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Factors Influencing Acceptance to Use M-learning in Learning Arabic Language for Non-native Speakers in Saudi Universities

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Abstrac

The acceptance of mobile learning apparatus in language learning in the Arab world in general and Saudi Arabia in particular is not widespread as expected, despite the several advantages the m-learning has offered to the rest of the world. Therefore, the present study intended to uncover the factors that significantly predict the intention to use mobile learning for learning Arabic to non-native speakers in Saudi Universities. Relevant model was developed by extending the unified theory of acceptance and use of technology (UTAUT) as well as incorporating three other factors namely; language interactivity (LI), system enjoyment (SE) as well as content quality. Quantitative method based on cross-sectional survey design was employed for data collection from 460 students of teaching Arabic to non-native speakers' programs in Saudi Universities. The tool used for analysis in this study was a Partial Least Squares (PLS) which was used to test the model empirically. It was found from the study that language interactivity (LI), system enjoyment (SE), performance expectancy (PE), facilitating conditions (FC), and expected effort (EE) are significant in relation (either directly or indirectly) to behavioural intention (BI) to use m-learning. The implication for future research development as well as the limitations of the findings are also discussed the paper.

Keywords:

Structural Equation Modeling. Language Interactivity, System Enjoyment Arabic Language Learning, Saudi Arabia, UTAUT.

Factores que influyen en la aceptación del uso de M-learning en el aprendizaje del idioma árabe para hablantes no nativos en universidades sauditas

Resumen

La aceptación del aparato de aprendizaje móvil en el aprendizaje de idiomas en el mundo árabe en general y en Arabia Saudita en particular no está tan extendida como se esperaba, a pesar de las diversas ventajas que el m-learning ha ofrecido al resto del mundo. Por lo tanto, el presente estudio pretendía descubrir los factores que predicen significativamente la intención de utilizar el aprendizaje móvil para aprender árabe a hablantes no nativos en las universidades sauditas. El modelo relevante se desarrolló ampliando la teoría unificada de aceptación y uso de la tecnología (UTAUT) e incorporando otros tres factores, a saber; interactividad del lenguaje (LI), disfrute del sistema (SE) y calidad del contenido. Se empleó un método cuantitativo basado en el diseño de encuestas transversales para la recolección de datos de 460 estudiantes de enseñanza de árabe a programas de hablantes no nativos en universidades sauditas. La herramienta utilizada para el análisis en este estudio fue un Mínimo Cuadrado Parcial (PLS) que se utilizó para probar el modelo empíricamente. Del estudio se descubrió que la interactividad del lenguaje (LI), el disfrute del sistema (SE), la expectativa de rendimiento (PE), las condiciones de facilitación (FC) y el esfuerzo esperado (EE) son significativos en relación (directa o indirectamente) con la intención de comportamiento (BI) para usar m-learning. También se discuten las implicaciones para el desarrollo futuro de la investigación, así como las limitaciones de los resultados.

Palabras claves:

Modelos de ecuaciones estructurales. Interactividad lingüística, disfrute del sistema Aprendizaje de la lengua árabe, Arabia Saudita, UTAUT.

INTRODUCTION

The continuous development in the field of mobile technology has brought about new paradigm in education known as mobile learning or m-learning. M-learning is defined as the process of using mobile technologies to facilitate learning according to Hwang and Tsai (2011). Majorly, m-learning is viewed as any form of learning that takes place through a mobile device (Winters,

2007) The major factor that influences the usage of m-learning is the perception of mobility. That is why it is asserted by Freitas and Schlemmer (2013) that technology is not necessarily the most important factor that affects m-learning but perception of mobility. The usage of the applications (apps) of m-learning is one of the most popular forms of m-learning in education. A small program with accessibility through a wireless network which can be downloaded onto smart-phones or tablets is known as Apps. Its usage will provide easy access to learning resources, interesting activities (such as games, quizzes and interactive educational), and it will equally enhance sharing of educational information among students.

