MOTIVATIONAL CHARACTERISTICS OF LEARNING DIFFERENT TARGET LANGUAGES: RESULTS OF A NATIONWIDE SURVEY

Authors' note

Such a large-scale study could not have been carried out without the support and help of a number of organizations and individuals. We are particularly grateful to the Hungarian Scientific Research Foundation for providing the financial resources; to the Department of English Applied Linguistics, Eötvös University, Budapest, for providing a range of research facilities; and to Krisztina Kertész and Emese Nyilasi for their invaluable contribution as Research Assistants during the project.

Abstract

This study reports on the results of a large-scale attitude/motivation survey (N=4765) conducted in Hungary. The affective dispositions of school children aged 13-14 years old toward five different target languages (English, German, French, Italian, and Russian) were assessed, and the data were analyzed by means of a number of univariate and multivariate statistical procedures focusing on the underlying structure of the learners' motivation and the similarities/differences related to the different target languages. As well, variations linked to gender and to regional characteristics were examined. The emerging motivational components were also studied as they related to two criterion measures: the pupils' language choice for future language studies and the amount of effort they were planning to expend in learning the selected languages.

INTRODUCTION

Human motivation to learn is a complex phenomenon involving a number of diverse sources and conditions. Some of the motivational sources are situation-specific, that is, they are rooted in the student's immediate learning environment, whereas some others appear to be more stable and generalized, stemming from a succession of the student's past experiences in the social world (for recent overviews, see Dornyei, 2000, 2001; Clement & Gardner, in press). This paper presents the results of a nationwide attitude/motivation survey carried out among 13- and 14-year-old teenagers in Hungary. The focus here was restricted to non-situation-specific motives for two reasons

1. Our study involved a substantial stratified national sample (with over 4,700 participants), and in order to obtain comparable measures we needed variables that were generalizable across various learning situations.

2. One key aspect of our investigation concerned the participating students'
language choice for future language studies after leaving primary school
(which in Hungary took place at the time of the survey at the age of 14),
and in this case —because the appraisal involves decision-making prior to
actual engagement in the planned learning process— non-situation-
specific motives are of particular importance.

Generalized (and usually socially grounded) motives that underlie the study of an L2
have been the subject of extensive research during the past decades. A number of
different frameworks and models have been suggested to describe the multi-faceted
nature of the L2 motivation construct, including Clement, Dornyei and Noels
(1994); Crookes and Schmidt (1991); Dornyei (1994); Dornyei and Otto (1998);
Gardner (1985); Schmidt, Boraie and Kassabgy (1996); Schumann (1998);
Tremblay and Gardner (1995); Williams and Burden (1997). While these
constructs have included some identical or very similar components, attesting to the
existence of some broad, generalizable factors/dimensions that make up the
motivational disposition of L2 learners, other constituents were specific to one or a
few constructs only. In an attempt to identify the common dimensions, Dornyei
(1998) has presented a synthesis of 13 different constructs by tabulating the main
motivational domains underlying them. It was found that almost all the
motivational constituents of the selected models/frameworks could be classified into
seven broad dimensions:

1. **Affective/integrative dimension**, referring to a general affective "core" of the
L2 motivation complex related to attitudes, beliefs and values associated
with the process, the target and the outcome of learning, including
variables such as "integrativeness," "affective motive," "language attitudes,"
"intrinsic motivation," "attitudes toward L2 learning," "enjoyment" and
"interest;"

2. **Instrumental/pragmatic dimension**, referring to extrinsic, largely utilitarian
factors such as financial benefits;

3. **Macro-context-related** dimension, referring to broad, societal and
sociocultural factors such as multicultural, intergroup and ethnolinguistic
relations;

4. **Self-concept-related** dimension, referring to learner-specific variables such as
self-confidence, self-esteem, anxiety and need for achievement;

5. **Goal-related dimension**, involving various goal characteristics;

6. **Educational context-related** dimension, referring to the characteristics and
appraisal of the immediate learning environment (i.e., classroom) and the
school context; and

7. **Significant others-related** dimension, referring to the motivational influence of
parents, family, and friends.
Dörnyei concluded that the different L2 motivation models varied in the extent of emphasis they placed on each of the seven dimensions, in the actual ways they operationalized them, and in the way they linked the different factors to each other and to the general process of second language acquisition.

What causes the variation in the components of the different frameworks/models? Several reasons can be suggested. The observed differences can be the result of variation in

- the data gathering instruments and data processing techniques (in the case of empirical studies);
- the actual target language(s) studied;
- the particular language learning situations examined (e.g., the level and format of learning) and the characteristics of the learners (e.g., age, gender, and status);
- various aspects of the social milieu in which L2 learning took place (including social expectations and ethnomultilingual attitudes); and
- other geographical and geopolitical factors.

The systematic examination of these (and other) modifying factors has been an ongoing process in L2 motivation research; the current investigation sets out to contribute to this discussion in four ways.

COMPARING FIVE TARGET LANGUAGES

Most studies examining L2 motivation base their generalizations on the study of the motivational characteristics of one specific target language (typically English or French). Far fewer studies have compared the learning of different L2s (e.g., Clement & Kruidenier, 1983; Julkunen & Borzova, 1997; Laine, 1995; Tachibana, Matsukawa, & Zhong, 1996), and the vast majority of these comparative analyses have involved the study of different L2s in different learning communities (e.g., comparing Finns and Russians learning English in the Julkunen & Borzova study). Hardly any studies have focused on the motivational dispositions related to learning various L2s within the same community (for exceptions, see Clement & Kruidenier, 1983; Schmidt & Watanabe, this volume), even though it is only through such investigations that the learning population can be held constant and thus L2-related variation in the motivation construct can be reliably identified. Therefore, the question of to what extent motivational constructs generalized on the basis of studying one or two specific languages are valid is still a largely unresolved issue, particularly when comparing world languages (such as English), other major international languages traditionally taught in a particular region (such as Russian in Hungary), and less commonly taught languages (such as Italian). In the light of this hiatus, the first objective of our study is to compare L2-related attitudes/motivation associated with several target languages within the same...
speech community. For the purpose of our particular analysis, we have selected five languages:

- **English** and **German**, which are the dominant foreign languages in Hungary;
- Russian, which, for political reasons, was the compulsory first foreign language taught in Hungarian schools for four decades, until 1989;
- French, which has a long tradition in the country and, besides German, used to be the language of the Hungarian aristocracy;
- Italian, which, although usually associated with happy memories of summer holidays and a rich culture, is by no means viewed as a "world" or "international" language by Hungarians and can therefore be seen as a "control" with which to compare the other languages.

**GENDER-BASED VARIATION**

Recording gender differences in language attitudinal/motivational data has got a long history; studies have again and again evidenced that male and female learners show systematic difference in their disposition toward language studies (e.g., Burstall, Jamieson, Cohen, & Hargreaves, 1974; Clark & Trafford, 1995; Djigunović, 1993; Julkunen, 1994; Ludwig, 1983). However, the amount of systematic gender-specific research has been meager relative to the potential importance of the issue, which may be partly due to the fact that sample sizes often did not allow for confident gender-based generalizations. Because our sample is representative of the total population of a national speech community, it is particularly appropriate for the purpose of examining the motivational characteristics of the boys and the girls, and the multi-language design of the study allows us to investigate any gender-based biases toward the five target languages.

**THE IMPORTANCE OF THE VARIOUS MOTIVATIONAL CLUSTERS**

A particular strength of survey studies (such as ours) in general is their effectiveness in assessing a wide range of relevant variables, which can then be processed by means of various statistical procedures to distill broader underlying dimensions. This has been a standard procedure in L2 motivation research, going back to Gardner and Lambert’s (1959) pioneering factor analytical study of L2 learners in Montreal. Dovetailing with the issue of the underlying structure is that of the procedural outcome of that structure. In the context of this study, students are presented with multiple potential L2s. Language choice and degree of involvement are not only questions with immediate pedagogical consequences but also decisions which risk altering the linguistic profile of the nation. In order to address this issue, we have included in our survey two criterion measures, language choice (i.e., the selection of certain L2s that the participants wished to study in the future) and intended effort (i.e., the amount of effort that the participants were planning to exert in their future language studies). Determining the extent of association between these criterion variables and the identified motivational dimensions can provide information about
the relative importance of the various factors, which is the third objective of the study.

