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SOCIAL NETWORK-BASED INSTRUCTION AND VOCABULARY LEARNING

(A Case of Telegram and Iranian EFL Learners)

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A B S T R A C T

This study investigated Iranian intermediate EFL learners' vocabulary learning through social networks. To begin with, 60 males intermediate Iranian EFL learners were chosen and divided into two groups of social network-based (experimental) and paper-based (control), each group with 30 members. And so, during the treatment sessions, the experimental group engaged in a social network-based (mode of vocabulary learning) and the control group enjoyed paper-based (mode of vocabulary learning) to learn vocabulary items. After each five instructional sessions, both groups took the related 20-item immediate protest, and two weeks after the end of the term, students of both groups took the 50-item delayed posttest. The collected data were analyzed through statistical procedures, including independent T-test which showed that 1) social network-based instruction had a significant effect (p=. 000<. 05) on promoting short-term vocabulary knowledge of Iranian intermediate EFL learners; 2) social network-based instruction had a significant effect (p=. 000<. 05) on promoting long-term vocabulary knowledge of Iranian intermediate EFL learners.

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Introduction

Recent centuries have witnessed a growing interest in learning languages all over the world for varieties of reasons such as commerce, tourism, education, sport and so on. While overcoming a new language, the essential language element whose importance is accepted by most teachers, students, researchers, and native speakers of that language is vocabulary. As Harmer (1993) stated, language structures are the skeleton of language and vocabulary provides the vital organs and the flesh. Similarly, Richards &Renandya (2002) indicated that vocabulary is a fundamental component of language proficiency and much of the basis for how well learners speak, listen, read and write is rooted in vocabulary knowledge.

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According to Stahl and Nagy (2006) "The language that we use both express and form who we are. Our Vocabulary, even more than our accent, gives away our social and educational setting. As a major factor in determining what we can understand, it opens or closes access to sources of information that will impact our future" (p. 78).

Appreciating such importance, Camille et al. (2006) pointed out that attention to vocabulary should be a school and curriculum goal with all teachers calling on students to use new vocabularies in writing and discussion, where feedback is available. Bearing in mind this important suggestion, the language learning policy makers should make arrangement to include specific vocabulary learning time in any language learning environment.

Since the emergence of computers and their application to education, the world of teaching has witnessed newer varieties of usage of them to feed the insatiable inclination of the learners to learn through computers. As a sub category of CALL based education, many new softwares have been developed to help students carry the task of language learning with more enthusiasm and comfort over the past few decades.

Social nets are one of the most recent examples of this growth; through social networks a great slew of data in the course of writing, photograph, audio and television can be easily transmitted and applied.

On the unitary hand, many of today's learners spend a great mess of time online through their PCs and smart phones and on the other hand, as Zhu, Zhang & Jin (2013) claimed, the increment of social networking and the attributes of those networks have created great potential for producing intelligent softwares that integrate a user's social network and preferences installed on the PCs and smart mobile phones.

Because of the observed properties of new computers and cellular phone phones and also the learner's preference to practice them for learning, this work looks particularly at assigning trust in social networks and investigates how learners can gain from the Telegram social network in vocabulary learning. The following questions are under consideration in the present study:

1. Does social networking-based instruction has any significant short-term effect on intermediate EFL learners' vocabulary learning?
2. Does social networking-based instruction has any significant long-term effect on intermediate EFL learners' vocabulary learning?

2. Review of current literature

2.1 Computer Assisted Language Learning

The field of language learning, during the recent decades, has adopted more and more technology-based techniques and methods to help language learners. Warschauer& Kern (2005, p. 32) wrote: "While the first CALL (Computer-Assisted Language Learning) programs were mostly used for manipulating text and sentences, in the 90s the emergence of CD-ROMs storing complete encyclopedias or language courses with text, graphics, animations, audio and video elements entered the classrooms".