M-learning possesses several advantages that it may offer its users, such as corporate learning, interactive learning activities, personalized learning, self-managing learning, and an effective methodology of receiving and sending knowledge (Viberg & Grönlund, 2013; Bidin & Ziden, 2013; Jeong & Hong, 2013; Martin & Ertzberger, 2013). The strongest feature of m-learning is Mobility in comparison with the conventional education (Liu, 2011; Coursaris & Hassanein, 2002). This is because, it allows students to have access and exchange information whenever and wherever they need to. It equally will assist to solve the problems concerning students' transition to access learning resources.

M-learning equally, has the ability to manage collaborative learning through interaction. This is due to the fact that, availability of mobile device helps achieve mutual interaction as well as improves the accessibility of learning materials (Liaw, Hatala, & Huang, 2010). Some of the communication platforms that allows for interaction are Viber, SMS and WhatsApp. The possible forms of m-learning interactions are three they include, the interaction between students and content, interaction among the students themselves and between students and educators (Dyson, Litchfield, Raban, & Tyler, 2009; Alshalabi & Elleithy, 2012). It is possible for students to exchange and share information, knowledge and ideas with the help of this interaction (Kuo, Walker, Schroder, & Belland, 2014) and this brings about attractiveness to the learning process. Edutainment applications, such as educational games and e-books, through mobile technology, make learning process to be more enjoyable and interesting compared with the conventional classroom (Ali & Arshad, 2016). Even, situated learning feature are made available through m-learning. This is because students carry along their mobile devices wherever they go, of which they are able to capture their own materials using cameras for pictures and videos, eventually exchange and share them with other students and lecturers (Ali & Arshad, 2016). It equally

enhances autonomous learning and responsible behaviour and this allows the learners to become the central point of the learning process and manage their learning. Therefore, it can be concluded that m-learning is complementary traditional learning.

There are numerous models developed to analyse individuals' acceptance and intention to adopt new technologies in the world of information systems. It was attempted by Davis (1989) to figure out the rationale behind information technology acceptance and rejection by people. It was equally asserted by Davis, (1989), that, the most highly adopted model in the field of technology is the technology acceptance model (TAM). This is because it possesses the ability to provide a theoretical foundation that assists in explaining the impact of external variables such as the objective system design characteristics, training, and computer self-efficacy on attitude toward use, internal beliefs, actual system use and behavioural intentions (Ibrahim & Jaafar, 2011). Another popularly used and also one of the most recently developed models in regard to information technology acceptance is the unified theory of acceptance and use of technology (UTAUT) proposed by Venkatesh, Morris, Davis, and Davis (2003). The theory attempted to channel and empirically compares elements from several technology acceptance models in technology acceptance.

There are four determinants of IT consumer behaviour and four moderators that are capable of moderating the effect of the four determinants on the behaviour intention and user behaviour in UTAUT. This theory explains that, performance expectancy, effort expectancy, social influence, and facilitating conditions are direct determinants of user behaviour or behaviour intention. The interrelationship in this model allows great improvement to the explanatory power of the theory. Equally, the moderating variables (age, gender, voluntariness of use and experience) are very vital in order to understand the characteristics of different user groups (as in Figure 1).

According to Venkatesh et al. (2003), UTAUT is able to explain around 70% of the variance in the intention. The author equally indicated that UTAUT has shown the superiority to outperform the previous models. More so, Ibrahim & Jaafar, (2011) stated that the model can act a beneficial tool for managers that are able to assess the success of the new technology. Several empirical studies have discussed the factors that predict students' intention to use m-learning, of which most of these studies are recent and likewise employed UTAUT in place of TAM. It was indicated from the outcome that student's intention to use m-learning is the major key to developing a successful m-learning system. Hence, it is believed that it will be necessary to investigate the factors that affect consumer intention to use

