

International Journal of Language Education
Volume 5, Number 2, 2021, pp. 1-14
ISSN: 2548-8457 (Print) 2548-8465 (Online)
Doi: <https://doi.org/10.26858/ijole.v5i2.15787>

Learners' Perceptions on WhatsApp Integration as a Learning Tool to Develop EFL Vocabulary for Speaking Skill

Raja Muhammad Ishtiaq Khan

Al-Majma'ah University, Zulfi, Kingdom of Saudi Arabia.
Email: r.khan@mu.edu.sa

Noor Raha Mohd Radzuan

Universiti Malaysia Pahang, Kuantan, Pahang, Malaysia.
Email: nraha@ump.edu.my

Shahzad-ul-Hassan Farooqi

Al-Majmaah University, Majmaah, Saudi Arabia
Email : s.farooqi@mu.edu.sa

Muhammad Shahbaz

GC Women University Sialkot, Sialkot, Pakistan.
Email: m.shahbaz@gcwus.edu.pk

Mohammad Seemab Khan

Future University, Buraidah
Email: semab_khan2000@yahoo.com

Received: 05 November 2020
Reviewed: 15 March -14 April 2021
Accepted: 5 May 2021

Abstract

Technology integration has a great impact on learners' learning styles and everyday life, where various encouraging responses come across in language learning institutions through the use of mobile technology. WhatsApp application instantly transfers information in different modes. At the present time it can be effectively used as a platform to engage learners with conventional classroom setting. The present study is an attempt to investigate learners' attitudes towards WhatsApp application and their intention for future use. 32 EFL learners were exposed to learn vocabulary by the use of WhatsApp application for a period of 6 weeks. Data were collected by using questionnaire and semi-structured interviews. The result exhibited higher levels (M= 4.4 and Mode 4.37) of the mean scores of the learners' perception and (M= 4.3) on WhatsApp Usage attitudes. The finding of the study indicated that learners expressed positive attitudes in using WhatsApp applications for vocabulary development. The present study also suggests that the integration of WhatsApp should be fortified to learners, instructors and institutions in developing other language learning process.

Keywords: MALL, Attitudes, Perceptions, Vocabulary, Spoken vocabulary

Introduction

English language is by any means a worldwide language, which is increasingly gaining the numbers of its users. It is one of the leading languages of global communication, business, official language of more than 50 countries and is the 3rd most spoken language around the world (Crystal, 2013). It is adopted as “English as a Second” or “Foreign Language” (ESL/EFL) to assist learners to acquire the mastery in language learning in most of the countries in the world today. Various theories and methodologies have been utilized to develop the learning process of English language and still the development is in progress. Currently, the use of growing and readily available technology language learning process has progressed as compared to traditional ways of learning. Technology has shortened the distances and made communication process easy among the learners both in classroom and outside of the formal learning atmosphere (Khan et al., 2018; Mohamad & Woollard, 2012; Papadakis & Kalogiannakis, 2017). Moreover, the appropriate incorporation of technology can help learners to attain the desired level of language learning.

The integration of social media as an auxiliary tool for EFL learners to study language effectively has been investigated quite a lot in many countries (Blattner & Lomicka, 2012; Chang & Hwang, 2018; Coyle, Hood, & Marsh, 2010; Levy & Stockwell, 2013; Mohamad & Woollard, 2010; Stockwell, 2010; Toffoli & Sockett, 2010; Khan, et al., 2020). The use of mobile assisted language learning (MALL) has gain popularity in teaching and learning English throughout the world. MALL integration has developed learners’ progress in the process of various language learning aspects containing vocabulary, grammar, pronunciation, listening and speaking (Gwo-Jen Hwang, Shi, & Chu, 2011; Gwo-Jen Hwang & Tsai, 2011; Gwo Jen Hwang, Wu, Zhuang, & Huang, 2013). Numerous MALL studies have been tested to be applied on learners including twitter, Snapchat, BBM, Kiki, Line, Somo, but the use of WhatsApp as a learning tool on developing vocabulary learning for spoken proficiency in Gulf region and other in other parts of the world could not gained popularity in this aspect. Several investigations have been made to fine the effectiveness of WhatsApp on vocabulary and other language learning skills (Al-Emran, Elsherif, & Shaalan, 2016; Dashti & Aldashti, 2015; Kiili, Multisilta, Suominen, & Ketamo, 2010; Njoku, 2016).

