Original Article

Effect of MALL on the Acquisition of Receptive and Productive Knowledge of L2 Vocabulary by Iranian EFL Learners: The Case of Telegram

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Abstract

This study investigated the role of Telegram, a mobile messenger app, in mastering receptive and productive knowledge of vocabulary by Iranian EFL learners. In addition, it was intended to survey EFL learners' attitude toward using telegram to learn English vocabulary. Therefore, both quantitative and qualitative design were used. So, 57 students were selected from a language institute in Isfahan, Iran. To homogenize the participants, Oxford Quick Placement Test (OQPT) was administered and the participants were divided into two groups accordingly, a Telegram group and a control group. At the beginning of the study a checklist of words was given to the participants. Afterward, during the study, the experimental group received the treatment (teaching words via telegram), while the control group received the target words traditionally. After 8 sessions, 20-30 minutes each, an achievement test was administered to the groups. The results of Independent Sample t-test revealed a statistically significant difference between the achievement test scores of the experimental and control group. Moreover, the participants had positive attitude about using Telegram to learn English vocabulary. The findings of this study may inspire teachers to use mobile applications and also course developers to modify and improve not only the curriculum, but also the methodology of teaching vocabulary.

Keywords: mobile application, productive vocabulary knowledge, receptive vocabulary knowledge, social networking sites (SNS), telegram

1. Introduction

Mobile learning (m-learning) means the usage of any transportable learning tools such as books, audio-cassette, audio-CDs, and transportable radios and DVD players. On the other hand, m-learning has a special part which is using the modern technologies. According to Trifanova, Knapp, Ronchetti, and Gamper (2004, p. 45) mobile devices is "any device that is small, autonomous, and unobtrusive enough to accompany in every moment." As stated by the concept of learning in anywhere and anytime, mobile learning can be defined as "any educational provision where the sole or dominant technologies are handheld or palmtop" (Traxler, 2005, p. 23).

The technique that uses mobile and wireless electrical tools for learning and education is defined as M-learning (Sarrab, Elgamel, & Aldabbas, 2012). M-Learning allows students to blend their experiences of learning in a common cooperative situation (Farooq, Schafer, Rosson, & Caroll, 2002). The term mobile deals with the capability of taking place in different settings, through different times, and directing different content places using either stationary and transportable devices like wireless laptops, Personal Digital Assistants (PDAs), and smart phones. Smart phones, mobile devices and PDAs are the quickest developing and growing computing platforms with 1.6 billion mobile device gainers by 2013 (Sarrab, Elgamel, & Aldabbas, 2012). Dame (2014) states that "a huge number of college and university academicians are found to be using social networking sites (SNSs) in their classroom" (p. 41).

What's app messenger, Telegram, Facebook, and Viber etc. have earned more notice among the SNSs (Underwood, 2009). Telegram is one of the internet applications serving a huge online population which was set up by two Russian brothers named Pavel and Nikolai Durov, an entrepreneur and a computer programmer, and its location is in Berlin. Individuals can use Telegram on all devices at the same time and they can also send messages perfectly through any of their phone numbers, tablets, or computers. Telegram is capable to create groups for up to 5000 members for broadcasting to endless individuals (Vivienne, 2016). Telegram allows users to send and receive information about location, photos, films, sounds, and messages between people and even friends in groups. People can install Telegram on every mobile software (Android, IOS, Windows Phone, Ubuntu Touch) and computer systems (Windows, mac OS, Linux).

Improving proficiency and reaching to competence need an important key in target language and that key is vocabulary teaching. Many hard works have been made to find the best method of teaching vocabulary (Cooper, 1998, 1999). Some of the researchers have a propensity to look at knowledge of vocabulary as a complicated structure including some correlated sub-knowledge such as knowledge of parts of speech, meaning, associations and knowledge of orthography (Webb, 2007). On the other hand, some scholars describe knowledge of vocabulary (or lexical knowledge) with regard to dual differences such as vocabulary breadth (or size) and depth, pointing to amount of vocabularies that the learners know and how much they know about them respectively (Heidari-Shahreza, Moinzadeh, & Barati, 2014; Webb, 2013). Moreover, Nation (2001) believes that the vocabulary knowledge contains productive and receptive sub-knowledge in three main dimensions of meaning, form, and vocabulary use.

Learning vocabulary is one of the important parts of language learning and EFL learners usually have some problems in learning vocabulary. Vocabulary is also an essential skill for learning to read, speak, write, and listen. Without sufficient vocabulary knowledge, people cannot communicate and express their feeling both in form of spoken and written effectively. In addition, it is supported by Ur (1996) that there are lots of important things to be taught in learning a language and vocabulary is the most important because it isn't possible to speak up without various range of vocabulary. Learning vocabulary seems difficult for language learners, so it is the instructors' duty to plan the process of teaching and learning. "Receptive vocabulary knowledge means the capability to comprehend a word when the learners hear or see it, while productive knowledge means the knowledge to produce a word when the learner can use it in their writing or speech" (Zhou, 2010, p.15). Learners know and understand receptive knowledge of vocabulary and its meaning when they read a text or listen to it and they can pronounce and understand the words by productive vocabulary knowledge (Webb, 2005).

