

USAGE OF SMARTPHONE AMONG STUDENT FOR EDUCATION LEARNING

Nazirah Zaini
*Faculty of Information Management,
Universiti Teknologi MARA (UiTM)
Puncak Perdana Campus,
UiTM Selangor, Malaysia*

Abstract

The purposed of this research is to determine the usage of smartphone among student for education learning. This paper proposes a framework to identify three aspects concerning about the usage of smartphone among student for education learning. As a result, the study reveals that the usage of smartphone among student for education learning consists of factors influence, student behavior and frequency of usage. This paper also shows the table analysis of review and the figure proposed research framework.

Keywords: smartphone, use of smartphone, student attitude, education, communication tools.

1. Introduction

The aims of this paper is to investigate the usage of smartphone among student for education learning. World today has improved their modernism from time to time. If people used mobile phones as tools to communicate in particular before this but nowadays everything has changed drastically and according to the circulation of the times. This has made changes to the development of new means of communication such as text messaging in place of phone calls and changes in the use of the data for the user part (Geffet & Maya, 2017). In this era of modernization, the smartphone has switched from a communicating tool to one of the media to find information or data among students. According to Mansour, (2016), smartphone was the one of the most commonly used devices for users to access and use by people in the world.

Moreover, smartphone has is one of the main tools for users especially students to get quick access to such information. Other person maybe chooses some smartphones instead of laptops because it's more convenient to go anywhere than personal computers because limited to bring anywhere based on the size, this mobile phone play a part for search information, entertainment, chat, shopping, tracking, providing a home-based learning (Nayak, 2018). Several progressively college campuses, students, teachers, and librarians receive this mobile device as an example of tablet computers, smartphones to increase knowledge outcomes.

They renowned that some devices can make lecture rooms further cooperating and cooperation can be combined with webpages, PowerPoint, video, audio, and others media. Students at institutions of higher learning are more likely to use mobile phones as an additive to their scientific materials (Iwari & Fasae, 2015). In addition, with the development of technologies, give an opportunity to the student to access significant information for academic purposes.

According to Khang et al., (2013); Noa Aharony (2016), humans are always involved in various of media form action, such as sending messages, surfing the

internet, searching for data, playing online games or communicating to each other. According to Dukic, Chiu & Lo (2015), they said that the variety of academic activities especially includes looking academic performance information, accessing course management systems and also accessing materials from library sources and conducting course registration. Besides that, a student also uses the smartphone to do various education related activities for example surfing the internet to find some info, retrieving education material, create the contents, record a presentations and so on. There have several studies that focus about the usage of smartphone in education among student including the factor influence, behavior and frequency.

2. Literature Review

This research is to evaluate the usage of smartphone among student for education learning. For the usage of smartphone, we focus on three main aspects; factor influence, student behavior and frequency of usage.

2.1 Factors influence

Student tends to use a smartphone in education especially related with academic purposed. Here are numerous studies that have prioritized the use of smartphones in our daily lives, while a little study has been recognized on the consumer's discernment and their behaviors in using mobile phones in various learning purposes (Grant & Gikas 2013; Joo & Sang 2013; Park et al., 2013; Bae et al., 2016). Students at institutions of higher learning spend averages of 118 minutes to surf the internet, 97 minutes a day to send messages 49 minutes' on email, 41 minutes' time on Facebook, as well as 51 minutes talking on mobile. This study is very important because mobile phones are not only used for connecting multiple people, but also being a device that allows multiple people to engage in various activities (Roberts et al., 2014). The voiced of the opinion that most adults and teens are less fully aware of smartphone functionality this can cause them to be addicted to their smartphone (Junco & Cotton, 2012; Aharony, 2017).

According to Arifin et al., (2017), in these study aims to find out the causes that affect the level of smartphone obsession to the students and their effect on their generally academic performance. The other factors are the internet addiction is among the user especially the student. In this observation, has assessed the level of internet addiction in identifying smart phone addiction criteria and the results have gained some important features before. Technology dependency remains attractive widespread anywhere with variety of forms like smartphones addiction, smartphones addiction and internet addiction. However, Bae et al., (2016), in their study they identify the reasons that cause the use of smartphones among students for academic purposes. The multi-functional handset supports available on the computer, with the access to the internet, and nowadays serves by way of a medium for message or the simple communication that cannot be done using regular phones.

