual, moral, technological, aesthetic, physical) to personality development, their open attitude towards the aspects of permanent training, their desire for continued professional self-improvement.

Daniel Goleman is the one who used for the first time the concept of ecological intelligence in the literature (2009, p. 41). Becoming aware of how things and nature work includes the recognition and understanding of the countless ways in which systems created by humans interact with natural ones, that is what Daniel Goleman calls ecological intelligence. Only an all-embracing sensitivity can make us see the connections between our actions and their hidden effects on the planet, on our health and on our social systems. Ecological intelligence combines these cognitive abilities with the empathy for any form of life.

Attitude towards mother-nature is a matter of education, culture, civilization and civic duty, but protecting nature represents the duty of each Earth citizen (Oltean, 2016: 78).

Preoccupations of professors regarding the implementation of ecological education are presented in the journal *Human Education Today For Tomorrow's World*, de ex. „Ornithological data from Bihor county (Romania)” (Ilie, 2016: 113-115), „*Drosera rotundifolia* – a miracle of nature. Reservation and repopulation of the round-leaved sundew's in the swamp of Iaz, Sălaj counties” (Kovács et al, 2016: 116-117), „Young generation relationship with environment in curricular and extracurricular activities” (Oltean, 2016: 78-88).

Methods

The sample consisted of teachers from Bihor county – Romania, both from urban and rural areas. The number of teachers who filled in the questionnaire was 150 (80 from urban areas and 70 from rural areas). The data were collected between 12 January-19 June 2017.

The main objective was to assess the situation existing at the level of educational reality concerning the place and role of ecological education in the Romanian education system. We consider that such an endeavor is absolutely necessary, as the results obtained in this way represent an essential support for the organization and implementation of future researches.

The purpose was to:

- assess the place and role of ecological education in the pre-university education of Bihor county;
- gather opinions on attitude and responsibility towards the environment;
- collect the teachers' proposals and suggestions for organizing and implementing ecological education.

The system of data collection methods

- a. The survey method, which will contribute to data and information collection so that the issue is understood as thoroughly as possible. Being an interactive method, the information exchange with the subjects assumes collecting data on: knowledge, actions, educational needs, behavior, desires, aspirations etc. The specific instrument used is the questionnaire. A presurvey was conducted beforehand.
- b.



The questionnaires were applied in four stages and the number of items is 35. The items are grouped based on the aspects below:

- attitude towards environment protection;
- responsibility towards environment protection;
- ecological actions: examples;
- place and role of ecological education.

At each stage, the administered questionnaires included 5 to 15 items, the time allowed was one hour. The reason why these items predominate is to obtain open answers and offer the freedom of expression in the process of studying aspects of the place and role of ecological education in the preuniversity education of our county.

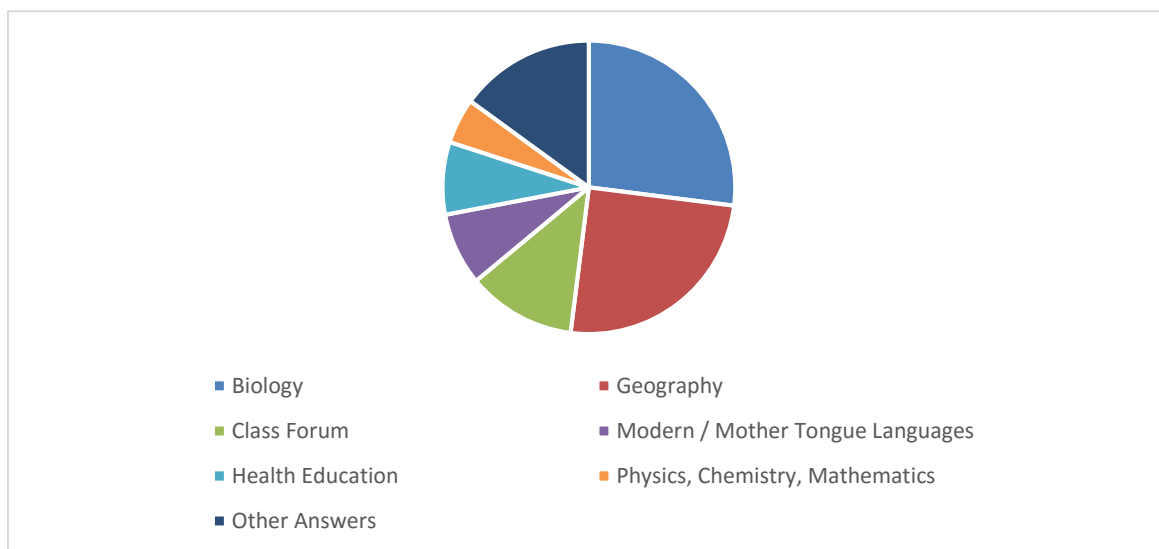
b. The interview method is also an interactive method, but a qualitative one, and it will complete some data and information on the subjects of the research. Both group and focus group interviews will be applied.

Findings

The processing of the information collected in the third stage are presented, as this was the stage concerning the place and role of ecological education in the preuniversity education.

In the case of the first item, the statistic situation is as follows: ecological education content is taught in the following disciplines: Biology (27%) and Geography (25%), followed by the Homeroom class (12%) and Health Literacy classes (8%). 8% is also taken by modern languages/mother tongue (Romanian language/Hungarian language in the case of some schools). 5% by Physics, Chemistry, Mathematics. The other answers fall within the 15%.

