



The Impact of Telegram on Learning of Collocational Knowledge among EFL High School Students

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ABSTRACT

Rapidly developing mobile applications and ubiquitous access to the Internet provide the learners with extended opportunities to be independent from any time and location. In this regard, this study aimed to investigate the impact of Telegram on collocation learning of Iranian EFL learners. To this end, 40 high school participants whose language proficiency homogeneity was examined through a language proficiency test were selected and randomly divided into two equal-in-number groups of 20 students in the experimental and control group. To minimize the effect of participants' background knowledge in terms of collocations, a pretest was administered to the participants. At the end of treatment sessions, parallel to the pretest a teacher-made collocation knowledge test was administered for both the control and experimental groups in order to measure the learners' progress as a result of instruction. The experimental group installed Telegram application on their mobiles or tablets for collocation learning and retention, whereas the control groups were not allowed to use any tool. To ascertain that the participants were statistically different in terms of collocation learning, an independent samples t-test was run between the experimental and control groups' post-test scores. In order to determine the effectiveness of the program, a paired samples t-test was also conducted to compare the mean scores of pre-test and post-test of both groups. Analyzing the results showed that there was a significant difference between the performance of experimental and control groups, of course, in favor of experimental group confirming the effect of Telegram on improving collocational knowledge among Iranian high school students. This study implies that utilizing telegram as a newly emerging mobile application has various pedagogical benefits and fosters EFL instruction effectively..

Keywords: Collocation learning; Telegram, Mobile applications; Social networks; EFL learners.

1. Introduction

Usage of information and communication technology (ICT) brings about changes in learning environments (Uzunboylu, Bicen, & Cavus, 2011), to the extent that our lives are deeply immersed in technology. Similarly, Garret (1991) rightly states that "the integrating of ICT in teaching and learning is not a method; rather it is a medium in which variety of methods, approaches, and pedagogical philosophies may be implemented"(p.77). Web 2.0 which was the base of Social Networking Sites (SNSs) paved the way for users to create, upload, and share multi-media contents

which in turn encourages an active role for users in learning and knowledge making (Rosen & Nelson, 2009). Therefore, it was through SNSs that individuals create relationship, tied to each other (Marshall, 1999), overcome the barriers of geography, class, and ethnicity (McCarroll & Curran, 2013); the rare events in the real world. In fact, new form of electronic learning (E-learning) has managed to become one of the hallmarks of our lives (Cavus, Uzunboylu, & Ebrahim, 2008).

In addition to social networks, devices such as smartphones and tablets have now become tools to offering anywhere any time access to social networks and online content (McCarroll &

Curran, 2013). In other words, the possibility of installing different applications on these devices has opened new opportunities for learners to comprehend language contents (Ghytasi, Azizifar, & Gowhary, 2015). In fact, in information processing world, it is now a consensus idea that application-based learning devices and SNSs overcome limitations of time and space and empower the students to study wherever and whenever feasible (Chen & Chung, 2008; Trifanova & Ronchetti, 2003). As mentioned earlier, learning via mobile applications is an ideal solution to language learning barriers and limitations in terms of time and place and helps language teachers and scholars to use them in educational environments for learning and teaching purposes as frequent, portable, and accessible devices (Miangah & Nezarat, 2012; Tayebinik & Puteh, 2012).

Vocabulary in general and collocations in particular have significant roles in language learning (i.e., collocation competence is important for language production and reception) and are essential to non-native speakers of English to speak and write fluently and accurately (Ja'en, 2007); as a result, they draw the attention of language teachers and educators. On the importance of collocations, Hill (2000) states that, "it is estimated more than 70% of individual dialogues in speaking, hearing, reading, or writing are to be found in several forms of fixed expressions" (p.53). Moreover, during the last decades, pedagogical environments have witnessed increased focus in second language research and even publications concerning collocations (e.g., Granger & Meunier, 2008; Lewis, 2000; Schmitt, 2004; Wood, 2010).

In sum, while the effect of some mobile phone affordances such as SMS, voice-messaging, cameras, video-recording, and Internet access have spawned studies (e.g., Jee, 2011; Thornton & Houser, 2005), "Few studies have investigated students' personal use of mobile applications for learning and the learning benefits" (Steel, 2012, p.1). So, lack of enough research on the effects of Telegram messaging application in teaching and learning and because of widespread use of this messaging application among the learners in societal environments and educational institutions, a study is demanded. In other words, the purpose of this study is to find out whether teaching collocations via telegram will result in better collocation learning and retention more than using traditional equipment or classical techniques.

