

Gender Difference Of Self Learning Aspect, Effective Learning Aspect and Multimedia Aspect Towards E-Learning Courses In Hong Kong Higher Education

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Abstract—The purpose of this study is to identify the differences between males and females on Self Learning Aspect (SLA), Effective Learning Aspect (ELA) and Multimedia Aspect (MMA) towards e-learning courses in Hong Kong higher education. 250 questionnaires were distributed and 225 useful copies were collected. The findings show that there are no significantly difference between males and females on Self-learning Aspect (SLA), Effective Learning Aspect (ELA) and Multimedia Aspect (MMA) towards e-learning courses in Hong Kong higher education.

Index Terms—Self-learning Aspect; Effective Learning Aspect; Multimedia Aspect; Hong Kong higher education

I. INTRODUCTION

Information and communication technologies have socially and economically reshaped society. E-learning is the nexus of technological and pedagogical developments which has led to insights into deep and meaningful learning. It has demonstrated that deep and meaningful learning is not limited to the face-to-face classroom experience. E-learning is not a radical innovation but a return to traditional values associated with discourse and collaborative inquiry that distinguishes human development. Innovative e-learning practices represent authentic approaches to teaching and learning based on collaboratively constructing meaning through critical reflection and discourse [1]. Since it appears that no study has studied the differences between males and females on Self-learning Aspect (SLA), Effective Learning Aspect (ELA) and Multimedia Aspect (MMA) towards e-learning courses in Hong Kong higher education. The purpose of this study is to identify the differences between males and females on Self-learning Aspect (SLA), Effective Learning Aspect (ELA) and Multimedia Aspect (MMA) towards e-learning courses in Hong Kong higher education.

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II. LITERATURE REVIEW

Gender difference may affect student's perceived satisfaction, behavior intention and effectiveness of e-learning. Gender refers to the socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of women and men [2].

A good case for why women and men would respond in different ways to IT can be built via the literature that studies circumstances analogous to those involved in IT perception and use [3].

Sex differences will affect the thinking and behavior arise, which suggests, in turn, why there might be underlying IT gender differences [4].

Males, generally, have higher levels of affect than female students in classroom scenarios where instructors used no technology, whereas female students reported higher levels initial affect than male students in classroom scenarios where instructors used moderate amounts of technology [5].

Female students are more satisfied than male students in the e-learning subjects, female give more importance to planning of learning and contact with the teacher [6].

The consideration of gender in models of behavior was introduced in the gender schema theory [7] and other technology acceptance models. Most of the historical researches have stated that gender difference is one of the major influence on IT aspects, as well as e-learning. Also, Tarhini, Hone, & Liu [7] state that men are more pragmatic compared to women and highly task-oriented. Moreover, men usually have a greater emphasis on earnings and are motivated by achievement needs.

As mentioned above, many historical researches agreed that gender difference may be a huge influence on effectiveness of IT, technology as well as E-learning. However, is it mean that male students are more likely to accept e-learning than female? Or male students will tend to reject e-learning against female?

In this study, as gender difference may affect students' perceived satisfaction, behavior intention and effectiveness of e-learning, gender will be one of the hypothesis elements in this study. Therefore, we propose:

H1: There is a significant difference between different males and females on Self-learning aspect (SLA)

H2: There is a significant difference between different males and females on Effective learning aspect (ELA)

H3: There is a significant difference between different males and females on Multimedia aspect (MMA)

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 focused 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 that 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: $\text{=copies returned / total number of questionnaires distributed} = 225/250 \times 100\%$
 =90\%

IV. RESULTS AND DISCUSSION

The t-value for Self-learning aspect (SLA) is ($t = -0.603$, $p = 0.548$). The significance (2-tailed) is 0.548, which is higher than 0.05, which means there are no significant difference between gender and Self-learning aspect (SLA).

According to the result above, ($p=0.538 > 0.05$), H1: There is a significant difference between different genders on Self-learning aspect (SLA), is rejected.

The t-value of Effective learning aspect (ELA) is ($t=-0.187$, $p=0.852$). The value of significance (2-tailed) is 0.852, which is higher than 0.05, which means there are no significant difference between gender and Effective learning aspect (ELA).

According to the result above, t-Test ($p=0.852 > 0.05$), H2: There is a significant difference between different genders on Effective learning aspect (ELA), is rejected.

The t-value of Multimedia Aspect (MMA) is ($t=-0.244$, $p=0.808$). The value of significance (2-tailed) is 0.808, which is higher than 0.05, which means there are no significant difference between gender and Multimedia aspect (MMA).

According to the result above, t-Test ($p=0.808 > 0.05$), H3: There is a significant difference between different genders on Multimedia aspect (MMA), is rejected.

At first, H1: There is a significant difference between different genders on Self-learning aspect (SLA) was rejected, which means there are no significant difference between gender and Self-learning aspect (SLA). This result does not match the assumption that I take in the previous section. Also, there are some researches stated that sex differences will affect the thinking and behavior arise [4], males have higher levels of affect than female students in classroom scenarios where instructors used no technology, whereas female students reported higher levels initial affect than male students in classroom scenarios [5]. Those studies mentioned above stated that there are some social characteristic differences between male and female, and it probably will affect e-learning on students. However, under the result in this paper, there are no significant differences between male and female in Self-learning aspect (SLA). There are several reasons that may cause the result of this study different to others. One reason is that the number of questionnaires distributed is too small. In this research, only 250 questionnaires were distributed, which may cause the result different to other studies. Moreover, the change of e-learning trend may also affect the result. In recent ten years, e-learning become more common around the world. Students have more chances to study through e-learning, which may affect their comments on e-learning. Gender difference in thinking become less important.

Secondly, for H2: There is a significant difference between different genders on Effective learning aspect (ELA) was also rejected. The result of independent T-test find that there is no significant difference affect different genders on Effective learning aspect (ELA). As mentioned above, some research stated that there should have gender difference on several aspects, including e-learning.

However, in this study, the result that there is no significant difference affect their acceptance and effectiveness of e-learning. The reason is probably similar to above, the small number of questionnaires distributed and the change of trend of e-learning.

Thirdly, for H3: There is a significant difference between different genders on Multimedia aspect (MMA) is also rejected, which means there is no significant difference between different genders on Multimedia aspect (MMA). As same as the reason stated above, the small number of questionnaires distributed and the change of trend of e-learning are probably the main differences that affect the final result different to previous researches.

V. CONCLUSION

It is concluded that there were no significant difference of SLA, ELA and MMA between males and females towards e-learning courses in Hong Kong higher education.

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 were no

significant difference of SLA, ELA and MMA 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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