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Effects of Social Networking on Iranian EFL Learners' Vocabulary Acquisition

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Abstract

The study aimed to scrutinize social networking effects on Iranian EFL learners' vocabulary acquisition. Eighty Iranian EFL learners at the intermediate level participated in a pretest-posttest study after taking the placement test. They were then divided into an experimental group whose participants were supposed to equip their mobile phones or tablet PCs with a social networking application, that is, Line and form an online group to take part in eighteen virtual instructional sessions. Participants of the control group, however, underwent classroom learning during which target words were presented through routine classroom activities. Results of the independent-samples t-test in the posttest indicated that participants of the experimental group outperformed those of the control group. Results have important implications for both pedagogy and theory, especially socio-cultural theories of second language development.

Keywords: CALL, EFL vocabulary, Mobile learning, Social networking

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1. Introduction

The application of mobile devices in language learning, technically called Mobile-Assisted Language Learning (MALL), has attracted language learners and teachers, despite controversy over the issue (e.g., Zhang, Song, & Burston, 2011). Since the first MALL paper (Callan, 1994), numerous studies have been conducted on different issues and topic in EFL/ESL contexts. For example, Belanger (2005) studied listening and speaking; Hsu (2013) worked on learners' perception of mobile phones; Kukulska-Hulme and Shield (2006) examined communicative activities, McCarty (2005) introduced support learners' English studies, Stanley (2006) took classroom-based learning into account, Zhang et al. (2011) reviewed a study on vocabulary, and O'Byran and Hegelheimer (2007) studied listening strategies.

What is mobile learning? An essential component of mobile learning is not just using a mobile phone, as it may commonly be thought of, but the emphasis is on the mobility of the learner (Sharples, 2006); it is a kind of learning which is quite informal (e.g., Fallahkhair, Pemberton, & Griffiths, 2007). Furthermore, MALL includes the most recent technological developments, including tablet PCs and smart phones (Kukulska-Hulme & Shield, 2008). As a result, it can be defined as a kind of learning supported by handheld and portable devices available at any time and any place.

Callan's (1994) first published study on MALL, examining Canadian native speakers' writing skills who were asked to use PDAs, was followed by a large number of studies on different aspects of language. For example, Basoglu and Akdemir (2010) examined 60 Turkish EFL learners' acquisition of vocabulary comparing effects of mobile phones and those of printed flashcards. Participants, who also developed a positive attitude towards the experiment, showed improvements in learning new words through mobile learning. Similarly, Zhang, et al. (2011) study of Chinese EFL learners came to the same conclusions; nevertheless, they suggested using technology, including mobile phones as complementary devices rather than the main way to teach.

Although vocabulary has always been a crucial part of language learning, teaching and communication, it is said that vocabulary teaching has not been receptive to problems in the area, and most language teachers have not fully recognized the great communicative advantage in developing an extensive vocabulary (McCarthy, 1990). Hedge (2000) believed that vocabulary often seems to be the least systematized and the least well-catered for of all

the aspects of learning a foreign language, such as listening, speaking, reading, writing, grammar, or even pronunciation. There seems to be a neglect of vocabulary studies and the teaching and learning of vocabulary has never aroused the same degree of interest within language teaching as have such issues as grammatical competence, contrastive analysis, reading, writing, phonology or discourse analysis which have received considerable attention from scholars and teachers.

Allen (1983) pointed out that all experienced language teachers confirm the important role of words and maintain that their absence leads to feeling of insecurity; on the other hand, teachers' attitude towards teaching vocabulary and classroom techniques varies enormously. Different techniques are used by teachers, such as teaching the words through lists, translation, synonyms, antonyms, contexts, realia, and so on. Some teachers believe before teaching vocabulary to their students, they should have been taught the grammar of the foreign language. Therefore, they give little or no attention to vocabulary. Allen also stated that in many English language classes, even where teachers have devoted much time to vocabulary teaching, the results are usually quite disappointing. Sometimes, after months or even years of learning English, many of the words most needed have never been learned. This is more significant in countries where English is not the main language of communication; consequently, many teachers want more help with vocabulary instruction than they used to receive.