2. Literature Review

2.1 Social Media as an Interactive Tool for Sharing of Information

Arrival and popularity of the Internet as the first global computer network for scientists and educators to search information and conducting research (McCarroll & Curran, 2013) as well as the development of personal digital assistances (PDAs), laptops, and desk top computers pave the way to provide more resources to be accessible. Later on in 1989, the creation of worldwide web (www) gave rise to the next generation of Electronic- learning (Sharples, 2000).

It needs to be pointed out that fostering a sense of community in an online environment is very important since students often do not get the opportunity to encounter face to face communication with their peers or the teacher in the course (Brady, Holcomb, & Smith, 2010). In other words, learning through social networking sites outside the classroom makes the students to better exploit their free time (Kukulka-Hulme, 2009). In fact, SNSs provide opportunity for the learners to serve as a resource for each other, thus play a more active role in learning. Moreover, through SNSs the users create cooperative groups, discuss in groups, and build communities in online courses which help them work together to maximize their own and other students' learning (Brady, Holcomb, & Smith, 2010). In addition, SNSs assist in promoting social presence which is an essential element of education and learning (Garrison, Anderson, & Archer, 2000).

These days mobile devices such as PDAs, mobile phones, and other handheld tools are used extensively everywhere by students and educators and they are extremely noteworthy for the following capabilities: a) they have become soon accessible for all urban and rural areas even the poorest areas, b) they have the functionality of e-mail, SMS, and availability of Internet browsers, and c) they have been used for doing everything ranging from voice recording to transferring videos, chat messages, audio files, web surfing, shopping, and the like. In fact, due to physical characteristics such as weight and size as well as their speed in processing information, mobile phones rapidly have attracted the students and educationalists' attention and displayed a plenty of capabilities to be suited for educational settings (Miangah & Nezarat, 2012).

Today, "Internet accessibility allows instant communication with other users", and "Increasing bandwidth facilitates the combination of different media" (Ghytasi, Azizifar, & Gowhary, 2015, p.226). In another statement, Steel (2012) maintains that language learners use these applications quite frequently due to their "availability, convenience, and low cost" (p.1).

Nowadays, increasing popularity of mobile applications such as WhatsApp, Viber, Line, and recently Telegram and increasing number of application users allow the access to more information resources in terms of sharing and learning, or what Yang (2013) asserts "as mobile technologies have evolved, so have their advanced applications developed for language education"(p.19).

2.2 Telegram as a Social Interactive Tool

Due to widespread popularity in application use, these tools are not only substituted with each other but also serve as extension for each other in learning environments. The newly developed mobile application in this regard which is extensively utilized by users is Telegram. A range of advantages such as sharing photos, videos, audio messages, marketing, connecting to web-based resources, and sending files (up to 1.5 gigabyte in size) as well as sending messages to other users individually or to groups of up to 5000 members for broadcasting to infinite audiences (Sawers, 2016; Vivienne, 2016) make Telegram a better choice in place of its counterparts among users. In other words, Telegram is one of the messaging and call software that is used by millions users around the world since it is a free software (Pirouz, 2015). In sum, "Integrating Telegram channels into existing learning practices can provide informal learning contexts and create new opportunities for English learning (Mashhadi Heidar & Kaviani, 2016, p. 67).

2.3 Collocations

Lexical approach (Lewis, 1993) was drawn from a belief that "the building blocks of language learning and communication are not grammar, function, notion, or some other units of planning and teaching but lexis, that is, words and word combinations" (Richards & Rodgers, 2001, p.132). Due to large scope of vocabulary learning and teaching, a range of different types of formulaic sequences (Nattinger & DeCarrico, 1992) have been identified: idioms, proverbs, sayings, figurative expressions, lexicalized sentence stems, lexical phrases, and collocations. These formulaic expressions are vital elements of language capability and are criterion for distinguishing native speakers from non-native speakers. Moreover, non-native speakers often use fewer collocations (Laufer & Waldman, 2011). Moreover, instead of teaching vocabulary as a single-lexical item which cause a lexical incompetency on the part of learners, students must acquire collocations to be aware of their necessity in language learning (Fan, 2009).