Grant & Gikas (2013) and Yi et al., (2016), mobile technology offers online lectures, e-learners and digital library services using mobile technology in the higher education sector which is a cause for students to always appreciate the usage of smartphone for education learning. Compare to Aharony (2016), his stated that the

assimilate and outspread the literature by concentrating on numerous behavior characteristics and inspirations to completely understand what affects this on smartphone usage. Numerous academics, like Roberts et al., (2014), has continued that the usage of media has turned to a major part of adult life. But, according to Arif et al., (2016), their intention to this study, were to discover for a social need, social inspiration and comfort of affecting dependency on smartphones and purchases behavior between undergraduates. The need for social need is to interact with others, fulfilled through communication among college, family, co-workers and club members or groups (Tikkanen, 2009; Arif et al., 2016). Community requirement remains single vital aspect behind users' dependency on mobile phone.

2.2 Student Behaviours

According to Veloutsou & Alonan (2012) and Murillo, (2017), student is further expected to discover the information they needed by thorough on the internet and they confidence with search engines in all-purpose, and Google in a specific, to make available for them with the relevant and dispassionate results (Pan et al., 2007; Veloutsou & Alonan, 2012; Fallows, 2005; Murillo, 2017). Alongside, positive perception of smartphones influenced by the purchased of behavior through consumers on the future. Similarly, their reliance on smartphone usage consumes fundamental effects for the acquiring attitude of the students (Kuhlmeier & Knight, 2005; Aslam et al., 2016). Furthermore, some immoral experience the habit of using this mobile phone is outshined by an optimistic experience which in turn to greater usage of smartphones between students. Based on study by Bai et al., (2018), this intention was to giving the best of outcome established on the attitudes and behaviors of users regarding the recycling of smartphones. Recognition has been carried out to demonstrate that the attitude regarding the use of smartphones understanding the behaviors of consumers and the role of smartphones greatly exceeds as a means of communication.

However, based on study by Geffet & Blau, (2017), they have been investigating some of the predictive reasons for information seeking smartphone user behaviors is from a cross generation viewpoint. Smartphones give users the opportunity to check social networks and solve problems with requests for immediate access to required information (Lee & Song, 2015). Undergraduate are choosing to use smartphone to looking on the internet, because mobile phones are extra intensive, considered by go to every few pages on the site and continuing on a page more extensive than with laptops or desktop computers (Nicholas et al., 2013; Geffet & Blau, 2017). Compare to Murillo, (2016), in his study, he wanted to measure the negative trends and value of advertising they experienced on the advertisements they were taking while searching for products and services from their mobile device.

Also, he thought consumer attitudes regarding the backed outcomes in desktop-size has been deliberate previously (Jansen et al., 2007; Lin & Hung, 2009; Murillo, 2017), nevertheless remain mostly unfamiliar for transportable exploration, which previously takes exceeded the desktop exploration capacity (Millan, 2015). According to Nowrin & Bawden (2018), based on their studies they founded that student were enjoying an abstemiously protected behavior of escaping destructive attitude, by means

of beneficial phone settings and disaster recovery. Commonly the student behavior is needed to be more protected to ensure the security in the proper use of smartphones to protect the information security of the student and all private data. Furthermore, if they do not protect their attitude to this security, they are taking a tendency to cause accidental leak of private data but also can loom the users with illegal blackmail attempts obtainable of their discomfitures (Muslukhov et al., 2013; Nowrin & Bawden, 2018).

2.3 Frequency of usage

The frequent student use smartphone is based on their purpose, whichever for social networking or for academic purposed. According to Hossain & Ahmed (2016), majority of university students used smartphones for academic purposes. A progressive awareness in the direction of academic use of smartphones were have some dissimilarities in terms of, age, gender and place of origin also the time of smartphone usage. These dissimilarities were essentially because the fact that a smartphone is a moderately new accumulation to the life. Moreover, the literature of info looking for emphases on information requirements within a mobile setting explored knowledgeable users, students, and IT professionals and determined that portable internet users are very expected to address information desires as them arise (Heimonen, 2009; Bomhold, 2013). Farkas et al., (2010): Bomhold, (2013) distinguish the prospective of smartphones as a tools for libraries use, both public and academic, but does not address recent enthusiast use. Nevertheless, common pupil use smartphone for regular phone as a device with internet link as well as digital camera and also smartphone used for education activities (Hossain & Ahmed, 2016).