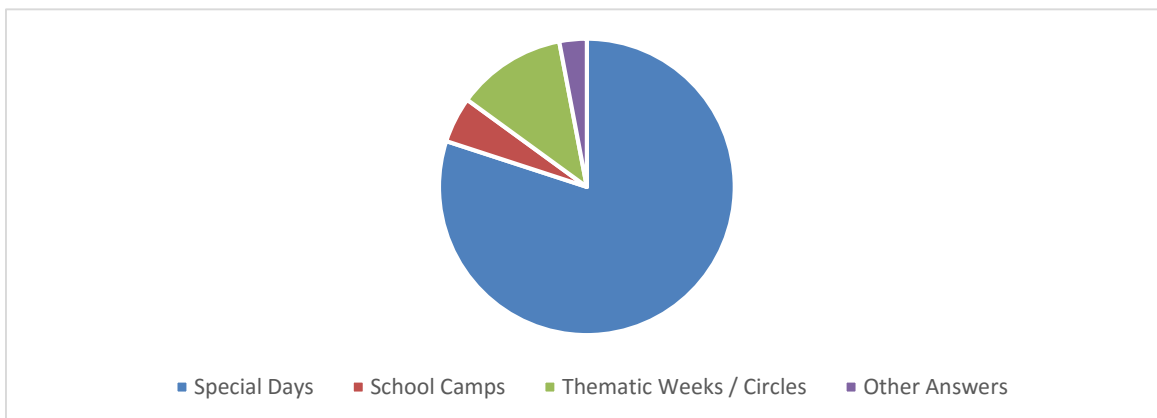
Figure 1. Subjects which cover ecological education



In the case of the second item, which refers to the implementation of ecological education through extracurricular activities, the respondents mention excursions, trips, field visits, didactic visits, where the percentage is 80%; special days (Earth Day - 22 April, Environment Day, Water Day etc.): 5%; activities such as school camps, "School in Nature", thematic weeks, thematic groups, meetings with ecologists, geologists, geographers, journalists – 12%; other answers – 3%. The other answers category includes didactic ecological games, TV/radio programmes, cleaning the environment etc.

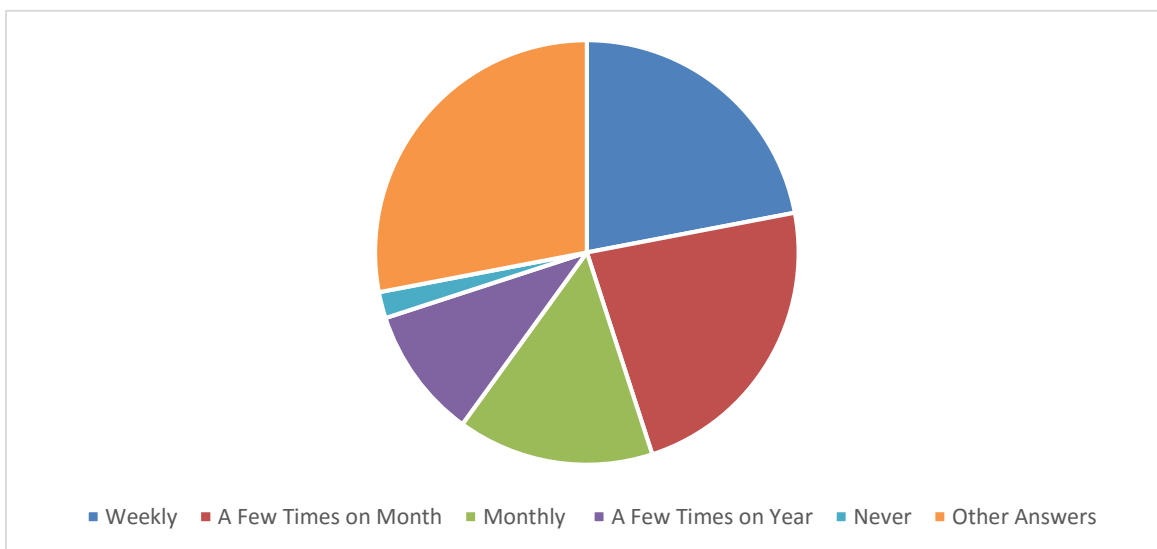


Figure 2. Extracurricular activities which cover ecological education



Items 3 and 5, ideationally linked, have clear answers. Biology, Geography, Homeroom teachers are seriously concerned with the environment, with providing ecological education, with developing the children's attitude towards the environment. In the case of item 3, ecological education is done weekly (22%) and a few times per semester (23%), monthly - 15%, a few times per year – 10%; never – 2%. The remaining 28% belongs to the other answers category.