GEOGRAPHICAL VARIATION

It has been one of the main assumptions underlying L2 motivation research during the past four decades that the social milieu in which language learning takes place exerts a profound influence on L2 motivation; accordingly, there have been several studies investigating the motivational impact of macro-contextual variation (e.g., differences between foreign language learning and second language acquisition contexts, or between multicultural contexts characterized by different ethnolinguistic setup) (for reviews, see Clement & Gardner, in press; Dörnyei, in press; Gardner, 1985; Gardner & MacIntyre, 1993). An interesting question that has not been studied extensively before is whether the geographical location within a relatively homogeneous community has a motivational impact.

Although Hungary, the site of our survey, is a relatively small country, with the greatest distance within the country not exceeding 320 miles, it is located in a special position within Europe, along the latent borderline separating Eastern and Western Europe. This borderline has been in evidence for the past 2000 years, with the Roman Empire having its eastern border in Hungary, the Turkish Empire having its western border in Hungary, the Habsburg Empire having its eastern border in Hungary, and recently the Soviet Union having its western border (the "Iron Curtain") in Hungary. The country also lies at the dividing line between Western Christianity and Eastern (Orthodox) Christianity, which reflects the country's position being halfway between Rome and Byzantium (Istanbul), the two religious centers that determined Christian orientation in the early middle ages.

A further peculiarity of Hungary's geographical position is that the latent geopolitical/cultural border between Eastern and Western Europe appears to cut through the country, along the River Danube, which divides Hungary into two roughly equal parts. This dividing line can be acutely felt in the country even today: while the east of the country is largely rural, "traditional," and relatively poor, the west of the country (adjacent to Austria) is far more developed and westernized. The capital of Hungary, Budapest, situated along the Danube in the center of the country, is a modern metropolis, forming a "country within the country" with a quarter of the total population living there. It is by far the most developed area in the country, constituting the undisputed economic and cultural center. In view of these geopolitical considerations, the fourth objective of our study was to examine whether the marked regional division was reflected in the learners' L2-related affective dispositions as well. In order to answer this question, we have systematically sampled learners from different parts of Hungary, and also coded the type of the dwelling (i.e., village, town, or city) the data were collected in.
METHOD

PARTICIPANTS
The participants of the survey were 4,765 (2,377 males; 2,305 females; 83 with missing gender data) eighth grade primary school pupils (ages 13-14) living in various parts of Hungary (see Table 1). This population fitted the investigation best, because at the time of the survey this was the most mature age group in the Hungarian educational system which studied within a more or less homogenous curricular and organizational framework (i.e., the national primary school system). Therefore, by sampling students from this cohort, we did not need to be concerned with the modifying influences of various specialized secondary school types. At the same time, these learners were in the final year of their primary school studies and were just about to make the decision about which type of secondary education to choose for their further studies and which foreign language they wished to study during the consecutive years. This lent particular relevance and validity to our question concerning language choice.

Table 1: The sample investigated in the survey

<table>
<thead>
<tr>
<th></th>
<th>number of schools</th>
<th>classes</th>
<th>pupils&lt;sup&gt;a&lt;/sup&gt;</th>
<th>total</th>
<th>boys</th>
<th>girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>whole country</td>
<td>77</td>
<td>212</td>
<td>4765</td>
<td>2377</td>
<td>2305</td>
<td></td>
</tr>
<tr>
<td>capital</td>
<td>15</td>
<td>38</td>
<td>792</td>
<td>406</td>
<td>372</td>
<td></td>
</tr>
<tr>
<td>city</td>
<td>13</td>
<td>45</td>
<td>1083</td>
<td>538</td>
<td>514</td>
<td></td>
</tr>
<tr>
<td>town</td>
<td>32</td>
<td>94</td>
<td>2128</td>
<td>1048</td>
<td>1052</td>
<td></td>
</tr>
<tr>
<td>village</td>
<td>17</td>
<td>35</td>
<td>762</td>
<td>385</td>
<td>366</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Some questionnaires had missing gender data.

INSTRUMENTS
When designing the questionnaire we had to achieve a trade-off: On the one hand, L2 motivation is known to be a complex, multi-dimensional construct, and therefore in order to obtain a comprehensive motivation measure one needs to administer a rather elaborate (and therefore long) instrument with every variable assessed by multi-item scales. On the other hand, the practical constraints inherent to the survey (namely, that in order to get permission to administer the questionnaire in over 70 schools across the country we had to make sure that we disrupted the course of teaching as little as possible) imposed a significant limitation to the time we could have access to the students. Rather than narrowing down the scope of the instrument, we decided to cut down on the number of items focusing on each variable. In order to ensure that the instrument had appropriate psychometric properties, the items we used were adopted from established

404 ◆ MOTIVATION AND SECOND LANGUAGE ACQUISITION
motivation questionnaires (some of which had been specifically developed to be used in Hungary), with sufficient validity and reliability coefficients (e.g., Clement et al., 1994; Dörnyei, 1990; Gardner, 1985).

The final version of the questionnaire used in the survey (see Appendix A) consisted of 37 items, assessing various student attitudes toward five target languages (English, German, French, Italian, and Russian) and toward six L2 communities (the United States, the United Kingdom, Germany, France, Italy, and Russia), and also asking about various aspects of the students' language learning environment and background. Because 21 of the 37 items focused on more than one L2 or L2 community (in a grid format), even this relatively short instrument yielded a total of 139 variables.

The main variable groups in the questionnaire were as follows (with the total number of items and the actual item numbers given in parentheses):

Items concerning the five target languages (5-point rating scales)

- Orientations, that is, the students' various reasons for learning a given language (5 items: Nos. 2, 4, 6, 7, & 10)
- Attitudes toward the L2 (2 items: Nos. 1 & 3)
- Intended effort, that is, the amount of effort the student was willing to put into learning the given language (1 item: No. 5)
- Parents' language proficiency (2 items: Nos. 8 & 9)

Items concerning the six target language communities (5-point rating scales)

- Attitudes toward the L2 community that is, the extent to which students felt positively toward the particular countries and its citizens (2 items: Nos. 11 & 17), and the international importance they attached to these communities (2 items: Nos. 12 & 13). Britain and the US were mentioned separately to explore differences in the evaluations of the two communities, in spite of their common language (referred to in this study where relevant as English/UK and English/US).
- Contact with the L2 and its speakers; both the quantity (2 items: Nos. 18 & 20) and the quality (5 items: Nos. 14, 15, 16, 19, & 21) of the contact (e.g., watching L2 TV programs, meeting tourists) were assessed.

Non-language-specific Likert scales (5-point scales)

- Attitudes toward L2 learning at school (1 item: No. 25)
- Contact with foreign languages through watching satellite TV (1 item: No. 26)
• Fear of assimilation, that is, the extent to which students believed that learning and using the foreign language might lead to the loss of the native language and culture (1 item: No. 28)

• Self-confidence in L2 learning and use (3 items: Nos. 22, 23, & 29)

• Language learning milieu, that is, the extent of the parents' support (1 item: No. 27) and the friends' attitudes toward L2 learning (1 item: No. 24)

Background questions (open-ended and multiple-choice items)

• Language choice: Students were asked to name three languages they were intending to learn in the next school year (1 item: No. 30)

• Personal variables, such as the student's gender and language learning background (7 items: Nos. 31-37)

DATA COLLECTION AND ANALYSIS

Data collection was conducted by a research team consisting of the two principal researchers (Zoltán Dörnyei and Richard Clement), two graduate student research assistants (Krisztina Kertész and Ernese Nyilasi), and a number of paid workers who helped to administer and to code the questionnaires (mostly recruited from English majors at Eotvos University, Budapest). First we approached the selected schools by an official letter from Eotvos University, Budapest (which hosted the project), providing information about the purpose of the survey and details of the actual administration of the questionnaires. Once permission was granted by the Principal of a school, we contacted the form-masters of the selected classes individually, asking for their cooperation. The questionnaires were filled in during class time (but not during language classes so as to avoid the students being influenced by the situation). A representative of the university was always present at the administration, providing the introduction and overseeing the procedure. Answering the questions took the students approximately 20 minutes on average.