Accordingly, there are some boring and traditional vocabulary teaching and learning strategies in Iran. Advocates of traditional methods rely heavily on dictionaries as the main source to look up word definitions and examples; however, this task is often too laborious and time-consuming. This is such a challenging problem for Iranian EFL learners that in some cases it makes them disappointed in their attempt to learn the foreign language. Also, lack of innovative and updated strategies for vocabulary learning and placing all vocabulary learning responsibilities on learners' shoulders have created some negative attitudes towards the current vocabulary teaching methodologies. In addition, the majority of EFL learners complain that their lexical knowledge is transient, since there is no opportunity to practice their knowledge out of class time. Language learners look for effective ways to increase opportunities for retaining new words in long-term memory. This is because there is a common assumption that vocabulary is so elusive and they are forgotten easily if not practiced. In fact, language learners often complain that they forget new words soon after

learning them. The importance of vocabulary learning also poses some challenges for teachers. They like to know in what ways instructional programs might foster the acquisition and retention of new and already-acquired words.

Poor vocabulary knowledge of Iranian EFL students is also a matter of serious concern among those in education, and their quest for finding suitable remedies is getting more and more intense. Therefore, regarding all aforementioned problems, the need for a study to address these problems and provide some suggestions and implications to solve them is inevitable. The instructional approach that a teacher uses directly impacts learning (Anderson, 2009). Understanding how the Internet and other technological developments can change a teacher's instructional approach to make learning more meaningful and relevant is critical because it helps the educator understand how a new paradigm for teaching and learning ought to look in the 21st century. The present study was planned to show an effective technique in vocabulary teaching, namely online groups, in order to help language teachers, leaners, and other professionals in the field to get some steps closer to finding a remedy for the poor vocabulary knowledge of EFL learners.

In line with previous studies on the integration of mobile devices into the language learning process, especially vocabulary acquisition, the present study was intended to encourage students to join an online social network (Line) accessed through mobile phones and tablet PCs to form a social group and learn new vocabulary. Therefore, the study was aimed at finding out the extent to which social networking conducted through mobile devices can be effective and what the differences between teaching vocabulary with and without social networking are. Similarly, the effects would be compared with traditional classroom learning. Thus, the following research questions are posed.

1. Does social networking affect the acquisition of vocabulary among Iranian EFL learners?
2. Is there a significant difference between the acquisition of vocabulary through social networking and traditional classroom learning among Iranian EFL learners?

2. Methodology

This research was a quasi-experimental study using a pretest, posttest, and delayed posttest design carried out over a period of 11 weeks with homogenous participants who were non-randomly assigned to experimental and control groups.

2.1. Participants

Participants were chosen from among 100 intermediate Persian-speaking EFL learners who were taking classes in a language institute in Isfahan. It should be noted that their age ranged between 16 and 25. It is essential to mention that participants' gender and age were not considered as independent variables of the study.

In order to make sure that the learners were truly homogenous in terms of their level of proficiency, a Quick Placement Test (UCLES, 2001) was administered. To see whether the two groups were homogeneous in terms of statistics, an independent samples t-test was conducted. Results indicated there was no significant difference, $t_{(78)} = -.367$, $p = .715$, between the control group ($M = 46.98$, $SD = 1.00$) and experimental group ($M = 46.60$, $SD = 6.39$). This shows that participants were quite homogeneous. Therefore, 80 participants who met this homogeneity criterion were assigned to the Experimental (n = 40) and Control (n = 40) groups.

2.2. Instruments

In order to collect the data, the following instruments were used.

2.2.1. Quick placement test (QPT)

A Quick Placement Test (UCLES, 2001) was administered to guarantee participants' homogeneity in terms of their proficiency level. This placement test contains 100 multiple-choice questions, and participants' responses were scored on a scale of 100 points. The rationale behind using QPT was two-fold. First, it was deemed to be more appropriate than the other available tests for the intermediate-level. In addition, QPT appeared to fully serve the purpose of the researcher to include homogenous participants in the experiment.

2.2.2. Pretest

After grouping participants into Experimental and Control groups, a researcher-made vocabulary test was designed to determine the prior lexical knowledge of the participants. The test items were selected from Richards, Hull, and Proctor's (2013) *New Interchange*. The main purpose for designing the pretest was to make sure that participants of the study did not know any of the target words of the study. To achieve this goal, 50 vocabulary items were selected from the textbook (i.e., *New Interchange*: Units 1 to 8).