2.3.1 Collocation Definition and Categorization

Longman Dictionary of Contemporary English (2009) defines collocations as "the way in which some words are often used together, or a particular combination of words used in this way (p. VIII)". It maintains that "by focusing on collocational information users are able to improve their comprehension when reading and listening, and increase their fluency when speaking or writing in English". Celce-Murcia (2001) gives a straightforward definition of collocations as "These patterns, or *collocations*, consist of words that co-occur with very high frequency"(p.292). Oxford Advance

Dictionary (2005, p.293) defines collocations as “a combination of words in a language that happens very often and more frequently than would happen by chance”.

Collocations are also categorized into two major aspects as lexical and grammatical. Lexical collocations are combinations of two or more lexemes, whereas grammatical collocations are combinations of a lexeme and a preposition. In other words, lexical collocations consist of combinations of full lexical items, i.e., nouns, verbs, adjectives, and adverbs or combinations of content words. On the contrary, grammatical collocations are those in which content words frequently co-occur with grammatical items, usually a preposition.

2.4 Previous Studies Concerning SNSs and Vocabulary Learning

Pirouz (2015) adopted an applied method and used a descriptive and correlation technique for data collection. She investigated the relationship between using Telegram and interpersonal communication of Islamic Azad University students of Karaj. Among 3865 candidates, she selected 345 students as the sample of her study. The obtained results indicated that the average scores of the students who are members of Telegram application higher than that of the students who do not use Telegram. Furthermore, a significant relationship exists between Telegram and emotional dependence. She suggested that universities have duties to inform the society in relation to the role and use, and also the various effects of Telegram on students.

Ashiyani and Salehi (2016) conducted a study in which they investigated the use and effects of mobile applications such as WhatsApp. They selected 60 participants as experimental and control groups equally. The experimental group installed WhatsApp application on their mobile phones in order to learn and practice new collocations, while the control group did not use any tool for learning them. The results in each group were statistically evaluated and the findings manifested that the experimental group that used WhatsApp application in collocation learning outperformed the control group. This study also prepares pedagogical implications for utilizing mobile applications as an instrument in learning a second language.

Mashhadi Heidar and Kaviani (2016) conducted a study to investigate whether Telegram would be an effective and easy learning tool of vocabulary for Iranian female EFL learners at intermediate level at Payam Noor University of Babol. For the purpose of this study 50 female EFL university students among 100 candidates were selected and after using proficiency test concerning the learners' vocabulary knowledge, they were divided into two experimental and control groups. They stated that Telegram learning can bring unique technological pedagogical advantages for EFL learners. The results also revealed that Telegram learning has a significant positive effect on the development of vocabulary learning.

Ghaem and Sayed Golshan (2017) administered a study to investigate the effects of Telegram as a social network on teaching English vocabulary among Iranian intermediate EFL learners. To this end, an experimental approach was applied to assess the efficacy of short messages services (SMS) via Telegram on teaching students' vocabulary learning. The study has revealed that the use of SMS-based teaching had a positive effect on students' vocabulary learning.

Zarei, Heidari Darani, and Ameri-Golestan (2017) examined the effects of Telegram on EFL learners' vocabulary knowledge and the attitude of them towards vocabulary learning. A group of 100 Iranian advanced learners were selected and assigned in an experimental design project. Results of the collected data indicated that participants of the experimental group outperformed those of the control group. Moreover, findings of attitudinal questionnaire showed that the learners had positive attitude toward using Telegram. The conclusion drawn indicated that the participants enjoyed this instruction as it was fun to embark on a new technological learning method.

Ghobadi and Taki (2018) investigated the effect of using Telegram stickers on EFL learners' vocabulary learning. 60 Iranian EFL learners from Islamic Azad University were selected and assigned randomly to the experimental and control groups. The experimental group took their lessons via Telegram while for the control group conventional teaching techniques were used. The results indicated that social networking had a positive effect on learning vocabulary items of Iranian EFL learners.