The data obtained were computer-coded and negatively worded items were recoded positively. Following Gardner's (1985, pp. 78-79) recommendation, in order to form unitary groups from heterogeneous sources (as was the case in our study with students sampled from different schools and classes), before conducting any correlation-based analyses we computed standard scores within each class and used these rather than the raw scores in the computations (however, for the purpose of comparing subsample means —through ANOVA— we used the raw scores). Where the classes were not large enough (i.e., did not have more than 25 students), pooled data within the particular school with more parallel classes were standardized.
In order to reduce the number of variables in the student questionnaire by identifying broader underlying dimensions, we submitted the attitude items concerning the L2s and L2 communities to factor analyses (separate analyses were conducted for each language). A maximum likelihood extraction method was applied and, because the factors were assumed to be intercorrelated, we used subsequent oblique rotation. As is well known, it is not always an unambiguous task to decide how many factors should be extracted in factor analysis. The final solutions were arrived at after applying Cattell's (1966) scree test and making sure that the factor matrix had a "simple structure" (i.e., each variable had salient loadings only on one factor without any cross-loadings). The high ratio of cases to variables (approximately 300:1) ensured the stability of the solutions.

The final pattern matrices obtained in the factor analyses met our requirements and contained relatively easily interpretable clusters of variables determining each factor. A five-factor solution appeared to explain our data adequately in the case of all the target languages. The emerging factors in the different solutions were similar, though not identical. Table 2 presents a summary of the variable clusters for each factor for each L2 (the actual factor pattern matrices are included in Appendix B). In the table, we referred to the variables by short labels (and because the item numbers may be more useful for quick visual comparisons of factor contents, these are also listed); the complete list of questionnaire items are included in Appendix A.

English and German. As can be seen in Table 2, the factor matrices for English and German are very similar, the only real differences found in the matrix concerning English/US, which can be attributed to the fact that the mean scores for some US-related items were so high that the resulting insufficient variance depressed some of the correlations underlying the analysis. Looking at the English/UK and German matrices, Factor 1 is associated with Items 14, 17, and 11. These all concern direct contact with members of the L2 community, and therefore this factor is labeled Direct contact with L2 speakers.

Factor 2 has received salient loadings from four items (3, 2, 6, & 7). They are all associated with the pragmatic, instrumental values of knowing a world language and will therefore be labeled Instrumentality.

Factor 3 shows salient loadings from two variables (12 & 13), both concerning the perceived importance and wealth of the L2 communities; accordingly, this factor will be referred to as Vitality of L2 community.
Table 2: Results of the factor analyses of the attitudinal items:
Variable clusters determining each factor for each target language
(for the actual factor matrices, see Appendix A)

<table>
<thead>
<tr>
<th>Variable clusters</th>
<th>English (US)</th>
<th>English (UK)</th>
<th>German</th>
<th>French</th>
<th>Italian</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>factor 1</td>
<td>12 country: developed</td>
<td>14 meet L2 speakers (11 travel to country)</td>
<td>14 meet L2 speakers</td>
<td>14 meet L2 speakers</td>
<td>14 meet L2 speakers</td>
<td>10 similar to L2 speakers</td>
</tr>
<tr>
<td></td>
<td>10 similar to L2 speakers</td>
<td>3 L2 important in world</td>
<td>3 L2 important in world</td>
<td>2 become knowledgeable</td>
<td>3 L2 important in world</td>
<td>2 become knowledgeable</td>
</tr>
<tr>
<td></td>
<td>4 get to know culture</td>
<td>17 like L2 speakers</td>
<td>6 useful for travel</td>
<td>6 useful for travel</td>
<td>12 country: important</td>
<td>6 useful for travel</td>
</tr>
<tr>
<td></td>
<td>1 like L2</td>
<td>11 travel to country</td>
<td>7 useful for travel</td>
<td>7 useful for travel</td>
<td>13 country: important</td>
<td>7 useful for travel</td>
</tr>
<tr>
<td>factor 2</td>
<td>16 like TV programs</td>
<td>15 like films</td>
<td>15 like films</td>
<td>19 like magazines</td>
<td>21 like pop music</td>
<td>19 like magazines</td>
</tr>
<tr>
<td></td>
<td>14 meet L2 speakers</td>
<td>17 like L2 speakers</td>
<td>11 travel to country</td>
<td>10 similar to L2 speakers</td>
<td>1 like L2</td>
<td>4 get to know culture</td>
</tr>
<tr>
<td>factor 3</td>
<td>3 L2 important in world</td>
<td>12 country: developed</td>
<td>12 country: developed</td>
<td>15 like TV programs</td>
<td>16 like TV programs</td>
<td>16 like TV programs</td>
</tr>
<tr>
<td></td>
<td>2 become knowledgeable</td>
<td>13 country: important</td>
<td>13 country: important</td>
<td>15 like films</td>
<td>16 like TV programs</td>
<td>15 like films</td>
</tr>
<tr>
<td></td>
<td>6 useful for travel</td>
<td>16 like TV programs</td>
<td>16 like TV programs</td>
<td>19 like magazines</td>
<td>21 like pop music</td>
<td>21 like pop music</td>
</tr>
<tr>
<td></td>
<td>17 like L2 speakers</td>
<td>11 travel to country</td>
<td>10 similar to L2 speakers</td>
<td>1 like L2</td>
<td>4 get to know culture</td>
<td>19 like magazines</td>
</tr>
<tr>
<td>factor 4</td>
<td>16 like TV programs</td>
<td>15 like films</td>
<td>15 like films</td>
<td>19 like magazines</td>
<td>21 like pop music</td>
<td>19 like magazines</td>
</tr>
<tr>
<td></td>
<td>14 meet L2 speakers</td>
<td>17 like L2 speakers</td>
<td>11 travel to country</td>
<td>10 similar to L2 speakers</td>
<td>1 like L2</td>
<td>4 get to know culture</td>
</tr>
<tr>
<td>factor 5</td>
<td>10 similar to L2 speakers</td>
<td>4 get to know culture</td>
<td>1 like L2</td>
<td>16 like TV programs</td>
<td>15 like films</td>
<td>15 like films</td>
</tr>
<tr>
<td></td>
<td>14 meet L2 speakers</td>
<td>17 like L2 speakers</td>
<td>11 travel to country</td>
<td>10 similar to L2 speakers</td>
<td>1 like L2</td>
<td>4 get to know culture</td>
</tr>
</tbody>
</table>

(19 like magazines)
The four items loading onto Factor 4 (15, 16, 21, & 19) all have to do with the appreciation of cultural products (films, TV programs, magazines, and pop music) associated with the particular L2. These cultural products are conveyed through the media and therefore this factor will be termed Media usage.

The last factor, Factor 5, has salient loadings from three items, 10, 1, and 4. These concern a general positive outlook on the L2 and its culture, to the extent that learners scoring high on this factor would like to become similar to the L2 speakers. Because of the strong resemblance with Integrativeness in Gardner's (1985) motivation theory, this factor will be labeled accordingly.

French and Italian. Two of the factors in the matrices obtained for French and Italian (Media Usage and Vitality of L2 Community) are similar to the corresponding factors for English and German, the only difference being that the media factor does not receive salient loading from "magazines," most probably because French and Italian magazines are not widely accessible in Hungary. With respect to the other three factors, an interesting variation can be observed. Integrativeness and Direct Contact with L2 Speakers merge into one factor and Instrumentality splits into two factors. The former change may be related to the fact that the number of French and Italian visitors coming to Hungary is very low compared to the other language communities, and therefore direct contact with them takes place primarily when visiting France and Italy, which have been traditional tourist targets for Hungarians. Therefore, the positive outlook on the community (as reflected by Integrativeness) is very closely associated with qualitative aspects of the time spent in these countries (as reflected by Direct Contact).

The split of Instrumentality into two constituents (determined by Items 2 & 3, and 6 & 7, respectively) reflects the specific nature of French and Italian. The first subcluster concerns the importance of these languages in the world and the contribution their proficiency makes to being an educated person. The second is related to the pragmatic values associated with competence in these languages. For English and German, the two subclusters formed one unified cluster, indicating that, for Hungarian learners, these languages represent at the same time rich cultural heritage as well as pragmatic values stemming from their being seen as world languages. In contrast, although Italian and French are associated with definite cultural values, they are not considered of primary importance for instrumental purposes, which resulted in the separation of the two subclusters.

Russian. The factor matrix obtained for Russian is similar to the ones describing English and German in every main respect except for one, but this difference is quite interesting. Item 7, concerning the capacity of the L2 in furthering one's career, is not associated with Instrumentality but with Integrativeness. This is likely to have a historical explanation: After the dramatic political changes in Eastern and Central Europe at the end of the 1980's, Hungary consciously opened up toward the western world, thereby replacing the traditional Russian orientation of the Communist times. Consequently, even though the knowledge of Russian has without any doubt major pragmatic potential in the region, only those learners are
willing to recognize this who do not have a negative integrative predisposition toward the language.