1.1 Statement of the Problem

EFL learners can use productive knowledge of vocabulary to make sentences for instance and they also have more problems in it and when two words overlap in meaning, learners are likely to confuse them. This problem creates an obstacle for the learners of English language to make slower and slower progression in mastering and learning the language. Vocabulary knowledge has some dimensions that the receptive and productive knowledge are the most

important. It is proven that learners with a larger receptive vocabulary know more of those words productively than learners with a smaller receptive vocabulary (Webb, 2008).

It might be the case that some words are likely to cause more difficulty for EFL learners in some aspects like semantic one of vocabulary knowledge (Heidari-shahreza, 2014). In order to see if there is any significant difference between Iranian EFL learners productive and receptive knowledge of vocabulary, when they are taught through traditional way and via telegram, this study attempts to determine the advantage and disadvantage of using the smartphone in teaching and learning English. The researchers attempt to answer the question of whether changing the media of material presentation can lead to better results.

1.2 Research Questions

In order to cover the gap which is in the literature in Iranian context, the present study tried to answer the following research questions.

1. Does using Telegram as an SNS have any effect on acquisition of receptive and productive knowledge of English words among Iranian EFL learners?

2. What is Iranian intermediate EFL learners' attitude towards using Telegram to acquire English vocabulary?

1.3 Research Hypothesis

The hypothesis of this study is as follows.

MALL has no effect on the acquisition of receptive and productive knowledge of L2 vocabulary among Iranian EFL learners.

2. Literature Review

In a recent study, Wu (2019) stated that instructors should combine Mobile Assisted Language Teaching (MALT) in their English teaching in the way that teaching is shaped carefully, and they should try to help poor learners change their minds about using mobile teaching platforms. Lindaman and Nolan (2015) reported a set of mobile language learning application development projects launched by language instructors and the results suggested that app development projects are possible for language teachers, and that educationally sound apps can reduce some of the stress and fear related to learning a second language. The idea of the study which conducted by LAI Wing Hong (2014) is to create Mobile immersion on smartphone using instant messenger, WhatsApp, and it shared the experience from the case study and draws insights into a new direction contributing to the knowledge base of Second Language Acquisition and Mobile Assisted Language Learning. The study of Balcikanli (2012) showed that EFL learners considered second life as an Internet-based platform helping a reliable interplay.

In another study, Basöz (2016) explored pre-service EFL teachers' attitudes towards language learning through social media. In addition, the study tried to analyze the role of social media in their experiences of language learning. The study was administered with 120 pre-service EFL instructors. The data were collected through a questionnaire and the results showed that pre-service EFL teachers consider social media as a specific part of their experiences of second language learning. As regards, the major contrast between the present research and Basoz's research is that Basoz explored the social media's role generally, but the present research examined the Telegram's role. In addition, the present research examined the role of teaching receptive and productive knowledge of L2 words, but Basoz analyzed language learning in whole.

Due to the increasing of mobile technology usage, it is penetrating to all aspects of our lives. Therefore, in learning different parts of knowledge, this technology acts as an extremely and essential role. Wu (2015) designed a smartphone app to help college students to learn English (L2) vocabulary. The app contained 3,402 English words that were collected into an alphabetic list with each word presented on three features; namely: spelling, pronunciation, and Chinese definitions. To examine the effect of the app, a control group was compared with an experimental group and knowledge of words was examined after and before the investigation. The study indicated that the students using the program significantly outperformed those in the control group in vocabulary acquisition.

In a similar study Khodarahmi and Heidari-shahreza (2018) investigated the role of Telegram in mastering word stress patterns of English by Iranian EFL learners. In addition, it was intended to survey EFL learners' attitude toward using Telegram to learn word stress patterns. 60 students were selected. To homogenize the participants, Oxford Quick

Placement Test (OQPT) was carried out and the participants were divided into a Telegram group and a control group. The results of independent samples t-test showed a statistically significant difference. Moreover, the participants had positive attitude about using Telegram in learning word stress patterns.

Pirasteh and Mirzaiean (2015) explored the efficacy of a subset of MALL, SMS on learning phrasal verbs among university students in Iran. The role of gender was also determined in this study. During the study, the participants of control group received phrasal verbs which were in the booklet and the participants of experimental group received phrasal verbs via SMS. The pre-test and post-test scores indicated that although the experimental group outperformed control group, there is no relationship between gender and learning phrasal verbs.

