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The Effect of Mobile Applications on Learning English vocabulary by EFL Learners at Shaqra University

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Abstract:*This study explored the effect of mobile phones (smartphones) applications on learning English vocabulary by EFL learners at Shaqra University. It attempted to investigate the Saudi EFL learners' perceptions and attitudes about the use of smartphones applications in learning English vocabulary. In addition, it aimed to identify the challenges and problems Saudi EFL learners face while using smartphones applications in learning vocabulary. The sample consisted of one hundred Saudi female college students majoring in the English language at Al-Muzahimiyah Faculty of Education in Shaqra University, Saudi Arabia. The participants were chosen randomly from different levels: from level two up to level eight. Data were collected through questionnaires. The findings showed that Saudi EFL learners at the university had a positive attitude towards using smartphones applications in learning vocabulary. In addition, the results proved that there were some problems and challenges EFL learners face when using smartphone applications in learning vocabulary.*

Key Word*: Smartphones applications, M-learning, English vocabulary.*

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I. Introduction

Mobile technologies are now a commonplace feature of most people's contemporary life. The evolution of wireless technology has great effects on modern people lifestyles. As a result, mobile learning (m-learning) has become popular in the domain of both learning and teaching. It refers to the use of mobile and handheld information technology devices in teaching and learning. The emergence of mobile technologies has led to great changes in the learning styles and teaching methods. According to Brown (2003), "mobile technologies have the power to make learning even more widely available and accessible than we are used to in existing e-learning environments"(P.1). In fact, the rapid use of mobile devices among young people has affected their learning process. It creates new challenges and opportunities to enhance the learning experience of learners at all levels of education. This technology generally changes the process of traditional teaching and learning; also, it facilitates lifelong learning and produces new ways to deliver knowledge and information without the limitations of time and space.

Ally (2009) defined m-learning as the process of using a mobile device to access and study learning materials to communicate with fellow students, instructors or institution. That means, M-learning has the ability to provide educational content on personal pocket devices as Personal digital assistants (PDAs), mobile phones and smartphones. It has also been defined as "any educational provision where the sole or dominant technologies are handheld or palmtop devices" (Traxler, 2005, P.262), that can be used 'anywhere, anytime' (Al Fahad, 2009). In other words, learning mediated through any mobile device that is accessible anywhere anytime is mobile learning (Kukulska-Hulme& Shield, 2008). M-learning challenges tradition learning with its potential for learning to be informal and personalized. Such learning is suitable for leaners to acquire new materials outside classrooms; also, it brings diversity in the way learning occurs. Ozdamli and Cavus (2011) stated that "Mobile learning has different characteristics. The core characteristics of mobile learning are ubiquitous, portablesize of mobile tools, blended, private, interactive, collaborative, and instant information."(P.940). These features support learning at all times and in all places.

Mobile devices have increasingly grown to become great tools for education and language learning. Teachers and students have realized that mobile devices provide a very effective resource for education. Therefore, many researchers regarded Mobile Assisted Language Learning (MALL) as useful approach for teaching and learning language. MALL refers to an approach to language learning that is assisted or enhanced using handheld mobile devices. MALL offers the opportunity for learners to learn language using devices such as mobile phones (including IPhone, Samsung Galaxy, and Blackberry), IPod, MP3 or MP4, and personal Digital Assistants (PDAs) when they desire and where ever they are. Mobile devices are effective and easy tools for language learning. Their ubiquity feature makes them available for students to have an equal opportunity of learning. Researchers such as Milrad (2003) explained a number of features that mobile devices

have: portability, social interactivity, individuality, context sensitivity, and connectivity. Such devices help learners and students to be free from the constraints of time and place thereby they can study according to their schedule.

Many studies showed that most students have positive perceptions toward using mobile devices for learning English. They found that using mobile devices allowed learning to be flexible and portable because of the portability (Alfahad, 2009; Cavus& Ibrahim, 2009). In addition, students' confidence and motivation increased more after using these devices. In 2011, Course SmartCompany conducted a survey showed that college students cannot go long without checking their devices including Smartphones, Laptop, tablets and more. Nevertheless mobile devices benefits, few learners find some challenges while using it, for instance; screen sizes, virtual keyboarding, and limited power. Many researchers considered mobile phones the most common devices used as a tool by language learners.