Attitudes towards technology integration could be depleted to gauge into which level the users (leaners and instructors) of available technology have motivation, determination to integrate technology in education pursuits and to look into its positive and negative effects on the learning environment. MALL is now being used as a platform in the development of learning purpose; has capacity to enhance the association among learners and inspire the collaboration among their peers and instructors (Saeidi & Mozaheb, 2012). The importance of attitudes aspect is very vital in technology integration by accepting or rejecting the acceptance of technology. (Hsieh, Huang, & Wu, 2017; Yau & Joy, 2010) has pragmatically reinforced that learners’ or users’ attitudes lead to the goals of use and real user of the newly adopted practice. Thus, learners’ attitudes and perception can easily offer a background for inferring the learners’ perspective intention of practice and approval of MALL in developing language learning.

Mobile Assisted Language Learning (MALL) is one such emerging field of language learning which enhances the chances of language development effectively. WhatsApp application is vastly used software application which is used as source of communication among its users and most learners have this application in their smartphones nowadays. The integration of MALL technology has become vital in advanced educational institutes globally because of the extensive spectrum of its advantages. When MALL is combined with the traditional classroom, it offers learning ubiquitously by the means of technology incorporation. More specifically, MALL

technology helps learners in developing their technological consciousness, collaborating with instructors and their classmates, interaction in classroom discussion, develop teamwork, and enhance communication that leverage the process of learning and using new words (Aljohani, Davis, & Loke, 2012). MALL has increasingly incorporated with conventional classroom teaching by combining MALL applications which is “new-breathe” in language classrooms directly or indirectly. Technology has its nurseries in the Gulf region in the shape of language labs, digital classrooms, PCs and tablets. Following the line of technological advancements many institutions have initiated the usage of MALL applications in developing learners’ language learning skills. Many researchers have investigated the learners’ attitudes of MALL integration in vocabulary development, reading comprehension and writing skills, there is very little on spoken proficiency.

Speaking is an essential skill of language learning which can be developed by learning new words. Speaking is the process of constructing and revealing meaning through the use of words and body language in different context (Rivers, 2018). To attain proficiency in speaking skills learners need to have the adequate vocabulary to convey meaning or to take part discussion (Saville-Troike & Barto, 2016). Vocabulary for speaking development is particularly less investigated aspect of language learning. Most learners get the required standard in formal exams but in normal communication they cannot get across their message (Rivers, 2018). This is perhaps because of many reasons and vocabulary is one of the most important and key element in this regard. So, in the case of vocabulary for speaking development, it is essential to investigate learners’ attitudes’ towards MALL, particularly WhatsApp integration with formal classroom. Most of the learners in Saudi Arabia are uncomfortable to speak presciently in classroom because of having dearth of vocabulary and self-assurance in them. Meanwhile, most of them have knowledge about the topic in the given subject but still, they encounter hurdles in explicating and expressing their ideas orally. Contrarily, certain learners who may have ideas and vocabulary in given context but have problems in speaking due to lack of the actual practice of the words. Thus, the instructors can integrate MALL in the shape of WhatsApp application as a means of transporting and communicating new vocabulary items by the means of pictures and illustrations for the learners to generate sentences in the discussion.

The main aim of the present attempt is to examine the Saudi EFL learners’ attitudes towards WhatsApp in developing vocabulary for speaking performance. This in reward will support instructors and educators to take their consideration in adopting MALL application for teaching vocabulary in developing spoken proficiency. Moreover, this will help policy makers to integrate MALL applications as an aid in the curriculum to attain the required goal of language teaching which could be an essential footstep towards MALL integration. Our effort specified that these attitudes were not yet examined in gulf region sufficiently. This is the central motive that motivates us to pay our focus on this aspect and attempt to indicate the gap for the researchers.

Literature review

The popularity of MALL has grown up among learners and instructors for accomplishing everyday language learning task. Previous research has indicated that MALL plays an important role in developing EFL learning (Kukulka-Hulme, 2009; Levy & Stockwell, 2013). Numerous institutions and instructors worldwide are implementing the ubiquitous learning with their formal classroom teaching. However, MALL has not yet attained its popularity and acceptance in gulf region (Alwraikat & Al Tokhaim, 2014).

WhatsApp is a prevalent mobile phone android application that functions on several handheld devices, in the shape of smartphone, tablets, MAC books and even it can also be linked

to the computers. It is widely free available in the plays stores since 2010 and is evolved chiefly for the better replacement of short message service (SMS) to a free platform with unlimited messages with unlimited characters. It has ability to send and receive text, audio and video clips, pictures and even word and PDF documents which can be shared in personal chat or in the groups. This novel marvel is parallel with Vygotsky Constructivist approach of language learning which matches the usage of WhatsApp application. This theory intends to advance the learners' social interface as well as to elevate and share information (Vygotsky, 1978).