The relationship between receptive and productive vocabulary of Slavic EFL learners is the idea of the next research. Šišková (2016) investigated the relationship between learners' receptive vocabulary knowledge as measured by the Vocabulary Size Test and free productive vocabulary knowledge as illustrated by the learners when writing a short story based on pictures. The focus of this study is on three different scopes of productive vocabulary use: lexical diversity, lexical sophistication, and lexical density. The results showed that there is an equal relationship between learners' receptive vocabulary knowledge and lexical diversity of the texts they produce; there was a weak relationship between their receptive vocabulary knowledge and lexical sophistication in the texts; and there was no relationship between their receptive vocabulary knowledge and lexical density.

Finally, Batmetan and Palilingan (2018) investigated the higher education students' behavior in using mobile learning. The research method used is Structural equation models (SEM) method to analyze the factors that affect the higher education students' behavior in using mobile learning. The results of this study demonstrated that 85% of students keep internet access in privacy. The majority of respondents (78%) continues mobile learning and still uses it in the future. This study showed that on the level of usability, easy to use, easy to learn, in various devices have a significant effect on the level of adoption of mobile learning.

3. Methodology

3.1 Research Design

The researchers intended to find the impact of an independent variable on a dependent variable. The independent variable included using Telegram to teach receptive and productive knowledge of words and the dependent variables were EFL learners' attitude about using Telegram to teach receptive and productive words and EFL learners' knowledge of receptive and productive English words. A quantitative quasi-experimental method and qualitative method were used. The method of data collection was primary source data gathering. To put it another way, the necessary data were collected from comparative analyses of scores gained from participants in two groups. Besides, the present study employed a quantitative quasi-experimental method in the sense that it made use of both experimental approaches and statistical analyses of quantitative data, including comparison of experimental and control groups.

3.2 Participants

To collect the required data, a sample of 57 female Iranian EFL learners were selected. Most of the participants were teenagers. These participants were selected from individuals from a language institute in Isfahan, Iran who sat for the Oxford Quick Placement Test (OQPT). Among these participants, 57 learners earned the required scores for the intermediate level in OQPT. All of the selected individuals were native speakers of Persian and their proficiency level was intermediate. The participants were divided into two groups randomly: an experimental group and a control group.

3.3 Instruments and Materials

The participants in this study were given the following tests for data collection. All of the selected learners participated in the following examinations.

3.3.1 Oxford Quick Placement Test (OQPT)

To specify the level of the students, the researchers used an OQPT which is a standard exam. The OQPT was carried out to participants studying English as a foreign language. There were three reasons to use OQPT: QOPT was supposed to be more suitable than the other available tests for all proficiency levels. OQPT was appropriate to serve the purpose of the researcher to contain participants with the same level of proficiency in the experiment. The important reason for using OQPT was that the test is a proficiency standard test, and its validity and reliability were deemed to be satisfactory.

3.3.2 Target Words

Some target words, 20 English words, including words that the participants didn't know were selected to be taught to both groups of participants. In order to choose these words, at first a test consisting of 120 words as a checklist was run. Through this test, the participants were asked to choose the words that they didn't know the meaning of them, then those 20 words to which all of the participants didn't know were chosen to be the target words. It was ensured that the target words were unknown to all of the participants before the experiment. These words were based on a checklist of 120 words (including the ones in the study) which were previously identified as 'intermediate' by the researchers.

3.3.3 Attitude Questionnaire

In order to survey the participants' attitude toward using Telegram for learning receptive and productive knowledge of new vocabulary items, a modified version of attitude questionnaire developed by Basöz (2016) was administered among the participants in the experimental group. In order to set the validity of the questionnaire, the questionnaire was proofread by three experts in the field. Then, the questionnaire was piloted on 27 EFL learners. The Cronbach's alpha reliability coefficient of the questionnaire was calculated (r=.86). The questionnaire, which is made of three sections, involved an attitude scale including 22 items in a five-point Likert type and aimed to measure the participants' attitudes towards language learning through social media (see appendix A).

3.3.4 Achievement Test

The participants in this study were given a test as achievement test. This test was a modified version of the test which was used by Heidari-shahreza (2014). This test was used to measure seven sub-knowledge which contains: productive knowledge of orthographic form, receptive knowledge of orthographic form, receptive knowledge of meaning and form, productive knowledge of parts of speech, productive knowledge of associations, receptive knowledge of parts of speech, and receptive knowledge of associations. This test was a syllabus-based one and was used to measure the learners' receptive and productive knowledge of vocabulary and the reliability was satisfactory. After the treatment this test was administered among the participants as achievement test.

3.4 Procedure

The data collection procedure was carried out at Kian-e-danesh Language Institute, Isfahan, Iran. The first step of this study was the administration of OQPT. The OQPT was administrated to a group of learners in order to choose intermediate EFL learners (N=57). As the next step, the participants were divided into two groups, namely, control and experimental groups. Then a checklist of words was administered to ensure that the participants were not familiar with the target words. As the experimental phase, the participants in the experimental group received the meaning, synonyms, and the parts of speech of the target words via telegram. The instruction took 8 sessions each around 20-30 minutes. During this phase, meaning and synonyms of each word were sent to the participants in a Telegram group. The participants learnt the target words and interacted with each other in that area. The same explanations were delivered to the participants in the control group; however, the participants were exposed to the explanations while they were in class. After 8 sessions, an achievement test was run among the participants of the two groups. In order to investigate the participants' attitude toward using Telegram to teach new words, the attitude questionnaire was administered among the participants in the experimental group who was exposed to instruction via Telegram.