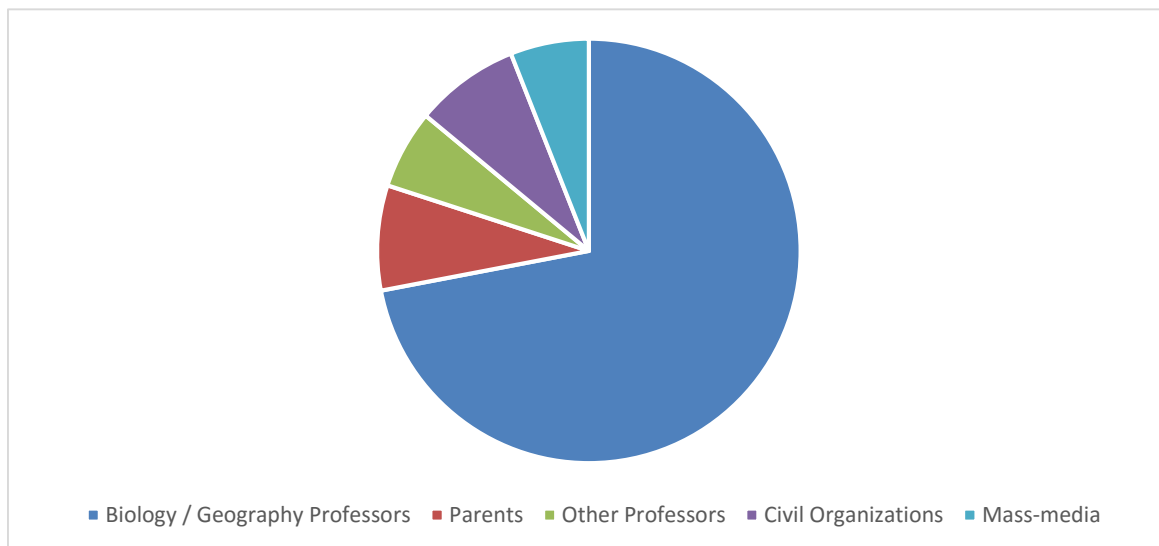
Figure 3. Frequency of ecological education teaching



Ecological education is not done only by teachers who teach disciplines closely related to this field, namely, Biology and Geography teachers (72%), but also by parents (8%), Homeroom teachers and other teachers (6%), civil organizations (8%), mass media (6%).



Figure 4. Persons who teach ecological education



The answers given to item 4 are very interesting. The wide range of answers shows that ecological education is a continuous process, where the activities are carefully chosen, they are highly topical and also attractive. Ecological education is the foundation of civilisation and human progress. Today's children, the generation of tomorrow, have a duty to preserve, to correct, to make amendments to what has been destroyed by previous generations (Marinescu, 2010: 169; Dulamă, 2010: 78).

The attitude towards nature is a matter of culture and education, of civilization and a civic duty, and the protection of nature is a duty of each inhabitant of the World. Preserving a healthy living environment is in fact the major duty and task of each member of society. “A healthy mind, in a healthy body, in a healthy world, with a healthy environment” are the words of Academician A.T. Bogdan. We look at it as a challenge which encourages us to perform reflection and self-reflection.

Dominant-relevant skills, such as knowledge, intelligence, and expertise, are an essential component that affects individuals with creative potential (Titrek et al, 2015: 6).

Results, conclusions and recommendations

The numerous implications of ecological education with the dynamics of the contemporary society face educators with two fundamental problems:

- the place of ecological education alongside the modernization of the education content;
- the continuous improvement of the teachers' didactic activity through:
 - modernization of teaching-learning by applying interdisciplinarity / transdisciplinarity;
 - transformation of school learning into a process which truly supports young people's active and competent integration into the private, the professional and the public lives.
- increasing interest in the local problems of communities (preserving and taking care of green spaces, planting trees and bushes, hygienization, building nests for birds etc.) and in problems beyond those of communities (protection of nature reserves, participations in fundraising for actions at national level etc.);
- developing of an ecological culture, of an ecological consciousness.



It is impossible to discover the secrets of nature only by watching TV programs or reading newspaper articles. Ecological education does not begin only with love for mother nature, with observing and admiring the environment, with understanding the relations between organism and the environment, but it assumes developing the required competences and attitudes.

At school level, ecological education tends to become a transdisciplinary value included in the pedagogical design. The particularity of ecological education comes from the emergence of social contents reflected by the two complex notions – ecology and environment –, which should not be mixed up or overlapped, but interpreted and exploited from a pedagogical point of view.

The issue of environmental conservation is not only the experts' issue, but also an issue of each inhabitant of the World, because we all are “the children of nature”. Due to its interdisciplinary character, ecological education has an essential role in developing and shaping the human personality. But we should not forget its role in the training for respecting the values of nature and of the environment we live in. The life quality of a nation is also determined by the quality of the environment.

