International Journal of Civil Engineering and Technology (IJCIET)
Volume 9, Issue 13, December 2018, pp. 852–858, Article ID: IJCIET_09_13_084
Available online at http://www.iaeme.com/ijciet/issues.asp?JType=IJCIET&VType=9&IType=13
ISSN Print: 0976-6308 and ISSN Online: 0976-6316

SUBJECTIVE NORM AND PERCEIVED ENJOYMENT AMONG STUDENTS IN INFLUENCING THE INTENTION TO USE E-LEARNING

Zuhal Hussein
Faculty of Business Management, Universiti Teknologi MARA Kota Bharu Campus, Lembah Sireh, 15050, Kota Bharu, Kelantan, Malaysia
zuhal@kelantan.uitm.edu.my

ABSTRACT

E-learning is well known as a platform for transferring knowledge in the most effective way in terms of cost saving and it can be accessed by people widely and simultaneously. Now in the era of the 4th Industrial Revolution, Malaysian universities of higher learning have no choice but to move towards digital learning and open learning such as Massive Open Online Courses (MOOC) in order to be competitive. However, the success of the e-learning program depends not only on technology readiness or world competitiveness but also on the intention of students to use it. In order for e-learning to be successfully accepted and adopted by students, this study examined two factors, subjective norm and perceived enjoyment, affecting students' intention to use e-learning in their education. One hundred and thirty-three students were recruited in this quantitative study through purposive sampling at the Health Campus, Universiti Sains Malaysia. A questionnaire with 30 items was used as a tool for data collection using survey methods. Consent was obtained from a respondent before starting the survey. Results indicated that those two factors did influence student behavioural intention. The highest mean value was perceived enjoyment (4.1058), followed by subjective norm and social influence (4.0391). Subjective norm was found to be significant and having a positive relationship with behavioural intention, while perceived enjoyment was not significant. In conclusion, future research on the intention of students to use e-learning is always relevant. Society may provide students with an alternative source for judging e-learning.

Key words: Behavioural intention, e-learning, perceived enjoyment, subjective norm

Cite this Article: Zuhal Hussein, Subjective Norm and Perceived Enjoyment among Students in Influencing the Intention to use E-Learning, *International Journal of Civil Engineering and Technology (IJCIET)* 9(13), 2018, pp. 852–858.
http://www.iaeme.com/IJCIET/issues.asp?JType=IJCIET&VType=9&IType=13

1. INTRODUCTION

In the era of the 4th Industrial Revolution, the future of education and the learning process will change and harness the potential of digital technologies. Technology has become integrated into virtually every aspect of education. E-learning is becoming significantly more important for the progressive evolution of education by making it more accessible, flexible and low cost. According to Yu and Hu (2016), the e-learning market has been estimated to grow tremendously to $255 billion by 2017, a 65 per cent increment from the year 2016 in which it was reported to be worth an enormous $166.5 billion. This trend is expected to grow faster between 2018 and 2020 due to demand and the digitisation of the learning process. Undoubtedly, with the even wider spread of technology and the agenda of learning helping to transform the world, e-learning is becoming a crucial platform for learning, which is very competitive and on the brink of a revolution.

E-learning is well known as a platform for transferring knowledge in the most effective way in terms of cost saving and it can be accessed by people widely and simultaneously. Due to its flexibility, e-learning is becoming a useful platform for higher education institutions to deliver their teaching materials and for students to receive the learning process outside the classroom (Al-Adwan et al., 2013). Now in the era of the 4th Industrial Revolution, universities or higher learning institutions have no choice but to apply e-learning and focus on advancing its context and function. Without exception, education in Malaysia has moved to digital learning and open learning, such as Massive Open Online Courses (MOOC), in order to be competitive.

In Malaysia, Universiti Sains Malaysia (USM) was a pioneering public university that began its e-learning system in 1971 and offered courses at its Distance Learning Centre. In 1994, the Ministry of Education announced the implementation of e-learning for all local universities in Malaysia. This initiative was enforced because of the high demand, cost effectiveness and efficiency of e-learning. It has proven to be a good future platform for the life-long learning process. Currently, e-learning has been used widely in all higher learning institutions and universities in Malaysia in transferring knowledge to more than 1.2 million students (*Penang Monthly*, 2017).