3.5 Data Collection

To collect data a primary source data gathering was used. In other words, participants sat for an Oxford Quick Placement Test and those who got the desired scores (the score between 46 and 60) were regarded as the sample of the investigation. After that the participants were divided into control and experimental groups. A checklist of words was used to determine the target words. The target words contain twenty words which were taught to the participants of each group separately. To collect data in control group, the participants received the meaning, synonym, and parts of speech of three or four words in the class in each session. However, learning of the participants of experimental group was in Telegram group.

After teaching the target words, an achievement test was used immediately after instruction and the participants scores were used as the data of the investigation. The maximum score that the participants could get was 20 and the lowest score that the participants could get was 0. These scores were calculated for each subtest. It took an hour to take this achievement test. The participants of the control group participated in the exam in person while the participants of the

experimental group participated in the test via Telegram. After gathering the data, the results were obtained by comparing the scores of the two groups by an Independent sample t-test. As the final step, an attitude questionnaire was used in the experimental group and the participant's answers formed the research data. This questionnaire was also sent to the participants in Telegram. Therefore, the qualitative and the quantitative data of the research were obtained.

3.6 Data Analysis

After the essential data were collected, the Statistical Package for Social Sciences (SPSS, 23) was used in order to run required statistical tests. The gathered data were exposed to descriptive and inferential statistics. An Independent Sample t-test was run in order to find out the possible effect of using Telegram on teaching receptive and productive knowledge of English vocabulary. In addition, participants' attitude about using Telegram in teaching new words, were qualitatively analyzed based on the attitude questionnaire.

4. Results

The scores on productive knowledge of orthographic form test were analyzed and tabulated in Table 1. Based on the analyses of mean score differences between the groups, there was a significant difference for productive knowledge of orthographic form test.

4.1 Quantitative Analysis for Reliability of the Scores

Table 1. Descriptive statistics (Experimental vs. control group, productive knowledge of orthographic form)

		N	Mean	Std. Deviation	Std. Error Mean
Control group	1.00	30	9.8000	5.75596	1.05089
Experimental group	2.00	27	14.3704	4.11515	.79196

Table 2. Independent sample t-test (Experimental vs. control group, productive knowledge of orthographic form)

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	3.882	.054	-3.414	55	.001	-4.57037	1.33890	-7.25358	-1.88716
Equal variances not assumed			-3.473	52.431	.001	-4.57037	1.31589	-7.21038	-1.93036

The results of Independent Sample t-test for receptive knowledge of orthographic form were tabulated in Table 2. Based on the results given in Table 2, the level of significance is .001 which was smaller than the identified level of significance (.001<.05). This expresses the fact that the difference between the performance of the experimental and control group is statistically significant.

Table 3. Descriptive statistics (Experimental vs. control group, receptive knowledge of orthographic form)

		N	Mean	Std. Deviation	Std. Error Mean
Control group	1.00	30	14.6667	4.34172	.79269
Experimental group	2.00	27	17.0370	3.05692	.58830

The table above shows the mean difference of two groups for receptive knowledge of orthographic form. Table 3 shows that the achievement test mean score of the participants in control group was 14.66 and that for experimental group was 17.03; therefore, the mean difference of the two groups seemed to be significant.

Table 4 illustrates the results of independent sample t-test for receptive knowledge of orthographic form. The significant level in this table is .02 which is smaller than the identified significance level .05 (.02<.05). This shows that the difference between the performance of the experimental and control group is statistically significant.

Table 4. Independent Sample t-test (Experimental vs. control group, receptive knowledge of orthographic form)

	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	3.080	.085	-2.358	55	.022	-2.37037	1.00514	-4.38471	-.35603
Equal variances not assumed			-2.401	52.111	.020	-2.37037	.98714	-4.35112	-.38962

The results and the significance level of the table below show that the observed levels of significance were smaller than the identified level of significance (<.05). This shows a significant difference between the control group and experimental group scores for all the subtests.

Table 5. Summary of the results

Subtest	F	Sig.
receptive knowledge of meaning and form	2.414	.019
productive knowledge of parts of speech	6.296	.015
productive knowledge of associations	3.755	.000

receptive knowledge of parts of speech	2.027	.002
receptive knowledge of associations	1.836	.009

For each of these tests, the value under the column marked Sig. must be checked. The table above shows the results of the tests in brief. This shows whether this variable was making a statistically significant contribution to the equation or not. The Sig. values for all these subtests were smaller than identified significance level (i.e. .05). For receptive knowledge of meaning and form the significant level was .01 and for productive knowledge of parts of speech was .015. The significant level of productive knowledge of associations was .00 and the significant level of receptive knowledge of parts of speech and receptive knowledge of associations respectively were .002 and .009 which are smaller than the identified significant level.