The researcher then prepared a fifty-item multiple-choice test and did a pilot study on a smaller group. Based on the results of the pilot study, 10 items were discarded and some changes were made in the other items mainly because of participants' familiarity with the items and because some items were not appropriate. Therefore, the revised test contained 40 multiple-choice items and was used for both Experimental and Control groups.

In order to determine the reliability of the tests, it was pilot tested on a sample of L2 learners (n = 20) who were similar to those participating in the study in terms of age, sex, and the level of proficiency. The results of Cronbach's alpha analysis showed that the test was reliable (r = 0.84). The content validity of the test was evaluated by three experts in the filed with more than five years of teaching and testing experience. It should be noted that these experts were completely familiar and had the experience of teaching the textbook. Finally, the researcher decided to include those words as new items for the study. The time for the pretest was twenty-five minutes and learners were instructed to choose the best answer.

The pretest was given to both groups to specifically verify participants' vocabulary knowledge. This test would reveal that all target words in this study were new and unfamiliar for all the participants and ultimately any changes in their vocabulary knowledge would be due to the treatment.

2.2.3. Posttest

The posttest was exactly the same as the pretest with the same 40 English words. It is imperative to mention that the test was the same for both groups. In order to eliminate the probability of remembering the correct answers from the pretest, a similar version was used with different item and distracter arrangement. This was done at the end of the treatment to examine whether participants mastered the target words.

2.2.4. A Mobile Phone or Tablet PC with Internet Access

Because it was the prime goal of the study to investigate effects of social networking and internet-based learning (i.e., joining social groups), participants of the Experimental group had to have a personal mobile phone or tablet PC with internet access. They were also asked to have the 'Line' application installed on their devices. The ability of accessing the internet and sending messages by the mobile phone or tablet PC were other requirements for the participants of the Experimental group. Therefore, to ensure the aforementioned

capabilities, learners were asked whether they had the required devices at home and if they had any problems accessing the Internet. Fortunately, all of the learners expressed that they accessed a personal mobile phone and/or tablet PC and could use them for the research purposes.

2.2.5. Line Application

'Line' is a social network through which many online users chat and have social interactions. In addition, the application is mostly used via cellphones providing the ability to make groups and invite other users to join. All the participants of the Experimental group were asked to give their mobile phone number to the office after asking their parents' permission. After making sure that all participants in the Experimental group were able to use 'Line', they were also trained to run the application on their mobile phones and tablet PCs and join online groups with the aim of familiarizing them with the group and methods which were used to learn in this environment before starting the experiment.

2.3. Procedures

2. 3.1. Procedure for the Experimental Group

The study started at the beginning of the course. After making sure that participants were homogeneous using the QPT, they were divided into the Experimental and Control groups. One of the major goals of the study was to achieve a more concrete operationalization of online learning through social networks and to investigate their potential facilitative effects on Iranian EFL learners' vocabulary learning. Therefore, a researcher-made tests was used as the pretest, posttest, and delayed posttest.

At the beginning of the treatment, a pretest was administered to make sure that participants were not already familiar with the target items. After taking the pretest, each group participated in different instructional sessions. One day after the last session, the posttest was conducted. Finally, two weeks after the posttest, and at the end of the course, the delayed posttest was administered.

Before starting the study, an introductory session was held, and the researcher provided the participants of the Experimental group with a brief introduction of the study. Then, the researcher instructed the learners to install the software on their mobile devices, namely cellphones and tablet PCs. Afterwards, the researcher explained all the features of the

program and answered participants' questions regarding the application. Then, participants of the Experimental group used the application in order to make sure that they were completely familiar with the application. In this introductory session, nothing was taught, and the goal was merely to familiarize participants with the application. Moreover, the problems related to the learners' access and using the application were solved.

The experiment lasted for 18 sessions and were virtually organized (20 minutes each session) including an introductory session and 17 sessions of vocabulary learning through online networking. In each online session, the target vocabulary was posted to the group. In addition, the posts contained some information which they could use to review what they had been taught. Thus, the Experimental group participated in thirty-minute classes two sessions a week on Sundays and Tuesdays. It should be noted that these short sessions were a part of their syllabus and it was done besides their ordinary classes at the institute. It is imperative to indicate that nothing was done to teach and review the target words in their classroom.