m-learning and to solve all issues that may hinder the success of the factors. It should be noted that, few studies have investigated the m-learning through the use of UTAUT in Saudi Arabia. For example, a modified model was used incorporating attitude as a predictor, to assess acceptance of m-learning at Al-Faisal University by (Nassuora, 2013). Equally, a survey was carried out on 80 samples of mixed gender, and the outcomes were analysed through bivariate correlation analysis. Performance expectancy and effort expectancy were found to be correlated positively with behavioural intention on one hand, social factors and facilitating conditions were found to be correlated positively with attitude, on the other hand. This, in turn, correlated positively with behavioural intention. The outcomes of the analysis indicated both findings. The paramount contribution this study that it furthers the understanding of acceptance of mobile learning in a socio-educational situation which is closely related to the focus of the current paper. Encouragingly, the results partially support that UTAUT predict m-learning acceptance in the Saudi Arabia. However, differences exist between Nassuora's study and the present paper. In the first place, Nassuora's study employed a modified and qualitatively different UTAUT. Secondly, m-learning adoption appears to have been voluntary. Equally, the study was been conducted prior to any form of implementation, whereas in the current study data is collected following integration. The potentially differing profile of learners and the mixed gender sample at a university versus a technical college further preclude generalizations. Finally, the use of the relatively small sample size and bivariate correlation in the study fails to capture variance caused by inter-related predictors.

Therefore, the present study intends to investigate factors predicting the acceptance of mobile learning in Arabic language in the KSA in order to resolve the inconsistencies in previous researches and to further understand the acceptance of MALL, as well as support policy makers and educators concerned with integration of mobile devices. Meanwhile, the secondary aim is to validate the UTAUT model in context of KSA. There are few studies specific to mobile learning in Arabic language in the Saudi Arabian context despite that, there are studies concerning technology acceptance in the Gulf. Specifically, there are few studies concerning mobile learning integration in Arabic language learning programmes in non-native speaking centres, whereas there is sharply growing importance of this sector and the costs involved in the one-to-one deployment of tablets. In this regard, in order to investigate acceptance of mobile learning as tools for learning language in a non-native speaker's context this study will employ the prominent UTAUT model to investigate acceptance of mobile learning as tools for learning language in a non-native speaker's context. The present research will investigate the role of performance expectancy, effort expectancy, language interactivity,

system enjoyment, content quality and facilitating conditions, in predicting the behavioural intention to use mobile learning in learning Arabic as a second language in order to keep up with the premises of the model.

Equally, the major motivating factor to the present study is the lack of studies implementing the UTAUT in educational settings in the cultural context of the Saudi Arabia. This is because it was asserted that models must be robust across cultures, whereas most studies incorporating the UTAUT have been conducted in North American settings, with the exception of Al-Gahtani, Hubona and Wang (2007) that used the model to investigate user acceptance of ICT in the KSA. As it was affirmed by Hofstede's (1980) that, cultural dimensions is to rationalize differences in findings compared with western studies, the researchers surveyed knowledge workers regarding their technology acceptance of a range of ICT gadgets. It is equally, the system-specific predictor of social factors was replaced with a non-system-specific, similar construct of social norm, taken from the preceding TRA and TPB frameworks. It was shown from the outcomes that, while performance expectancy and social norm predicted behavioural intention, effort expectancy and facilitating conditions is not predicting behavioural intention. Meanwhile, the significant aspect of the present study is that, it provides support and partial validation for the UTAUT in the KSA.

Therefore, it is obvious from the previous explanation that further exploration of the mobile learning acceptance in the KSA is required. It will serve as a means of resolving the inconsistencies in prior studies, as well as to further understanding of the acceptance of MALL, and support policymakers and educators concerned with integration of mobile devices, this study will investigate factors affecting acceptance of mobile learning in language learning in the KSA. In view of this, there is apparent evidence that the previous empirical studies have not fulfilled the required demand of m-learning in the KSA. The present research therefore, intends to fulfil the required demand.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

2.1 Unified Theory of Acceptance and Use Technology (UTAUT)

Mobile learning tools may be treated as information system acceptance, as previously mentioned that the modern theory in this field is UTAUT Venkatesh, (2003). It is predicted by this theory that acceptance of an information system is approximately 70% of the cases. If this theory is compared with

TAM, it can only predict the acceptance of an information system in just about 40% of the cases. Meanwhile, the validity of UTAUT in the context of information system needs further testing Marchewka, (2007). Due to this, the present research intends to extend UTAUT with some of information system with the successful factors that mentioned below. Therefore, the following hypotheses have been proposed for this study.