References

- Bălăşoiu, T., “Integration of ecological education in the new education”, in AGIR Bulletin 3/2014 • July-September, 87-89. <http://www.agir.ro/buletine/2130.pdf> / retrieved 16.07.2017
- Blândul, V.C., (2017), 50 de jocuri și activități specifice educației nonformale, Edit. Mega, Cluj-Napoca.
- Comșa, D.; Bogdan A.T., (2011), Eco-Bio-Diplomacy - A new concept for a sustainable intelligent development, in a globalized world, in the context of eco-bio-economy, <http://www.postdoctorat.ro/Documente/Biblioteca%20virtuala/Ziua%20Mediului%205%20iunie%202011/extras%201%20din%20cartea%20ECO-BIO-DIPLOMATIE.pdf>/ accessed July 25th 2017.
- Dulamă, E.M., (2010), Knowledge and Protection of the Environment by Children. Theory and Applications. Cluj-Napoca: Cluj University Press.
- Frumos, F., (2008), Didactics. Foundations and Cognitive Development. Iași: Polirom Press.
- Goleman, D., (2009), Ecological Intelligence, București: Curtea veche Press, 41-42.
- Ilie, A.L., (2016), “Ornithological data from Bihor county (Romania)” in Human Education Today for Tomorrow’s World, Prouniversitaria Press, Bucharest, p.113.
- Kovács, Z.Z.; Máté, Z., (2016), “Drosera rotundifolia – a miracle of nature. Reservation and repopulation of the round-leaved sundew’s in the swamp of iaz, Sălaj county” in Human Education Today for Tomorrow’s World, Prouniversitaria Press, Bucharest, p. 116.
- Marinescu, M., (2010), Didactica biologiei. Teorie și aplicații, Editura Paralela 45, Pitești.
- Marinescu, M., (2013), New Education in the Society of Knowledge. Bucharest: Prouniversitaria Press, 132-165.
- Oltean, M., (2016), “Young generation relationship with environment in curricular and extracurricular activities” in Human Education Today for Tomorrow’s World, Prouniversitaria Press, Bucharest, p. 78-88. http://eke.ro/document/Raport%20de%20cercetare_EDUCATIE%20ECOLOGICA.pdf
- Transylvanian Carpathian Society Satu Mare, Project: Two countries, one goal, common success!, Research report, 2010/ retrieved 16.07.2017.
- Titrek, O., (2015), Entrepreneurship via Creativity for European Citizenship in Education, coord. Osman Titrek (Ed.), LAP LAMBERT Academic Publishing, Saarbrücken, Germany.
- Titrek, O; Zafer-Güneş, D.; Sezen-Gultekin, G., (2015), “Creativity and education” in Entrepreneurship via Creativity for European Citizenship in Education, coord. Osman Titrek (Ed.), LAP LAMBERT Academic Publishing, Saarbrücken, Germany, p. 6-17. https://www.researchgate.net/profile/Osman_Titrek2/publication/303995210_CREATIVITY_AND_EDUCATION/links/5809c70008ae993dc0514f00/CREATIVITY-AND-EDUCATION.pdf



Aging Behind Bars in Portugal: A Case Study on Elderly Inmates

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Abstract

This paper presents a study about the ageing of people under detention, based on the analysis of a prison located in the north of Portugal. Scarce studies were developed with this population and statistical data indicates the increasing number of elderly inmates in the Portuguese prison context. This paper intends to explore the perceptions of the inmates who are over 60 years old, as well as other professionals who interact daily with this population. The research is a case study with a qualitative approach. Data collection includes semi-structured interviews to prisoners, the prison director, guards, health professionals, reeducation professionals, etc. For the purpose of this paper, only results from interviews to prisoners will be analyzed (n=11). Ethical issues and procedures were carefully considered during all phases of the research plan. The results intend to contribute to a greater comprehension of the ageing phenomena behind bars and the imprisonment experiences lived by elderly prisoners, including adaptation to prison as well as resocialization issues, pointed out as of great importance by the Portuguese legal system frameworks. Results of this exploratory paper show a description of the social representations of elderly inmates, regarding perspectives of life trajectory without imprisonment, reasons for the crime practice and its interpretation, representation of prison admission, adaptation to prison, representation of the relationship with professionals, social representation of prison population and resocialization and age.

Keywords: ageing, elderly inmates, social reintegration, Portuguese context.

Introduction

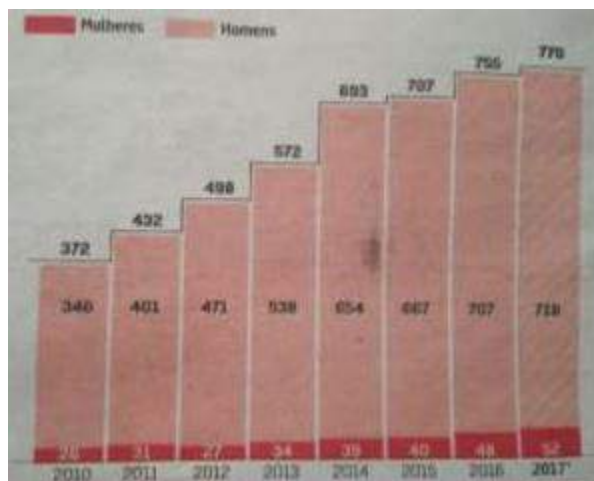
In 2015, Portugal was the 4th country within the European Union with the biggest percentage of elderly people, with 20.5% (source: PORDATA). It can be designated as a “hyper-aged society”, considering that in 2050 numbers will increase to over 30%. The prison context is not an exception. There are more and more elderly people in the prisons and statistical data shows that the numbers are increasing every year (see figure 1). A newspaper headline published on a national Portuguese newspaper, on the 3rd of May 2017, calls the attention to this phenomena: “Number of elderly prisoners duplicated in seven years”. This matter has become an issue of great concern and challenge for the Portuguese Prison Services. Statistics from the General Board of Prison Services (DGSP -



Direção Geral dos Serviços Prisionais) indicate that in 2010, there were 372 inmates aged 60 or more years old in the Portuguese prisons. In the following year (2011), the number increased to 432 (see figure 2). And the number never stopped increasing since then. At the end of the year of 2016, there were 755 elderly prisoners. Of these, 707 were male and 48 female.