**Summary of factor analysis of language-related items.** In terms of their underlying attitudinal/motivational structure, the five languages investigated in our study can be divided into three groups: (a) English and German, the two dominant international languages in the Central European region; (b) French and Italian, which are two important languages associated with a lively culture and rich historical heritage, but without playing the role of lingua francas; and (3) Russian, which functions like an "ex-colonial" language, with political and experiential considerations tainting the learners' perceptions.

We must, on the other hand, also notice that the differences are not very big, particularly in view of the fact that all the factors—including the ones that display marked differences—show strong intercorrelations (e.g., in the case of French and Italian, the correlation between the two subclusters of Instrumentality is .59 and .61, respectively, whereas in the case of Russian, the correlation between Instrumentality and Integrativeness is .61).

Thus, we may conclude that Hungarian teenage language learners appraise different target languages through the same mental framework or schema, in terms of five broad and interrelated dimensions: Integrativeness, Instrumentality, Direct contact, Media usage (or "indirect contact") and Vitality. The boundaries between these dimensions are not rigid and, depending on the perceived ethnolinguistic significance of a particular L2, there can be overlaps between them.

**FACTOR ANALYSIS OF THE NON-L2 SPECIFIC LIKERT-TYPE ITEMS**

The student questionnaire contained eight items (22—29) which concerned the learners' generalized perceptions related to their milieu and linguistic self-confidence that were not linked to particular languages. To these we added the mean of the variables concerning the language proficiency of the learners' parents across the five languages (items 8 & 9) and conducted a factor analysis similar to the ones performed for the L2-specific items. The factor matrix in Table 3 presents a simple, two-factor solution. Factor 1 has salient loadings from items related to the general appreciation of foreign languages in the learners' immediate environment, like the school context and friends' and parents' views. This factor is labeled therefore Milieu. The items loading on Factor 2 are in accordance with Clement's (1980) conceptualization of Linguistic Self-confidence, and therefore this factor will be termed accordingly.
Table 3: Factor analysis of the non-language-specific Likert-type items: Maximum likelihood extraction, oblique rotation, pattern matrix*

<table>
<thead>
<tr>
<th></th>
<th>factor 1</th>
<th>factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>'I don’t think that foreign languages are important school subjects.'</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>My parents do not consider foreign languages important school subjects.</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>People around me tend to think that it is a good thing to know foreign languages.</td>
<td>- .43</td>
<td></td>
</tr>
<tr>
<td>Learning foreign languages makes me fear that I will feel less Hungarian because of it.</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>I think I am the type who would feel anxious and ill at ease if I had to speak to someone in a foreign language.</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Learning a foreign language is a difficult task.</td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td>I am sure I will be able to learn a foreign language well.</td>
<td>-.30</td>
<td>-.34</td>
</tr>
<tr>
<td>Parents’ mean language proficiency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* loadings under .3 not shown

There are two interesting points concerning the factor matrix that are worth mentioning: (a) the lack or any appreciable loadings by the parents' mean L2 proficiency on either of the factors and (b) the crossloading by the variable concerning the learner's certainty about being able to learn a L2 well. In the first case, it is possible that the participants' perception of their parents' L2 competence was not reliable enough. Alternatively, the parents' proficiency may not directly be related to the milieu factor (where it was expected to belong) but is mediated by the parent's socializing behavior — in which case this indirect relationship would not show up in this analysis. Regarding the second point, the confidence item appeared to capture the communality between the two factors (which is also confirmed by the two factors' intercorrelation of .25). It would appear that both the milieu and personal confidence are related in the student's self-assurance in being able to learn a second language.

**COMPUTING COMPOSITE MOTIVATIONAL VARIABLES**

The factor matrices (and the subsequent discussion above) have highlighted seven broad dimensions underlying the learners' L2-related appraisals. In order to be able to use these factors in further analyses, we have computed composite factor scores for them by summing up the item scores related to each dimension. Table 4 presents the seven scales, the list of the variables they are made up of, descriptive statistics for each scale, and the Cronbach alpha internal consistency reliability coefficient for each scale. The table also contains t-test statistics comparing the boys' and the
girls' scores. The mean reliability coefficient of the scales is .67, which is acceptable with such relatively short scales.

Table 4: Descriptive information about the seven main motivational dimensions, and t-test statistics comparing boys' and girls' scores

<table>
<thead>
<tr>
<th>scale</th>
<th>question items</th>
<th>items</th>
<th>$\bar{x}$</th>
<th>SD</th>
<th>Cronbach alpha</th>
<th>$\bar{x}$ (boys)</th>
<th>$\bar{x}$ (girls)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct contact with L2 speakers</td>
<td>* *, 14, 17</td>
<td>English (US)</td>
<td>4.49</td>
<td>.67</td>
<td>.67</td>
<td>4.42</td>
<td>4.56</td>
<td>-7.33***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English (UK)</td>
<td>4.20</td>
<td>.76</td>
<td>.70</td>
<td>4.10</td>
<td>4.31</td>
<td>-9.69***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>German</td>
<td>3.97</td>
<td>.86</td>
<td>.74</td>
<td>3.96</td>
<td>4.00</td>
<td>-1.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td>French</td>
<td>3.97</td>
<td>.85</td>
<td>.72</td>
<td>3.77</td>
<td>4.17</td>
<td>-16.64***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Italian</td>
<td>4.01</td>
<td>.85</td>
<td>.73</td>
<td>3.83</td>
<td>4.19</td>
<td>-17.74***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Russian</td>
<td>2.42</td>
<td>1.02</td>
<td>.77</td>
<td>2.34</td>
<td>2.50</td>
<td>-5.48***</td>
</tr>
<tr>
<td>Instrumentality</td>
<td>2, 3, 6, 7</td>
<td>English</td>
<td>4.65</td>
<td>.55</td>
<td>.73</td>
<td>4.61</td>
<td>4.70</td>
<td>-6.27***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>German</td>
<td>4.41</td>
<td>.63</td>
<td>.75</td>
<td>4.37</td>
<td>4.46</td>
<td>-4.97***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>French</td>
<td>3.58</td>
<td>.77</td>
<td>.73</td>
<td>3.48</td>
<td>3.68</td>
<td>-8.76***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Italian</td>
<td>3.19</td>
<td>.86</td>
<td>.77</td>
<td>3.07</td>
<td>3.31</td>
<td>-9.47***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Russian</td>
<td>2.52</td>
<td>1.00</td>
<td>.81</td>
<td>2.46</td>
<td>2.58</td>
<td>-4.12***</td>
</tr>
<tr>
<td>Integrativeness</td>
<td>1, 4, 10</td>
<td>English</td>
<td>4.20</td>
<td>.80</td>
<td>.66</td>
<td>4.07</td>
<td>4.33</td>
<td>-11.32***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>German</td>
<td>3.67</td>
<td>.94</td>
<td>.72</td>
<td>3.66</td>
<td>3.70</td>
<td>-1.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>French</td>
<td>3.39</td>
<td>.93</td>
<td>.70</td>
<td>3.12</td>
<td>3.67</td>
<td>-21.17***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Russian</td>
<td>3.32</td>
<td>1.00</td>
<td>.73</td>
<td>3.06</td>
<td>3.58</td>
<td>-18.18***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Italian</td>
<td>2.04</td>
<td>.86</td>
<td>.66</td>
<td>1.98</td>
<td>2.10</td>
<td>-4.79***</td>
</tr>
<tr>
<td>Vitality of L2 community</td>
<td>* *, 13</td>
<td>English (US)</td>
<td>4.84</td>
<td>.40</td>
<td>.56</td>
<td>4.86</td>
<td>4.83</td>
<td>3.09**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English (UK)</td>
<td>4.28</td>
<td>.62</td>
<td>.59</td>
<td>4.28</td>
<td>4.29</td>
<td>-.73</td>
</tr>
<tr>
<td></td>
<td></td>
<td>German</td>
<td>4.19</td>
<td>.62</td>
<td>.60</td>
<td>4.20</td>
<td>4.18</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>French</td>
<td>3.95</td>
<td>.62</td>
<td>.54</td>
<td>3.90</td>
<td>4.00</td>
<td>-5.13***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Italian</td>
<td>3.49</td>
<td>.70</td>
<td>.61</td>
<td>3.41</td>
<td>3.57</td>
<td>-8.09***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Russian</td>
<td>2.81</td>
<td>.85</td>
<td>.41</td>
<td>2.87</td>
<td>2.76</td>
<td>4.49***</td>
</tr>
<tr>
<td>Cultural interest</td>
<td>15, 16, 19, 21</td>
<td>English (US)</td>
<td>4.56</td>
<td>.59</td>
<td>.66</td>
<td>4.52</td>
<td>4.61</td>
<td>-5.53***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English (UK)</td>
<td>3.90</td>
<td>.79</td>
<td>.70</td>
<td>3.79</td>
<td>4.02</td>
<td>-9.93***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>German</td>
<td>3.74</td>
<td>.79</td>
<td>.67</td>
<td>3.72</td>
<td>3.77</td>
<td>-2.03*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>French</td>
<td>3.42</td>
<td>.90</td>
<td>.68</td>
<td>3.28</td>
<td>3.57</td>
<td>-10.89***</td>
</tr>
</tbody>
</table>
As we can see, all the variables show a very consistent rank order across the various languages, with English obtaining the top and Russian the bottom scores. English is indeed a very popular language in Hungary, with every aspect of it highly appraised, with an average rating of 4.39 on a 5-point scale. Interestingly, even though the dominant English variety in Hungary has traditionally been British English, in the items where the UK and the US have been separated, US-based attitudes are always higher (so that if we ignore the UK-based scores, the average rating is as high as 4.55!).