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In order to assess how typical English language classroom, students can take benefits of technology to learn English as a second language, No mass (2012) designed a questionnaire form. The farm was given to arbitrary samples of students at the department of English language, college of arts, Al-Jabal Al-GharbiUniversity in Libya. The results showed that:

- 60% of the students use technology in their daily life.
- 98% of the students believe that the computer can improve their English vocabulary.
- 96% of the students believe that using computers in the classroom increases students' interaction with learning.
- 75% of the students assure that their teachers sometimes encourage them to use technology for learning English language.
- 96% of the students believe that using a computer will help them to develop their writing skills.
- 33% of the students assure that their university has a good source of technology for learning English language.
- 83% of the students believe that the use of computers will improve their listening skills.
- 66% of the students prefer using technology to learn English language.
- 98% of the students believe that using technology will help them to learn English language faster than other ways.
- 90% of the students believe that using technology can help them to improve their speaking skills.

Ewing (2000) postulated that call-based education can be differentiated from traditional classrooms in that it lets students work on their own desired pace and receive immediate feedback on their performance.

Nutta (1998, p.38) introduced the following advantages as reasons for increasing interest in the use of CALL

- The computer adds variety to the language learning experience.
- The computer individualizes learning.
- The learner is not dependent on other members of a class, but can choose the pace at which he or she progresses, control the degree of difficulty (e.g., by leaving out elements which are too easy or too difficult), decide whether and how often to repeat an exercise, and so forth.
- In CALL exercises, the computer can yield prompt feedback for each solution.
- Many aspects of work with the computer have an interactive component which is dropping in books, tapes, video, and so along.
- Using the computer can save teachers time and work, with routine marking, for example, that can then be used for the more creative aspects of language teaching (thus benefiting the learner).
- CALL is a helpful environment for student-computer interaction.
- Interaction via computer facilitates language acquisition.
- CALL provides interactive computer activities for language learning which helps learners to interact in a communicative way
- Students are motivated to use the computer for all types of activity.

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- By using the computer for the presentation, explanation, and application of vocabularies, more classroom time could be dedicated to real communication that focuses on expressing meaning and using appropriate words to express meaning.
- CALL can cope with the real needs of individuals
- They increase motivation, mainly in non self-motivated students

2.2 Social Networks

Based on Nutta (1998, p. 49) defined social networks as " an online service, platform, or area where social communication and relations can be established, and also individuals share information". Through social networks, individuals can share online their views, feelings, activities, events, and fields of interest. Moreover, social network environments offer possibilities for personal statements, creating interest groups, ensuring cooperation, and sharing data. Bottison (2015) believed that the best way of keeping oneself updated and connected to friends, colleagues and family members is to use social networks.

The vital role of online social networks As Zhu, Zhang & Jin (2013) confirmed in the emergence of knowledge transmission activities in today's internet world is undeniable because the distance barrier has been removed. Today, many social network sites emerged, which reshaped communication, interaction, collaboration, and exertions of people. Level of participation in social networks also constantly increases in a way that in an informal statistics, the number of people using Telegram social network in Iran is more than 30000000 users.

"Individuals may define themselves over the internet in the social life and they become a member of social networks in order to reach and communicate with friends of similar cultural level, field of interest, common background, and mutual friends. Thus, a group of friends can be enlarged and information exchange is enabled" (Bottison, 2015, p. 19).

People use social networks for different purposes. Social network sites have become an extremely important tool for sharing news, communication and obtaining new information as well as making new friendships. Using a few touches of fingers, people may send each other videos, images, or any other content.

According to researchers, social networks improve communication skills, enhance participation and social commitment, reinforce peer support, and ensure the realization of education based on collaboration (Zhu, Zhang & Jin, 2013). Moreover, social networking sites can be easily and inexpensively used without a substantial support from universities so that they can be integrated into the educational process of students. The ease and cost-effectiveness with which people can communicate and share their writings, photos, voices, audios, and videos have made people more and more willing to use these social networks.

Some notable features of social network sites such as socialization of individuals, ability to communicate with people living worldwide, ability to be a member of a group which cannot be possible in real life due to geographical and physical constraints, self-expression and ability to receive information and share it have made it a helpful means to use in education. Stahl and Negay (2006) recommended educators that they may gain benefits such as program exchanges, job announcements,

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creating relief funds or searching such funds, arranging concurrent or non-concurrent conferences, and publishing studies conducted by themselves or their students. Moreover, studies such as course plans, activities, etc. can be more efficiently used by a larger number of educators over a database.

When we examine the advantages deriving from the use of social networks as an educational tool, as Bottison 2015 announced, interactivity and participation provided by such environments should be also mentioned. Balci (2010) showed possible Advantages deriving from the use of social networks as an educational tool as follows.