H1. Performance expectancy will have direct effect on the students' intention to use mobile learning
H2. Effort expectancy will have direct effect on the students' intention to use mobile learning.

2.2 Language Interactivity

On this factor few studies have paid attention to it. For instance, Abbad et al. (2009) proposed that perceived interactivity indirectly predicts user's intention to use e-learning system through perceived usefulness of use. Equally, Davis (1989) discovered that perceived usefulness of use fully mediates effect of system's characteristics on user's intention to use the e-mail technology. As a result, several researchers agree that perceived performance expectancy and perceived effort expectancy related to perceived usefulness and perceived ease of use (Venkatesh, 2003; Wang & Jong, 2009; Marchewka, 2007). Based on the above reports the hypotheses below are proposed.

H6. System interactivity has a positive impact on perceived performance expectancy

H4. System interactivity has an impact on students' intention to use mobile learning through performance expectancy.

2.3 Perceived Enjoyment

Concerning the perceived enjoyment, several studies indicated that perceived enjoyment has direct effect on learners' intention to use mobile learning and indirect effect on the users intention through expected performance (Alrawashdeh, Muhairat, & Alqatawnah, 2012; Sheng, et, al., 2008; Chatzoglou,et, al., 2009; Davis,et, al., 1992). Therefore, the following hypotheses are proposed.

H4. Perceived enjoyment has an impact on students' intention to use mobile learning through performance expectancy.

H8. Perceived enjoyment has a direct impact on performance expectancy.

2.4 Content Quality Design (CQD)

It was asserted by (Liu, 2011) that one of the rationales that prevents students from not interested in mobile learning applications is the lack of content quality. This is due to the fact that, most of the systems only offer Content Quality Design with learning materials that are not enjoyable and attractive enough to them. More so, mobile devices require the application of some unique features such as small screen size that make prior e-learning materials for personal computer (desk computer) usage are no longer suitable to be applied in these devices. Due to this, it is essential that the mobile application content quality is considered as a factor in the present research.

Meanwhile, according to Lee & Kozar, (2006) content quality design is related with the type and format of learning content. Learning content's format associated with the students' perception on how the learning material content is show caused by the system. It was equally claimed by Liu, Han, and Li (2010) that the type of learning content plays a massive role for language students. More so, Almaiah, Jalil, and Man, (2016) on the effects of quality features on mobile learning acceptance, discovered that the content quality design is an important aspect in regards to mobile learning acceptance. Thus, the following hypotheses are generated:

H7: Content quality has a positive impact on effort expectancy.

H4. Content quality has an impact on students' intention to use mobile learning through effort expectancy.

2.5 Facilitating conditions

According to Venkatesh, et al. (2003) facilitating conditions are direct determinant of the users' behavioural intentions. Equally, another study found new significant relationships between facilitating conditions and behavioural intention through effort expectancy as well as between facilitating conditions and expected effort (Alrawashdeh, et al. 2003).

H2: Facilitating Condition has a positive effect on the students' effort expectancy.

H5: Facilitating Condition has a positive effect on students' intention through effort expectancy.

3. METHODOLOGY

The present study adopted the cross sectional research design an aspect of quantitative research method. In view of this, questionnaire consisted of 24 items adapted from Almaiah et al. (2016), Venkatesh and Davis (2000), and Yeap et al. (2016) for investigating seven constructs, conducted on centres of teaching Arabic language for non-native speakers in Saudi Universities. Non-

random convenient sampling technique was use to collect the data for this study. Sample size was extracted from the population and determined based on the Krejcie and Morgan Table (Krejcie& Morgan, 1970). Therefore, based on the number of the entire population from all grades 384 sample sizes was determined of which each participated students in each school was defined. Therefore, total number of 500 questionnaires was distributed, when a total of 460 questionnaires were completed. The questionnaire was administered with a Paper-based survey. The researcher provided participants with a short description of the research purposes and what m-learning is all about before the students completed the questionnaire.