German appears to be still widely endorsed among Hungarian teenagers, although the distribution of ratings here shows an imbalance toward the instrumental aspects, reflecting the importance of German economic influence in the region. With respect to French, the third language in the rank scale, the figures in the Table indicate that its international importance is not recognized fully by the respondents. This is reflected by the facts that it is rated significantly lower than German (a mean of 3.66 vs. 4.00) and that the appraisal of Italian not only approaches the average French ratings (3.49 vs. 3.66), but in two scales (Cultural Interest and Direct Contact with L2 Speakers) actually exceeds them. Finally, the ratings of Russian are very low: Even the strongest aspect, its vitality, failed to reach 3.00 and the average rating across the dimensions was only 2.31, reflecting a general dislike.

**GENDER DIFFERENCES**

The gender-based results in Table 4 confirm the frequent observation in the motivation literature that there is a tendency for girls' scores to be significantly higher than boys'. Out of the 30 variables included in the table, this tendency is true for 24, with the mean differences sometimes exceeding .50. The only exceptions concern three of the five German-specific scales where the differences are not statistically significant, and the Vitality of L2 Community scale with regard to the Americans and the Russians, where the boys' scores are higher than the girls' (and with English/UK not reaching statistical significance). With every motivational dimension, the biggest gender differences in favor of girls occur with French and Italian.

Looking at the language choice measures in Table 5, we find certain gender-preferences: English appears to be gender-neutral, French and Italian tend to be preferred by females, whereas German and Russian can be seen preferred by males.
LANGUAGE CHOICE

Table 5 presents the foreign languages the students intended to learn in order of popularity. The scores were obtained the following way: If a language was marked as the student's first choice, it was assigned 3 points, if it was the second choice, 2 points, and if it was the third choice, 1 point. Non-ranked languages received a score of 0. The table confirms the rank order of the five target languages included in the survey presented in Table 4. English is indisputably the most popular foreign language among Hungarian primary school pupils. It is preferred to German, although proficiency in the latter language is still regarded as generally desirable. We find again that French does not have much general appeal in Hungary. Although it is the third most popular language, the fact that it is basically in the same preference range as Italian shows that Hungarian school children do not see its world significance. Although Russian is little endorsed relative to its historical significance, it has not completely lost its importance: it still precedes Spanish and Latin amongst others.

Table 5: Composite language choice measures for every L2 mentioned by the pupils and t-test statistics comparing boys' and girls' scores with regard to the five target languages in the survey

<table>
<thead>
<tr>
<th>language</th>
<th>score</th>
<th>total</th>
<th>boys</th>
<th>girls</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>11352</td>
<td>2.39</td>
<td>2.39</td>
<td>2.39</td>
<td>.15</td>
</tr>
<tr>
<td>German</td>
<td>8466</td>
<td>1.78</td>
<td>1.94</td>
<td>1.62</td>
<td>10.49**</td>
</tr>
<tr>
<td>French</td>
<td>3921</td>
<td>.82</td>
<td>.70</td>
<td>.97</td>
<td>-10.93**</td>
</tr>
<tr>
<td>Italian</td>
<td>2485</td>
<td>.52</td>
<td>.41</td>
<td>.64</td>
<td>-9.33**</td>
</tr>
<tr>
<td>Russian</td>
<td>684</td>
<td>.14</td>
<td>.16</td>
<td>.12</td>
<td>2.85*</td>
</tr>
<tr>
<td>Spanish</td>
<td>369</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin</td>
<td>229</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portuguese</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dutch</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greek</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romanian</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swedish</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norwegian</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esperanto</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finnish</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tibetan</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE RELATIONSHIP BETWEEN THE MOTIVATIONAL SCALES AND LANGUAGE CHOICE

In order to evaluate the potency of the obtained motivational factors, let us now examine how they are related to the learners' language choice. Table 6 presents correlations between the seven motivational scales and the language choice measure for each of the six target language communities investigated. Three motivational dimensions show substantial positive correlations with language choice across all the six L2 communities: Integrativeness, Instrumentality, and Direct Contact with L2 Speakers. The table also presents multiple correlation coefficients between all the motivational scales and language choice. Except for Russian, the coefficients are fairly high, explaining between 19-24% of the variance. A closer look at these coefficients, however, reveals an intriguing phenomenon: the multiple correlation coefficients are only marginally higher than the correlations obtained with integrativeness alone. This would suggest that integrativeness represents a certain "core" of the learners' attitudinal/motivational disposition, subsuming, or mediating most other variables.

Table 6: Correlations between the attitudinal/motivational scales and language choice, computed for each target language community

<table>
<thead>
<tr>
<th>Motivational scales</th>
<th>English (UK)</th>
<th>English (US)</th>
<th>German</th>
<th>French</th>
<th>Italian</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct contact with L2 speakers</td>
<td>.23*</td>
<td>.17*</td>
<td>.33*</td>
<td>.31*</td>
<td>.32*</td>
<td>.12*</td>
</tr>
<tr>
<td>Instrumentality</td>
<td>.28*</td>
<td>.30*</td>
<td>.27*</td>
<td>.29*</td>
<td>.20*</td>
<td></td>
</tr>
<tr>
<td>Integrativeness</td>
<td>.43*</td>
<td>.47*</td>
<td>.42*</td>
<td>.43*</td>
<td>.25*</td>
<td></td>
</tr>
<tr>
<td>Vitality of the community</td>
<td>.12*</td>
<td>.12*</td>
<td>.11*</td>
<td>.13*</td>
<td>.16*</td>
<td>.07*</td>
</tr>
<tr>
<td>Cultural interest</td>
<td>.14*</td>
<td>.12*</td>
<td>.20*</td>
<td>.20*</td>
<td>.26*</td>
<td>.12*</td>
</tr>
<tr>
<td>Milieu</td>
<td>.12*</td>
<td>.01</td>
<td>.03</td>
<td>.01</td>
<td>-0.05*</td>
<td></td>
</tr>
<tr>
<td>Linguistic self-confidence</td>
<td>.07*</td>
<td>-.00</td>
<td>.03</td>
<td>-.01</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>Multiple correlations</td>
<td>.44*</td>
<td>.44*</td>
<td>.49*</td>
<td>.44*</td>
<td>.45*</td>
<td>.27*</td>
</tr>
</tbody>
</table>

*=p<.01; **=p<.001
In order to verify this claim, we have carried out a multiple regression analysis in which the seven motivational scales were entered as a block to predict language choice, the dependent variable, for each of the five languages (Table 7). As could be expected, all the equations were significant, and the results confirm the correlational findings, namely that Integrativeness is by far the most important predictor of language choice.