However, based on Al-Daihani, (2018), undergraduates were reported to using the smartphones most repeatedly for community networking or entertainment, for accessing academic material are ranked to fifth in the middle of seven purpose classifications. A lack of information concerning smartphone use for education learning was commonly described as a complications encountered. Mobile devices bargain online learning resources that arrange for info anytime and anywhere (Al-Emran et al., 2016). This level of ease of access disturbs the information-seeking attitude of the students (Ebiye, 2015; Al-Daihani, 2018). Compare to Lo et al., (2016), only a smaller of them regularly practice these mobile devices intended for official education purposes, they give priority to those who are most fascinated in consuming search engines, social communications, and other smartphone use but eliminating for exploration and duplicate of other requirements and usage behaviors are related to main university students.

Based on table 1 for analysis of review for the usage of smartphone among student for education learning, most of the previous study authors more focused on the frequency use of smartphone and factor influence student use smartphone while just a few authors focus in a student's behavior.

Table 1: Analysis of review

Author	Factors influence	Student behavior	Frequency of usage
Shamsul et al., (2017)	/		
Ariff et al., (2016)	/		
Sarwar and Tariq (2013)	/		
Aharony (2016)	/		
Yi et al.,(2014)	/		
Geffet and Maya (2017)		/	
Bai et al.,(2018)		/	
Murillo (2016)		/	
Nowrin and Bawden (2018)		/	
Al-Daihani (2018)			/
Mansour(2015)			/
Lo et al.,(2015)			/
Boruff (2014)			/
Reese Bomhold (2013)			/
Nayak (2018)			/
Fasae and Iwari (2014)			/

3. Proposed Framework

In this study we develop our research framework based on Figure 1. In Figure 1 we identify dependent variable and independent variables. Independent variable is develop based on the summary from the table 1. Independence variables define based on previous discussion in Section 2.1 Factors influence, Section 2.2 Student behaviors and Section 2.3 Frequency of usage.

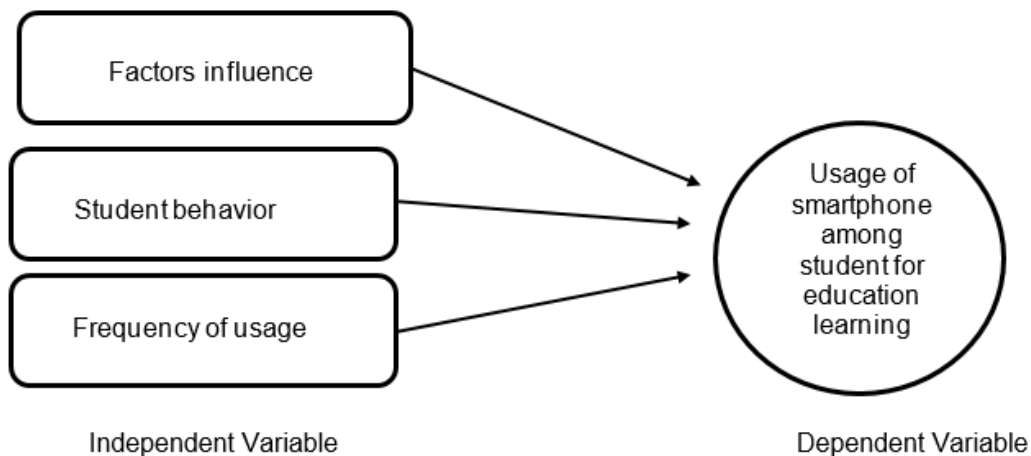


Figure 1. Proposed research framework

4. Conclusions

Smartphone now likely to be common part of our daily life. From the reflection, we can specify that student is tend to use smartphone for entertainment and communication rather than using it for learning education. Commonly, smartphone is used by student less often for education to seeking information. Generally, a student will use a smartphone as their tools for searching the data for academic information and use search engine like Google to search the relevant info. Efficiency used of smartphone id depending on the capability the student to manipulated the function of the smartphone. In addition, the major factor inspirations the student to use the smartphone is based on the quality time to spent on it or the motivation to use for what. But, in the term to control the usage of smartphone among student, student need to have time to relax and try to avoid to use a smartphone if there is no necessity to use it because the frequently use the smartphone can be a source of a smartphone addiction. Moreover, smartphones have indirectly encouragement students' observations of performance effectiveness and indirectly affecting the usage of smartphones over the development of use, such as attitudes towards smartphone use whether for positive or negative impact. Nevertheless, an investigated in future should be done to know why some students are not applying their smartphones for academic purpose whichever because the lack of internet connection or they are more interested to use the smartphone just for an entertainment.