WhatsApp has the capability to interact learners anywhere and anytime in groups or individually. As of January 2017, WhatsApp has over 1.2 billion active users around the globe and ranks as one of the most famous application. More specifically, WhatsApp is valued as an immense societal association that connects individuals to attain and share the enormous information worldwide promptly. According to Vygotsky (1978) the production of information and knowledge among learners is greatly relied social interactions. He illustrated that learning can be affected by various elements, containing the psychological and cognitive condition of learner, proficiency of teacher, nature and difficulty level of the educational approach. In general, the effectiveness of the teaching and learning can be developed by the means of social interaction, this result in the involvement of learners sharing of information (Vygotsky, 1978).

Kilic (2019) have conducted an empirical investigation to underpin the place of the vocabulary in developing the speaking and writing performance. The participants of the investigation were 54 Turkish EFL learners. The finding of the study indicated that vocabulary is the predicator of the speaking and writing proficiency. Moreover, (Khan et al., 2018) also conducted a study to find out the teachers and learners' participants in determining the role of vocabulary in speaking skills. The results showed that both teachers and learners' pointed out that vocabulary is the main hindrance in the speaking inabilities.

The integration of WhatsApp provides the opportunity to learn independently by using wireless devices ubiquitously. In this regard Al-Fahad (2009) conducted a study on learners' attitudes and perception on the effectiveness of m-learning in a public university in Saudi Arabia. The analysis of learners' perception on m-learning points out that learner widely accepted the integration of MALL. The mainstream of the learners supported the idea of learning with wireless devices.

MALL offers relaxing and flexible online activities to the learners. Khaddage and Knezek (2013) have carried out a comparative analysis that examines learners' attitudes towards MALL from USA and UAE background. The result of the study showed that the learners from USA had moderately positive attitudes on the MALL integration as compared to the UAE learners. Similarly, (Ubaidullah et al., 2011) conducted a study at a public university in Saudi Arabia, to explore the attitude of computer science on the use of (social networking sites) SNS to develop their learning. Finding of the study indicated that learners' usage of SNS is limited to social interaction as compared to its usage for academic benefits.

Kumar, Lian, and Vasudevan (2016) carried out a study with the purpose to investigate learners' perception on the use of WhatsApp in learning Mandarin language in Malaysian. Quantitative analysis of data showed that learners' have positive attitudes towards using WhatsApp application for learning. Results also indicated that WhatsApp integration can improve language learning process. Likewise, (Mistar & Embi, 2016) investigated the significance of WhatsApp integration and learners perception about it. The results suggest that the use of WhatsApp have the potential in developing the process of language learning. The behavioral intention and perception towards the usage of WhatsApp were all at the high levels.

(Plana et al., 2013) also underscored that majority of the learners were favorably satisfied and approved this software, not merely it could enhance their willingness to discuss their language learning but also it provided positive effects on their learning habits, thus developing more consistency and self-assurance. These studies showed that WhatsApp could help a lot in enhancing learners' learning performance particularly developing EFL. It is obvious from the literature, that literature lacks the studies that examines learners' attitude towards developing vocabulary for spoken performance (Mustafa, 2018; Khan, et al., 2018; Khan, et al., 2019). Therefore, the present study is an attempt to underpin learners' attitudes towards WhatsApp integration in developing vocabulary which in turn can be used for speaking improvement. The major focus of the study is the development of the vocabulary learning using WhatsApp application.

Research questions

1. What are the Saudi EFL learners' perceptions towards using WhatsApp for vocabulary development?
2. What are the Saudi EFL learners' attitudes towards the usefulness of WhatsApp activities for vocabulary development?
3. What is the level of learners' behavioral intention in using WhatsApp activities?

Methodology

The current study aims to apprehend learners' attitudes of using WhatsApp in developing vocabulary for speaking performance. The present study used mixed methods (qualitative and quantitative) to collect the data. Creswell and Creswell (2017) asserted that mixed methods research allows researchers to collect and analyze data, integrate finds and appeal inferences by using both quantitative and qualitative approaches in one study.

Population

Participants of the current were 32 EFL learners of a public university. The entire participants were regular students. Their ages ranges from 18 to 20. Learners were of the same level as they appeared in the level determination test at the beginning of the semesters. Participant had smartphones and WhatsApp application. They were asked to join the group and also they signed a consent form.