¹Figure 1: Evolution of the Prison Population in Portugal



²Figure 2: Prison population aged 60 and over

Adding to this fact, several of these people were arrested when they were already over 60 years old. With the advance of the age, multiple health problems, the lack of hope and the possible loss of social-affective attachment, are some of the main difficulties faced by these people. The challenges of social reintegration are enormous and Prison Services have a complex task in occupying and monitoring these people.

Portuguese Prison System – some features and regulations

The Portuguese legislation concerning the Prison Establishments includes two important legal frameworks which support and guide the organization of all Prison Establishments. These are the Decree Law n°115/2009 of October 12, which refers to the *Code of Execution of Sentences and Deprivation of Liberty* and the Decree Law n° 51/2011 of April 11, which sets the *General Regulation of the Prison Establishments*. These Diplomas are the legal support that legitimizes all the work carried out by professionals (including the Re-education Professional) working in the prison context who, in an organized and cooperative manner, deal with the re-socialization of the prisoner, since the moment of his/her entrance until the moment of his/her exit. After the admission of the prisoner, his/her clinical evaluation, the contact with the surveillance and security services and other steps that are necessary to guarantee the specific needs of each person, a specific individual plan is elaborated by the Re-education Professional, who accompanies the prisoner during the entire duration of his/her detention. Special attention and consideration is given to the problem of elderly people, aged over 65, as well as youths and pregnant women. In the case of elderly inmates, the article 4° of the Decree Law n°115/2009 of October 12, referring to Special Guiding Principles, mentions on the 2nd point, the following: “the execution of sentences and deprivation of liberty for persons over 65 years of age must respect their specific needs and their state of health and autonomy, in particular by guaranteeing them the necessary assistance in the activities of daily living and by providing them with accommodation, safety, activities and programs”. This is, however, the only specific orientation found in the legislation which refers, in a clear and straight way, to the elderly population.

¹ Source: Direção Geral dos Serviços Prisionais, números a 31 de dezembro de cada ano | Infografia Jornal de Notícias (JN)

² Source: Direção Geral dos Serviços Prisionais, números a 31 de dezembro de cada ano | Infografia Jornal de Notícias (JN)



Besides this, the Individual Plan of Rehabilitation (PIR – *Plano Individual de Reabilitação*) takes into consideration specific needs of groups and population. According to the article 69º of the Decree-Law nº51/2011 of 11 of April, each inmate has an Individual Plan of Rehabilitation. The plan is compulsory for all prisoners sentenced to more than one year in prison. This plan sets out the objectives to be achieved by the inmate, the activities to be developed, the different stages of implementation and actions needed to be taken by the prison establishment to ensure the support and control of the accomplishment of these activities, based on the following areas: a) education and vocational training; b) occupational work and activities; c) programs; d) social and cultural activities; e) health; f) contacts with the outside; g) strategies for preparation for freedom. It is the responsibility of the Re-education Professional to formalize the Individual Readjustment Plan, which is approved by the director of the prison establishment. After homologation and approval, the Individual Readjustment Plan is reissued to the Court of Execution of Sentences. The Individual Plan of Rehabilitation should be carried out by the departments responsible for supervising the execution of the sentence in cooperation with all the other prison services. During the execution of the Plan, the inmate is given priority to express himself /herself about the plan. In this sense, the inmate can present ideas, programs that may be part of his individual plan. It should be noted that the intervention plan should not be restricted to prisoners, but should involve the other prison actors, such as guards, Re-education professionals, directors, among others. It is a treatment that includes a multidisciplinary intervention. This plan must be reassessed after 60 days of inmate's admission to prison. As Ramos (2011) points out, the plan is carried out and made by the Re-education Professional assuming a fundamental role in the performance of his work in order to occupy the time of imprisonment in the most pro-active way, providing the inmate with the opportunity to acquire new skills or strengthen existing ones, so as to fit him in the overall environment. About the relevance and implementation of the Individual Plan of Rehabilitation, Pontes (2015) developed a study aimed to analyse its complexity and the difficulties found in its practical use by the professionals in the prison context. Based on the empirical study, the author concluded that the Individual Plan of Rehabilitation was considered relatively well structured, in spite of being too complex and, therefore, difficult to accomplish in terms of practical utility. Also, a significant proportion of the individuals surveyed in the study proposed a wider involvement of others sectors and services, mainly the reintegration services, as well as greater specificity and individualization of the plan's objectives. The reformulation of the Individual Plan of Rehabilitation and its greater connection with the Evaluation, to better define the objectives of the inmates' reintegration, are also an important conclusion of this study.

To conclude, based on this short description of the main characteristics of the Portuguese prison context, its features and regulations, several issues and challenges must be considered in the analysis and study of this complex phenomena of ageing in the prison context. The role of the social reintegration teams that work with the prison establishments are of great importance also to establish the articulation with the families of the inmates and with the communities of origin, when the flexibility of the sentences is considered: jurisdictional exits, proposals for placement in the open regime in the interior or abroad and appreciations for a possible probation and other situations like the use of the electronic bracelet.