Table 7: Regression analysis of the motivational scales with language choice as the dependent variable

<table>
<thead>
<tr>
<th>Language choice</th>
<th>standardised beta</th>
<th>t</th>
<th>sig.</th>
<th>correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>zero-ord.</td>
</tr>
<tr>
<td>Direct contact with L2 speakers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English (US)</td>
<td>-.01</td>
<td>-84</td>
<td>.402</td>
<td>.17</td>
</tr>
<tr>
<td>English (UK)</td>
<td>.05</td>
<td>2.76</td>
<td>.006</td>
<td>.23</td>
</tr>
<tr>
<td>German</td>
<td>.10</td>
<td>5.90</td>
<td>.000</td>
<td>.33</td>
</tr>
<tr>
<td>French</td>
<td>.10</td>
<td>5.35</td>
<td>.000</td>
<td>.31</td>
</tr>
<tr>
<td>Italian</td>
<td>.08</td>
<td>4.29</td>
<td>.000</td>
<td>.32</td>
</tr>
<tr>
<td>Russian</td>
<td>-.04</td>
<td>-1.81</td>
<td>.070</td>
<td>.20</td>
</tr>
<tr>
<td>Instrumentality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>-.08</td>
<td>4.77</td>
<td>.000</td>
<td>.28</td>
</tr>
<tr>
<td>German</td>
<td>.08</td>
<td>5.08</td>
<td>.000</td>
<td>.30</td>
</tr>
<tr>
<td>French</td>
<td>.05</td>
<td>3.31</td>
<td>.001</td>
<td>.27</td>
</tr>
<tr>
<td>Italian</td>
<td>.03</td>
<td>1.90</td>
<td>.058</td>
<td>.29</td>
</tr>
<tr>
<td>Russian</td>
<td>.09</td>
<td>4.55</td>
<td>.000</td>
<td>.20</td>
</tr>
<tr>
<td>Integrativeness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>.39</td>
<td>22.83</td>
<td>.000</td>
<td>.43</td>
</tr>
<tr>
<td>German</td>
<td>.40</td>
<td>24.10</td>
<td>.000</td>
<td>.47</td>
</tr>
<tr>
<td>French</td>
<td>.35</td>
<td>19.47</td>
<td>.000</td>
<td>.42</td>
</tr>
<tr>
<td>Italian</td>
<td>.36</td>
<td>19.14</td>
<td>.000</td>
<td>.43</td>
</tr>
<tr>
<td>Russian</td>
<td>.21</td>
<td>10.69</td>
<td>.000</td>
<td>.25</td>
</tr>
<tr>
<td>Vitality of L2 community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English (US)</td>
<td>.03</td>
<td>1.80</td>
<td>.072</td>
<td>.12</td>
</tr>
<tr>
<td>English (UK)</td>
<td>-.01</td>
<td>-82</td>
<td>.411</td>
<td>.12</td>
</tr>
<tr>
<td>German</td>
<td>-.03</td>
<td>-2.41</td>
<td>.016</td>
<td>.11</td>
</tr>
<tr>
<td>French</td>
<td>-.01</td>
<td>-7.4</td>
<td>.461</td>
<td>.13</td>
</tr>
<tr>
<td>Italian</td>
<td>-.02</td>
<td>-1.32</td>
<td>.188</td>
<td>.16</td>
</tr>
<tr>
<td>Russian</td>
<td>-.01</td>
<td>-7.6</td>
<td>.449</td>
<td>.07</td>
</tr>
</tbody>
</table>
Table 8 presents the correlations between the seven motivational scales and intended effort. The coefficients in the table are generally higher than the ones in Table 6, which is partly due to the fact that "intended effort" was assessed in the same format as the independent variables. Again, Integrativeness, Instrumentality and Direct Contact with L2 Speakers show stronger associations with the criterion measure than the other scales, and again Integrativeness explains nearly as much variance as the multiple correlation coefficients. To illustrate the magnitude of the latter coefficients, they explain around half of the variance in intended effort, which is quite remarkable.

**Table 8: Correlations between the attitudinal/motivational scales and intended effort, computed for each target language community**

<table>
<thead>
<tr>
<th>Motivational scales</th>
<th>English (UK)</th>
<th>English (US)</th>
<th>German</th>
<th>French</th>
<th>Italian</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct contact with L2 speakers</td>
<td>.49</td>
<td>.30</td>
<td>.46</td>
<td>.50</td>
<td>.51</td>
<td>.45</td>
</tr>
<tr>
<td>Instrumentality</td>
<td>.50</td>
<td>.49</td>
<td>.51</td>
<td>.54</td>
<td>.57</td>
<td></td>
</tr>
</tbody>
</table>

THE RELATIONSHIP BETWEEN THE MOTIVATIONAL SCALES AND INTENDED EFFORT
Table 8: Correlations between the attitudinal/motivational scales and intended effort, computed for each target language community* (cont.)

<table>
<thead>
<tr>
<th>Motivational scales</th>
<th>English (UK)</th>
<th>English (US)</th>
<th>German</th>
<th>French</th>
<th>Italian</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrativeness</td>
<td>.63</td>
<td>.66</td>
<td>.70</td>
<td>.71</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>Vitality of L2 community</td>
<td>.23</td>
<td>.23</td>
<td>.22</td>
<td>.25</td>
<td>.27</td>
<td>.24</td>
</tr>
<tr>
<td>Cultural interest</td>
<td>.26</td>
<td>.25</td>
<td>.31</td>
<td>.32</td>
<td>.35</td>
<td>.30</td>
</tr>
<tr>
<td>Milieu</td>
<td>.29</td>
<td>.18</td>
<td>.17</td>
<td>.13</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Multiple correlation</td>
<td>.68</td>
<td>.68</td>
<td>.69</td>
<td>.72</td>
<td>.73</td>
<td>.68</td>
</tr>
</tbody>
</table>

* all the correlation coefficients are significant at the p<.001 level

We have conducted a multiple regression analysis (Table 9) in a similar way to the one presented in Table 7, and it confirmed that Integrativeness was the major predictor of intended effort. In this equation, however, there was also a second scale which played a significant (although far smaller) role: Instrumentality.

Table 9: Regression analysis of the motivational scales with intended effort as the dependent variable

<table>
<thead>
<tr>
<th>Language choice</th>
<th>standardised beta</th>
<th>t</th>
<th>sig.</th>
<th>zero-ord.</th>
<th>partial</th>
<th>part</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct contact with L2 speakers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English (US)</td>
<td>.01</td>
<td>.50</td>
<td>.620</td>
<td>.30</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>English (UK)</td>
<td>.06</td>
<td>3.94</td>
<td>.000</td>
<td>.38</td>
<td>.06</td>
<td>.04</td>
</tr>
<tr>
<td>German</td>
<td>.08</td>
<td>5.77</td>
<td>.000</td>
<td>.46</td>
<td>.08</td>
<td>.06</td>
</tr>
<tr>
<td>French</td>
<td>.11</td>
<td>7.75</td>
<td>.000</td>
<td>.50</td>
<td>.11</td>
<td>.08</td>
</tr>
<tr>
<td>Italian</td>
<td>.11</td>
<td>8.04</td>
<td>.000</td>
<td>.51</td>
<td>.12</td>
<td>.08</td>
</tr>
<tr>
<td>Russian</td>
<td>.10</td>
<td>6.32</td>
<td>.000</td>
<td>A5</td>
<td>.10</td>
<td>.07</td>
</tr>
<tr>
<td>Instrumentality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>.19</td>
<td>14.12</td>
<td>.000</td>
<td>.50</td>
<td>.20</td>
<td>.15</td>
</tr>
<tr>
<td>German</td>
<td>.16</td>
<td>12.13</td>
<td>.000</td>
<td>.49</td>
<td>.17</td>
<td>.13</td>
</tr>
<tr>
<td>French</td>
<td>.17</td>
<td>13.81</td>
<td>.000</td>
<td>.51</td>
<td>.20</td>
<td>.14</td>
</tr>
<tr>
<td>Italian</td>
<td>.17</td>
<td>13.23</td>
<td>.000</td>
<td>.54</td>
<td>.19</td>
<td>.13</td>
</tr>
<tr>
<td>Russian</td>
<td>.26</td>
<td>17.26</td>
<td>.000</td>
<td>.57</td>
<td>.25</td>
<td>.19</td>
</tr>
</tbody>
</table>
These findings, together with the results obtained with language choice being the dependent variable, unambiguously confirm Gardner's (1985; this volume) repeated claim that the integrative motive plays a significant role in shaping L2 motivation.
GEOGRAPHICAL VARIATION IN THE LEARNERS' LANGUAGE ATTITUDES AND LANGUAGE CHOICE

As explained in the Introduction, participants in our study were systematically sampled from various regions in Hungary. We also argued that the country displays a historical capital/east/west division. In order to investigate the extent to which this regional division is reflected in the students' L2 attitudes, we have conducted analyses of variance of the two most important motivational scales, Integrativeness and Instrumentality, as well as the main criterion measure, Language Choice, according to a combined measure of regions and dwelling types (i.e., contrasting students from, say, an eastern village and a western city). Tables 10–12 present the results.