Procedure

During the first week of the semesters a WhatsApp group was created by the researcher and learners from preparatory year's section were asked to join the group. As one of the researchers was the instructor of the targeted groups and learners were promised to give reward on the basis of their WhatsApp interaction. A consent form was distributed to the learners to get their consent in participating in WhatsApp groups. Researcher created vocabulary cards with the description of the targeted words, containing translation, example sentence of the words and pictures. Learners were instructed to write a new sentence by looking into example and translation of the targeted words in the WhatsApp group. They were also asked to read and comment on the sentences of other learners. The cards were sent to them on day prior to each listening and speaking class. Next day in the classroom they had to discuss these words before the traditional vocabulary teaching section. Here learners were supposed to use these words in group discussion. They received vocabulary cards two days in week. The vocabulary discussion on the WhatsApp continued for 8 weeks. After 8 weeks questionnaire was distributed to 32 EFL learners via Google

forms. The data was collected in the first semester 2018. A questionnaire (see questionnaire for detail) was used to gather the data from the participants.

Whatsapp group procedure

The following image displays the procedure of the administration of the WhatsApp in order to attain the learners' perceptions.



Figure 1. Whatsapp group procedure

Instruments

Two instruments were mainly employed to collect the data. A five point likert-Scale questionnaire was administered to 32 learners and semi-structured interviews form the 6 EFL learners.

Questionnaire

A five point likert-scale questionnaire (5 from strongly agree to 1 for strongly disagree) was used to determine learners' attitudes and perception towards vocabulary learning for speaking proficiency. Questionnaire is useful tool in collecting learners responses, it allows researcher to know the learners' perceptions and attitudes (Liaw, Huang, & Chen, 2007). Question was adopted from previous studies (Fageeh, 2013; Liaw et al., 2007; Mistar & Embi, 2016) and modified to current study. Then questionnaire was sent to four experts in the field of EFL teaching. Their suggestions were incorporated and then finally administer to the participants. The reliability of the questionnaire is as under the interview section

Table 1. Reliability analysis of the questionnaire

No	Questionnaire part	Statistical test used	Reliability
1	Perceptions	Cornbach Alpha	0.86
2	Attitudes	Cornbach Alpha	0.87
3	Behavioural Intention for future use	Cornbach Alpha	0.71

Table above illustrates that the reliability of the questionnaire is (0.86; 0.87; 0.71) which is acceptable and the can be used as a tool to investigate learners' attitudes

Interviews

After the treatment procedure interviews were conducted from five volunteer learners from the targeted population. Learners were explained about the process of interview. Interview protocol was designed by the researchers and sent to two assistant professors for their feedback. Their feedback was taken into account. Interviews are very helpful for the research to investigate the participants' professed opinions and perceptions that can't be determined evidently by enquiring and questionnaire (Mackey & Gass, 2015). Furthermore, interview questions were translated into Arabic language in order to express learners more deeply about the nature of their attitudes and perceptions. The learners of the experiment were initially sorted out on their

participation of the WhatsApp group and speaking discussion for the interviews. The learners having 85% and above participation in WhatsApp group and speaking were categorized in a group. Then they were given a consent form to take part in the interview session, they have been briefed about the process and purpose of the interviews. 8 learners signed the consent form for the participation in the interview session but only 6 showed up during the set time of the interviews

Result

A descriptive analysis of mode (frequency, mean and standard deviation are expended to recognize the learners' Perceptions on the integration of WhatsApp application to develop their vocabulary for spoken proficiency. The responses of the participants were analyzed by using SPSS. The analysis of the questionnaire was done on the basis of following coding procedure. The code 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree.

Table 2. Learners' perceptions about whatsapp

S.No	Items	N	Mean	Mode	SD
1	Learning Vocabulary through WhatsApp is a good idea	32	4.17	4	0.77
2	Vocabulary learning through WhatsApp makes attractive learning	32	3.83	4	0.96
3	It takes less time to pass the Vocabulary related information through WhatsApp	32	4.01	4	0.97
4	Learning Vocabulary is suitable through WhatsApp for Speaking skill	32	4.02	4	0.99
5	Vocabulary through WhatsApp saves the time	32	4.1	4	0.87
6	Vocabulary learning through WhatsApp is easy for developing speaking discussion	32	4.3	4	0.84
7	WhatsApp is a good source of interaction for language purposes	32	4.1	4	0.816
8	The use of WhatsApp can improve the EFL learning	32	4.13	4	0.772
9	I use WhatsApp to share vocabulary with my classmates	32	3.01	4	1.1
10	Vocabulary learning through WhatsApp is a fun way of language learning	32	4.2	4	0.618
	Valid Nlistwise	32			

Table 2 illustrates learners' perceptions in using WhatsApp application for learning vocabulary. Most of the learners indicated that WhatsApp vocabulary learning is a fun way of learning and they also acknowledged that WhatsApp is convenient for academic engagement (mean=4.40 and 4.37 respectively) which is at the highest level among other items. Moreover learners also asserted (mean= 4.24; 4.03 and Mode =4 in both cases) that learning vocabulary by the use of WhatsApp is a pleasant idea and this platform is suitable for learning vocabulary for developing speaking skills. This mean score indicates that the participants chose agree on the likert-scale to the perception items and some participants remarked it as neutral. Whereas, the

lowest mean was the “I often use WhatsApp to discuss vocabulary with classmates” (Mean=3.07 and Mode= 3) showed that learners were not accustomed to use WhatsApp for learning purposes.