- Independence from time and location
- Improvement in quality, success, and efficiency of education by use of computer in education
- Ability to learn in a more systematic manner and in shorter time due to advances in computer technology
- Individualization of learning
- Ability to have instant feedback
- Offering the student's ability to repeat course content as much as desired
- Ease of displaying the content
- Allowing to the design of visual and auditory learning environments
- Ability to present courses that require laboratory applications to students via simulation, animation, and virtual laboratories
- Archiving course content and synchronized class (virtual class) applications
- Bidirectional communication
- Tendency towards more voluntary behaviors on the side of students for improving research, knowledge, and skills in comparison to conventional programs
- Offering possibility to evaluate performance of students
- Minimizing risk of error in measuring evaluation results

Improving skills of students and teachers to reach, evaluate, use, and efficiently cite the knowledge

2.3 Telegram Social Network

The telegram is a social networking service founded in 2015, which is privately owned by Telegram, Inc. Telegram users may create a personal profile, add other users as friends, exchange messages, or join common interest user groups. The telegram has the dominant share of the social networking market and is not just the number one ranked social networking service, but one of the most popular Websites on the internet. In education Telegram is being used to link students for discourse, interaction, and or collaboration; to share links to articles, videos, and other resources; for study questions and Q and A sessions; to post news and announcements; and as a means to create learning communities. According to the Telegram Guide for Educators, Telegram can provide students with the opportunity to effectively present their ideas, lead online discussions, and collaborate. In addition, Telegram can help educators, to tap into the digital learning styles of his students. For example, it can facilitate student-to-student collaboration and provide innovative ways for you to involve students in your subject matter. We also believe that Telegram can be a powerful tool to help you connect with your colleagues, share educational content, and enhance communication among teachers, parents and students (http/www.telegram.socialnetworking.com).

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3. Methodology

3.1 Participants

The participants in this study were 60 intermediate students taking the general English course in a language Institute in Tehran, Iran. All the participating learners were native speakers of persian and, before attending the classes, had received five semesters of English instruction in the institute; their ages ranged from 20 to 35, and they were all male students. Thirty participants were put to the Telegram group and 30 to the Paper-based group.

3.2 Instrumentation

3.2.1 Posttests

At the beginning of the study, students sat for Preliminary English Test (PET) to ensure their homogeneity as intermediate EFL learners and the results showed that they were at the same level of ability.

3.3.2 Posttests

The present study had two sorts of posttests with different aims. First, immediate posttests that were administered at the end of every five instructional sessions to measure students' short-term vocabulary learning in regard to the newly practiced vocabularies. These tests were three different 20-item multiple choice questions. And second, the delayed 50-item multiple choice vocabulary test, with the content from all practiced vocabularies. It should be noted that all the immediate posttests were the same for both groups.

3.4 Method and design of the study

This was a quantitative survey to investigate the likely effects of vocabulary learning through Telegram social network on improving short-term and long-term vocabulary knowledge and retention of intermediate level language learners. Sixty intermediate subjects who were all military recruits were chosen to take part in the survey. They were assigned to two groups of the Telegram and Paper-based. The aim of this survey was a quasi-experimental in nature because random assignment to the both groups was impossible to be employed.

To begin with, the two groups in the study (G1 and G2) took the pretest. During the treatment, the first group (G1) tried to learn the words through using Telegram social network (X1) and the second group (G2) tried to learn the words using the paper-and-pencil (X2) technique. Then, both groups took the same immediate posttests (T2 and T2). The final part of the study was delayed posttest (T3, T3) which was common in both groups.

3.5 Procedure

This study was conducted for one semester. The participants were assigned to two different groups of classes by the institute. The researcher identified them as the Telegram and Paper-based groups. The first group (Telegram) was considered as the experimental group and the second group, (Paper-based) as the control group. Following the results of the pretest, the instruction in both groups was started. The treatment session was started right from the beginning of the

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semester. Both groups followed the syllabus of the institution and were instructed three times a week for 90 minutes for a period of 2 months. The vocabulary instruction time was the first twenty-minute time of every session. And the related immediate posttest was administered to both groups on sessions 5,10 and 15. After the whole term was finished, the comprehensive delayed posttest, adapted from all the immediate protests was administered to both groups to measure the probable long-term effects of instructions too. The following parts will present treatment and test administration procedures.