4.2 Qualitative Analysis

This shows a significant difference between the achievement test scores of participants in experimental group and this leads to the rejection of the null hypothesis of the research that is MALL has no effect on the acquisition of receptive and productive knowledge of L2 vocabulary among Iranian EFL learners. On the other hand, the method which was using Telegram to teach receptive and productive knowledge of vocabulary resulted in significant difference in achievement-tests of participants in experimental group and the first research question of the study was verified.

4.2.1 The Participants' Attitude toward Using Telegram

The second question of the present study aimed to investigate EFL learners' attitude towards using Telegram in acquisition of new English vocabulary. To answer this question, as it was said, a modified version of attitude questionnaire developed by Basöz (2016) was administered among the participants in the experimental group. Most of the participants agree that this social media can help them to develop their vocabulary knowledge (88.9 %). A great number of them believe that Telegram forms a more relaxed and stress free language learning environment (77.8%). As for language skills, most of the EFL learners agree that Telegram can help them to develop their reading (77.8%), listening (74.1%), writing, speaking, communication (70.4%), and pronunciation (63%).

According to them, Telegram gives language learners achievement to more authentic language use (63%) and aids them to improve their studies (88.9%). 81.5% of the participants think that social media can make language learning more accessible. In addition, a large number of the participants believe that a language learner is more self-directed and flexible while using this social media (74.1%). 77.8% of the participants agree that Telegram makes them able to become more confident in using language and Telegram also can motivate them more to learn a language. A great number of participants agree that Telegram can help them to learn wherever they want (81.8%) and 63% of them believe that using Telegram for language learning can assist them to incorporate better into the world they live in.

Moreover, many of them regard language learning through Telegram is more collaborative than traditional learning (70.4%). 74.1% of the participants think that Telegram can help them to develop their grammar. A little more than half of the participants believed that Telegram can help them to learn in ways matching their personalities and needs (51.9%). Lastly, 77.8 % of the participants have no doubts at all about the application of this social media to language learning but there are also some statements that they do not agree with them. For example, they disagree that Telegram can help them to plan and organize their own studies better (52.3%) and they also do not believe that Telegram can help them to continue in studying even when they feel like giving up (51.8%).
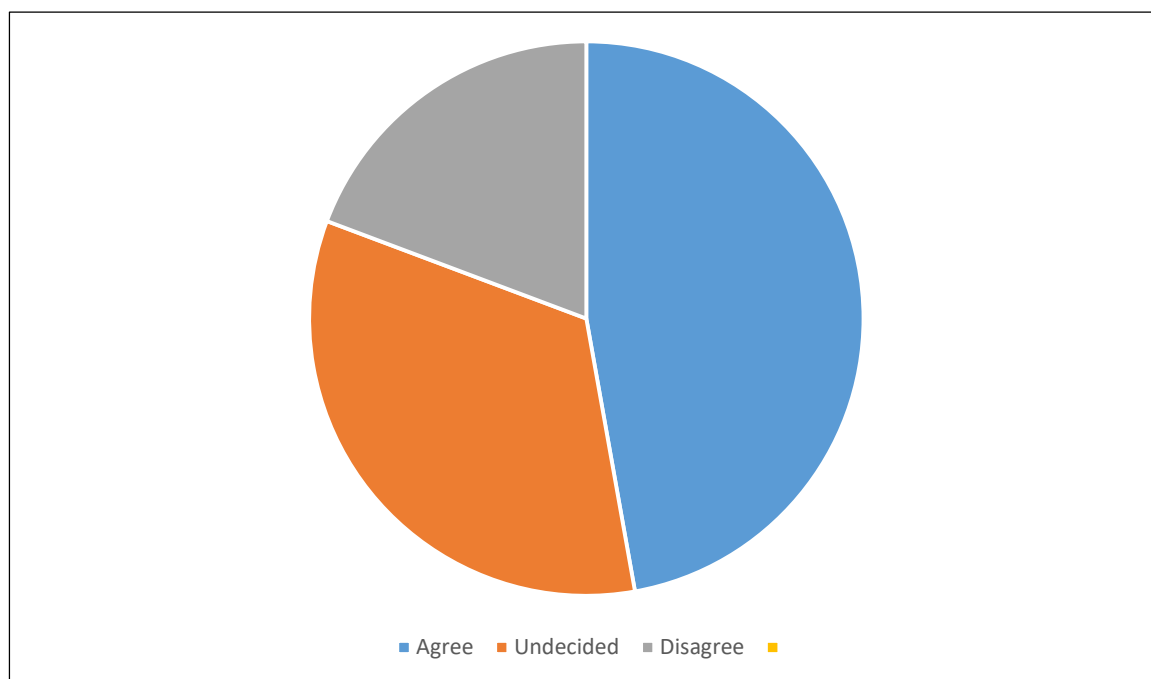
Figure 1. Percentage of participants' attitude towards using Telegram in language learning

According to the figure 1, 19.28% of the participants disagreed with using telegram and other social media in learning language. 33.53% of the participants expressed no idea about using telegram in learning a foreign language. On the contrary, 47.19% of the participants believed that using telegram is useful in learning another language.