Table 3. Learners’ attitudes towards usefulness of whatsapp

Items	N	Mean	Mode	SD
1 The utilization of WhatsApp increased the vocabulary learning chances	32	4.11	4	0.717
2 WhatsApp offered varied ways of vocabulary learning for speaking	32	3.89	4	1.012
3 WhatsApp usage provided better opportunities in speaking practice	32	3.77	4	0.93
4 The use of WhatsApp developed my speaking	32	3.9	4	0.832
5 The Use of WhatsApp developed my speaking confidence	32	4.1	4	0.789
6 WhatsApp gave be confidence to consult the teacher	32	4.3	4	0.978
7 WhatsApp usage improved my speaking practice and vocabulary	32	4.13	4	0.697
8 WhatsApp application helped my vocabulary retention and its usage	32	4.13	4	0.812

It is vital from the table 3 that almost all learners endorsed the usefulness of WhatsApp application in learning vocabulary for spoken proficiency. Overall mean (4.30) indicate that most learners are agreed that WhatsApp develops vocabulary learning process. It is also vibrant (mean=4.23; Mode: 4) from the table that WhatsApp usage helped them in vocabulary retention. Moreover, WhatsApp usage encouraged vocabulary learning process (mean=4.30) and also it has improved speaking skills (mean=4). This mean score indicates that the participant choose agree on the likert-scale to the attitudes of the usefulness items and some participants remarked it as neutral.

Table 4. Learners’ behavioral intention towards the usage of whatsapp

S.No	Items	N	Mean	Mode	SD
1	I will use WhatsApp in learning vocabulary in future	32	3.99	4	0.816
2	I will not stop using WhatsApp for learning vocabulary	32	3.98	4	0.826
3	I am eager to use WhatsApp for vocabulary learning	32	3.79	4	0.819
4	WhatsApp makes impediments in learning vocabulary	32	3.69	4	0.861
5	WhatsApp usage is wastage of time for vocabulary learning	32	3.81	4	0.761

Table 4 illustrates learners’ behavioral intention on WhatsApp integration for learning purposes. It is obvious form the highest rank of the mean of the Item that “I will use WhatsApp in learning English vocabulary” (mean=4.13; mode= 4) indicate that most leaners’ will continue using WhatsApp for vocabulary learning purposes. This mean score indicates that the participant

choose agree on the likert-scale to the behavioral intention items and some participants remarked it as neutral. Whereas the lowest mean (1.80) indicates that all learners rejected that WhatsApp creates hindrance in vocabulary learning. On the whole, learners' behavioral intention in WhatsApp integration was marked at the higher level.

Generally, the analysis of the findings determined that learners perceive WhatsApp application as a useful platform in developing vocabulary. Their attitudes towards perception, usefulness and their intention of its usage for future were all at the higher level which is agree aspect in the questionnaire items. The result exhibited higher levels (M= 4.4 and Mode 4.37) of the mean scores of the learners' perception and (M= 4.3) on WhatsApp Usage attitudes. The mean score (M=3.9) indicates that the learners have acknowledged the WhatsApp application role in developing speaking skills. The findings confirmed that WhatsApp application is useful learning platform among Saudi EFL learner and it is highly significant for integration with conventional classrooms

Qualitative analysis of the data

During the interview data learners were inquired about the current state of speaking skills. Most learners expressed that they face the problem in speaking skills because of the lack interaction for practicing speaking skill and insufficient vocabulary skills. Corresponding to the learners interviews, they felt that vocabulary is one the key elements that hinders the process of communication and classroom discussion. As learner 3 and 5 expressed during the interview session:

“There is lack of interaction and communication opportunities in classrooms as well as outside of the classroom. Moreover, I do not have any contact after leaving the classroom. In addition, lack of there is dearth of adequate vocabulary for speaking efficiently”.

Learners 1, 7 and 9 indicated that, they have enough vocabulary but when it comes to speaking they cannot express themselves patently:

“When I read or try to write I feel that I know quite a lot and can convey my message easily but when it comes to speaking I cannot use same words in expressing myself”.

Vocabulary is crucial part of language learning, more importantly for speaking proficiency. Learners need a dynamic environment for vocabulary retention, that is only possible by creating a discussion platform and hence WhatsApp could be useful application for creating discussion background.