3.5.1 Instruction for the experimental (Telegram) group

As mentioned before, students attended a 90-minute class whose first 20 minutes were devoted to vocabulary learning. In the first group (Telegram) students had their PCs in front of them and attended the previousely created group to practice 10 target vocabularies (it is worth mentioning that the institute has created the group in the Telegram social network and students had their own IDs and can attend the group in the class on the PCs and they can also check the class materials later on through their mobile phones (providing that they have installed Telegram social network on their cell phones and of course all of them did). The teacher controlled the group, shared the new vocabularies and their meanings in English along with an example sentence to help students read the words and get the meaning of words. In this phase, the focus was on getting the meaning of the words by all students. Then, students were encouraged to use the words in their own sentences. It is worth mentioning no correction (grammatical, orthographical and so on) is done by the teacher. Students receive positive feedbacks from the teacher for giving their examples. At the end of this part some extra synonyms and antonyms is given by the teacher and students are heartened to do so.

3.5.2 Instruction for the control (paper-based) group

In the second group, the Paper-based, the session started with giving student sheets containing the words along with their meaning and related examples. Each word and its related example, are written on the board by the teacher. Having helped the students learn the meaning, the teacher encouraged them to write their own examples and read it to the class. Like the experimental class, no correction is contained in this part and the teacher tried to give positive feedbacks to the students for their examples. The closing part of this class is like the experimental class; teachers and students try to give more synonyms and antonyms.

3.5.3 Test administration procedure

Having been qualified as intermediate level language learners, the participants attended two different instructional classes to practice learning vocabulary (one group) through Telegram, (and another group) through Paper-based mode. At sessions 5, 10 and 15there was no vocabulary learning and the two groups took the related post test to show the short-term effects of the (two) different types of vocabulary instruction on their vocabulary knowledge and retention.

For the final test, two weeks later the whole instruction was terminated, students sat for a delayed (comprehensive) posttest. This test was a 50-item multiple choice test from the

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previouslypracticedvocabularies to determine the probable long-term effect of vocabulary learning through Telegram on the vocabulary knowledge and retention of the students.

4. Results

The statistical analyses were based on mean comparisons using the independent T - test to compare subjects (of experimental and control groups) in different immediate protests and a delayed posttest. The in-depth discussion of all the tests with their statistical tables is given at a lower place.

4.1 Results of the first immediate posttest

The results of the first immediate posttest for both groups (experimental and control) were analyzed through (SPSS) an independent-sample T-test. The statistics for experimental (M=15.36, SD=1.84) and control (M=13.96, SD=1.73) and conditions; t (58) = 3.028, p=.004 (p<. 05) showed that the performance of the two groups was significantly different. The experimental group outperformed the control group. The detailed representation of the results for both groups is in tables 4.1 and 4.2.

Table 4.1 Groups' mean differences in first immediate posttest

	Groups	N	Mean	Std. Deviation	Std. Error Mean
first posttest	Experimental	30	15.36	1.847	.337
	Control	30	13.96	1.731	.316

Table4.2 Independent T-Test for groups in first posttest

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	T	Df	Sig.(2-tailed)
Equal variances assumed	.407	.526	3.028	58	.004

4.2 Results of the second immediate posttest

An independent t-test was conducted to compare the collected quantitative data from two groups of experimental (social network-based) and control (paper-based). Reported statistics from the second test showed a significant difference in the experimental group (M=16.30, SD=1.78) compared to control group (M=14.70, SD=1.62). Conditions; t (58) =3.63, p=.001 (p<.05). These statistics are presented in tables 4.3 and 4.4.

Table 4.3 Groups' mean differences in second immediate posttest

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Second posttest	Experimental	30	16.30	1.784	.325
	Control	30	14.70	1.622	.296

Table 4.4 Independent T-Test for groups in second posttest

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	T	df	Sig. (2-tailed)
	Equal variances assumed	.690	.409	3.635	58	.001

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4.3 Results of the first immediate posttest

The results of the third immediate posttest, like two previous ones, were used to compare two groups of experimental and control through independent t-test. The reported mean and standard deviation for the contextualization group (M=15.86, SD=1.83) and for visualization group (M=14.60, SD=1.58) delivered to (58) = 2.86, p=. 006. Once again, these statistics proved that the experimental group performed significantly better than the control group. These statistics are presented in detail in tables 4.5 and 4.6.