Advanced mobile phones such as smartphones are very popular among young people because of their features. With the increasing use of smartphones, mobile applications might become the perfect tool that can help language learners for enhancing their vocabulary. Mobile applications are software programs, where people can download and access directly using their phones or other mobile devices. The Android, Apple, Microsoft, and BlackBerry mobile operating systems have applications stores online where learners can look for, download and installed applications that can help language learners. "Few studies have investigated students' personal use of mobile apps for learning and the learning benefits" (Steel, 2012, P.1). Whereas the effectiveness of using applications like SMS (Short Message Service) in vocabulary learning has been widely discussed and confirmed in a number of studies (Thornton and Houser (2005) in Japan, Lu (2008) in Taiwan, Cavus and Ibrahim (2009) in Turkey).

Statement of the problem:

English language learners need to acquire at least 5000 word to understand non-specialized English text (Laufer 1997). It is a challenge for Learners to enlarge their vocabulary, especially busy students. In Saudi universities, the amount of class time is limited; a typical vocabulary class meets once a week for 110 minutes. Therefore, technology can be used as a great assistance to help in vocabulary developments. Mobile technology, especially mobile phones can promote vocabulary-learning process. Zengning (2013) stated that " Vocabulary learning with mobile phones allows learners to be exposed to spaced repetition of vocabulary items, which is believed to be more effective than massed repetition" (P.46). Mobile phones provide learners with flexibility and individuality to study anywhere and anytime. A large amount of mobile phones' applications can be employed to facilitate vocabulary learning and to motivate learners to continue their learning outside the class.
Alfawareh and Jusoh (2014) indicated that "94.14% of students in Saudi Arabia can afford to own smartphones"(P.325). With the spread of mobile phones, especially smartphones among Saudi learners, they are expected to benefit from their applications to develop their learning skills. Also, Saudi Arabia lacks the variety of studies that investigate the perceptions and attitude of EFL Learners towards mobile phones application in learning. Thus, the current study attempts to identify learners' perceptions and attitudes towards using smartphones applications for learning English vocabulary.

Purpose of the study:

Mobile technologies are part of the life of EFL learners and this study aims to investigate the Saudi EFL learners' perceptions and attitudes about the use of smartphones applications in learning English vocabulary. Another aim is to explore the challenges and difficulties they encounter while using this technology.

Significance of the study:

This study will help to find out whether mobile phone application facilitates the learning process outside the classroom or not. It highlights EFL learners' use of mobile phone (smartphones) applications in learning English vocabulary. Thus, it may provide valuable information concerning learners' perceptions about using smartphones applications in learning. Also, the findings may encourage the Saudi learners to use their mobile phones as a learning tool to improve their learning skills inside and outside the classroom. In addition, the findings of the study may stimulate instructors' and supervisors' interest to use mobile phone (smartphones) applications in their courses.

Questions of the study:

The study attempts to answer the following questions :

1. What are EFL learners' perceptions and attitudes about the use of mobile phone (smartphone) applications in learning vocabulary?
2. What challenges and problems do EFL learners face while using mobile phone (smartphone) applications in learning vocabulary?

Hypotheses of the study:

The study assumes the following:

1. EFL learners who use smartphone applications in learning new vocabulary will show positive attitudes towards them.
2. There are some challenges and problems in using smartphone applications as a learning tool.

Limitations of the study:

The study has certain limitations that can be noted. First, the study is limited to one hundred Saudi female students majoring in English at Shaqra University. Second, it was concerned with identifying the effect of using mobile phones applications on learning vocabulary from learners' perspectives.Third, the study was conducted in Al-Muzahimeyah Faculty of Education during the first term of the academic year (1435-1436 / 2014-2015).