By implementing the e-learning system in higher education institutions, despite having the benefits, lecturers and students need to have knowledge of ICT, certain skills and a positive attitude towards e-learning in order to create a meaningful and conducive learning environment. This is important because, according to Rhema and Milizewska (2010), most students and lecturers have had little or even no experience in using computers, and those who are familiar with computers generally only use them as a medium for entertainment and communication. It is supported by Anuwar (2008) that there is a large segment of the population that is computer illiterate. This hinders the implementation of e-learning and this can be a cause for refusal to use e-learning. Additionally, in some universities, e-learning does not add any value to learning activities and has no impact on student academic performance (Oye et al., 2012).

In order for e-learning to be successfully accepted and adopted by students, besides their skills and knowledge in using it, there is a need to identify other factors that influence their behavioural intention to use e-learning. The success of e-learning programs depends not only on students' satisfaction but also on their intent to use it (Brahmasrene & Lee, 2012). This study considers the impact of subjective norms and perceived enjoyment on students' intention and attitude to use e-learning in their education.

2. LITERATURE REVIEW

This study focuses on three main variables, behavioural intention, subjective norm and perceived enjoyment as described below.

2.1. Behavioral Intention

Intention is an indicator used to capture the factor that influences a desired behaviour (Ajzen, 1991). The Theory of Reasoned Action (TRA) states that Behavioural Intention is the cognitive representation of a person's readiness to perform a given behaviour, and it is considered to be the immediate antecedent of behaviour (Punnoose, 2012). Behavioural intention indicates how much effort an individual should engage or commit in order to perform such a behaviour. It is also a model for predicting and explaining human behaviour in different domains. There are several factors such as perceived ease of use, perceived usefulness (Park, 2009), perceived enjoyment (Ajzen, 1991), subjective norm (Schepers & Wetzels, 2007) and security (Ndubisi, 2004) that are positively associated with behavioural intention to use a technology such as e-learning.

2. Subjective Norm

The Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975, 1980) began as a theory of attitude and was later applied to the study of behaviour. The three general constructs in TRA include behavioural intention, attitude and subjective norm. Subjective norm in TRA studies was defined as "a social factor that influences a person's belief". One's perception is dependent on the people surrounding oneself as to whether one is encouraged to perform certain behaviours (Ajzen & Fishbein, 1980). The intended behaviour will be performed when they have a positive attitude towards it and when they think that people surrounding them think they should do so. It means that a student's behavioural intention towards e-learning can be influenced by close ones such as family members, friends and others.

Research by Ndubisi (2004) suggests that generally the groups of people having the potential to influence students to adopt and increase their intention to use e-learning will be the adopter's friends, family and colleagues. Subjective norms are an important determinant of behavioural intentions because they reflect the influence of others and the importance of having others think positively of them. According to a study done by Grandon et al. (2005), subjective norm was found to be a significant factor in affecting university students' intention to use e-learning. If conscientious personalities think that significant others believe that the technology should be used, they will form stronger intentions to use it. However, there have been contrary findings. In another study, Saadé et al. (2008) found that subjective norms are not significant because the compliance effect might occur only in mandatory situations but not in voluntary settings.

3. Perceived Enjoyment

According to Punnoose (2012), perceived enjoyment can explain behavioural intention to use information systems. In learning, a student's subjective feelings of joy, relaxation, pleasure and positive holistic experience also play critical roles in explaining user acceptance and usage behaviour of e-learning (Saadé et al., 2008). This was supported by the study by van der Heijden (2004) which proposed that intrinsic motivators such as perceived enjoyment could influence a user to use information systems such as e-learning; results showed that perceived enjoyment had a significant impact on student intention to use e-learning. Venkatesh et al. (2002) posited that individuals who find that the technology they used was interesting would start to enjoy the activity they experienced and realise the usefulness of it and find it easier to use. When more technology is incorporated into learning, e-learning can be more enjoyable

than traditional classroom learning. Thus, if a student perceives e-learning as enjoyable, he or she tends to have the intention to use the technology.

3. METHODOLOGY

3.1. Study Location

This quantitative study was conducted at the Universiti Sains Malaysia (USM) Health Campus in Kelantan since it was the first tertiary institution in Malaysia to start the e-learning program.

3.2. Study Sample

This study recruited 133 e-PJJ (Distance Education) students who engaged in e-learning mode. E-PJJ students were students who took distance learning courses. Initially, 150 sample questionnaires were distributed to respondents. However, only 133 questionnaires were valid for analysis because the remaining had problems in term of answers, completion and other errors.

3.3. Data Collection

The respondents of this study were recruited randomly through non-probability sampling. The survey was conducted using the questionnaire as a tool of data collection. Before conducting the survey, consent was obtained from the respondent in order to ensure that ethical considerations were observed. The confidentiality and rights of the respondent to participate or withdraw from the study were assured. The respondents were given 20 minutes to complete the questionnaire. It included four sections which were socio-demographic profile, behavioural intention, subjective norm and perceived enjoyment.