Learners exhibited positive perceptiveness on the use of Vocabulary cards through the use of WhatsApp platform. The responses of learners reveal a favorably positive attitude toward WhatsApp activities. Conferring to the learners' interviews, they experienced that the WhatsApp assisted activities had a substantial effect on their acquaintance with new words. As Students 10 and 8 expressed in the interview session:

“WhatsApp based activities offer opportunities to practice new vocabulary, which develops the impression of the ideas, vocabulary knowledge and understanding new words. This also helps in expanding the knowledge of sentences as it is supported by pictures.”(Learner10)

“The activity is extremely effective for retaining English vocabulary as it allows me to discuss vocabulary learned in WhatsApp group in my everyday conversation. Moreover, this allows me to produce and read the responses of other learners that I think is the most effective way of creating discussion and learning new words”. (Learner8)

WhatsApp oriented learning activity was innovative and interesting for learning new words. Likewise, the sharing ideas, explanation of words with pictures of the instructional design improved acquaintance among the learners, which strengthened their learning motivation and using these words in speaking activities. As learner 3 and 5 specified:

“WhatsApp vocabulary discussion activity creates interaction and it brings group members closer by passionate interaction in learning English, which strengthened their associations with each other. I think this is very useful for developing spoken proficiency”. (Learner 3)

“In addition to developing the meaning of words, this activity could increase my expressive connections with my peers. The most interesting aspect of the WhatsApp activities is discussion with the classmates.”(Student 5)

In the nut shell, the learners, overall, had positive insights of the WhatsApp activities; almost all of them stated that the activities assisted them in acquaintance themselves with new vocabulary presented prior to conventional class as well as in classroom discussion. In addition, WhatsApp as a learning tool was reportedly suitable, convenient, fun way of learning and a handy tool for interaction with peers in and outside of the conventional classroom. While most learners have positive attitudes in using WhatsApp-based activities, they also indicated some challenges of the WhatsApp instruction. One of the most challenging aspects of WhatsApp instruction was the association with in the WhatsApp group for the learners who are not quick to respond. Some learners also indicated that the time for discussion and reproducing sentences was another problem in WhatsApp instruction.

Discussion

The results revealed that the attitudes of Saudi EFL learners in WhatsApp integration were at higher level. The ease of using WhatsApp, availability, transformation of information and discussion gave learners better chances of learning vocabulary for speaking proficiency. The findings of the study support (Khaddage & Knezek, 2013) results who indicated that learners had positive attitudes towards MALL among UAE and USA learners as it offers relaxing and supple online activities. Moreover, it permits learners a mutual communication in no time as it passes information swiftly that develops interaction among learners. Likewise, the ease of the usage of WhatsApp increases the chances of vocabulary learning and it can provide explanation and elaboration of new words (Al-Fahad, 2009). Learners' group discussion and creating new sentences can also foster the process of vocabulary retention effectively as it allows learner to retrieve information. This helped learner to retain the words and use them in their speaking discussion. Hence their attitudes towards the used of the WhatsApp application turned positive in questionnaire data as well as during the interview sessions. Additionally, WhatsApp application proved to be a useful tool for developing speaking skills by increasing their developing their vocabulary.

The results also displayed that the usefulness of WhatsApp among Saudi EFL was also considered positive. WhatsApp application could develop learners confidence in practicing new vocabulary, their active involvement in the group discussion, greatly helped them in learning vocabulary in a better way which in turn develops language learning process efficiently. The learners' participation in the WhatsApp group has increased their confidence in taking part in the speaking discussion activities. This has been viewed their interest in the speaking activities next day before the class. The translation and pictures sent through WhatsApp helped learners to understand, produce and retain new words. The results of the usability are in the line with (Kumar, Lian, & Vasudevan, 2016) who found that most EFL learners' are keen in using WhatsApp because this platform provides interesting activities and attractive facilities for language learning including, text message, audios and videos message, picture annotation and group discussion.

Moreover, the present study also observed learners' behavioral intention towards MALL integration. Learners' behavior in WhatsApp integration was found at the higher level. Almost all learners showed highest level of intention in WhatsApp incorporation, they inserted that they will not stop using WhatsApp software in language learning process in future. This can be useful foundation for knowledge sharing and discussion individually as well as in group. The shared information will increase the chances of learning in group chat. Similarly, learners' indicated that WhatsApp vocabulary discussion activity initiates collaboration which bring all members closer and active in learning English, which results in developing their association for language learning.