Table 10: Analysis of variance of Integrativeness across regions and dwelling types

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>German</th>
<th>French</th>
<th>Italian</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. capital</td>
<td>4.22</td>
<td>3.81</td>
<td>3.29</td>
<td>3.49</td>
<td>2.14</td>
</tr>
<tr>
<td>2. Western town</td>
<td>4.15</td>
<td>3.78</td>
<td>3.34</td>
<td>3.27</td>
<td>1.86</td>
</tr>
<tr>
<td>3. Western village</td>
<td>4.11</td>
<td>3.65</td>
<td>3.35</td>
<td>3.19</td>
<td>1.98</td>
</tr>
<tr>
<td>4. Eastern town</td>
<td>4.24</td>
<td>3.62</td>
<td>3.43</td>
<td>3.26</td>
<td>2.08</td>
</tr>
<tr>
<td>5. Eastern village</td>
<td>4.20</td>
<td>3.67</td>
<td>3.48</td>
<td>3.23</td>
<td>2.22</td>
</tr>
<tr>
<td>F</td>
<td>3.316*</td>
<td>18.807***</td>
<td>4.29**</td>
<td>9.538***</td>
<td>20.319***</td>
</tr>
<tr>
<td>post-hoc comparison&lt;sup&gt;a&lt;/sup&gt;:</td>
<td>4, 1, 5</td>
<td>1</td>
<td>5, 4, 3, 2</td>
<td>1</td>
<td>5, 1</td>
</tr>
<tr>
<td>LSD (Least Significant Difference)</td>
<td>1, 5, 2</td>
<td>2, 3</td>
<td>1</td>
<td>2, 4, 5, 3</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>5, 2, 3</td>
<td>5, 4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> numbers refer to dwelling types; numbers in the same line indicate non-significant, in different lines significant, mean differences.

*=p<.05; **=p<.01; ***=p<.001

Table 11: Analysis of variance of Instrumentality across regions and dwelling types

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>German</th>
<th>French</th>
<th>Italian</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. capital</td>
<td>4.81</td>
<td>4.47</td>
<td>3.65</td>
<td>3.37</td>
<td>2.77</td>
</tr>
<tr>
<td>2. Western town</td>
<td>4.61</td>
<td>4.51</td>
<td>3.47</td>
<td>3.10</td>
<td>2.27</td>
</tr>
<tr>
<td>3. Western village</td>
<td>4.50</td>
<td>4.40</td>
<td>3.51</td>
<td>3.20</td>
<td>2.33</td>
</tr>
<tr>
<td>4. Eastern town</td>
<td>4.63</td>
<td>4.32</td>
<td>3.60</td>
<td>3.14</td>
<td>2.61</td>
</tr>
<tr>
<td>5. Eastern village</td>
<td>4.55</td>
<td>4.29</td>
<td>3.69</td>
<td>3.14</td>
<td>2.58</td>
</tr>
<tr>
<td>F</td>
<td>29.430***</td>
<td>18.257***</td>
<td>10.360***</td>
<td>13.661***</td>
<td>39.286***</td>
</tr>
</tbody>
</table>
Although the tables reveal a seemingly complex pattern, we can find some strong tendencies across the three measures. The cosmopolitan nature of Budapest is well reflected by the high scores on practically all the variables. The popularity of English is fairly even across the regions, with the west of the country falling slightly behind, which may be due to the importance attached to German there (see below). There is a marked preference for German in the west of the country, which is clearly related to the fact that Hungary's western neighbor is German-speaking Austria, and the number of German visitors in this part of the country is particularly high: Attracted by the lower prices, Austrians often come over to Western Hungary to do their shopping or even to go to the dentist. With regard to French, we can conclude that the more eastern and more rural a particular area is, the more marked the preference for French in it. This may be due to the prevalence of more traditional values in these communities. Italian is endorsed in the capital, which may be due to the fact that Budapest is the target of most Italian tourists and also that the city is the cultural center of Hungary. Finally, Russian is preferred (or rather, less disliked) in the east of the country, which is in accordance with the eastern influence there and the fact that Hungary's eastern neighbor used to be the Soviet Union and is
currently Ukraine. Russian is also more tolerated in Budapest, which might be related to the increased awareness there about the pragmatic benefits that trade with Russia brings about.

In sum, even in a relatively small country such as Hungary, macro-contextual (geopolitical) factors actively shape language attitudes and language learning motivation. Hungary has traditionally been somewhere in the middle between Eastern and Western Europe, at the dividing line of Germanic and Russian dominance. This is clearly reflected in the preference for German in the west and Russian in the east of the country. French appears to be endorsed in more eastern and rural areas; we have proposed the explanation that this is due to the fact that in more traditional communities the past importance attached to the French language in Hungary has prevailed more than in other parts of the country.

CONCLUSION

The nationwide attitude/motivation survey described in this paper has produced a wealth of data, and the current study has provided the first systematic presentation of the results. Although some aspects of the data have not been processed yet (e.g., the impact of the participants' varying degree of contact with the L2 and L2 speakers), the findings reported above reveal some interesting patterns and trends.

In this paper we have addressed four main issues: a) the comparison of the attitudinal/motivational basis of learning different target languages; b) the exploration of any systematic gender-based variation in the data; c) the assessment of the relative importance of the emerging motivational clusters by relating them to two criterion measures, language choice and intended effort; and d) the examination of geographical (macro-contextual) variation in the responses.

(a) Our analyses have indicated that Hungarian language learners' general motivational disposition toward different target languages is characterized by a similar structure, consisting of five broad dimensions: Integrativeness, Instrumentality, Direct Contact with L2 speakers, Media Usage (or "indirect contact"), and Vitality of L2 Community. The main language-specific effect that has emerged was the fact that with certain languages some of these components have merged together into a broader disposition or have split up into sub-dimensions, depending on the perceived ethnolinguistic vitality of the L2 in question. However, the emerging factors were strongly intercorrelated in the case of all the five target languages, indicating that the general disposition toward a particular target language and L2 community among Hungarian school children is fairly homogeneous. Only Russian was an exception to this tendency with the historical heritage of the communist era having a strong enough impact to divide the image of "Russia/Russian" into a power-related and a culture-related dimension.
(b) We found marked gender differences in terms of the boys' and girls' dispositions toward the different languages. Girls in general tended to score higher on most attitudinal/motivational measures, the only main exception being three factors related to the German language. A comparison of girls' and boys' language choice preferences confirmed that German—along with Russian—is indeed a more "masculine" language, whereas French and Italian are more "feminine;" this gender-bias is in accordance with Ludwig's (1983) findings in a markedly different language learning context: among college students of French and German in the US. It was interesting to note that English was largely gender-neutral amongst our participants.

(c) Our findings reveal a strong association between the motivational measures and the criterion variables, explaining as much as 20-50% of the variance. Our results also confirm the uncontested superiority of integrativeness as a predictor of language choice relative to the other motivational scales: The regression analyses revealed that the bulk of the variance in language choice explained by motivational factors was, in fact, due to the impact of the integrativeness factor. Furthermore, what is even more remarkable, we obtained exactly the same pattern when examining the association between the attitudinal/motivational measures and the other criterion measure in our study, intended effort. This suggests that integrativeness represents a certain "core" of the learners' generalized attitudinal/motivational disposition, subsuming or mediating other variables, which is in complete accordance with Gardner's (1985) motivation theory.

(d) Comparing the data gathered in different regions of the country and in different dwelling types, a very straightforward picture emerged. Budapest, the most cosmopolitan part of Hungary produced the highest scores in most variables. In the west of the country (nearest to the Austrian border), German displayed a marked preference, whereas the generally unpopular Russian language was more endorsed in the east of the country (nearest to the ex-Soviet border). French was favored in more traditional (eastern and rural) communities, whereas Italian was particularly popular in the capital, which is the cultural and tourist center. These findings provide unambiguous support to the claim that macrocontextual, geopolitical factors significantly affect people's language attitudes.