3.4. Data Analysis

Data were analysed using SPSS version 17. Statistical techniques such as descriptive analysis, Spearman correlation and regression analysis were applied.

4. RESULTS

A profile of the respondents follows.

Table 1. Respondent demography (*n*=133)

Profile	Categories	Percentage (%)
Sex	Male	57.9
	Female	42.1
Age (Years)	25–30	9
	31–35	36.8
	36–40	54.1
Marital status	Single	21.8
	Married	78.2
Ethnicity	Malay	88.7
	Chinese	11.3
Courses/Stream	Science	77.5
	Arts	22.5
Occupation sector	Private	24.8
	Govt	69.9
	Others	5.3
Place of using internet	Home	83.5
	Office	16.5
House subscribing to internet	Yes	86.5
	No	13.5

The results of this socio-demographic analysis of respondents are shown in Table 1. The number of males compared to females was 57.9% and 42.1% respectively. In terms of age, the majority of respondents were in the age range of 36–40 years (54.1%) and the least number fell into the age range of 25–30 years (9%). This was due to e-PJJ students consisting of senior people who have already worked for several years. In line with the age factor, the majority of respondents were married (78.2%) and only 21.8% were single.

In terms of ethnicity, Malays were the larger number at 88.7% while Chinese only accounted for 11.3%. This could be because Malays were more populous in Kelantan. The majority of respondents were in the science stream (77.5%) compared to those in the arts stream (22.5%). This was because of the nature of USM which offers more courses and programmes in the sciences.

Most of the respondents worked in the government sector (69.9%), followed by those in the private sector and others, 24.8% and 5.3% respectively. In terms of the place of using the internet, the majority of respondents used the internet in their homes which accounted for 83.5% instead of using it in the office, which accounted for only 16.5%. The majority of respondents also claimed that they had subscribed to the internet in their houses (86.5%) while only 13.5% mentioned that they had not.

Table 2. Results of correlations

		BI*	**SN***	**PE***
BI	Spearman correlation	1	.520**	.410**
	Sig. (2-tailed)	.	.000	.000
	N	133	133	133
SN	Spearman correlation	.520**	1	.384**
	Sig. (2-tailed)	.000	.	.000
	N	133	133	133
PE	Spearman orrelation	.410**	.384**	1
	Sig. (2-tailed)	.000	.000	.
	N	133	133	133

* BI Behavioural Intention, SN Subjective Norm, PE Perceived Enjoyment
**Correlation is significant at the 0.01 level (2-tailed)

The results of Spearman Correlations from Table 2 above shows a moderate relationship between behavioural intention (BI) with subjective norm (SN), with a moderate correlation r=.520. Meanwhile, perceived enjoyment (PE) shows a modest relationship with behavioural intention (BI) with a low correlation r=.410.

Table 3. Regression analysis of coefficients

		Unstandardised coefficients		**Standardised coefficients**		
	Model	**β**	**std. error**	**beta**	**t**	**sig.**
1	(Constant)	1.414	.274		5.152	.000
	SN	.130	0.63	.176	2.070	.041
	PE	.020	.064	.024	.308	.759

Dependent Variable: Behavioural Intention (BI)

According to the results above, subjective norm (SN) with a p-value=0.41 was significant with behavioural intention (BI). However, perceived enjoyment (PE) was found not to be significant with BI with a p-value=.759. The results also revealed that SN was the most important factor that contributed to BI with the highest value of β=.130. The results indicated that they had a positive relationship with each other. Meanwhile, PE was the factor that did not contribute to BI.

5. DISCUSSION

From the above findings, subjective norm was found to be a significant factor in affecting university students' intention to use e-learning. This finding was supported by Grandon et al. (2005) that if conscientious personalities think that significant others believe that the technology should be used, they will form stronger intentions to use the technology. This is because most of the students agreed that their friends, family and other people who were close to them influenced them to engage in e-learning activity. Research by Ndubisi (2004) suggests that generally the groups of people having potential to influence the students to adopt and increase their intention to use e-learning will be their adopter's friends, family and colleagues. This reveals that integrating subjective norm in the theoretical construct of behavioural intention definitely can be used to better explain and should be included in the successful future of e-learning.