As mentioned earlier, the target words were selected by the researcher based on their novelty and participants' unfamiliarity. Therefore, after presenting the lessons (Units 1 to 8) which contained the target words, learners were given enough time to practice the new words by chatting online. This provided learner-learner and teacher-learner interaction in which instruction and feedback were provided. At the end of each session, the researcher recorded the word and sent the file to the group. Learners could listen to the recording and ask their questions about the meaning, pronunciation, use, and usage of the word.

In the following session, in addition to providing some new words, the ones which were studied in the previous session were also practiced in the group, and participants were asked to make a sentence with the target word in it. Learners were asked to comment on their peers' sentences. Then, the researcher instructed the learners to mention whenever they had any problems. The learners could correct their errors by sending the correct sentence to the group. Having learned the new vocabulary besides practicing them via chatting, the learners were asked to write a short essay as their assignment using the new words. They were instructed to send the homework through Line to the instructor's private account. Finally, to facilitate the learning of the new words, the learners could also use the group chat in their free time.

2. 3.2. Procedure for the Control Group

Participants in the control group received ordinary classroom instruction in each session. In order to teach the new words, the learners were asked to close their books and then

the following procedure was adopted. The first step included reading out each word two or three times allowing a short pause for learners to pick up the correct pronunciation, and recognize the syllable which received the primary stress. The second step included reading out each word two or three times again and having the learners repeat the words. This was done in chorus with individual spot checks. After each spot check, the class was asked to repeat the word one more time. In the third step, the learners were asked to open their books to the right page and only listen as the words were read out to them two or three times. The last step included going through the vocabulary list and explaining each word by giving examples and writing the definitions, synonyms and antonyms on the board. In addition, they were asked to check their dictionaries to look up for possible examples and idiomatic expressions. In summary, the Control group received the instruction of target words through the traditional or teacher-led methods and techniques. In fact, they took the posttest in order for the researcher to investigate the effect of this method.

3. Results

3.1. Results of the Pretest

In order to examine the impact of social networking, the independent variable, on Iranian EFL learners' vocabulary acquisition and retention, the dependent variables, it was essential for all the participants to take the pretest to make sure that they were homogeneous in terms of their knowledge of vocabulary. Results of the independent samples *t*-test showed no significant difference, $t_{(78)} = -.961$, $p = .340$, between the control group ($M = 14.10$, $SD = 1.72$) and experimental group ($M = 13.73$, $SD = 1.77$). Table 1 presents the results.

Table 1.

Independent Samples Test for the Pretest

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Pretest	Equal variances assumed	.152	.698	-.961	78	.340	-.38	.39
	Equal variances not assumed			-.961	77.944	.340	-.38	.39

The results indicate that participants were homogeneous in their vocabulary knowledge and any changes in the results would be due to the treatment.

3.2. Results of the Posttest

After conducting the experiment and following the instructional sessions, participants took the posttest to examine whether the treatment, teaching words through social networking, the independent variable made any changes in participants' vocabulary knowledge. To examine if there was any significant difference between the control and experimental groups, an independent samples *t*-test was conducted. Table 2 demonstrates the results of the posttest.

Table 2.

Independent Samples Test for the Posttest

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Posttest	Equal variances assumed	3.783	.055	5.074	78	.000	1.78	.35
	Equal variances not assumed			5.074	69.967	.000	1.78	.35

Results showed a significant difference, $t_{(78)} = 5.074$, $P < .05$, between the performance of the participants in the control group ($M = 15.58$, $SD = 1.81$) and that of the experimental group ($M = 17.35$, $SD = 1.27$) in terms of their knowledge of vocabulary in the posttest. The results provided a positive answer to the first research question: *Does social networking affect the acquisition of vocabulary among Iranian EFL learners?* In fact, social networking, the independent variable, did make a difference in acquiring the target words among Iranian EFL learners.

4. Discussion

Results of the first research questions are in line with a number of similar studies in the field. In fact, a plethora of studies have been conducted examining the use and impact of CALL and MALL on vocabulary acquisition. While some of such studies found no significant effect (Bowles, 2004; Groot, 2000; Kang, 1995, among others), most studies on the topic

emphasized the effectiveness of instruction through CALL and MALL (e.g., Amemiya, Hasegawa, Kaneko, Miyakoda, & Tsukahara, 2007; Azabdaftari & Mozaheb, 2012; Basoglu & Akdemir, 2010; Callan, 1994; Cavus & Ibrahim, 2008; Chen, Hsieh, & Kinshuk, 2008; Clarke, Keing, Lam, & McNaught, 2008; Tozcu & Coady, 2004).

