Students' Acceptance of Mobile Application based-Office English Learning Material for University Students

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Abstract: Learning material is one of the strategic tools that can be used to achieve the learning goal. However, the conventional learning material is still employed such as a book, printed module, etc. Responding to this issue, the researchers have developed mobile application-based office English learning material. The application was named ENFORCE. Hence, this research aimed to analyse the correlation among factors and to figure out the best factor that influenced students' acceptance of the mobile application as a learning material for university students. In this research, 105 students had been asked to use a supportive mobile application-based learning material during the learning process. Further, at the end of the semester, online questionnaires were distributed to obtain the data. In analysing the data, the correlation and regression analysis were carried out through SPSS. The results revealed that the correlation among the factor was correlated significantly. It was emphasized by the significant value which was greater than 0.01. Additionally, the result of regression analysis showed that significant value which was .000 that greater than 0.005. It can be declared that the best factor that influenced students' acceptance of mobile application-based office English learning material for university students was ease of use.

1 INTRODUCTION

The development of the mobile application has been utilized for educational issues (Domingo and Garganté, 2016). Specifically for language learning, there are many mobile applications designed for supporting language learning and providing learning material (Hao et al., 2019). The movement of mobile objectives has opened opportunities an alternative media in providing an interactive learning material (Akpan, 2017; Al-Hunaiyyan et al., 2018). Besides, it also becomes challenges for lecturers and students to maximize the mobile application-based learning (Chavoshi and Hamidi, 2019).

As confirmed by several studies that have announced the advantages of language learning through mobile applications (Pilar et al., 2013; Shanmugapriya and Tamilarasi, 2013; Wu, 2015). In term of the students' acceptance of learning mobile also showed positive attitude (Al-Emran et al., 2018; Bozdoğan, 2015; Dashti and Aldashti, 2015). In this research, the students' acceptance was determined based on the internal factors that influenced the students' behavioural intention of use mobile-based learning material such as usefulness perception and

ease of use perception (Davis, 1989).

Additionally, external factors were also considered as affected aspect in acceptance namely self-efficacy and compatibility (Venkatesh and Davis, 2000). In consequence, the current research aimed to reveal the correlation and the best-affecting factor on students' acceptance of mobile application-based office English learning material at the end of the semester after using the application.

2 RESEARCH METHOD

The respondents of this research were 105 private university students who had learned English for office through mobile application namely ENFORCE. The students were asked to use ENFORCE as a supportive learning material during 14 weeks of the effective learning time allocation. To have the app, the installation through play store was required for every student at the first week. In its implementation, the semester learning plan was modified for applying this application. Further, the quantitative method was used through the survey to achieve the purpose of this study. The 20 statements of the questionnaire were

adapted from (Davis, 1989); (Venkatesh and Davis, 2000); and (Chung et al., 2015) employed to collect the data at the end of semester. The google form was utilized to address the questionnaire to the students. After collecting the data, SPSS was used to compute and analyse quantitatively the data. Additionally, the correlation analysis was carried out to figure out the correlation among factors and regression analysis was conducted to know the best-affecting factor.

3 RESULTS AND DISCUSSION

In this part, the researchers discussed the results and discussion in some sub-section. To elaborate on the research results obviously, the researcher divided the sub-section into descriptive statistics, the result of correlation among factors, and the result of regression analysis.

3.1 Descriptive Statistics of Each Factor

The descriptive statistics revealed that ease of use showed the greatest mean score which was 16.45. The behavioural intention of use, usefulness, self-efficacy, and compatibility were 15.96, 15.84, 14.75, and 14.4 respectively. The criteria for each factor are based on the range of average scores with levels from very high to very low. The descriptive statistics of each factor can be seen in table 1-5.