5. Discussion

The findings of this study provided some knowledge into the usage of Telegram application in learning a second language. The aim of present study is to investigate the effect of utilizing a mobile application called Telegram on Iranian intermediate EFL learners' knowledge of vocabulary. As a matter of fact, the study in hand declared that Telegram as an ICT tool influences learner's receptive and productive knowledge of English words. So, the findings of this study were in line with the study by Ozer and Kılıç (2018) which showed a significant difference in academic achievement and mobile learning tools acceptance level of students in favor of the experimental group. On the other hand, the results of data analysis supported the research by Wu (2015) who designed a smartphone app to help college students to learn English (L2) vocabulary. His experiment indicated that the students using the program significantly outperformed those in the control group in vocabulary acquisition.

In addition, the findings of present study advocated Tess (2013) who claimed that social networks as an alternative environment develop the social knowledge of the students at higher levels of education. Similarly, the findings support the study by Heidari-Shahreza and khodarahmi (2018) in which they investigated the role of Telegram in mastering word stress patterns of English by Iranian EFL learners. The findings revealed that Telegram has a significant effect on learning word stress patterns by Iranian EFL learners and participants had positive attitude about using Telegram to learn word stress patterns. The outcomes of the present study also confirm those of Pirasteh and Mirzaeian (2015) who explored the efficacy of a subset of MALL, SMS on learning phrasal verbs among university students in Iran. In addition, the findings are in line with the study by Heidari-shahreza (2014) who studied the development of productive knowledge of vocabulary through implicit exposure. The results revealed that there were significant differences between lexicalized and non-lexicalized target words in the productive knowledge of associations. The findings of this study were at odds with the results of Salaberry (2001), who mentioned that mobile phones are not effective tools for learning.

The second research question of the study investigated Iranian intermediate EFL learners' attitude towards using Telegram in the acquisition of English vocabulary. The results showed that most of the participants agreed that this social media could help them to develop their vocabulary knowledge and formed a more relaxed and stress-free language learning environment. Most of the EFL learners claimed that Telegram could help them to develop their reading, communication, listening, writing, speaking, and pronunciation skills. Telegram gave them access to more authentic language use and improved EFL learners' studies. They also believed that they are more self-directed and flexible while using this social media. In addition, the participants believed this social media made them more confident in using language so this could motivate them more to learn a second language. A great number of participants believed that Telegram could help them to learn wherever they want and could develop their grammar. On the other hand, the EFL learners disagreed that Telegram could help them to plan and organize their own studies. So, the results related to the second research question of the present research lend support to the study by Basöz (2016) who explored pre-service EFL teachers' attitudes towards language learning through social media which indicated that preservice EFL teachers regard social media as a regular component of their foreign language learning experiences.

The findings are also compatible with the study by Muhammed (2014) who investigated the impact of mobiles on language learning on the part of EFL university students and the smartphones were considered as an effective mobile resource in the process of English language learning by 99 percent of the participants. Furthermore, the findings related to the second research question seem to be compatible with the findings of the study by Gürkan (2018) which aimed to define students' views on the effects of a mobile assisted vocabulary learning (MAVL) application (VocaStyle), which was developed by the researcher, on their learning process and their learning styles' impact on their views. The results of this study confirmed the results of the research by SorayyaeiAzar and Nasiri (2014) which aimed to check Iranian EFL learners' attitudes toward the effectiveness of MALL on their listening comprehension. The results of this study demonstrated that the control group is outperformed the experimental group taking instruction through cellphone on the basis of audiobooks on their listening comprehension.

6. Conclusion

The findings of this study declared that technology and education are closely related to each other in the information era and consequently technology has the potential ability to make learning easier and more exiting. In fact, some cell phone applications and social technologies such as Telegram are effective and considerable means of communication. In particular, Telegram as an application that provides learners to send messages has become popular among EFL learners that allows them to interact and communicate with others and their classmates through text. One of the remarkable features of Telegram is that it has become a great resource for teaching different forms of lexicons (specially teaching receptive and productive knowledge of vocabulary) of a language to L2 learners. Accordingly, this study was an effort to make clear that using Telegram as a mobile application could improve second language vocabulary acquisition (including receptive and productive knowledge of vocabulary) of Iranian EFL learners.