Method

This study is part of a broader research project carried out within a Masters Dissertation on Education Sciences at the Portucalense University, in Porto, Portugal. The study aims to analyze and understand the ageing phenomena of people who are under detention, mostly those who are over 60 years old, crossing their perspectives with the perspectives of the professionals who work daily with them.

The following research questions were defined to orient the study:

- How do elderly inmates and professionals working in the prison context see and understand the ageing phenomena of inmates?
- What are the psychological and social processes that can lead to successful or unsuccessful individual adjustment of elderly inmates?



- What are the strategies and practices implemented for the by the Portuguese Prison System to support the adaptation to prison by elderly inmates?
- How do elderly inmates describe their imprisonment experiences?
- What are the perceptions of the elderly inmates and professionals who work daily with them (guards, health professionals, reeducation professionals, prison director) about social reinsertion?

To attain these objectives, a case study (Yin, 2003) was carried out at a prison context located in the north of Portugal . The research design is based on a qualitative approach and data collection includes open interviews to prisoners and semi-structured interviews to other professionals, such as the prison director, guards, health professionals, reeducation professionals, etc. For the purpose of this paper, only qualitative data from the open interviews carried out with prisoners (N=11) over 60 years old will be analyzed.

• Procedures

Ethical issues and procedures were carefully considered during all phases of the research plan. A letter was sent to the General Board of Prison Services and Reinsertion (*Direção Geral de Reinserção dos Serviços Prisionais - DGRSP*), presenting the Research Protocol and the authorization request to develop the study in the selected prison context. Once the confirmation of the authorization of the study was obtained, the data collection phase was initiated and carried out for a period of two weeks, starting the first interview at the midterm of the month of July.

The elderly inmates were selected from a list of 46 prisoners aged 60 and over. Due to the short period available to keep up with the paper publication deadline, only 11 inmates were interviewed in the first phase of data collection. Inmates were informed about the purpose of the investigation as well as the authorization of informed consent. During a period of two weeks, the interviewees were randomly called by the guards and directed to the interview rooms. Previously, the researcher had access to the individual reports and cases of each inmate, in order to get to know him better prior to the interview, for example: age; crime; years of pity; recidivism; among others. The previous dialogue established with the guards became crucial to help the researcher become aware of certain characteristics of the inmates. In this way, it was easier for the researcher to adapt her behavior and discourse to each case.

• Participants

Participants in the study included a sample of 11 male inmates, selected by a sample convenience. They all have Portuguese nationality and place of residence was located in the north of Portugal. The following table summarizes the characterization of the participants in the study.

Table 1. Characterization of Participants

#	Sex	Age	Civil Status	Number sons/daughters	Qualifications	Detention period	Cause(s) of Detention
P1	Male	66	Single	1	2 th grade	7years	Robbery
P2	Male	69	Single	0	9 th grade	6 Years and four months	Sexual abuse of minors
P3	Male	72	Married	3	4 th grade	7 years	Sexual abuse of minors
P4	Male	75	Widow	0	Ceramic course	6 Years	Sexual abuse of minors
P5	Male	65	Married	3	2 th grade	6 Years	Sexual abuse of minors
P6	Male	76	Married	2	4 th grade	7 years	Tax fraud
P7	Male	69	Divorced	5	4 th grade	8 years	Attempted murder
P8	Male	66	Married	3	4 th grade	3 years	Tax fraud
P9	Male	64	Married	1	4 th grade	3 years and 9 months	Road accident
P10	Male	63	Divorced	2	3 th grade	3 years and 4 months	Domestic violence
P11	Male	60	Married	2	7 th grade	6 years	Drug dealing



• Data Collection

Data collection was based on open interviews carried out with prisoners over 60 years old. The interview was seen as the best research method to attain the research goals, although several constraints and limitations that are strongly related to the use of this method were also carefully considered, such as social desirability, nonverbal communication, the characteristics of the interviewer, the audio recording, etc. (Bryman, 2004; Kvale, 1996).

The script of the interview was organized according to the following guidelines (see table 2), systematized in four major dimensions: a) life before imprisonment; b) adaptation to prison; c) life imprisoned; and, finally, d) life after imprisonment.

Table 2. Interview Script and Guidelines

Dimension / Topic	Objectives
Ethical Procedures	• Inform about the interview and its objectives • Request permission to record the interview • Create a positive atmosphere of trust
Life before imprisonment	• Understand the professional trajectory of the inmate before the prison entry • Identify the inmate's view of family • Identify personal goals and interests prior to the imprisonment
Adaptation to prison	• Describe the process of adaptation to prison • Identify successful or unsuccessful strategies of adjustment to prison • Understand how inmates spend their time in prison • Identify positive and negative aspects of prison life • Analyse the relationships between inmates and the professionals who daily work in the prison
Life imprisoned	• Analyse aspects related to ageing • Analyse the participation in activities and programs that favor inmates' reintegration • Compare the past with the future and the motivations for social reinsertion
Life after imprisonment	• Analyse possible regrets and expectations after imprisonment • Understand whether aging is a factor of demotivation

• Data Analysis

For data analysis, a content analysis was carried out and data from the interviews was organized in different themes (Bardin, 2009). Results will not follow the previous four themes identified in the interview guidelines, as a variety of themes emerged from the data analyzed in the interviews. In the interpretation of the data, we also followed a recent paper from Santos and Nogueira (2015), which refers to the same theme and that was an important reference in the organization of the results, considering that there is scarce literature regarding this theme. Results should be interpreted as the result of a small sample of inmates, that was not possible to extend due to the timeline. Also it is relevant to present that no theoretical saturation was obtained by this data, so they must be considered as exploratory. Also, in this type of population social desirability is very common so the data must be interpreted and observed within this framework (Gonçalves & Gonçalves, 2012).