Table 4.5 Groups' mean differences in third immediate posttest

	Groups	N	Mean	Std. Deviation	Std. Error Mean
third posttest	Experimental	30	15.86	1.833	.334
	Control	30	14.60	1.588	.290

Table 4.6 Independent T-Test for groups in third immediate posttest

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	T	Df	Sig. (2-tailed)
Equal variances assumed	.319	.514	2.860	58	.006

According to the above results of implemented T-tests, there exists a significant difference between performances of these two groups in three immediate posttests. As statistical results have shown, experimental group outperformed the control group. As a result, the null hypothesis that social network-base instruction has no significant effect on Iranian intermediate EFL learners' vocabulary learning was safely rejected.

4.4 Results of the delayed posttest

Based on the second research question which dealt with the long-term effects of social network-based instruction, it was hypothesized that social network-based instruction has no significant long-term effect on Iranian intermediate EFL learners' vocabulary learning. To meet the needs for examining this hypothesis, subjects of both groups, two weeks after completing the whole instructional sessions, took a comprehensive (50-item) posttest. Through independent T-test, the quantitative data collected from the delayed posttest was analyzed and showed that the experimental group (M=35.60, SD=5.73) outperformed a control group (M=32.63, SD=3.25). Conditions; t (58) = 2.46, p =. These statistics and results are presented in tables 4.7, 4.8.

4.7 Groups' mean differences in delayed posttest

Groups	N	Mean	Std. Deviation	Std. Error Mean
experimental	30	35.6000	5.73916	1.04782
control	30	32.6333	3.25347	.59400

4.8 Independent T-test for groups in delayed posttest

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	T	Df	Sig. (2-tailed)
Equal variances assumed	11.129	.001	2.463	58	.017

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As the results of conducting the T-test showed, our null hypothesis that social network-based instruction has no significant long-term effect on Iranian intermediate EFL learners' vocabulary learning was rejected.

5. Discussion

The results were discussed with regard to research questions and hypotheses.

1) **Does social networking-based instruction has any significant short-term effect on intermediate EFL learners' vocabulary learning?**

In order to answer this question, both groups (social network-based and paper-based) went through three immediate posttests. The results were analyzed through T-test and all of the three analyses were in favor of social network-based. The P-value for three immediate posttests were (.004), (.001), and (.006) to prove the statistically meaningful difference between two groups. Bearing in mind that these immediate posttests were assigned at different points of time and all of them testified that experimental group outperformed control group, one can consider this conclusion a liable one.

2) **Does social networking-based instruction has any significant long-term effect on intermediate EFL learners' vocabulary learning?**

The final phase of the study was the delayed 50-item vocabulary post test to show the long-term effects of the social network-based instruction. The other T-test was used to compare the students' performances in two groups and, not surprisingly, it was proved that social network-based long-term effects were meaningfully better than that of the control group. The mean score for experimental and control groups was respectively 35.60 and 32.64 and the P-value was.017 to show that there was statistically meaningful difference between two groups.

Conclusions and Implications

The first gain of the study, according to the statistical results of data analyses done in chapter four, was the approval of the short-term effectiveness of social network-based instruction on Iranian intermediate EFL learners' vocabulary learning. As performed statistical results of the independent T - test showed, experimental (treatment) group outperformed the control group significantly. Besides, not surprisingly, the long-term effectiveness of social network-based instruction on Iranian intermediate EFL learners' vocabulary learning was also approved.

The results of this study are in agreement with the existing findings of other studies. In fact, this study confirmed the previously found data in favor of both short-term and long-term effects of learning vocabulary through a social network-based instruction which is in accordance with the findings of Beatty (2003) that stated, social network-based education can benefit students through provoking their motivation. Conclusively, these findings reject the null hypotheses of the study.

Since social networking-based instruction is supposed to be facilitating in both short-term and long-term vocabulary learning and retention, teachers who are

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looking for an effective vocabulary learning techniques to suggest and help ease the problematic task (of developing vocabulary) to the students can utilize it.

The other helpful suggestion, emanating from the study findings, for the students is to use more social network-based education (to create a deeper mental processing and ease the task of association between new and old concepts) when the aim is long-term learning and retention of vocabularies.

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