One of the educational conclusions of this study was to upgrade and promote the learner's attitude towards learning a second language through MALL. Therefore, it is effective to EFL learners to use their phones for learning a second language. Telegram made a good opportunity for learners to interact and communicate with their teachers as well as peers. After making several analyses, it was found that traditional learning and acquisition of receptive and productive knowledge of vocabulary via Telegram were not similar in learning because the group that took instruction through Telegram outperformed the other group that received learning in traditional way.

6.1 Implications of the Study

When learners utilized digital instruments to be connected, they were capable to internalize context in order to learn. This connection and exchange of information can help learners develop the ability to create new knowledge at any point in time. The quick progress of technology affected many changes both in knowledge generally and learning a language particularly. One of the wondrous transformations of learning confirmed that learning is not an individual activity, but rather a process that allowed the students to flourish in the digital age. According to the present study, Telegram as a learning platform used in order to improve the accessibility of learning materials and the performance of learning activities. The present study evaluated a combination of technology and language practice in acquisition of receptive and productive knowledge of English words. According to the findings of the study, Iranian EFL learners can discriminate the characteristics and uses of MALL in learning a second language and apply its advantages and implications appropriately to their learning.

6.2 Limitations of the Study

As with any research procedure, the present study had a number of problems by which the effect on the issue of generalizability of the results can be delimited. The population from whom the participants of the study were selected were intermediate learners, as well as a small range of age participated in the investigation. Because this study was carried out in one institute, a larger sample of participants could not be participated in the study. Another limitation of this research was the limited access of the experimental group participants in using Telegram in Iran due to the Telegram filtering.

6.3 Suggestions for further Research

It seems necessary that future investigations are needed to explore the significance of mastering receptive and productive vocabulary knowledge for Iranian EFL learners. The teachers should pay more attention to teaching English vocabulary and attempt to extract the learner's consideration to learning them and assist students to learn them more efficiently. Based on the findings of present study and previous findings in mobile learning, the effect of Telegram on improving English vocabulary learning is recommended. The additional surveys are necessary to investigate the consequences of the other social networks and ICT tools on the learning and development of a second language.

References

Balcikanli, C. (2012). Language learning in second life: American and Turkish students' experiences. *Turkish Online Journal of Distance Education-TOJDE, 13*(2), 131-146. Retrieved June 11, 2021 from https://www.learntechlib.org/p/55347/

Basöz, T. (2016). Pre-service EFL teachers' attitudes towards language learning through social media. *Social and Behavioral Sciences, 232*, 430-438. doi: 10.1016/j.sbspro.2016.10.059

Batmetan, J. R., & Palilingan, V. R. (2018). Higher education students' behaviour to adopt mobile learning. *Materials Science and Engineering, 10*, 1-8. doi:https://doi.org/10.1088/1757-899X/306/1/012067

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Cooper, H. (1998). *Synthesizing research: A guide for literature reviews*. Thousand Oaks, CA: Sage.

Dame, J. (2014). *More professors using social media to teach.* https://www.usatoday.com/story/news/nation/2013/11/02/social-mediateaching-tool/3377929

Farooq, U., Schafer, W., Rosson, M. B., & Caroll, J. M. (2002). *M-Education: Bridging the gap of mobile and desktop computing.* Centre for Human-Computer Interaction and Department of Computer Science. Virginia Polytechnic Institute and State University, 1-2.

Gürkan, S. (2018). The effects of a mobile assisted vocabulary learning application on vocabulary learning. *Turkish Online Journal of Qualitative Inquiry, 9*(3), 288-311. doi: 10.17569/tojqi.407512

Heidari-Shahreza, M. A. (2014). The development of productive knowledge of vocabulary through implicit exposure: Non-lexicalized words in focus. *Journal of Applied Linguistics and Language Research, 1*(1), 1-11. http://www.jallr.com/index.php/JALLR/article/view/1

Khodarahmi, Z., & Heidari-Shahreza, M. A. (2018). Effect of MALL on the acquisition of word stress patterns of English by Iranian EFL learners: The case of Telegram. *Journal of Applied Linguistics and Language Research, 5*(1), 40-55. http://www.jallr.com/index.php/JALLR/article/view/752

Lai Wing Hong, A. (2014). *Using mobile instant messenger (WhatsApp) to support second language learning* (M.Ed. dissertation). University of Hong Kong, Faculty of Education, The University of Hong Kong, Pokfulam, Hong Kong. http://hdl.handle.net/10722/209642

Lindaman, D., & Nolan, D. (2015). Mobile-assisted language learning: Application development projects within reach for language teachers. *International Association for Language Learning Technology, 45*(1), 1-22. doi: https://doi.org/10.17161/iallt.v45i1.8547

Muhammed, A. A. (2014). The impact of mobiles on language learning on the part of English foreign language (EFL) university students. *Social and Behavioral Sciences, 136*, 104-108. https://doi.org/10.1016/j.sbspro.2014.05.297

Nation, I. S. P. (2001). *Learning vocabulary in another language.* Cambridge: Cambridge University Press. http://dx.doi.org/10.1017/CBO9781139524759

Ozer, O., & Kılıç, F. (2018). The effect of mobile-assisted language learning environment on EFL students' academic achievement, cognitive load and acceptance of mobile learning tools. *Journal of Mathematics, Science and Technology Education, 14*(7), 2915-2928. doi:10.29333/ejmste.90992

Pirasteh, A., & Mirzaiean, V. R. (2015). The effect of short message service (SMS) on learning phrasal verbs by Iranian EFL learners. *Language in India, 15*(1), 144-161.