Although knowledge of collocations is said to be an important aspect of achieving native-like competence in foreign language learning, it has been largely neglected by the researchers and language practitioners (Shei & Hellen, 2000; Chan & Liou, 2005). In sum, in spite of the popularity of applications among students, the will to exploit them in educational environment is still not desired. Similarly, as education-based SNSs are relatively new, there is little research detailing how educators are using such education-based SNSs for e-learning purposes. However, to the best knowledge of the researcher there is no research concerning the influence of Telegram on collocations. Therefore, to fill this gap, the present study attempts to investigate the ways of effective learning through Telegram using in high school EFL beginner levels.

3. Research Questions

1. Is there any significant difference between students' learning of collocational knowledge by using Telegram compared to the traditional method?
2. Does teaching collocations via Telegram result in more effective collocational learning compared to the traditional method?

4. Methodology

4.1 Participants

To gather the required data, a sample of 40 female third grade high school students aged 15 to 16, learning English as a foreign language at a public high school in Bahmaei, a city in Kohgiluyeh and Boyer Ahmad province, in Iran, were selected to take part in this study. All the selected individuals in the current study were native speakers of Persian and their level of English language proficiency was elementary. The researchers tried to select 40 participants out of a population of 65 English language learners from three different classes through a proficiency test. Ensuring their homogeneity (i.e., by conducting a proficiency test) and excluding heterogeneous participants, the researchers randomly divided 40 students into two equal-in-number groups of 20 students in the experimental and 20 students in the control group as eligible participants of this study to receive the instruction on collocational knowledge.

4.2 Instruments

For conducting the present study three tests were utilized for achieving the predetermined objectives of the study including a web-based language proficiency test and teacher-made pre- and post-tests.

To guarantee the homogeneity of the participants upon their level of language proficiency, a sample of questions were adopted from a website found on the Internet (i.e., www.macmillanenglish.com/Straightforward Beginner Placement Test); then, they were utilized as a screen test for all the 65 available students to measure the general language proficiency at the outset of the study. After validating and making it reliable, it was administered, and the received results were analyzed based on SPSS. Finally, those who obtained one standard deviation above and below the mean score were selected as the participants of the current study.

In addition, to minimize the effect of participants' background knowledge in terms of collocations, an examination including 40-item teacher-made pretest that was piloted on 22 learners of the same age and language proficiency level was given to the participants a week prior to the treatment session. The selected participants in two groups took the pretest in order to evaluate their collocation knowledge.

Parallel to the pre-test, a 40-item collocation knowledge test was also given to the learners as a final examination to measure the effectiveness of the program. The full scores for both pre-test and post-tests were 40 marks; each question was assigned one mark. The time allocated for completing each test was 40 minutes.

4.3 Materials

As there were no courses or materials specifically devoted to collocations in high school period, some question items selected to check the current level of participants' collocational knowledge were extracted from the Junior Secondary Program English textbook (e.g., English for schools, prospect 3) used in junior high schools. From this source, issues such as travel, festivals and ceremonies, services, health and injuries, and media were selected to be utilized by the researchers for educational subjects and questions-making purposes related to collocational combinations. Besides, for the sake of their collocability features, the second source entitled 'Oxford Collocation Dictionary for Students of English (2002) was also utilized.

4.4 Procedure

The data collection procedure was carried out in Hazrat Roghayeh, a public junior high school in Bahmaei over 8 consecutive weeks. Both groups were pre- and post-tested on their language ability in terms of collocations one week before and after the treatment phase respectively. In order to carry out this study, five steps in turn were taken into accounts during the research process:

To control the possible effect of proficiency level and ensuring that the participants are representative samples of the larger population, a sample of questions downloaded from a website entitled www.macmillanenglish/straightforward designed by Macmillan Publishers Limited (2007) for beginner level learners utilized by the researchers. Since the researchers were not sure enough about the reliability and validity of the test, they tried to validate and make it reliable. In order to check the reliability of the test it was piloted on 22 learners of the same age and language proficiency level. The reliability coefficient was calculated through KR-21 and found to be 0.71 which was acceptable for the purpose of the current research.

For the sake of content validity, the researchers validated the revised version of the test by consulting a panel of experts including two EFL university professors, 2 EFL teachers, and 3 EFL college students with M.A degree. The researchers requested the panel of experts to evaluate the test as a whole in terms of appropriateness, suitability, and number of the test items concerning the students' proficiency level. The researchers followed their recommendations, remarks, and suggestions. The jury approved most of the questions and suggested to modify and remove some items.

