The Effect of the Use of, and Attitude towards, the Internet to Create Perceived Confidence and Satisfaction among Student Teachers Enrolled as Distance Learners

By

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Abstract

A study was conducted to investigate the effect of the use of, and attitude towards, the Internet to create perceived confidence and satisfaction in learning. The respondents in the study were student teachers who were enrolled as distance education learners at the School of Distance Education, Universiti Sains Malaysia. A total of 301 teacher students were involved in this study and the effect was elucidated using a specially developed questionnaire which was administered to them during the 2010/2011 annual residential course. There were 24 items in the questionnaire related to the use of the Internet and they were divided into four sub-dimensions, namely, resource, information, social aspects and entertainment. Twenty-one items on the attitude were divided into four sub-dimensions, namely, perceived control, perceived usefulness, affection and behaviour. The results of the study showed that there was a significant correlation (at 1% confidence level) between all sub-dimensions of Internet use towards the perceived confidence and satisfaction. In terms of the attitude, the results showed that at a 1% confidence level, only the dimensions of perceived usefulness and behaviour of the attitude affected the perceived confidence and satisfaction. The implications of the results in terms of enhancing the student teachers' confidence and satisfaction, particularly when referring to the use of the Internet in online learning activities, will be discussed in detail.

1. Introduction

The explosive growth of information and communication technology (ICT) has led to accessibility to a wealth of knowledge and information as well as eased digital communication across the globe. There now exists a plethora of digital devices   such as computers, laptops, mobile phones, digital entertainment (music and games) devices, digital cameras, cable TV and other digital items that are in common use in everyday life. The availability of such devices has created digital natives who have grown up in an environment where the digital technology is part of their everyday life and they have a high degree of familiarity with, and reliance on, ICT related devices.

The creation of digital natives whose lives are immersed in technology and surrounded by computers, videogames, digital music players, mobile phones and other digital toys and tools has called for educators to relook at how education is being delivered to students. The immersion of the technology-rich culture among the digital natives influences their skills and interests in ways significant for education. It is asserted that digital natives learn very differently compared with past generations of students. The digital

natives are active experiential learners, proficient in multitasking and dependent on communications technologies to access information and to interact with others.

Researchers argue that the characteristics of this new cohort of students in the digital age raise fundamental questions about whether education is currently equipped to meet their needs. There is growing appreciation that the old approach [of didactic teaching] is ill-suited to the intellectual, social, motivational and emotional needs of the new generation. A change in the paradigm in teaching is imperative so that the use of technology being deployed in the classroom is consistent with how the students interact with the world and with what will be expected of them in the future. It must also be consistent with the behaviour and aspirations of students of the digital age.

The educators must now realise that students in the digital age have different ways of thinking, speaking as well as approaching learning. Most research has reported that there is a positive association between the use of technology and learning attainment. However, the choice of technology being used must be appropriate so that it is purposeful and caters to the needs of students of the digital age. Teachers are then expected to have a positive attitude, confidence and satisfaction in using the technology in classroom teaching. Lai (1993) stressed that only teachers with the right attitude of using technology can be alongside the students, facilitating and guiding them in the acquisition of meta cognitive knowledge and higher order thinking skills.

The aspects of attitude, perceived confidence and satisfaction of technological tools used in classroom teaching, such as the computer and the Internet, have received considerable interest among researchers (Wong & Hanafi, 2007; Christensen & Knezek, 1998; Davis, 1989; Houtz & Gupta, 2001; Liaw, 2002; Kirkpatrik & Cuban, 1998). For instance, Wong & Hanafi (2007) found that in general, student teachers exhibit positive attitudes towards the use of ICT in their instructional approaches. There are many variables that influence the attitude, confidence and satisfaction such as the socioeconomic status and age. For instance, Shashaani (1994) and Shashaani & Khalili (2001) found that the occupations and incomes of parents have a significant influence on students' attitude towards computers. Kirkpatrick & Cuban (1998) found that age plays an important role in the relation of attitude towards computing.

This study is a continuation of the previous study undertaken by Wong & Hanafi (2007). The study of Wong & Hanafi (2007) looked at the gender difference among student teachers enrolled as full-time students and they found that the student teachers exhibit positive attitudes towards the use of the ICT in their instructional approaches. Unlike the previous study, this study looks at the use and attitude, confidence and satisfaction of the student teachers enrolled as distance education learners. Specifically, the research objectives of this research are:

i. What is the degree of correlation between perceived confidence and satisfaction with the type of Internet usage?

ii. What is the degree of correlation between the perceived confidence and satisfaction on the attitude toward the Internet?

iii. What is the degree of correlation between the perceived confidence and satisfaction toward the use of the Internet?

2. Methodology

The respondents of this study were 301 student teachers enrolled in the distance education programme at the School of Distance Education, USM. The questionnaire was based on the questionnaire developed by

Wong and Hanafi (2007). It consisted of 24 items on the use of the Internet and 21 items on the attitude
shown when using the Internet. Each item was accompanied by a 5-point Likert scale with "1"
representing "strongly disagree" and "5" representing "strongly agree" for positive items (and vice versa)
for negative items. The questionnaire was pilot tested on another sample not involved in the main study.
No ambiguous items were found and good internal consistency was recorded.