Table 1: Descriptive statistics of ease of use

Items	SD	Mean
studying English for office through ENFORCE App is easy for me	.994	4.05
studying English for office through ENFORCE App saves time	.814	4.17
studying English for office through ENFORCE App is convenient	.872	3.99
studying English for office through ENFORCE App is easy to use	.861	4.24

In term of ease of use perception, students trusted that studying office English class by using ENFORCE application was easy to operate it. The evidence of students' perceived of ease of use can be seen from the means score which were 4.24 and 4.05. As well, it can save their time learning through that application. Besides, mobile application-based office learning material was appropriate to use in learning English for office. The evidence of students' perceived of convenience and saving the time can be seen from the means score which were 4.17 and 3.99. It was evidenced from the mean score that was at a

high level and the students' perceived of ease of use was positive (see table 1).

Table 2: Descriptive statistics of behavioural intention of use

Items	SD	Mean
I am ready using ENFORCE App to learn office English	.898	4.10
I will continue using ENFORCE App to learn office English in the future	.950	3.96
Overall, I will learn office English through ENFORCE App	.946	3.90
I will recommend others learning office English through ENFORCE App	935	3.99

In term of behavioural intention of use, students intended to use ENFORCE application to learn office English. It was evidenced by mean score which was 4.10. As well, they would like to promote that app for other office learners. It was also evidenced by mean score which was 3.99. Overall, It can be proven from means scores that were at a high level and students' intention were positive (see table 2).

Table 3: Descriptive statistics of usefulness

Items	SD	mean
studying English for office through ENFORCE App is not limited by time and place	1.182	3.67
studying English for office through ENFORCE App can assist me to access the information I need	.895	4.08
studying English for office through ENFORCE App improve my learning effective	.866	3.98
studying English for office through ENFORCE App provides serviceable guidance in running tasks	.870	4.11

In term of usefulness, students perceived that using learning office English through ENFORCE Application can be done anywhere and anytime. Besides, they believed that application was a very effective learning resource during having to learn English for office. These statements can be proven by the means score which were 3.67 and 4.08. Besides, students perceived that this app was effective to employ as a supportive learning material especially for running the tasks. It can be proven by the means score which were 3.98 and 4.11. Additionally, the mean score was at a moderate level and the students' perceived of usefulness was positive (see table 3).

In term of self-efficacy, students believed that they can solve the obstacles faced during the learning process by using ENFORCE application. It can be seen from the means score which were 3.60, 3.63,

Table 4: Descriptive statistics of self-efficacy

Items	SD	mean
I can finish learning office English tasks through ENFORCE App if there is no information I got from people around me	.957	3.67
I can finish learning office English tasks through ENFORCE App if someone had helped me get started	1.025	3.60
I can solve the obstacles faced when I used ENFORCE App to study office English	1.058	3.63
I can finish learning office English assignments through ENFORCE App, no matter what the difficulties	.903	3.86

3.67, and 3.86 respectively. Overall, it can be said that in term of perceived self-efficacy was responded positively (see table 4).

Table 5: Descriptive statistics of compatibility

Items	SD	mean
studying English for office through ENFORCE App, I don't have to substitute anything I recently do	1.090	3.34
studying English for office through ENFORCE App does not need changes significantly in my existing work custom	1.010	3.48
studying English for office through ENFORCE App is similar to using other application that I have applied in the past	1.027	3.57
studying English for office through ENFORCE App can strengthen from computer	.976	3.72

In term of compatibility, students perceived that using ENFORCE application was related to their previous impression while using another application. It also confirmed by the means score which were 3.57 and 3.48. They also believed that using that application was useful as same as another application that they used before. It also strengthened by the mean score which was 3.34. As well, students perceived that this app was easy because it can be used through computer. This statement was supported by the mean score which was 3.72 (see table 5). It can be said that in term of compatibility that students positively responded.

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3.2 The Correlation among the Factors

To see the correlation among the students' acceptance factors of ENFORCE application as a learning resource, correlation analysis was conducted (see table 6).