Definition of terms

Mobile learning (M-Learning): is learning by means of wireless technological devices that can be pocketed and utilized wherever the learner's device is able to receive unbroken transmission signals (Attewell&Savill-Smith, 2005) (as cited in El-Hussein and Cronje**,** (2010))

MALL(**mobile assisted language learning):** The Oxford advanced learner's online dictionary (2014) defines it as " a method of learning languages with the help of a mobile/cell phone".

Smartphones: mobile phone that is able to perform many of the functions of a computer, typically having a relatively large screen and an operating system capable of running general-purpose applications.

Applications: It is a term used to describe Internet programs that run on smartphones and other mobile devices. Mobile applications usually help users by making it easier to use the Internet on their portable devices.

II. Material And Methods

The instrument used in the study was a questionnaire developed by the researcher. The questionnaire was designed to elicit EFL learners' perspectives on using smartphones applications as a tool to learn and improve their English vocabulary. It was a close-ended questionnaire consisted of 18 statements focusing on two sections: learners' attitudes and the problems and challenges they face while using smartphones' applications. The study was conducted using a sample of 100 female Saudi students. They were studying a Bachelor degree in the English language at AL-Muzahimeyah Faculty of education, Shaqra University, Saudi Arabia. The participants were chosen randomly from different levels: from level two up to level eight.

In order to ensure the instrument validity, the questionnaire form was evaluated by two professors from the department of English and literature in Al-Imam Muhammad Ibn Saud Islamic University. In addition, to measure the reliability of the instrument of the study, the researcher used Cronbach's Alpha Coefficient. The Alpha coefficient ranges in value from 0 to 1. Kumar (2011) indicated that " The greater the degree of consistency and stability in an instrument, the greater it is reliable". As table 3 shows, the general stability coefficient for the questionnaire form of this study reached (0.749) and this indicates that the instrument has a high degree of reliability.

Table 1

Cronbach's Alpha Coefficient used to measure the reliability of the instrument.

Questionnaire sections	Number of statements	Alpha Coefficient
Attitudes of EFL Learners at Shaqra University towards using smart phones applications	12	0,847
Problems and challenges facing you while using smartphones applications	6	0,564
General stability	18	0,749

Procedure methodology

Quantitative method was used in this research. The quantitative approach aims at explaining phenomena by investigating what are the factors that drive a certain outcome. In this study, Data were collected through one instrument: a questionnaire. First, the researcher took the permission from the Dean of Shaqra University to apply the study in Al-Muzahimeyah Faculty of Education. The questionnaire was distributed to the participants in different classes by the researcher in the first semester of the academic year (1435-1436 /

2014/2015). The researcher read the instructions for the participants, and the questions were explained. The researcher remained in the classroom while the participants answered the questionnaire to respond to any queries. The participants completed it in 20 minutes. It took five days for the researcher to finish the survey. Afterwards, the data were analyzed.

Statistical analysis

Data was analyzed using SPSS. Descriptive statistics were generated to answer the questions of the study.

III. Result

Results related to the first question

To answer the first question of the study which was," What are EFL learners' perceptions about the use of mobile phone (smartphone) applications in learning vocabulary?", the researcher calculated the means and the standard deviations for each statement. Table 2 presents the results of the questionnaire items related to the first question. It shows all the percentages, averages, standard deviations as well as ranks of participants' responses.

Table no 2*The participants' attitudes results towards using smartphones applications.*