Salaberry, M. R. (2001). The use of technology for second language learning and teaching: A retrospective. *Modern Language Journal, 85*(1), 39-56. https://doi.org/10.1111/0026-7902.00096

Sarrab, M., Aldabbas, H., & Elgamel, L. (2012). Mobile learning (M-learning) and educational environments. *International Journal of Distributed and Parallel Systems (IJDPS), 3*(4), 31-38. doi: 10.5121/ijdps.2012.3404

Šišková, Z. (2016). The relationship between receptive and productive vocabulary of Slavic EFL learners. *Topics in Linguistics, 17*(2), 22-40.   doi: 10.1515/topling-2016-0011

Sorayyaei Azar, A., & Nasiri, H. (2014). Learners' attitudes toward the effectiveness of mobile assisted language learning (MALL) in L2 listening comprehension. *Social and Behavioral Sciences, 98*, 1836-1843. doi: 10.1016/j.sbspro.2014.03.613

Tess, P. A. (2013). The role of social media in higher education classes (real and virtual): A literature review. *Computers in Human Behavior, 29*(5), 60-68. https://doi.org/10.1016/j.chb.2012.12.032

Traxler, J. (2005). Mobile learning: It's here, but what is it? *Interactions, 9*(1), 34-45.

Trifanova, A., Knapp, J., Ronchetti, M., & Gamper, J. (2004). *Mobile ELDIT: Challenges in the transitions from an e-learning to an m-learning system.* Trento, Italy: University of Trento.

Ur, P. (1996). *A course in language teaching, practice and theory*. Cambridge: Cambridge University Press.

Underwood, J. (2009). The impact of digital technologies on learning. Retrieved from: http://www.slideshare.net/pburgess

Vivienne, W. (2016). *With Telegram, A reclusive social media star rises again.* Fortune. http://fortune.com/telegram-pavel-durov-mobile-world-congress/

Webb, S. (2005). Receptive and productive vocabulary learning. *Studies in Second Language Acquisition, 27*(1), 33-52. doi: https://doi.org/10.1017/S0272263105050023

Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics, 28,* 46-65. http://dx.doi.org/10.1093/applin/aml048

Webb, S. (2008). Receptive and productive vocabulary sizes of L2 learners. *Studies in Second Language Acquisition, 30*(1), 79-95. doi: 10.1017/S0272263108080042

Webb, S. (2013). Depth of vocabulary knowledge. In *Encyclopedia of Applied Linguistics*, ed. C. Chapelle (Oxford: Wiley-Blackwell), 1656-1663. doi: 10.1002/9781405198431.wbeal1325

Wu, Q. (2015). Pulling mobile assisted language learning (MALL) into the mainstream: MALL in broad practice. *PLoS ONE, 10*(5), 1-12. doi: 10.1371/journal.pone.0128762

Zhou, S. (2010). Comparing receptive and productive academic vocabulary knowledge of Chinese EFL learners. *Asian Social Science, 6*(10), 14-19. doi:10.5539/ass.v6n10p14

Appendix A: Attitude Questionnaire

Statements	Totally disagree	disagree	undecided	agree	Totally agree
1. Telegram could help me to develop my vocabulary Knowledge.					
2. Telegram forms a more relaxed and stress-free language learning environment.					
3. Telegram could help me to develop my reading skills.					
4. Telegram provides learners with access to more real life language.					
5. Learning a language through Telegram can aid me to improve my studies.					
6. Telegram could help me to develop my communication skills.					
7. Telegram could help me to develop my listening skills use.					
8. Telegram can make language learning more accessible.					
9. A language learner is more self-directed and flexible while employing Telegram.					
10. Telegram can assist me in becoming a more self-confident language user.					
11. Using Telegram can help me to become a more motivated language learner.					
12. Telegram can aid me to learn wherever I wish.					
13. Telegram can aid me to develop my writing skills.					
14. Using Telegram in language learning can assist me to incorporate better into the world I live in.					
15. Language learning is more collaborative when using Telegram.					
16. Telegram could help me to develop my speaking skills.					
17. Telegram could help me to develop my pronunciation.					
18. Telegram could help me to learn in ways matching my personality and needs.					
19. Telegram could help me to develop my grammar.					
20. Telegram can enable me to plan and organize my own studies better.					
21. Telegram can motivate me to persist in studying, even when I feel like giving up.					