

Role of Game-Oriented Instruction in Learning L2 Vocabulary: A Case of Iranian EFL Young Beginner Learners

Ali Akbar Jafarpour Boroujeni*

PhD in TEFL, Shahrekord University

Mehdi Afshar

MA in TEFL, Shahrekord University

Abstract

The main purpose of this research was to investigate the role of game-oriented instruction on learning vocabulary of Iranian young beginner students. Ninety public school students were selected to participate in this study. Because of practical limitations, the researchers could not assign students to different groups randomly but the selection of the three groups as control and experimental groups were done randomly. After administration of Key English Test (KET), the groups were homogenized and 18 students were eliminated from this study. The treatment starts with 72 students, each group has 24 students. Before starting a treatment, a 20-item multiple choice test was used as pretest. After administration of pretest, the treatment was started. In the control group, new vocabularies were taught through traditional textbook method. In one of the control group, game was used as a main medium of instruction and in the other one, the combination of game and traditional methods were used. In this group, game was used as a supplementary activity. After treatment, posttest was administered in all three groups. In order to analyze the data, SPSS version 20 was used. Since the design of this study was pretest-posttest, analysis of Covariance (ANCOVA) was used for data analysis. Data analysis showed that there was not significance difference between game group and traditional group, but there was a significance difference between mixed group and traditional group. It means that using game as a supplementary activity has the most beneficial effects on learning new vocabularies.

Key words: game, game-oriented instruction, supplementary activity

* PhD in TEFL, Shahrekord University

Received on: 08/01/2016

Email: aliakbar_jafarpour@yahoo.com

Accepted on: 15/03/2016

1. Introduction

The acquisition of new vocabulary is one of the most important elements of language. Vocabulary knowledge is so essential and it has been described as a prerequisite for successful communication (Nation, 2001). Vocabulary has an important role in developing student's proficiency in English. It also has a major role in learning listening, speaking, reading, and writing. There are active and passive vocabularies. Vocabulary games bring real world context into the classroom and enhance the student's use of English in a flexible and communicative way (Huyen & Nega, 2003). Games automatically stimulate the students' interest, decrease their stress, and develop their own level of confidence (Krooal, 1990). Unlike adults, children are not self-motivated and do not have an immediate need to learn English. They are not concerned with job or university degree that requires knowledge of English (Hellay, 1971).

Motivation is a key element in all language classes, and the teachers can influence students' motivation by making a classroom a supportive environment in which students can find lots of opportunities to engage in different activities (Lightbown & Spada, 1990). We can define game as an organized activity that usually has the following properties: (a) a particular task or objective, (b) a set of rules, (c) competition between players, and (d) communication between players by spoken or written language. Hadfield (1984) stated, "Game is an activity with rule, goal, and an element of fun" (p. 67). Games can motivate students to have a better chance of success in learning new vocabularies.

Nation (1983) stated that vocabulary selection must satisfy the learners' communicative needs such as the students' personal needs, thinking needs, social needs, and classroom needs; however, the students' levels of interest determine the words that they actually learn in classroom situation. Another advantage of game is that it is easier to maintain the attention of the students in game playing because having fun helps students to satisfy their own inborn predisposition (Chen, 2007). Advocates of applying language games for teaching vocabulary offer that introducing new vocabulary through games needs to be practiced through predetermined period of time with appropriate facilities and by embedding new vocabularies in a presumptive games, words are more likely to be practiced, are more likely to be related to their interests, and are more likely to be accessed in memory (Aslanabady, 2013).

Traditional techniques in vocabulary learning such as word memorization will not help students to learn new words meaningfully. These techniques lead to rote learning and transfer new words into the learners' short-term memory, therefore they are not useful. The teacher should apply new techniques to help students learn new vocabularies meaningfully and use them in real situation. Another problem of traditional methods of teaching vocabulary

is that traditional techniques are so boring. The teacher should use interesting techniques to motivate the students to learn new words enthusiastically.