N	Statement .	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean	S.d	R
		F	F	F	F	F			
		%	%	%	%	%			
1	I have educational applications on my phone.	34	37	18	1	1	4.20	0.84	6
		43	37	18	1	1			
2	I enjoy using smartphone applications to learn.	37	40	19	3	1	4.09	0.88	7
		37	40	19	3	1			
3	Using smartphones applications enhance my skills.	27	44	25	1	3	3.91	0.91	8
		27	44	25	1	3			
4	Using smartphones applications allow me to communicate well.	44	36	20	0	0	4.24	0.77	5
		44	36	20	0	0			
5	Using smartphone applications help me increasing my vocabulary.	50	39	10	1	0	4.38	0.71	1
		50	39	10	1	0			
6	Using smartphones applications to learn vocabulary are more fun.	46	36	15	3	0	4.25	0.82	4
		46	36	15	3	0			
7	I use smartphones applications to test my vocabulary.	31	33	30	3	3	3.86	1.00	10
		31	33	30	3	3			
8	Using smartphones applications help me to memorize more words.	43	42	14	0	1	4.26	0.77	2
		43	42	14	0	1			
9	I use smartphones applications to review terms introduced in previous courses.	21	33	35	5	6	3.58	1.07	12
		21	33	35	5	6			
10	I use texting applications to reinforce my vocabulary.	24	50	21	3	2	3.91	0.87	9
		24	50	21	3	2			
11	I use certain applications to create my own vocabulary list.	25	31	31	8	5	3.63	1.10	11
		25	31	31	8	5			
12	I will increase my use of the smartphones applications in the future for learning.	47	35	16	1	1	4.26	0.84	3
		47	35	16	1	1			
		Mean					4.04	0.54	

Table 2 shows that students' attitudes were significantly positive toward using smart phones applications to learn English vocabulary. The statements were ranked according to the highest mean as follows:

1- Participants' responses to statement 5, which states that (Using smartphone applications help me increasing my vocabulary.), reveal that 50 participants strongly agreed that using smartphone applications help them in their vocabulary learning. The statement gets the first rank with the highest mean (4.38).
2- The analysis of participants' responses to statement 12, (I will increase my use of the smartphones applications in the future for learning.), shows that 47 of them have the intention to increase their use of smartphone applications in the future. With (4.26), they strongly agreed to increase their use in the future for learning.
3- Forty-three participants strongly agreed on statement 8 which states (Using smartphones applications help me to memorize more words). The statement gets the third rank with (4.26).
4- Participants' responses to statement 6, which states that (Using smartphone applications to learn vocabulary is more fun.) reveals that 46 participants strongly agreed that learning vocabulary becomes more fun when, using smartphone applications. It gets the fourth rank with (4.25).
5- The analysis of participants' responses to statement 4, which states that (Using smartphones applications allow me to communicate well.) shows that 44 of them strongly agreed on that statement.
6- Forty-three participants strongly agreed on the first statement which states (I have educational applications on my phone.). The statement gets the sixth rank with (4.20).
7- Participants' responses to statement 2, which states that (I enjoy using smartphone applications to learn.) show that 40 participants agreed that they like using smartphone applications to learn vocabulary. The statement gets the seventh rank with (4.09).
8- The analysis of participants' responses to statement 3, which says that (Using smartphones applications enhance my skills.), shows that 44 of them enhance and reinforce their skills when they use smartphone applications. With (3.91), they agreed on the statement.
9- Fifty participants agreed on statement 10 which states (I use texting applications to reinforce my vocabulary.). This means that texting application also increases learners' vocabulary. The statement gets the ninth rank with (3.91).
10- Participants' responses to statement 7, which states that (I use smartphones applications to test my vocabulary.) show that 33 participants agreed that they test their vocabulary using smartphone applications. The statement gets the tenth rank with (3.86).
11- The analysis of participants' responses to statement 11, which says that (I use certain applications to create my own vocabulary list), shows that 31 of them already use smartphone applications to create vocabulary lists. With (3.63), they agreed on the statement.
12- Thirty-five participants agreed on statement 9 which states (I use smartphones applications to review terms introduced in previous courses.). The statement gets the last rank since it has a low mean (3.91).

Results related to the second question

To answer the second question of the study, which states, "What challenges and problems do EFL learners face while using mobile phone (smartphone) applications in learning vocabulary?" the researcher calculated the means and the standard deviations for each statements. Table 3 shows the results of the questionnaire items related to the second question.