Table 6: The correlation among the factors

factors	Useful ness	Ease of use	Self-Efficacy	Compati bility	Intention
Useful ness	1	.778** .000	.569** .000	.550** .000	.666** .000
Ease of use	.778** .000	1	.514** .000	.416** .000	.704** .000
Self-Efficacy	.569** .000	.514** .000	1	.704** .000	.591** .000
Compati bility	550** .000	.416** .000	.704** .000	1	.538** .000
Intention	.666** .000	.704** .000	.591** .000	.538** .000	1

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

As could be seen in table 6, all of the factors were correlated to each other significantly. In term of the perception of usefulness, this factor had a significant correlation with ease of use perception ($r_{calculated}$=.778**> r_{table}=.176), behavioural intention of use ($r_{calculated}$=.666**> r_{table}=.176), self-efficacy $r_{calculated}$=.569**> r_{table}=.176), and compatibility ($r_{calculated}$=.550**> r_{table}= .176) respectively.

In term of perceived ease of use, it also had correlated significantly with perceived usefulness ($r_{calculated}$=.778**> r_{table}=.176), behavioural intention of use ($r_{calculated}$=.704**> r_{table}=.176), self-efficacy ($r_{calculated}$=.514**> r_{table}= .176), and compatibility ($r_{calculated}$=.416**> r_{table}= .176) sequentially. Further, self-efficacy had significant correlation with compatibility ($r_{calculated}$=.704**> r_{table}=.176), behavioural intention of use ($r_{calculated}$=.591**> r_{table}= .176), usefulness ($r_{calculated}$=.569**> r_{table}= .176), and ease of use ($r_{calculated}$=.514**> r_{table}= .176). Next factor, compatibility had significant correlation with others factor as well.

The most positive correlation was compatibility with self-efficacy ($r_{calculated}$=.704**> r_{table}=.176) and followed by perceived usefulness ($r_{calculated}$=.550**> r_{table}=.176), behavioural intention of use ($r_{calculated}$=.538**> r_{table}= .176), and ease of use ($r_{calculated}$=.418**> r_{table}=.176). Regard to the intention of use, ease of use perception was the most positive correlated factor. It can be seen from the $r_{calculated}$=.704**. Perceived usefulness ($r_{calculated}$=.666**), self-efficacy ($r_{calculated}$=.591**), and compatibility ($r_{calculated}$=.538**) were correlated with the intensive attitude of use. Overall, Correlation

analysis revealed that the intensive attitude to use the application as a learning resource had a positive correlation with the acceptance factors ($p < 0.01$).

This result was confirmed by previous studies that mentioned usefulness perception and ease of use perception had correlation to behavioural intention to use an application in learning as a resource during the learning process. Wahyuni & Etfita (2019) dan (Weng et al., 2018) stated that perceived usefulness and perceived ease of use influenced the attitude in using an application as a material. (Van De Bogart and Wichadee, 2015); (Elkaseh et al., 2016); and (Wahyuni, 2018a) also revealed that the intention of using an application mobile learning was the effect of two internal factors such as ease of use perception and usefulness perception of mobile application-based learning material. The effectiveness its mobile application-based learning material was in the context of usefulness and ease of use perception affected the attitude use it intensively (Kitchakarn, 2016). To sum up the research finding based on the analysis and supported by other studies, perceived usefulness and perceived ease of use had a correlation in influencing the intensive behaviour on using an additional mobile application-based learning material.

Further, the external factor namely self-efficacy and compatibly that also had a correlation to intention of use a mobile application in learning also emphasized by several related researchers. (Chen, 2014); (Chung et al, 2015); (Alshammari et al., 2016) strengthened that these external factors had a significant correlation in effecting the intention of using the mobile application in learning. It can be inferred that self-efficacy and compatibility should be considered in designing mobile application-based learning material.

3.3 The Analysis Regression Result

In figuring out the best-affected factor of students' acceptance, regression analysis was carried out. The result was presented in table 7.