Mastering vocabulary is one of the most challenging tasks that any learner faces while learning a new language (Kihckaya & Krajka, 2010). Maintaining large amounts of vocabularies is a key element of learning a foreign language. Game instruction, especially at the beginning stages of language learning, brings the real world context into the classroom and helps students to learn new vocabularies in relaxed and stress free environment. According to Holden (1999), there are many strategies to help learners to learn and remember new words. She recommended repeated exposure to new words and integrative strategies to help learners to store new words in their mind meaningfully.

An ability to manipulate the grammatical structure does not have any potential for expressing meaning unless words are used (Harmer, 2001). The acquisition of an adequate vocabulary is essential for successful language use because without an extensive vocabulary we would be unable to use the structures and functions we may have learned for comprehensible communication (Nunan, 1991). Vocabulary is one of the important elements in language. We arrange words to produce sentences, discourse, and conversation. Without words we can't express our ideas perfectly (Schmitt and McCarthy, 1990). There are six reasons for learning language such as target language community, ESP, school curriculum, culture, advancement, and miscellaneous (Harmer, 2001). Jacques et al. (1995) argue that designing interactions to be engaging can encourage and facilitate learning. There is a link between intrinsic motivation to learn, engagement and instructional effectiveness (Lapper and Malone, 1987).

Traditional techniques in vocabulary learning such as word memorization will not help students to learn new words meaningfully. These techniques lead to rote learning and transfer new words into the learners' short-term memory, therefore they are not useful. The teacher should apply new techniques to help students learn new vocabularies meaningfully and use them in real situation. Another problem of traditional methods of teaching vocabulary is that traditional techniques are so boring. The teacher should use interesting techniques to motivate the students to learn new words enthusiastically. Due to the above-mentioned problems in vocabulary learning, the present study sought to investigate the role of game as a means of instruction as well as a supplementary activity in vocabulary teaching.

2. Literature Review

Games can motivate students to learn the vocabularies better. The students' motivation and confidence can be enhanced in the process of playing games and they can learn language in a relaxing environment (Chan and Lin, 2000).

According to Skinner's theory, playing can be presented as a kind of prize after learning which helps students to learn the materials more effectively (Pound, 2005). Games and game-oriented activities have always been a popular tool in English classes in order to add fun and interest to the process of language teaching and learning (Atake, 2003).

According to Piaget, games contribute to development of problem-solving, creativity, and communication among students (Slavin, 2006). Language games are not aimed to kill the time or break the ice between the teachers and the students; they are activities with rule, goal, and element of fun (Hadfield, 1984). There are two kinds of games such as linguistic games and communicative games. Linguistic games focus on the accuracy; on the other hand, communicative games focus on the exchange of the information (Hadfield, 1984).

The students' motivation and confidence can be enhanced in the process of playing games when they achieved learning goals in a relaxing environment. Game-oriented instruction plays an important role for healthy child development (Ginsburg, 2007). Children do their best to learn the new materials through an imaginative play (Bodrova, 2003). Game-oriented instruction can provide an opportunity for the learners to focus their attention on the new vocabularies and try to learn them actively. Game can provide an opportunity for the learners to learn through simulated environment and they can be integral part of learning (Kee, 2009).

One of the interesting elements of game-oriented instruction is providing a stress free environment for the learners, so the students can practice a lot without concerning about failures (Gee, 2009). The other characteristic of game-oriented instruction is its capability of establishing clear goals and providing immediate feedbacks (Dickey, 2005). Receiving an immediate feedback can help students to change their role or parts of game in order to improve their own performances and reach optimal goals. The students can improve their own performance by receiving a constructive feedback (Black & Wiliam, 1988). In game-based learning, problem solving is the main factor behind the achievement in both learning and gaming (Kim, Parker, & Baek, 2009). There are many kinds of games such as role playing games, physical games, guessing games, arranging puzzles, labeling games, and cooperative games. Game-oriented instruction has three stages such as introducing the game, implementing the game, and evaluation of the game (Soker & Sohin, 2012).