4. DATA ANALYSIS AND RESULTS

In order to analyze the research model, Partial Least Squares (PLS) was utilized while the SmartPLS 3.0 software was used as the analysis technique (Ringle, Wende, & Becker, 2015). The measurement model (validity and reliability of the measures) was investigated based on the recommendation of two-stage analytical procedures by Anderson and Gerbing (1988), then followed by an evaluation of the structural model (testing the hypothesized relationships; (Hair, Sarstedt, Hopkins, & G. Kuppelwieser, 2014; Ramayah, Lee, & In, 2011). In order to check the significance of the loadings and the path coefficients a bootstrapping method was used according to (Hair et al., 2014).

4.1 Measurement Model Evaluation

The convergent validity was initially assessed according to the suggestions by Hair et al. (2014) by investigating the loadings, average variance extracted (AVE), and composite reliability (CR), where Hair et al. (2014) suggested that the loadings should be >0.70, CR > 0.7, and AVE > 0.5. As shown in Table 3, the AVE was greater than 0.5 and the CR was greater than 0.7. All loadings were above the cut-off value except for CQ2, and CQ3 which was respectively 0.669and 0.672.

*Table 1
Results for the Measurement Model*

Constructs	Items	Loading	AVE	CR
Facilitating Conditions (FC)	FC1	0.818	0.586	0.809
	FC2	0.762		
	FC3	0.716		
Expected Effort (EE)	EE1	0.826	0.629	0.835
	EE2	0.792		
	EE3	0.757		
Perceived Enjoyment (PE)	ENJ1	0.891	0.716	0.883
	ENJ2	0.84		
	ENJ3	0.808		

	<i>BI1</i>	0.872		
	<i>BI2</i>	0.855		
Behavioral Intention (BI)	<i>BI3</i>	0.871	0.724	0.929
	<i>BI4</i>	0.824		
	<i>BI5</i>	0.83		
	<i>LI1</i>	0.891		
Language Interactivity (LI)	<i>LI2</i>	0.846	0.687	0.868
	<i>LI3</i>	0.744		
	<i>EP1</i>	0.767		
Expected Performance (EP)	<i>EP2</i>	0.868	0.73	0.915
	<i>EP3</i>	0.892		
	<i>EP4</i>	0.884		
	<i>CQ1</i>	0.887		
Content Quality (CQ)	<i>CQ2</i>	0.669	0.562	0.791
	<i>CQ3</i>	0.672		

Secondly, the discriminant validity was assessed based on the Fornell and Larcker (1981), prescription who compare the AVE with squared correlations or alternatively compare the square root of the AVE with the correlations. As indicated in Table 4, the square roots of the AVE (bolded) are all more than the off-diagonal correlation values, suggesting that there is sufficient discriminant validity. Therefore, it can be concluded that the measures used in present study show appropriate validity and reliability.

Table 2
Discriminant Validity of Measurement Model

Constructs	1	2	3	4	5	6	7
1. Facilitating Conditions (FC)	0.767						
2. Expected Effort (EE)	0.369	0.792					
3. Perceived Enjoyment (PE)	0.552	0.648	0.847				
4. Behavioral Intention (BI)	0.399	0.846	0.618	0.851			
5. Perceived Interactivity (PI)	0.385	0.746	0.765	0.729	0.829		
6. Expected Performance (EP)	0.32	0.732	0.699	0.744	0.673	0.854	
7. Content Quality (CQ)	0.592	0.377	0.727	0.342	0.482	0.512	0.75