As mentioned earlier, the researchers administered a teacher-made collocation test to check the level of students' collocational knowledge at the outset of the treatment. Then they compared the scores with the results of participants' proficiency level of collocations at the end of the instructional course. Therefore, a pretest was administered to the students of both the control and experimental groups to make sure that they were at the same level of performance before starting the experiment.

During the treatment session, the control group worked with printed versions of collocation units to do their activities. In this phase, control group practiced the regular class procedures to learn and retain the collocations traditionally through pamphlets prepared by the researcher. Meanwhile, the experimental groups installed telegram applications on their devices (e.g., mobile phones or tablets) to receive the materials which the researchers sent them through packages online. The researchers' roles were as tutors, learning material providers, and facilitators. The experimental group was able to constantly transfer information to and from other chat members.

At the end of the treatment phase of this study (i.e., after 8 weeks of collocation learning in Telegram), a teacher-made collocation knowledge test parallel to pretest was conducted for both control and experimental groups on their collocational language ability in order to measure the learners' progress as a result of instruction. It should be mentioned that the materials used for both groups were identical and extracted from three above-mentioned resources.

4.5. Data Analysis

After the required data has been collected, the researchers utilized the Statistical Package for

Social Sciences (SPSS, 22) Software to analyze the data statistically. Hence, descriptive statistics were used throughout the process of data collection and the findings from the study were presented in the form of mean, standard deviation, standard error of mean. Moreover, to compare the obtained scores, an independent *t*-test was run to see if there are any significant differences in the performance of the participants.

5. Results

Administrating the proficiency test, those participants who obtained one standard deviation above and below the mean were selected and judged as the participants of the current study. Ensuring their homogeneity (i.e., by conducting a proficiency test) and excluding heterogeneous participants, the researchers randomly divided 40 students into two equal-in-number groups of 20 students in the experimental and 20 students in the control group as eligible participants of the present study. Table 1 shows the descriptive statistics of language proficiency test that was used for homogenization of the participants in this study.

Table 1. Descriptive Statistics for the Mean Comparison of Proficiency Test between Control and Experimental Groups

	Group	N	M	SD	SEM
Scores	Control group	20	25.90	3.59	.80
	Experimental group	20	25.90	5.29	1.18

By taking a look at group statistics, there are 20 participants in the control group and their mean score is 25.90 with a standard deviation of 3.59, while there are 20 ones in experimental group with mean score of 25.90 and a standard deviation of 5.29. As it is clear from the table above, the mean scores of experimental group and control group are exactly the same, but the standard deviations are different.

To check the participants' homogeneity, it was time to look at the results of actual independent samples *t*-test. For this end, an independent samples *t*-test was utilized to compare the proficiency test scores of control and experimental groups. The results of independent samples *t*-test are presented in table 2.

Table 2. Proficiency *T*-test Table for the Comparison of Means

<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig.</i> (2-tailed)	<i>Mean Dif- ference</i>	<i>Std. Error Difference</i>	95% Confidence Inter- val of the Difference	
							<i>Lower</i>	<i>Upper</i>
1.329	.25	.000	38	1.00	.000	1.43	-2.89	2.89
		.000	33.47	1.00	.000	1.43	-2.90	2.90

Based on the results presented in Table 2, the computed significance value was 0.256.

Since the significance value (i.e., *p*-value or *sig.*) is greater than the identified level of significance 0.05 ($0.256 > 0.05$), for the interpretation of data, we should rely on the first row of output table (i.e., Equal Variances Assumed). This means that the difference between the performance of the experimental and control groups was not statistically significant. That expresses the fact that we failed to observe a difference between experimental and control groups and concluded that experimental and control groups are the same in terms of proficiency level.

To check the level of students' background collocational knowledge at the outset of the treatment, the scores of collocation pretest were detailed, analyzed, and tabulated in table 3.

Table 3. Descriptive Statistics for the Mean Comparison of the Collocation Pretest Between Experimental and Control Groups

	Group	N	M	SD	SEM
Scores	Control	20	20.40	8.19	1.83
	Experimental	20	17.90	8.87	1.98

According to descriptive statistics depicted in Table 3, the mean difference of pretest for the two groups is 2.50. (i.e., the mean for control group being 20.40 and for the experimental group is 17.90). This means that the students' knowledge of collocations at the start of the study was not significantly different.