In the next section, findings will be presented and discussed, according to the data analysis and the review of literature in this field.

Results and Discussion

The first theme "*perspectives of life trajectory without imprisonment*" showed similar responses among all participants. Very low qualifications were reported, with some inmates almost without knowing how to read. Also professional careers with no defined purpose, or a specific qualification are reported. In this theme, we found an



idealization of the life courses reported by the interviewees. All inmates reported a professional life with a defined occupation, and showed the intention of maintaining that profession when they get out. They present an idealized “positive perspective” also reported by Santos and Nogueira (2015), referring that when they got out they will continue to work on the same tasks, or even open a new business. We found this idealization also associated with their role on the family. The inmates mainly were silent when asked for life goals.

The second theme is “**reasons for the crime practice and its interpretation**”. Surprisingly, this sample does not present any inmate who shows regret and guilty, which shows that these prisoners, according to Gonçalves (2002), are not prepared for re-entry into society, since they did not assume the crime nor demonstrate understanding of punishment and accountability. The emerged category “**victimization by others**”, was reported by subjects who tend to channel the guilt of the crime committed in people or circumstances that are external to them and “impossible” to control (Santos & Nogueira, 2015, 47), including for instances the victim who refers that “I’m here because of her”.

The third theme is “**representation of prison admission**”. It gathers two categories that associate subjective and reported interpretations regarding institutionalization. The first category is the “**surprise associated with the deprivation of freedom**”. The second category is “**sadness**” as most of inmates state this emotional state as part of their admission to prison.

The fourth theme is “**adaptation to prison**”. The main category reported is “**tendency of isolation for personal safety precaution**”. Also, as reported by Santos and Nogueira (2015), “**age**” is the second category and relevant indicator in this dimension as older inmates did not identify with the remaining age groups, so they tend to isolate themselves. The third category is “**relationships out of prison: support and contact with family and friends**” which focuses on the contacts with family and friends, either through letters, phone calls or visits. Family is the center. All, except one, declared family visits and phone calls as a great moment of anxiety, joy and excitement. As Gonçalves & Gonçalves (2012, p.556) argue “... the maintenance of family contacts during the period of incarceration may be a factor in the prevention of break-ups, which in turn lead to recidivism”. Surprisingly, we have a sample that does not work in prison. We did not find the importance of labor and training practice as an inclusion strategy, confirming the isolation of the interviewed inmates and their rigidity in not adapting to the prison system. For instances, the “precarious exits” granted for good behavior and work allows prisoners to visit family and friends during imprisonment. The fourth category is “**tendency of isolation and victimization of others**”. The majority of participants reported that they do not work in prison, however one does and another is in a resocialization program. They report a tendency to isolation associated with exploitation of other prisoners, that clean their cells and personal clothing.

The fifth theme is “**representation of the relationship with professionals**”. The prison staff plays a key role in adapting and reintegrating the inmate. Inmates reported difficulties in accessing a social resocialization professional or doctors. This set of participants demonstrated high satisfaction with the relationship established with nurses and the guards. The time of relationship established between these two professional groups, nurses and guards, with the inmates (more than the doctors or reeducation professionals) may allow the development of a closer relationship. It is also known prison’s financial difficulties in Portugal, in hiring professionals, so consequently the lack of human resources for the high number of inmates, that is reported by these interviewees. Also, an interesting information is pointed out by Gonçalves (2002), referring that guards tend to protect inmates who are detained for sexual offenses, against other inmates. In this sample, there is a high prevalence of interviewees arrested for this crime, who express appreciation for the guards, as expressed in by the former author. According to Decree-Law no. 3/2014, of January 9, “it is the responsibility of ensuring the security and order of prisons, observance of the law and prison regulations (...) and participate in the re-socialization of prisoners”. In Portugal, guards go through a training program with specific re-socialization dimensions, that are part of the



training program. We think that some small positive results are emerging from these training programs that can be seen in these exploratory and initial results.

The sixth theme is **“social representation of prison population and resocialization”**. In this theme three categories are relevant. The first is “the **stigma**” where they present feelings of shame towards the general population and do not want to be associated with a resocialization program considering this association with the prison stigma. Another category is **“lack of knowledge towards reintegration programs”**. Participants in the study refer that some other inmates, not themselves (once again these participants show high social desirability or lack of personal self-evaluation) probably would benefit from these programs. One refers that the programs should have an income associated, other states that he already has gone through one, and other says that he probably would enter in the city library in one of these programs. To sum up, they all show lack of knowledge about these programs and some inmates are not sure about their existence, or how they have access to them. The third category is **“disbelief in prison's regenerative capacity”**. As found in Nogueira and Santos (2015), these interviewees discredit the effectiveness of the prison's objectives.