In conclusion, the results of our survey have confirmed a number of assumptions and theories about L2 motivation and also revealed some important patterns and trends. Given the extensive size of our sample, these findings can be seen as fairly robust. We should note, however, that our results describe only one particular age group, 13/14-year-old teenagers, and with younger or older learners both the composition and the relative weighting of the L2 motivation construct may vary (e.g., instrumentality might have more of an impact, as was the case in the study by Dörnyei, 1990). Another special characteristic of our sample was that it included language learners for whom the L2 was primarily a school subject, and extracurricular contact with the L2 was rather limited. In contexts where L2 use is a...
regular practice, different motives might assume increasing importance. In order to explore the motivational characteristics of our sample in more detail, we are planning to conduct further in-depth analyses of our data set and have recently completed a follow-up survey study, involving over 3,800 participants, whose purpose was to explore the longitudinal changes in the motivation patterns of the investigated population.

REFERENCES


**APPENDIX A**

**ENGLISH TRANSLATION OF THE HUNGARIAN QUESTIONNAIRE USED IN THE SURVEY**

**Language orientation questionnaire**

We would like to ask you to help us by answering the following questions concerning foreign language learning. This is not a test so there are no "right" or "wrong" answers and you don't even have to write your name on it. We are interested in your personal opinion. Please give your answers sincerely as only this will guarantee the success of the investigation. Thank you very much for your help.

I. In the following section we would like you to answer some questions by simply giving marks from 1 to 5.

5 = very much, 4 = quite a lot, 3 = so-so, 2 = not really, 1 = not at all

For example, if you like "hamburgers" very much, "bean soup" not very much, and "spinach" not at all, write this:

<table>
<thead>
<tr>
<th></th>
<th>hamburgers</th>
<th>bean soup</th>
<th>spinach</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much do you like these foods?</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Please put one (and only one) whole number in each box and don't leave out any of them. Thanks.

5 = very much, 4 = quite a lot, 3 = so-so, 2 = not really, 1 = not at all

<table>
<thead>
<tr>
<th></th>
<th>German</th>
<th>French</th>
<th>Russian</th>
<th>English</th>
<th>Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much do you like these languages?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How much do you think knowing these languages would help you to become a more knowledgeable person?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. How important do you think these languages are in the world these days?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. How important do you think learning these languages is in order to learn more about the culture and art of its speakers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. How much effort are you prepared to expend in learning these languages?

6. How much do you think knowing these languages would help you when travelling abroad in the future?

7. How much do you think knowing these languages would help your future career?

8. How well does your mother speak these languages?

9. How well does your father speak these languages?

10. How much would you like to become similar to the people who speak these languages?

11. How much would you like to travel to these countries?

12. How rich and developed do you think these countries are?

13. How important a role do you think these countries play in the world?

14. How much do you like meeting foreigners from these countries?

15. How much do you like the films made in these countries? (Write 0 if you don't know them.)

16. How much do you like the TV programs made in these countries? (Write 0 if you don't know them.)

17. How much do you like the people who live in these countries?

18. How often do you see films/TV programs made in these countries?

19. How much do you like the magazines made in these countries? (Write 0 if you don't know them.)

20. How often do you meet foreigners (e.g., in the street, restaurants, public places) coming from these countries?

21. How much do you like the pop music of these countries? (Write 0 if you don't know it.)

<table>
<thead>
<tr>
<th>France</th>
<th>England</th>
<th>Russia</th>
<th>Germany</th>
<th>USA</th>
<th>Italy</th>
</tr>
</thead>
</table>

Have you put a number in each box? Thank you!
II. Now there are going to be statements some people agree with and some people don't. We would like to know to what extent they describe your own feelings or situation. After each statement you'll find five boxes. Please put an "X" in the box which best expresses how true the statement is about your feelings or situation. For example, if you like skiing very much, put an "X" in the last box:

<table>
<thead>
<tr>
<th>not at all true</th>
<th>not really true</th>
<th>partly true partly untrue</th>
<th>mostly true</th>
<th>absolutely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like skiing very much.</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

There are no good or bad answers — we are interested in your personal opinion.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>not really true</th>
<th>partly true partly untrue</th>
<th>mostly true</th>
<th>absolutely true</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. I am sure I will be able to learn a foreign language well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I think I am the type who would feel anxious and ill at ease if I had to speak to someone in a foreign language.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. People around me tend to think that it is a good thing to know foreign languages.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. I don't think that foreign languages are important school subjects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. I often watch satellite programs on TV.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. My parents do not consider foreign languages important school subjects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Learning foreign languages makes me fear that I will feel less Hungarian because of it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Learning a foreign language is a difficult task.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. Finally, please answer these few personal questions.

30. If you could choose, which foreign languages would you choose to learn next year at school (or work)? Please mark three languages in order of importance.
   1. ______________________________________________
   2. ______________________________________________
   3. ______________________________________________

31. Underline which gender you are: boy  girl

32. What foreign language(s) are you learning at school? ________________

33. Have you learnt any foreign languages outside school? ________________

34. If yes, which ones? ________________

35. At what age did you start learning a foreign language? ________________

36. Have you ever been abroad for longer than six months (e.g., when your parents worked there)? ________________

37. If yes, where? ________________
### APPENDIX B

**FACTOR ANALYSIS OF THE ATTITUDINAL ITEMS:**
**MAXIMUM LIKELIHOOD EXTRACTION, OBLIQUE ROTATION, PATTERN MATRICES**

<table>
<thead>
<tr>
<th>English (US)</th>
<th>English (UK)</th>
<th>German</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>factor</strong></td>
<td><strong>factor</strong></td>
<td><strong>factor</strong></td>
<td><strong>factor</strong></td>
</tr>
<tr>
<td>item</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12</td>
<td>1.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>item</td>
<td>1 2 3 4</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>- .63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>- .55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>- .52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italian</td>
<td>factor</td>
<td>Russian</td>
<td>factor</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>item</td>
<td>1 2 3 4 5</td>
<td>item</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14</td>
<td>.63</td>
<td>10</td>
<td>.52</td>
</tr>
<tr>
<td>17</td>
<td>.58</td>
<td>7</td>
<td>.35</td>
</tr>
<tr>
<td>1</td>
<td>.57</td>
<td>1</td>
<td>.33</td>
</tr>
<tr>
<td>10</td>
<td>.52</td>
<td>4</td>
<td>.32</td>
</tr>
<tr>
<td>11</td>
<td>.44</td>
<td>16</td>
<td>.76</td>
</tr>
<tr>
<td>4</td>
<td>.37</td>
<td>15</td>
<td>.65</td>
</tr>
<tr>
<td>2</td>
<td>.85</td>
<td>21</td>
<td>.51</td>
</tr>
<tr>
<td>3</td>
<td>.41</td>
<td>19</td>
<td>.42</td>
</tr>
<tr>
<td>12</td>
<td>.63</td>
<td>14</td>
<td>.70</td>
</tr>
<tr>
<td>13</td>
<td>.59</td>
<td>17</td>
<td>.69</td>
</tr>
<tr>
<td>16</td>
<td>.75</td>
<td>11</td>
<td>.39</td>
</tr>
<tr>
<td>15</td>
<td>.70</td>
<td>12</td>
<td>.41</td>
</tr>
<tr>
<td>21</td>
<td>.35</td>
<td>13</td>
<td>.39</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>3</td>
<td>.83</td>
</tr>
<tr>
<td>6</td>
<td>.53</td>
<td>2</td>
<td>.66</td>
</tr>
<tr>
<td>7</td>
<td>.44</td>
<td>6</td>
<td>.35</td>
</tr>
</tbody>
</table>

* loadings under .3 not shown

**Items submitted to the analyses**

1. How much do you like these languages?
2. How much do you think knowing these languages would help you to become a more knowledgeable person?
3. How important do you think these languages are in the world these days?
4. How important do you think learning these languages is in order to learn more about the culture and art of its speakers?
6. How much do you think knowing these languages would help you when travelling abroad in the future?
7. How much do you think knowing these languages would help your future career?
10. How much would you like to become similar to the people who speak these languages?
11. How much would you like to travel to these countries?
12. How rich and developed do you think these countries are?
13. How important a role do you think these countries play in the world?
14. How much do you like meeting foreigners from these countries?
15. How much do you like the films made in these countries?
16. How much do you like the TV programs made in these countries?
17. How much do you like the people who live in these countries?
19. How much do you like the magazines made in these countries?
21. How much do you like the pop music of these countries?