Accordingly, to see whether there was any significant difference between the groups as a whole in terms of their collocation background knowledge, an independent samples t-test was conducted. Table 4 summarizes the results of Independent Samples t-test concerning pretest collocation background knowledge.

Table 4. T- test Table for the Comparison of Control and Experimental groups

F	Sig.	T	d.f	Sig. (2-tailed)	Mean Dif- fer- ence	Std. Error Differ- ence	95% Confidence Interval of the Difference			
							Lower	Upper		
Scores	Equal variances assumed	.002	.965	.92	38	.36	2.50	2.70	-2.96	7.96
	Equal variances not as- sumed			.92	37.76	.36	2.50	2.70	-2.96	7.96

Based on the results given in Table 4, the computed significance level is 0.965 which is higher than the significance level set for the study (.965 > .05). As it is clear from the above table, the data should be read from the first line. This way it can be concluded that there is no significant difference between the performance of experimental and control groups at the beginning of the study concerning collocation background knowledge. So, it can safely be claimed that the two groups are homogeneous in terms of their previous knowledge of collocation learning before conducting any intervention program. In other words, both groups had similar knowledge concerning the target collocation combinations before they were exposed to the instruction.

5.1 Results of the Research Questions

To answer the research questions, after 8 consecutive weeks of collocation instruction through Telegram; parallel to the pretest, a 40-item collocation knowledge test was given to the learners of the study as a final examination to measure the effectiveness of the program; then, the results were compared.

5.1.1 Results of Descriptive Statistics Related to Collocation Post-test

The following table summarizes the results of descriptive statistics of collocation posttest scores for the experimental and control groups.

	Group	N	M	SD	SEM
Posttest Scores	Control Group	20	21.15	5.47	1.22
	Experimental group	20	25.90	8.02	1.79

As it is demonstrated in Table 5, there is a difference in the mean score of experimental and control groups, that is, the mean score for the experimental is 25.90 and that one for the control group is 21.15 which seems to be different ($M = 21.15$, $SD = 5.47$: for the control groups; $M = 25.90$, $SD = 8.02$: for the experimental group).

To ascertain that the mean difference between control and experimental groups was statistically significant, an independent samples t-test was also run between experimental and control groups' post-test scores. Moreover, the scores of post-test in the experimental and control groups were analyzed to show that the treatment was effective. The results obtained through independent samples t-test are represented in the table below.

Table 6. T-test Table for the Comparison of Posttest between Control and Experimental Groups

F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Scores	Equal variances assumed	4.51	38	.03	-4.75	2.17	-9.14	-.35
		1						
Scores	Equal variances not assumed	-2.18	33.52	.03	-4.75	2.17	-9.16	-.33
		8						

Analyzing the results showed that there was a difference between two groups in the posttest ($f=4.51$, $p=.035$) in favor of the experimental group. Since the sig. (2-tailed) value was less than the chosen significance level (i.e., $0.035 < 0.05$), the researchers concluded that the mean scores for experimental and control groups were significantly different. Accordingly, it can be stated that there would be significant differences between the two groups in Telegram-based learning in favor of the experimental group. Moreover, it expresses the fact that there are statistically differences between the mean scores of those who used Telegram for collocation learning compared to those who didn't do so. Differently stated, this substantiates the fact that there was a significant difference between the performance of experimental and control groups in the posttest confirming the effect of telegram as an interactive tool on improving collocational knowledge of Iranian high school student.

6. Discussion

The present study aimed at investigating the impact of Telegram on collocational knowledge of EFL learners. After collecting of data concerning the influence of Telegram on students' collocational knowledge to improve the students' learning, the students' answer sheets related to collocational knowledge tests were analyzed. The results showed improvement in the performance of the experimental group in the posttest. However, it should be remembered that improvement in experimental group posttest used Telegram was higher than the control group assessed with traditional procedure. The students' improvement in favor of the experimental group may be due

to different reasons. Among these SNSs Telegram as the newest tool has enabled the users to have all facilities. Positive results concerning the use of telegram may also contribute to allowing the learners to experience the materials as motivating, enjoyable, and different from what they have used in traditional classroom-based settings.