Table no 3:*The participants' responses results towards the problems and challenges facing them while using smartphones applications.*

N	Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Mean	Sd	R
		F	F	F	F	F			
		%	%	%	%	%			
1	Using smartphones applications to learn new vocabulary is time consuming.	24	33	24	13	6	3.56	1.17	2
		24	33	24	13	6			
2	I need help to understand most of smartphones applications.	18	26	25	18	13	3.18	1.29	5
		18	26	25	18	13			
3	I have poor networking in my city.	20	26	28	14	12	3.28	1.27	4
		20	26	28	14	12			
4	Most educational applications are not free.	19	38	28	8	7	3.54	1.10	3
		19	38	28	8	7			
5	Most smartphones applications are battery consuming.	22	44	27	4	3	3.78	0.94	1
		22	44	27	4	3			
6	I am not interested in using smartphones applications to learn.	9	18	23	27	23	2.63	1.27	6
		9	18	23	27	23			
		Mean					3.32	.66	

The results in table3 indicate that there are problems and challenges facing the participants while using smartphones' applications. The statements were ranked according to the highest mean as follows:

1. Statement number 5 which states that (Most smartphones' applications are battery consuming.) gets the first rank with (3,78). 44 participants agreed that most applications consume their phones battery.
2. Thirty-three participants agreed on statement number 1, which states that (Using smartphones applications to learn new vocabulary is time consuming.). It gets the second rank with (3.56).
3. Statement number 4 which states that (Most educational applications are not free.) takes the third rank with (3.54). 38 participants agreed that most of the applications are not free and this is a problem for some learners.
4. Twenty-eight participants responded with "Neutral" to statement number 3, which states that (I have poor networking in my city). It gets the fourth rank with (3.28).
5. Statement number 2, which states that (I need help to understand most of smartphones applications.) takes the fifth rank with (3.18). 26 participants agreed that they need someone to help them understand most of the applications.
6. Twenty-seven participants disagreed on statement number 6, which states (I am not interested in using smartphones applications to learn.),it takes the low mean with (2.63)

IV. Discussion

This study aims to elicit Saudi EFL learners' own perceptions and attituds about using mobile phones (smartphones) applications to learn vocabulary, and how they affect their learning. In addition, it aims to find the problems and challenges they face while using this technology. The participants of this study responded to the study questionnaire and the results, tables (4 and 5) support the study hypotheses.

According to the first question, which says that (What are EFL learners' perceptions about the use of mobile phone (smartphone) applications in learning vocabulary?), the results revealed that the learners' attitudes were positive towards using smartphone applications to learn vocabulary with a general mean (4.04). The majority of the participants stated that their vocabulary increased when they use smartphones applications. In addition, they will use more applications in the future for learning vocabulary. This supports the first hypothesis of the study, which indicates that (EFL learners who use smartphone applications in learning new vocabulary will show positive attitudes towards them).

Concerning the second question, which says (What challenges and problems do EFL learners face while using mobile phone (smartphone) applications in learning vocabulary?) table 5 provides an answer for it. The Participants stated that there are some difficulties that encounter them while using smart phone applications. This supports the second hypothesis of the study, which stats that (There will be some challenges and problems in using smartphone applications as a learning tool).

The results of this study are consistent with many studies such as the studies conducted by Basoglu and Akdemir (2010), Zang, Song, and Burston (2011), Ezati and Kimyayi (2011), and Rezael, Mai and Pesarnghader (2013). All of these studies showed that using mobile phones (smartphones) applications in learning vocabulary had positive effects. According to the participants, these applications them to acquire new vocabulary and improve their learning despite some challenges that can be avoided.

V. Conclusion

The overall aim of the present study was to investigate the effect of mobile phones applications on learning vocabulary, and the problems and challenges EFL learners face when using this technology to enhance their vocabulary. The research findings indicated that Saudi EFL college learners have positive attitudes towards using smartphones' applications to learn vocabulary. They showed interest in increasing their use of smartphones applications in the future for learning. They also believed that their vocabulary knowledge developed and enhanced after they use learning applications. This concludes that smartphones' applications have great effects on learning vocabulary. On the other hand, many Saudi EFL learners who use smartphones applications to improve their vocabulary face some challenges and problems. However, these problems can be solved.

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