References

- Al-Daihani, S. M. (2018). Smartphone use by students for information seeking. *Global Knowledge, Memory and Communication*, 67(4/5), 194-208. doi:10.1108/gkmc-01-2018-0008
- Arefin, S., Islam, R., Mustafi, M. A., Afrin, S., & Islam, N. (2017). Impact of Smartphone Addiction on Business Students' Academic Performance: A Case Study. *Independent Journal of Management & Production*, 8(3), 955. doi:10.14807/ijmp. v8i3.629
- Arif, I., Aslam, W., & Ali, M. (2016). Students' dependence on smartphones and its effect on purchasing behavior. *South Asian Journal of Global Business Research*, 5(2), 285-302. doi:10.1108/sajgbr-05-2014-0031
- Bai, H., Wang, J., & Zeng, A. Z. (2018). Exploring Chinese consumers' attitude and behavior toward smartphone recycling. *Journal of Cleaner Production*, 188, 227-236. doi: 10.1016/j.jclepro.2018.03.253
- Boruff, J. T., & Storie, D. (2014). Mobile devices in medicine: a survey of how medical students, residents, and faculty use smartphones and other mobile devices to

- find information. *Journal of the Medical Library Association: JMLA*, 102(1), 22-30. doi:10.3163/1536-5050.102.1.006
- Dukic, Z., Chiu, D. K., & Lo, P. (2015). How useful are smartphones for learning? Perceptions and practices of Library and Information Science students from Hong Kong and Japan. *Library Hi Tech*, 33(4), 545-561. doi:10.1108/lht-02-2015-0015
- Fasae, J. K., & Adegbilero-Iwari, I. (2015). Mobile devices for academic practices by students of college of sciences in selected Nigerian private universities. *The Electronic Library*, 33(4), 749-759. doi:10.1108/el-03-2014-0045
- Gökçearsan, Ş., Mumcu, F. K., Haşlaman, T., & Çevik, Y. D. (2016). Modelling smartphone addiction: The role of smartphone usage, self-regulation, general self-efficacy and cyberloafing in university students. *Computers in Human Behavior*, 63, 639-649. doi: 10.1016/j.chb.2016.05.091
- Hossain, M. E., & Ahmed, S. Z. (2016). Academic use of smartphones by university students: a developing country perspective. *The Electronic Library*, 34(4), 651-665. doi:10.1108/el-07-2015-0112
- Lo, P., Cho, A., Leung, M., Chiu, D. K., Ko, E. H., & Ho, K. K. (2016). Use of smartphones by art and design students for accessing library services and learning. *Library Hi Tech*, 34(2), 224-238. doi:10.1108/lht-02-2016-0015
- Mansour, E. (2016). Use of smartphone apps among library and information science students at South Valley University, Egypt. *The Electronic Library*, 34(3), 371-404. doi:10.1108/el-03-2015-0044
- Murillo, E. (2017). Attitudes toward mobile search ads: a study among Mexican millennials. *Journal of Research in Interactive Marketing*, 11(1), 91-108. doi:10.1108/jrim-06-2016-0061
- Nayak, J. K. (2018). Relationship among smartphone usage, addiction, academic performance and the moderating role of gender: A study of higher education students in India. *Computers & Education*, 123, 164-173. doi: 10.1016/j.compedu.2018.05.007
- Nowrin, S., & Bawden, D. (2018). Information security behaviour of smartphone users. *Information and Learning Science*, 119(7/8), 444-455. doi:10.1108/ils-04-2018-0029
- Patel, S., Lidor, A., Sanyal, A., Goepfert, A. R., & Hueppchen, N. (2018). Smartphone Use and the Perception of Professionalism Among Medical Students and Surgical Faculty. *Journal of Surgical Education*, 75(2), 321-325. doi: 10.1016/j.jsurg.2017.07.027

Reese Bomhold, C. (2013). Educational use of smart phone technology. *Program*, 47(4), 424-436. doi:10.1108/prog-01-2013-0003

Yi, Y. J., You, S., & Bae, B. J. (2016). The influence of smartphones on academic performance. *Library Hi Tech*, 34(3), 480-499. doi:10.1108/lht-04-2016-0038

Zhitomirsky-Geffet, M., & Blau, M. (2017). Cross-generational analysis of information seeking behavior of smartphone users. *Aslib Journal of Information Management*, 69(6), 721-739. doi:10.1108/ajim-04-2017-0083