Gender Difference of Time Spent on Computer to Learn E-Learning Courses in Hong Kong Higher Education

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Abstract— The purpose of this study is to identify the time spent difference on using computer to learn e-learning courses between males and females in Hong Kong higher education. 250 questionnaires were distributed and 225 useful copies were collected. The findings show that there is positive relationship between self-efficacy and attitudes towards the use of technology in learning in Hong Kong higher education.

Index Terms— E-learning, Gender difference, Hong Kong higher education,

I. INTRODUCTION

In the past, Internet was not popular at all, every student need to attend lessons to acknowledge information from their lecturers in classes or tutorials day by day. However, the way that the students receive education nowadays is changed significantly. Due to the popularization of information technology, the adoption of the Internet into universities has enabled the development of e-learning courses which enriched the teaching materials and learning experiences and have become very ordinary with the university students and instructors.

Some studies found that males tend to use technology with positive and favourable attitudes [1]; [2]; [3]; [4]. On the other hand, females are less favourable on using technology [5].

However, no studies have been found to identify the time spent difference on using computer to learn e-learning courses between males and females in Hong Kong higher education. The purpose of this study is to fill this gap and to identify the time spent difference on using computer to learn e-learning courses between males and females in Hong Kong higher education. The research question is "What is the time spent difference on using computer to learn e-learning courses between males and females in Hong Kong higher education"?

II. LITERATURE REVIEW

Some characteristic differentiations are easily occurred between males and females. Numerous researches have mentioned that using the computers for work is male-dominant thing. Males tend to use technology with positive and favourable attitudes [1]; [2]; [3]; [4]. On the other hand, females are less favourable on using technology [5]. They are less preferable to be interested in technology-related courses like e-learning courses than the males may be attracted with them [6]. Venkatesh and Morris [7] has mentioned that males tended to have a greater level of usefulness than females to use technology. As the result, males' time spending on technology related courses as well as e-learning courses can assume to be more than the females.

The familiarity of students to use of information technology refers to their previous experiences they have. It is determined by their replies to the related survey item [8]. Some research has mentioned that university students have more positive attitudes towards using information technology and they feel confident to make use of this technology [1]. Thus, more experienced students and have more confidence and interest which have a higher level of engagement in using technology for learning than those who have less experiences [9]. As the result, students with more experienced could have more perceived satisfaction towards e-learning.

H1: There is gender difference of time spent on computer to learn e-learning courses.

III. METHODOLOGY

A questionnaire was employed to use to collect data in this study. A pilot survey with quantitative questionnaires were conducted after finalizing a questionnaire. This is a strategy used to test questionnaires using similar sample to compare. Eight questionnaires were distributed to my friends from different universities in Hong Kong previously. In this pilot study, we focus on small group of people to ask for their help to conduct the first version of the questionnaire so as to find out whether there were some problems on the questions, wordings, meanings of the sentences or design of it. After the pilot study, they were requested for feedback and comments about the questionnaires individually. They were asked whether they understood to complete all the questions in the questionnaires or not. Their experiences or expectations would be considered and then included for the final version of questionnaire.

Altogether, there were 250 questionnaires distributed and 225 copies were collected. So that, the response rate was:
=copies returned / total number of questionnaires distributed
=225/250 x 100%
=90%

IV.   RESULTS AND DISCUSSION

Among all respondents, about 49.8% are male and 50.2% are female.

Regarding their time spent on using computer, 4.5% of respondents used computer less than 5 hours per week, 7.4% of them used computers between 5 to 10 hours per week, 24.2% of them used computers between 11 to 15 hours per week, 56.7% of them used 16 to 20 hours of computer per week, and 7.4% of them used more than 20 hours of computer per week.

From the result, it showed that the significance value under Levene's Test for Equality of Variances was 0.016 (<0.05), therefore, the values in the row of "Equal variances not assumed" was used. The value of significance (2-tailed) was 0.227 (>0.05) under the "t-test for Equality of Mean". So, we can assume that male and female participants had no equal variances and there were not any important differences between these two groups, in other words, no differences of time spent were occurred in between male and female participants. Based on the above results, H1: Distribution of time spent of e-learning courses is different between genders, was rejected.

The findings showed that there was no significant difference of time spending between males and females towards e-learning courses. Some studies have explained that there were some reasons between gender difference. As using technology is a man dominant activity, males would have more chances to make use of this and they like to spend more time on this kind of technology. Besides, a gender stereotype emphasize females are less using computer technology, so that people would think that females seldom using computer technology to do their work or even they do not have the basic skills of using it. This may lead to females spend less time on using this technology.

However, the obtained result of the survey showed that there **is** no gender difference of time spent on computer to learn e-learning courses.

Due to the advanced information technology, both males and females can make good use of technology on their work, like taking e-learning courses. The computer technology has improved a lot which provide convenience for students to use easily.

Nowadays, many schools instruct computer-related skills to students. They become very familiar of using it. The times spent of both investigating groups are about the same.

V. CONCLUSION

It is concluded that the findings showed that there was no significant difference of time spending between males and females towards e-learning courses.

Since the target participants were students in higher education, the findings of this study contributed to those educators who are teaching in higher education. Based on the findings, the educators can know that there was no significant

difference of time spending between males and females towards e-learning courses.

The limitations of this study are small sample size. If sufficient resource is provided, the sample size could be larger which the education level will be more evenly distributed.

For future study, students in different countries can be investigated separately, as the result could be significantly different from this study.

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