Mayer (2005) asserted that the use of audio video aids can help the learners to overcome the metal block. The use of WhatsApp application has provided learners an input to understand and utilize the words in the speaking discussions. Feryok (2012) that the use of activity theory helps the researcher to analyse the activities and conversation. The element of learners engaged activities improved the learners' levels of vocabulary and consequently increased the speaking proficiency in the group discussion. The level of learners speaking proficiency has improved by the words and activities in the WhatsApp group. Though they have mentioned in the interviews that they were unable to remember all of the posted words but still they used 40 to 50% of the posted words. Moreover the results of the study are in the line with ,(Mistar & Embi, 2016) where the use of WhatsApp assisted the vocabulary learning.

It is clear and vital from above discussion; it can be asserted that WhatsApp can be effectively incorporated in language teaching in following ways. On the onset WhatsApp integration is significant because of its usefulness property in developing language learning among learner, and it also enhance learners engagement and discussion in learning foreign language by instant transfer of ideas and knowledge.

Conclusion and implication

The implications of the present study are illustrated conferring to the learners, teachers, policy makers and curriculum developers and Ministry of Education in Saudi Arabia. As the results analysis displayed a high level of the learners' attitude in WhatsApp integration as an aid for developing EFL learning, therefore its practice should be fortified to the learners in order to develop the association among the outstanding and the weak learners by the use of WhatsApp interaction. Furthermore, it is also a valuable instructional platform for the instructors to convey their message, learning related material and information to the learners. The message can be easily and efficiently conveyed to learners in short period of time. Availability of WiFi and Internet is mandatory for effect integration of WhatsApp. Additionally, the findings also presented a high level of the usefulness of WhatsApp application among the learners. To avail the usability of

MALL universities, instructors and even Ministry should focus on the technological integration to maintain and develop the process of learning besides formal classroom teaching. Researchers can investigate the effectiveness of WhatsApp for developing other aspects of language learning along with language learning skills. Moreover, future research is required in the application MALL implementation and technology integration with conventional classroom teaching.

In addition, a large scale study is required to evaluate the effectiveness of MALL in language learning including female learners. In the present study as elaborated in methodology section might be relatively small (N=30), but still researches hopes that this size can satisfactorily provide empirical data for the foundation of MALL application and future research.

Declaration of conflicting interest

The authors state that there is no conflict of interest concerning the publication of this paper.

Funding acknowledgement

The authors received no specific funding for this work.

References

- Al-Emran, M., Elsherif, H. M., & Shaalan, K. (2016). Investigating attitudes towards the use of mobile learning in higher education. *Computers in Human Behavior*, 56, 93-102.
- Al-Fahad, F. N. (2009). Students' attitudes and perceptions towards the effectiveness of mobile learning in King Saud University, Saudi Arabia. *Online Submission*, 8(2).
- Aljohani, N. R., Davis, H. C., & Loke, S. W. (2012). A comparison between mobile and ubiquitous learning from the perspective of human-computer interaction. *International Journal of Mobile Learning and Organisation*, 6(3-4/2012), 218-231.
- Blattner, G., & Lomicka, L. (2012). Facebook-ing and the social generation: A new era of language learning. *Alsic. Apprentissage des Langues et Systèmes d'Information et de Communication*, 15(1).
- Chang, C.-Y., & Hwang, G.-J. (2018). Trends of mobile technology-enhanced medical education: a review of journal publications from 1998 to 2016. *International Journal of Mobile Learning and Organisation*, 12(4), 373-393.
- Coyle, D., Hood, P., & Marsh, D. (2010). *Content and language integrated learning*: Ernst Klett Sprachen.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications.
- Crystal, D. (2013). A global language *English in the World* (pp. 163-208): Routledge.
- Dashti, F. A., & Aldashti, A. A. (2015). EFL college students' attitudes towards mobile learning. *International Education Studies*, 8(8), 13.
- Fageeh, A. (2013). Effects of MALL applications on vocabulary acquisition and motivation. *Arab World English Journal*, 4(4).
- Feryok, A. (2012). Activity theory and language teacher agency. *The Modern Language Journal*, 96(1), 95-107.
- Hsieh, J. S. C., Huang, Y.-M., & Wu, W.-C. V. (2017). Technological acceptance of LINE in flipped EFL oral training. *Computers in Human Behavior*, 70, 178-190.
- Hwang, G. J., Shi, Y. R., & Chu, H. C. (2011). A concept map approach to developing collaborative Mindtools for context-aware ubiquitous learning. *British Journal of Educational Technology*, 42(5), 778-789.