4.2 Structural Model

After the reliability and the validity of the hypothesized model has been established the next step was to investigate the hypotheses generated for this study by running a bootstrapping procedure with a resample of 1000, as recommended by Hair et al. (2014). Table 5 below presents the results that the R2 for performance expectancy was 0.535, effort expectancy was 0.157, and behavioural intention was 0.749, which were all acceptable based on the cut-off points as suggested by Cohen (1988). Concerning the direct hypotheses, first hypothesis 1 expected performance ($\beta = 0.269$, $T > 1.96$, $p < 0.01$) was positively correlated with behavioural intention, while hypothesis 2 expected efforts ($\beta = 0.469$, $T > 1.96$, $p < 0.01$) was equally, positively related to behavioural intention, and the third, hypothesis 7 language interactivity ($\beta = 0.344$, $T > 1.96$, $p < 0.01$) was positively correlated with expected performance. The fourth, hypothesis 8 perceived enjoyment ($\beta = 0.444$, $T > 1.96$, $p < 0.01$) was positively related to expected performance, Fifth, hypothesis 9 facilitating conditions ($\beta = 0.255$, $T > 1.96$, $p < 0.01$) was positively correlated with expected efforts. Finally, the sixth, hypothesis 10 content quality ($\beta = 0.244$, $T > 1.96$, $p < 0.01$) was positively related to expected efforts.

Equally, on the aspect of the indirect hypotheses, the first, hypothesis 3 language interactivity ($\beta = 0.09$, $T > 1.96$, $p < 0.01$) positively predict behavioural intention through expected performance, while the hypothesis 8 perceived enjoyment ($\beta = 0.119$, $T > 1.96$, $p < 0.01$) also has a positive significant influence on behavioural intention via expected performance. More so, hypothesis 9 facilitating conditions ($\beta = 0.146$, $T > 1.96$, $p < 0.01$) has a positive significant influence on behavioural intention through expected efforts. Finally, on indirect hypothesis 10 content quality ($\beta = 0.158$, $T > 1.96$, $p < 0.01$) has a positively predict behavioural intention through expected efforts.

Table 3 Direct and Indirect Hypotheses of the Study

Hypo	Effect	β	S.E.	T. Value	P. Value	Decision	R2	F2
H1	EP \square BI	0.269	0.059	4.681	0.000	Supported		0.134
H2	EE \square BI	0.649	0.056	12.299	0.000	Supported		0.778
H3	LI \square EP \square BI	0.09	0.031	3.065	0.002	Supported		N.A
H4	ENJ \square EP \square BI	0.119	0.032	3.633	0.000	Supported	0.749	N.A
H5	FC \square EE \square BI	0.146	0.063	2.352	0.019	Supported		N.A
H6	CQ \square EE \square BI	0.158	0.054	2.957	0.003	Supported		N.A
H7	LI \square EP	0.334	0.076	5.858	0.000	Supported	0.535	0.099
H8	ENJ \square EP	0.444	0.075	4.33	0.000	Supported		0.176
H9	FC \square EE	0.225	0.09	2.507	0.012	Supported	0.175	0.04
H10	CQ \square EE	0.244	0.085	2.507	0.012	Supported		0.047