The final theme is **“age”**. Considering Santos and Nogueira (2015) research, we can observe a negative perception of elderly inmates regarding their ageing processes. In the interviewed inmates, there was a great diversity of responses, suggesting that elderly inmates do not reflect on ageing in general and on their ageing personally. Faced with this question, there was silence, there was no immediate response. Inmates assume that there is sadness associated, and psychical problems. Based on these interviews, it was not clear if these inmates acknowledge ageing. If they have a real perception of age and the impact of ageing and the life cycle in their life. Nogueira and Santos (2015) describe a resistance to ageing, fighting a constant battle against ageing, not even recognizing it. They also express, as reported by previous authors, a reported association of ageing with illness and disability. Also, they present an external control perception in behaviors that they are able to control. Participants lay down the responsibility of doing physical exercise, even with little intensity as walking, in the prison establishment. Several groups of inmates perform physical exercises in prison, but these inmates, as reported in Santos and Nogueira (2015), present more characteristics of isolation and external accountability for their own behavior. Therefore, there is a lack of personal responsibility in the practice of physical exercise required. Gonçalves (2002) refers that age is a fundamental dimension that differentiates inmates, as younger subjects would be more prone to develop adaptive problems in prison, as they have a more strict and limited repertoire of coping skills.

To sum up, in this sample, results, that are initial and exploratory, seem to acknowledge these elderly inmates as well-adapted to prison (Gonçalves & Gonçalves, 2012). Well-adapted as Gonçalves and Gonçalves (2012) refer do not usually have criminal records, are detained for occasional crimes, although violent, such as those in our sample, composed of several sexual offenders, are over 30 years of age, have conventional values and do not engage in disciplinary proceedings. In Gonçalves (2002), sexual offenders are reported as the best adapted to prison and this is relevant to understand our results as we have many participants detained by these crimes, or crimes against people, that are better adapted to prison than offenders with crimes against property.

Conclusions

This study presents a relevant and innovative design. Lorito, Völm and Denning (2017) wrote a systematic review of the existing literature on ageing prisoners. They found that literature tends to focus on diagnosis and physical health. Lorito et al (2017) results show that the experience of imprisonment from the perspective of inmates has received much lesser attention. This study is, therefore, relevant and updated. Presented results do not intend to establish a difference between elderly and younger inmates. This was an exploratory and initial study that intends to see if ageing was relevant in offenders' self-representation. As in Santos and Nogueira (2002) it seems that they are ignoring or rejecting ageing, and results can be a direct sum of other reported dimensions, for instances the crime that they executed and for which they were detained. So, no relevant differences were found between these elderly inmates and the literature that did not focused on ageing (Gonçalves, 1999). This is an important finding

to acknowledge, as future developments of this study need to deeper explore ageing in prison, possibly through more specific and detailed scripts regarding age. This study presents relevant advances in understanding ageing in prisons, exploring and describing perspectives of life trajectory without imprisonment, reasons for the crime practice and its interpretation, representation of prison admission, adaptation to prison, representation of the relationship with professionals, social representation of prison population and resocialization and age.

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References

- Bardin, L. (2009). *Análise de Conteúdo*. Lisboa: Edições 70.
- Bryman, A. (2004). *Social Research Methods*. Oxford: Oxford University Press.
- Decree-Law nº 115/2009 of October 12. Diário da República nº 197/2009 – Iª Série. (Código da Execução das Penas e Medidas Privativas da Liberdade). DR - Ministério da Justiça. Lisboa.
- Decree-Law nº 51/2011 of Abril 11. Diário da República nº 71/2011 – Iª Série. (Regulamento Geral dos Estabelecimentos Prisionais). DR - Ministério da Justiça. Lisboa.
- Decree-Law nº 3/2014, of January 9 of the Ministry of Intern Admnistration. Portuguese Republic. Available in www.dre.pt.
- Di Lorito, C. Völlm, B., & Dening, T. (2017) The individual experience of ageing prisoners: systematic review and meta-synthesis through a Good Lives Model framework. *International Journal Geriatric Psychiatry*. doi: 10.1002/gps.4762.
- Gonçalves, R. (2002). *Delinquência, crime e adaptação à prisão*. Quarteto Editora.
- Gonçalves, L. C., & Gonçalves, R. A. (2012). Agressividade, estilo de vida criminal e adaptação à prisão. *Psicologia USP*, 23(3), pp. 559-584.
- Kvale, S. (1996). *Interviews: an introduction to qualitative research interviewing*. Thousand Oaks: Sage Publications.
- Pontes, O. A. M. (2015). *Plano Individual de Readaptação – Um Instrumento para a Reinserção Social*. Instituto Superior de Ciências da Saúde do Norte.
- Ramos, I.C.O. (2011). *Contributos da educação: (Re)viver na prisão*. Tese de Mestrado em Ciências da Educação, Universidade de Lisboa.
- Santos, C. & Nogueira, A. (2014). *Envelhecimento em Contexto Prisional*. Instituto Superior de Serviço Social do Porto, Mestrado em Gerontologia Social. Porto, Portugal.
- Santos, C. & Nogueira, A. (2015). Envelhecer em Contexto Prisional. *Revista Brasileira de Griaatria e Gerontologia*. 18 (1), pp.39-48.
- Yin, R. K. (2003). *Case Study Research: Design and Methods*. (3rd Ed.). Newbury Park, CA: Sage