- Hwang, G. J., & Tsai, C. C. (2011). Research trends in mobile and ubiquitous learning: A review of publications in selected journals from 2001 to 2010. *British Journal of Educational Technology*, 42(4), E65-E70.
- Hwang, G. J., Wu, P. H., Zhuang, Y. Y., & Huang, Y. M. (2013). Effects of the inquiry-based mobile learning model on the cognitive load and learning achievement of students. *Interactive learning environments*, 21(4), 338-354.
- Khaddage, F., & Knezek, G. (2013). *iLearn via mobile technology: A comparison of mobile learning attitudes among university students in two nations*. Paper presented at the Advanced Learning Technologies (ICALT), 2013 IEEE 13th International Conference on.
- Khan, R. M. I., Radzuan, N. R. M., Shahbaz, M., Ibrahim, A. H., & Mustafa, G. (2018). The Role of Vocabulary Knowledge in Speaking Development of Saudi EFL Learners. *Arab World English Journal (AWEJ) Volume*, 9.
- Khan, R. M. I., Radzuan, N. R. M., Shahbaz, M., & Ibrahim, A. H. (2018). EFL Instructors' Perceptions on the Integration and Implementation of MALL in EFL Classes. *International Journal of Language Education and Applied Linguistics*, 39-50.
- Khan, R. M. I., Shahbaz, M., Kumar, T., & Khan, I. (2020). Investigating Reading Challenges Faced by EFL Learners at Elementary Level. *Register Journal*, 13(2), 277-292.
- Khan, R., Radzuan, N., Alkhunaizan, A., Mustafa, G., & Khan, I. (2019). The efficacy of MALL instruction in business English learning.
- Khan, R. M.S., Fatimah, A., Mustafa, G. and Farooqi, S. H. (2018). Effectiveness of an Educational Software System (Desire2Learn) in Teaching English Grammar. *Arab World English Journal (AWEJ) Special Issue on CALL* Number 4.
- Kilic, M. (2019). Vocabulary Knowledge as a Predictor of Performance in Writing and Speaking: A Case of Turkish EFL Learners. *PASAA: Journal of Language Teaching and Learning in Thailand*, 57, 133-164.
- Kiili, K., Multisilta, J., Suominen, M., & Ketamo, H. (2010). Learning experiences of mobile social media. *International Journal of Mobile Learning and Organisation*, 4(4), 346-359.
- Kumar, V. S., Lian, T. Y., & Vasudevan, H. (2016). UNiKL RCMP Undergraduates Perception on Using WhatsApp as a Tool for Mandarin Language Teaching and Learning.
- Levy, M., & Stockwell, G. (2013). *CALL dimensions: Options and issues in computer-assisted language learning*: Routledge.
- Liaw, S.-S., Huang, H.-M., & Chen, G.-D. (2007). Surveying instructor and learner attitudes toward e-learning. *Computers & Education*, 49(4), 1066-1080.
- Mackey, A., & Gass, S. M. (2015). *Second language research: Methodology and design*: Routledge.
- Mayor, B., & Pugh, A. K. (2005). *Language, communication and education*. Routledge.
- Mistar, I., & Embi, M. A. (2016). Students' Perception on the use of WhatsApp as a learning tool in ESL Classroom. *Journal of Education and Social Sciences*, 4, 96-104.
- Mohamad, M., & Woollard, J. (2010). Bringing change in secondary schools: can mobile learning via mobile phones be implemented in Malaysia?
- Mohamad, M., & Woollard, J. (2012). ISSUES and challenges in implementing mobile learning in Malaysian schools.
- Njoku, M. G. C. (2016). Trend analysis of mobile and ubiquitous learning: 2014-2015. *International Journal of Mobile Learning and Organisation*, 10(3), 117-128.

- Papadakis, S., & Kalogiannakis, M. (2017). Mobile educational applications for children: what educators and parents need to know. *International Journal of Mobile Learning and Organisation*, 11(3), 256-277.
- Rivers, W. M. (2018). *Teaching foreign-language skills*: University of Chicago Press.
- Saeidi, M., & Mozaheb, M. A. (2012). Comparing vocabulary learning of EFL learners by using two different strategies (mobile learning vs. flashcards). *International Journal of Mobile Learning and Organisation*, 6(3-4), 303-315.
- Saville-Troike, M., & Barto, K. (2016). *Introducing second language acquisition*: Cambridge University Press.
- Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of platform.
- Toffoli, D., & Sockett, G. (2010). How non-specialist students of English practice informal learning using web 2.0 tools. *ASp. la revue du GERAS*(58), 125-144.
- Ubaidullah, B., Hasbiah, N., Samsuddin, K., & Fabil, B. (2011). Report on Partial Findings of an Ongoing Research: Social Networking Sites (SNS) as a Platform to Support Teaching and Learning in Secondary Schools. *Journal of Educational Technology*, 8(1), 20-28.
- Yau, J.-K., & Joy, M. (2010). An adaptive context-aware mobile learning framework based on the usability perspective. *International Journal of Mobile Learning and Organisation*, 4(4), 378-390.