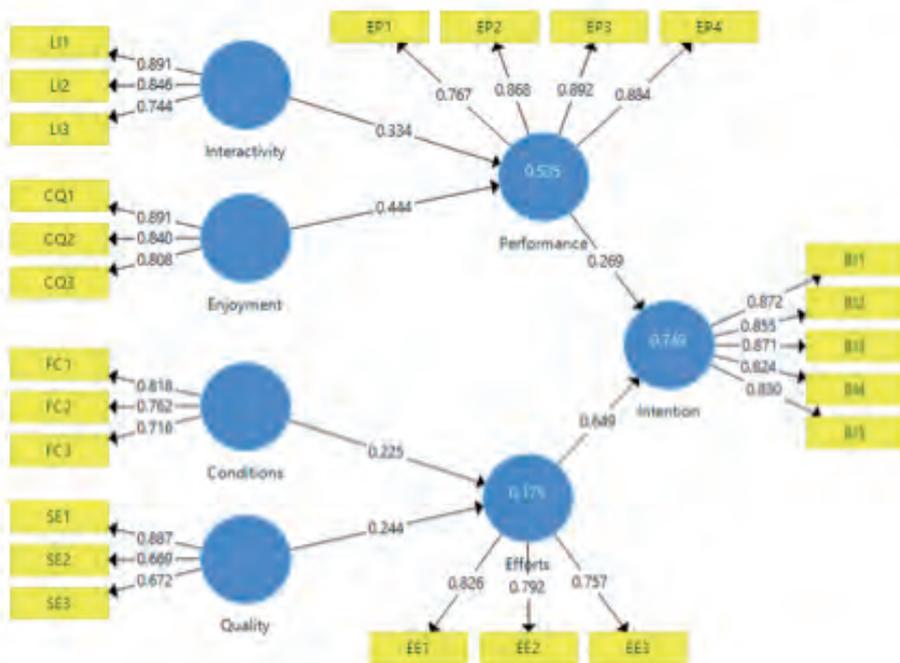


Figure 1: Research Model

. DISCUSSION AND CONCLUSION

It was discovered that the present study has indeed uncovered the factors that significantly predict the intention to use mobile learning for teaching/learning Arabic to non-native speakers in Saudi Universities. Equally, it was found that the present research has moved a step further by extending the unified theory of acceptance and use of technology (UTAUT) by incorporating three other factors namely; language interactivity (LI) and system enjoyment (SE) as well as content quality. In this regard, this discussion section will majorly focus on these three novel contributions to the unified theory of acceptance and use of technology (UTAUT). It was found from the outcome of the analysis that, language interactivity positively predicts behavioural intention through expected performance. Meanwhile, it was discovered that, previous studies have suggested similar findings to this study, that language interaction predicts behavioural intention (Gupta et al. 2008; Lawrence, 2016). However, the present study extended that, language interaction improves and boosts expected

performance which in turn predict behavioural intention. In essence, the message states that, language interactivity does not necessarily influence behavioural intention directly. Meaning that, language interaction is not the real rationale behind the change that occurs in the behavioural intention. Therefore, explanatorily when language interactivity brings about high level of expected performance then the expected performance will then improve or boost the behavioural intention.

The second novel finding in the present research is that perceived system enjoyment has positive significant influence on behavioural intention through expected effort. It should be noted several empirical studies has found similar result that, there is direct influence perceived system enjoyment on behavioural intention (Curtis et al. 2010; Alrawashdeh, Muhairat, & Alqatawnah, 2005). Meanwhile, the present study discovered additionally that, expected effort mediates the relationship between perceived system enjoyment and behavioural intention. It means that, system enjoyment might not be directly influence behavioural intention except through the influence of expected effort. It means, the effect that the system enjoyment has on expected effort will lead to behavioural intention. As it is has been explained earlier that, the findings of the present study is novel, hence there is yet to be a replicate study. Finally, the study equally discovered that, content quality positively and significantly influences behavioural intention through expected effort. In the same vein, extant literatures have found similar direct influence of content quality on the behavioural intention (Ali, Rafie, & Arshad, 2018). However, the present study extended the theory of acceptance and use of technology (UTAUT) by adding that expected effort mediates the relationship and influence between content quality and behavioural intention. Similar explanations on this have previously given from the above findings.

The present research has uncovered the factors that significantly predict the intention to use mobile learning for teaching/learning Arabic to non-native speakers in the Saudi Universities. It has as well, succeeded in extending the unified theory of acceptance and use of technology (UTAUT) as well as incorporating three other factors namely; language interactivity (LI), system enjoyment (SE) as well as content quality having indirect effect on the behavioural intention. It is discovered that the findings of this present study in novel due to the fact that, it has confirmed hypothesized model. It established that, expected performance mediates between system enjoyment and behavioural intention, expected performance mediates between system interactivity and behavioural intention and expected performance mediates between system enjoyment and

behavioural intention. It is therefore, recommended that, subsequent study should be conducted in another setting, using the unified theory of acceptance and use of technology (UTAUT) with the extended variables in order to further strengthen the findings of the present study. More so, it equally recommended that, the outcomes of the present study should be applied to the study of m-learning in the area of Language study within the context of the KSA higher institution.

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