To examine whether there was any statistically significant difference between the performance of the two groups before starting mediation program, an independent samples t-test was run. The results showed that students in control and experimental groups had the same level of collocational knowledge before the intervention program. That is, the results indicated that the both groups had similar scores in the pretest. This may be due to the fact that participants had very little knowledge of collocations which in turn may be due to the fact stated by Nesselhauf (2005) that collocations are "among the most difficult for the learners" (p. 9). Consequently, it was expected that by using telegram the students would be familiarized with collocations.

With regard to the research questions of the present study, it was explored that the experimental group had a higher mean scores compared to the control group. That is, the participants in the experimental group performed significantly better than the students who participated in the control group. The findings indicated a significant difference between the control and experimental group confirming the effect of telegram on collocational knowledge of the learners.

As it is evident based on the results, the success of the experimental group may be traced in the statements provided by Lederer (2012) who outlined several benefits for using social media in education. She stated that social media is an effective way for these reasons; first, social media increases student engagement and build communication skills by allowing the students to feel more comfortable expressing themselves in a less intimidating environment. Second, social media improves communication between the students and instructors (e.g., by answering the students' questions, posting homework assignments, providing lesson plans, texting messages, and sharing multimedia contents). In the same regard, Telegram-based instruction allows EFL teachers to make use of the current applications as a contributory source to help their students develop their language skills and sub-skills.

To sum up, the findings of this study corroborates the findings of previous studies (e.g., Piroz, 2015; Qarajeh & Abdolmanafi-Rokni, 2015; Jorjani and Abdolmanafi-Rokni, 2015; Ashiyan & Salehi, 2016; Mashhadi Heidar & Kaviani, 2016;; Ghaem & Sayed Golshan, 2017; Ghobadi & Taki, 2018) have been conducted in second language learning domain that reported positive effects of social networks in general and telegram in particular on language skills, subskills, and other related language chunks. Based on the findings, foreign language teachers need to open new door and become technology-oriented by incorporating multimedia technology outside and inside the classroom to improve the teaching and learning process.

7. Conclusion

Technological progresses in the age of technology and advancement have made it mandatory for the teachers to employ mobile applications as a tool to help in learning and teaching process. In other words, with the great influence that Internet and SNSs had on people's lives, no one can ignore the role of new mobile applications in education. It can be said that these SNSs especially mobile applications are becoming perhaps the most popular connective tools among language learners not only at the higher level of education but also in high school settings (Qarajeh & Abdolmanafi-Rokni, 2015) since this type of learning is beneficial for foreign language learners and considerably increases students' interest in the topic.

Consequently, Telegram application can be used as an ideal solution for learning barriers in terms of time and place. This application seems to have an impact on language education as well as collocation learning as one form of language chunks. Language chunks especially collocations help learners acquire the language more quickly and efficiently (Deveci, 2004). The knowledge of collocations enables non-native speakers to add some flavor to their speech. Regarding what has been said, collocations are prefabricated language chunks that are needed and should be highlighted in EFL classes. They should be incorporated in language teaching syllabus.

To sum up, EFL learners and teachers should consider the usefulness of Telegram in learning and retention of collocational knowledge in high school education without ignoring the contribution of traditional methods and equipment. Furthermore, both of these methods (i.e., traditional and applications-based) of learning and teaching should be seen as complementary rather than contradictory.

Every implication along the history of EFL enormously contributed in shaping the process of teaching and learning. This study has some pedagogical implications. Firstly, although the findings of this study are encouraging in language learning domain, the mere readiness and eagerness of students in exploiting the telegram pedagogically does not guarantee the successful integration of social networks in general and telegram application in particular in collocation learning among Iranian EFL learners. Teachers at high schools should be aware of the advances of communication and technology as well as their assumptions to the field of education because there are a lot of mobile applications in students' reach every year. Of course, the students can also benefit from the knowledge sharing on the net rapidly. Secondly, based on the findings of the current study, the ministry of education as the only source concerning high school education in Iran must provide the essential materials (e.g., technical and pedagogical), conditions, and opportunities to engage at least the students' free time in touch with their peers. Moreover, educational departments, policy makers, syllabus designers, and even instructors have also the responsibility to supply necessary resources to create the effective learning and teaching environment through media-based equipment and methods. Thirdly, the findings of this study would rather suggest that every EFL syllabus and test designer include some exercises on collocational combinations through SNSs to be done outside the classroom settings since SNSs are beneficial for the learners for self-assessment outside the classroom environment. They not only can help the students practice individually but also provide a partner for their peers and classmates to work. Utilization of these networks can also help the teachers easily evaluate their students' progress even during the instructional process.