The use of the Internet was measured in terms of the dimensions of resources, information, social aspects
and entertainment. There were six items each on resources and social aspects, seven items on information
and five items on entertainment.   On the other hand, the attitude toward the Internet was measured in
terms of four dimensions. These were five items each on perceived control, perceived usefulness and
affection and six items on behaviour. Table 1 shows the Internet usage and the attitude towards the
Internet and their dimensions as well as the number of items involved.

Table 1: Dimensions of the use of the Internet and attitude towards the Internet

	Dimension	**No. of items**
The use of the Internet	Resources	6
	Information	7
	Social aspects	6
	Entertainment	5
	Total	**24**
Attitude towards the Internet	Perceived control	5
	Perceived usefulness	5
	Affection	5
	Behaviour	6
	Total	**21**

3.   Results and discussion

The programmes enrolled by the respondents are shown in Table 2.

Table 2: Programmes enrolled by the respondents

Programme	**Frequency**
Humanities	140
Management	38
Science	90
Social Sciences	33
Total	**301**

The table shows that out of the total number of respondents, 46.5% were enrolled in the humanities
programme and 29.9% in the science programme. A few of the respondents were enrolled in the
management (12.6%) and social sciences programmes (11.0%). The access to the Internet in the
workplace was found to be satisfactory. A total of 62.8% of the respondents had access to the Internet as
opposed to 37.2% who did not. See Table 3.

Table 3: Sufficiency of Internet facilities provided in the workplace

	Frequency	Percent
No	112	37.2

3

Yes	189	62.8
Total	**301**	**100.0**

Correlation analyses on perceived confidence and satisfaction on the type of Internet usage

Table 4 shows the results of the correlation analyses on the perceived confidence and satisfaction on the type of Internet usage. There was significant and positive correlation between the perceived confidence on each of the dimensions. The results suggested that the student teachers were very confident in using the Internet when accessing resources and information and when seeking for social and entertainment activities; the levels of confidence and frequency of usage of the Internet on each of these dimensions were highly correlated. Similar results were also obtained when the satisfaction of using the Internet was considered. There was also a significant and positive correlation between the satisfaction levels of using the Internet on each of the dimensions of Internet usage. Again, this result implied that the student teachers were satisfied when using the Internet to access resources and information as well as when using it for social and entertainment activities.

Table 4: The correlation between perceived confidence and satisfaction on the type of Internet usage

Dimension of Internet usage	Perceived confidence in using the Internet	Satisfaction in using the Internet
Resources	.205(**)	.213(**)
Information	.316(**)	.230(**)
Social aspects	.203(**)	.202(**)
Entertainment	.241(**)	.153(**)

** Correlation is significant at the 0.01 level (2-tailed).

Correlation analyses on perceived confidence and satisfaction on the attitude towards the Internet

Table 5 shows the perceived confidence and satisfaction in using the Internet when measured on the dimension of the attitude. As in the dimension of Internet usage, there were also positive and significant correlations between the dimensions of the attitude with the perceived confidence and satisfaction.

Table 5: The correlation between perceived confidence and satisfaction on the attitude of using the Internet

Dimension of attitude	Perceived confidence in using the Internet	Satisfaction with the Internet
Perceived Control	.240(**)	.131(*)
Perceived Usefulness	.203(**)	.181(**)
Affection	.123(*)	.182(**)
Behaviour	.282(**)	.289(**)

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Correlation between perceived confidence and satisfaction toward the use of the Internet

The correlation between perceived confidence and satisfaction towards the use of the Internet is shown in Table 6. The results show that there was a significant and positive correlation between the perceived confidence and the satisfaction of using the Internet. This implies that the higher the degree of perceived

confidence in using the Internet, the higher the degree in the satisfaction of using it. The perceived confidence of using the Internet must be instilled by its continuous use before a high degree of satisfaction can be achieved. Appropriate effort must be undertaken by the relevant authorities to provide the right environment for the student teachers to have the access to the Internet so that they can use it in their teaching and learning.

Table 6: The correlation between perceived confidence and satisfaction toward the use of the Internet

		Confidence	Satisfaction
Confidence	Pearson Correlation	1	.476(**)
	Sig. (2-tailed)		.000
	N	301	301
Satisfaction	Pearson Correlation	.476(**)	1
	Sig. (2-tailed)	.000	
	N	301	301

** Correlation is significant at the 0.01 level (2-tailed).

4. Summary

The article reports on the study which has been conducted to look at the degree of correlation between the perceived confidence and satisfaction of Internet use with the attitude. The results show that the perceived confidence and satisfaction are significant and positively correlated with type of uses of the Internet such as access to resources and information as well with the social and entertainment activities. The perceived confidence and satisfaction are also significantly and positively correlated with the various dimensions of attitude being studied, including the perceived control, perceived usefulness, affection and behaviour. The results of the study suggest that the regular and continuous use of the Internet is imperative to build a positive attitude towards using it; this would subsequently lead to a high degree of confidence and the satisfaction of usage.

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