For example, Amemiya et al., (2007) used vodcasts to examine L1/L2 word lists among Japanese second language learners. Participants were given a five-second image, which was either still or moving, and included pronunciation, spelling, and the translation of the word in the first language as subtitles. Results of the vocabulary test two months after the experiment showed that participants benefitted from the system, a PC application called MultiPod. In another study, Cavus and Ibrahim (2008) used SMS to instruct 45 Northern Cyprus EFL learners. Every half hour, researchers sent messages by MOLT (an internet-based application) during a period of nine days, which summed a total of 48 word pairs. In addition to learning the words, as the results of the tests indicated, participants showed positive attitudes towards the experiment and using mobile phones to learn technical words.

Similarly, Basoglu and Akdemir (2010) studied 60 Turkish EFL learners' acquisition of vocabulary in an experimental group, whose participants used ECTACO (a mobile flashcard application), and a control group, whose participants used the printed flashcards. Using a pretest-posttest design, they showed that the mobile application produced better results than the printed flashcards. In another study, Azabdaftari and Mozaheb (2012) studied a group of 80 EFL learners' acquisition of vocabulary during a seven-week treatment. Participants used a mobile application and SMS exchanges. Results showed that participants of the experimental group outperformed those of the control group who used flashcards to learn the target vocabulary.

5. Conclusion

The study was mainly intended to scrutinize effects of social networking on EFL learners' acquisition of vocabulary. Results revealed the application of mobile devices was effective and participants acquired target words. This has been supported by research from other scholars in the field (see Burston**,** 2013 for a review of some CALL and MALL vocabulary studies). It is believed that social networking can be an added ingredient in an EFL class. For example, Salaberry (1996) pointed out that CALL needs to be considered as a way to support rather than replace the language teacher (see also Higgins, 1988; Kenning & Kenning, 1990).

It should be noted that taking CALL and MALL techniques into account can make acquisition and retention more effective and fun. It is rightly believed that the computer and technology in general cannot replace the physical classroom, simply because learners, in any field, need to develop their social identity in classrooms, i.e. they should learn how to get along with other people and how to interact with others to develop as a social being. Therefore, it is impossible, at least at this time, to completely forget about the physical classroom and face-to-face interaction.

The study has certain theoretical and pedagogical implications. From a theoretical point of view, the study contributes to a better understanding of the contribution of CALL and MALL to second language development. The fact that participants of the experimental group formed online social groups reminds one of social constructivist theories of second language development (Lantolf, 2000; Lantolf & Thorne, 2006) inspired by works of the prominent psychologist, Vygotsky (e.g., Vygotsky, 1978). Within the same line of thinking, Crook (1991) indicated that "cognitive development involves a necessary coordination of our thinking with that of others" (p. 158). It is interesting to note that online social groups can have such implications: participants need to coordinate themselves with what other people think and how they view the world. In addition, Steinberg (1991) pointed out that research in cognitive psychology has revealed that learners try to develop a sense of mutual understanding rather than reproduce instruction. Similarly, Gay and Grosz-Ngate (1994) maintained that group work and enhances development of knowledge as an interactive process. This results developing critical thinking, social skills, and learning in general.

In addition to theoretical implications, the study is expected to have certain pedagogical implications for language teachers as well. It is believed that results can contribute to a better understanding of the way technology, e.g. mobile phones and mobile applications can help language teachers to present different features of language, especially vocabulary. In fact, from a pedagogical perspective, findings of the study provide further empirical evidence of the usefulness of social networking in teaching vocabulary. More specifically, mobile devices can be used as a pedagogical tool to encourage learners to interact with each other in the virtual world and create an effective and fun environment.

Finally, several lines of research can be suggested. First, second language researchers are encouraged to use social networking to examine potential effects on the dimensions of second language proficiency, namely complexity, accuracy, and fluency. In addition, effects

of social networking can be studied on different skills and features of language, such as writing, listening, grammar, and collocations. Another line of research that can be supported by mobile is the effect it can have on EFL learners' consciousness. In fact, techniques can be developed and researched that can scrutinize learners' consciousness of the process of learning. Finally, in this study, the level of proficiency was controlled by including participants from one level of proficiency. It is believed that adding the level as another independent variable can lead to more illuminating results.

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