English teachers should be encouraged to spend some more time for application-based training in their classes and they should also assign more importance to Telegram application use in language development to make collocation learning more meaningful and effective for the students. In fact, Telegram application is among modern devices that can be used in the classroom environments safely even in secondary program school classes. Therefore, it is necessary to remember that foreign language teachers should be made aware of the benefits that Telegram-based instruction offers to the curriculum.

For above-mentioned statements, parents and instructors at first should reconsider their attitudes towards modern application use (e.g., they shouldn't see Telegram using as a crime inside and outside the classroom settings) and take some measures to strengthen social and educational interaction. In this regard, they should play their roles as supervisors, collaborators, and facilitators to support the students know what is appropriate and what is not in their language process. Furthermore, EFL teachers as well as parents should be trained about the use of new technologies so as to enhance their performance and mastery of technical material.

A further implication goes for the learners that are expected to make mobile as a part of their teaching process (e.g., using mobile applications for sending and receiving homework assignments, blogging, surfing the Internet, etc.). Since using mobile has numerous capabilities, EFL learners can also use the mobile applications for their self-assessment, improving autonomy outside the classroom settings, enhancing language skills, and decreasing the anxiety related to attending in an EFL classrooms. The last but not the least implication is that teachers and scholars are expected to utilize the findings of this study as a foundation for addressing the use of Telegram in improving collocational knowledge in public high schools as well as institutes and continue performing further studies for more discoveries. Further investigations in this area undoubtedly is required to ascertain whether SNSs in general and Telegram in particular has positive effects on learning and remembering collocations among Iranian high school students in order to make a conclusive remark.

As each research in its era faces a number of limitations which cannot be avoided, the present study like all other studies in social sciences encounter some limitations that point to further

investigations and opportunities. In this section, limitations of the present study and the strategies to tackle are mentioned. The first limitation of this study was related to gender selection. Due to students' separation based on gender in Iranian high school classrooms, privacy problems concerning virtual tools, schools' regularities, and moral considerations, the researcher had to focus only on female participants and ignored to investigate the effect of telegram as a social interactive tool on high school male beginner level EFL students. The second limitation of this study was that it was carried out with high school secondary program students with beginner language proficiency level only at one high school out of numerous public high schools in Iran. If other researchers examine the same issue by different participants in other schools, the outcome might show different results. Thirdly, since the researchers had access to only a limited number of female participants, this may decrease the degree of generalizability of the findings. In other words, the findings because of having small participants cannot be generalized to all EFL learners and all levels of language proficiency. Finally, it should be pointed out that one important limitation regarding similar studies is that some parents as well as some instructors may think that using Telegram and similar applications are a crime outside and inside the classroom. They think that intensive use of mobile applications by the students has negative effects on the students' learning process.

The results of this study indicated that teaching collocations by using Telegram improved collocation learning more than classical technique and methods. Based on the findings of the present study, the following suggestions may have effective results regarding the adopting Telegram as teaching and learning equipment in educational settings to develop the learners' awareness of collocational knowledge.

As this study has used quantitative methods to determine the effects of teaching collocations on enhancing collocational knowledge through Telegram, it is suggested further studies be directed towards investigating the effectiveness of using Telegram on language knowledge in general and collocations in particular qualitatively to examine the EFL learners' attitudes, reactions, and preferences towards Telegram using in educational settings.

As this study was administered focusing on one gender (females), therefore, it is suggested that similar studies be conducted on male participants to see whether males and females behave differently outside the educational settings.

Another suggestion to other researchers in the field is that as this study was conducted with students studying at one of the English public high schools in Iran, for a certainty they should study with a wider groups of participants in a longer time period. So, in seeking to determine the impacts of teaching and learning collocations through Telegram, it is suggested to replicate this study with other schools, institutes, and groups of learners with different proficiency levels.

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