Table 7: The result of regression analysis

Factors	t	Sig.	
Compatibility	1.644	.103	not significant
Usefulness	1.205	.231	not significant
Self-efficacy	1.852	.067	not significant
Ease of use	4.270	.000	significant

The result revealed that the best factor that influenced intention in using ENFORCE application as a supportive learning resource was ease of use intentionally. It can be proven from the significant

value which was .000<0.005. Additionally, the result was confirmed that the value of $t_{calculated}$ was greater that t_{table} which was $1.6602 < 4.270$ (see table 7). As emphasized by (Abu-Al-Aish and Love, 2013); (Davis, 1989); and (Wahyuni, 2018b), the perception of ease of use can give positive impression on using the learning based mobile application intentionally. Additionally, mobile language learning meets the students' needs, following the digital era, and creating autonomous learning (Shroff and Keyes, 2017). On contrary to the research finding conducted by (Alqahtani and Mohammad, 2015), they stated that the most affecting factor was perceived usefulness to behavioural intention in using the mobile application. It could be inferred that the most considerable factor of students in using ENFORCE application as an additional learning material for university students was the ease of use.

4 CONCLUSIONS

This study analysed the correlation among students' acceptance factors and which one the best factor that affected students' acceptance of behavioural intention in using ENFORCE application. The result showed that each factor had a positive correlation to the behavioural intention of use the mobile application. Furthermore, the most affected factor to intention of use was the sense of ease of use. Specifically, it could be inferred that students believed that utilizing ENFORCE application was easy and useful as an alternative media for providing learning material.

It is very crucial for lecturer to design implementation plan mobile assisted language learning model. As well, the lecturers should cooperate with practitioners or designer's mobile application to develop learning material based mobile to provide interactive learning.

In conclusion, the research findings indicated that the university should expand the strategic plan and offer guideline reflecting in students' acceptance of mobile learning in order to accommodate all on reflecting factors for sustainable development of mobile language learning. The result and findings of this study can contribute which factors can be offered for modelling to run plan of mobile assisted language learning in the university.
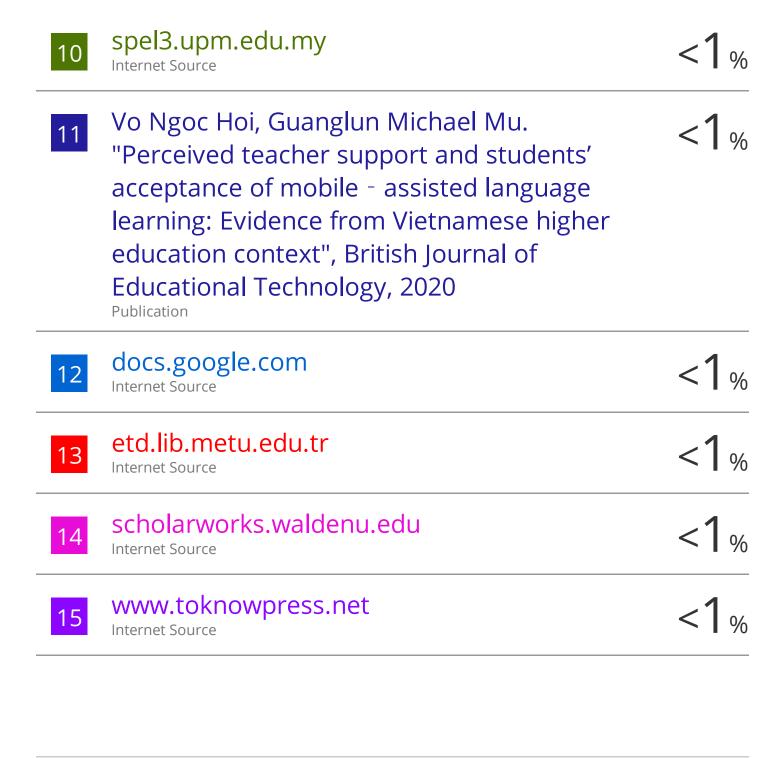
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