The results show that perceived enjoyment towards using computers is not a significant factor for students to engage in e-learning. Ryan and Deci (2000) stated that normal human beings who are healthy and active since young and those who are curious and playful will display an interest and eagerness to learn and explore, so they do not require extraneous incentives, such as enjoyment, to do so. In addition, the concept of enjoyment in surfing the internet applies to entertainment, chatting, shopping and doing online transactions rather than using it for studying or learning activities (Punnoose, 2012). Furthermore, once they enjoy using the internet in their daily lives, they see it as a normal activity which may not really excite them anymore.

6. CONCLUSIONS

In conclusion, the prospect of e-learning goes beyond skills and knowledge acquisition. The approaches to it must also be strategised and upgraded in terms of making e-learning more acceptable to a larger audience, not only at academic institutions. It could be used for educating and leveraging the benefits of e-learning to the wider community in order for them to support and encourage each other. Society may provide students with an alternative source for judging e-learning.

For the success of e-learning and to be competitive in the era of the 4th Industrial Revolution where e-learning will be drastically growing and evolving, it is crucial for the government to provide sufficient technological resources such as high speed internet, advanced computers and mobile learning applications because they play a vital role for the wide acceptance of and commitment towards e-learning.

This study has several limitations. First, the sample was collected only from one higher level educational institution in Kelantan. Future studies should consider conducting more studies at various institutions of higher learning and perhaps cover the whole of Malaysia to improve the generalisability of the findings. In addition, in the study of e-learning in the era of the 4th Industrial Revolution, the focus might also be on the educators' perspective about the challenges and the future of digital education. Lastly, further investigations are needed to examine the impact of the new e-learning paradigm in the era of the 4th Industrial Revolution on educators and students.

REFERENCES

[1] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2): 179–211.

[2] Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.

[3] Al-Adwan, A., Al-Adwan, A., & Smedley, J. (2013). Exploring students acceptance of e-learning using technology acceptance model in Jordanian universities. *International Journal of Education and Development using Information and Communication Technology*, 9(2): 4–18.

[4] Anuwar, A. (2008). Issues and challenges in implementing e-learning in Malaysia. Open University Malaysia.

[5] Brahmasrene, T., & Lee, J-W. (2012). Determinants of intent to continue using online learning: A tale of two universities. *Interdisciplinary Journal of Information, Knowledge, and Management*, 7(1): 1–20.

[6] Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior*. Reading, MA: Addison-Wesley.

[7] Grandon, E., Alshare, O., & Kwan, O. (2005). Factors influencing student intention to adopt online classes: A cross-cultural study. *Journal of Computing Sciences in Colleges*, 20(4): 46–56.

[8] Ndubisi, N. O. (2004). Understanding the salience of cultural dimensions on relationship marketing, its underpinnings and aftermaths. *Cross Cultural Management*, 11(3): 70–89.

[9] Oye, N. D., Iahad, N. A., Madar, M. J., & Rahim, N. A. (2012). The impact of e-learning on students performance in tertiary institutions. *International Journal of Computer Networks and Wireless Communications*, 2(2): 121–130.

[10] Park, S. Y. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning. *Educational Technology & Society*, 12(3): 150–162.

[11] Penang Monthly. (2017). The numbers on education in Malaysia and Penang. http://penangmonthly.com/article.aspx?pageid=165&name=the_numbers_on_education_in_malaysia_and_penang. Accessed dd mmm 2018.

[12] Punnoose, A. (2012). Determinants of intention to use e-learning based on the technology acceptance model. *Journal of Information Technology Education: Research*, 11(1): 301–337.

[13] Rhema, A., & Milizewska, I. (2010). Toward e-learning in higher education in Libya. *Issues in Informing Science and Information Technology*, 7.

[14] Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1): 68–78.

[15] Saadé, R. G., Tan, W., & Nebebe, F. (2008). Impact of motivation on intentions in online learning: Canada vs China. *Issues in Informing Science & Information Technology*, 5: 137–147.

[16] Schepers, J., & Wetzels, M. (2007). A meta-analysis of the technology acceptance model: Investigating subjective norm and moderation effects. *Information & Management*, 44: 90–103.

[17] van der Heijden, H. (2004). User acceptance of hedonic information systems. *MIS Quarterly*, 28(4): 695–704.

[18] Venkatesh, V., Speier, C., & Morris, M. G. (2002). User acceptance enablers in individual decision-making about technology: Toward an integrated model. *Decision Sciences*, 33: 297–316.

[19] Yu, J. Y., & Hu, Z. (2016). Is online learning the future of education? https://www.weforum.org/agenda/2016/09/is-online-learning-the-future-of-education/. Accessed dd mmm 2018.