Marzano (2010) conducted a research about using game to enhance achievement and he came to the conclusion that even though the overall effects of using games in the classroom was strong in the studies they conducted, the other studies demonstrated different results. Hemati and Teimoori (2013) conducted a research about the comparative effect of pictorial story-telling and

playing games on Iranian kindergartener's vocabulary recognition. They selected 60 Iranian EFL kindergarten students between the ages of 5 to 6 and randomly assigned them into two experimental groups. After 8 sessions of instruction, both groups received the posttest. These researchers concluded that the story-based group did slightly better than the game-based group.

Ebrahimi and Zamanian (2014) examined the effect of practical games on learning vocabulary of Iranian beginner learners. Students from 4 to 6 years old were chosen by the researchers and they assigned them randomly into two groups. In control group, they taught vocabulary through traditional methods and in experimental group, they taught vocabulary through practical games. Finally, they concluded that the participants in practical game outperformed at both vocabulary learning and sentence making. Sorayaie (2012) conducted a research about the effect of games on EFL learner's vocabulary learning strategies, and after observing English classes and interviewing teachers and students and also his own reflection of applying games to language classes, they came to the conclusion that game will be helpful for teaching and learning vocabulary.

Similarly, Dolati and Mikaili (2011) investigated the effect of games on improving vocabulary learning of Iranian beginner students. They selected 70 students with the age of 12 to 13 years old from one of the primary schools in Iran. They conducted pretest and posttest to examine the effectiveness of their instructions. After analyzing their data, they concluded that playing game has an important effect on improvement of students' vocabulary learning. They also found that games can motivate the passive and quiet students.

By the same token, Roohani and Pourgharib (2013) examined the effect of game on learning vocabulary of Iranian young beginner students. They selected 30 students from grade one in junior high school and assigned them to two groups. In control group, they used text book and in experimental group, they taught new vocabulary through game. After administering pretest, they started their treatment and then they administered posttest and analyze data. Their study indicated that both groups made noticeable progress after training program.

In a similar line of inquiry, Honarmand, Rostampour, and Abdorahimzadeh (2015) examined the effect of game on learning new vocabularies. They selected 50 beginner students from among learners in children departments at the Iran Language Institute and divided them into control and experimental groups. The control group was exposed to text book vocabularies through traditional method of teaching vocabulary while the experimental group was taught by the Tic Tac Toe game and flash cards. After administering pretest, treatment, and posttest, they analyzed the data and concluded that applying game had an important and determined role in learning new vocabulary of beginner students.

Due to the above-mentioned knowledge gap in L2 vocabulary learning literature and due to the significant issue of L2 young learners' vocabulary development, the present research attempted to answer the following research question about the role of game as a means of instruction as well as a supplementary activity in L2 vocabulary teaching:

1. Does game-oriented instruction have any significant effect on Iranian young beginner learners' L2 vocabulary development?
2. Is there any significant difference among learning vocabulary through textbook, learning new vocabulary through game as a supplementary activity, and learning new vocabularies through game as a main medium of instruction?

3. Method

3.1. Participants

The participants of this study were selected from a total population of 90 Iranian male junior high school students in grade two, aged 14, from Farhangian junior high school in Bahmaee city. They were all elementary level learners according to the results of Key English Test (KET), which was administered before starting the treatment. In order to ensure the homogeneous entry behavior of the participants, KET was administered before conducting a research. After analyzing the results of KET, 18 students were excluded from this study.

3.2. Instruments

This study used two instruments for data collection: the Key English Test (KET), and the teacher-made vocabulary test. In order to assure the homogeneity of three groups, the researchers administered the KET. This standard test contains 50 multiple choice items. It assessed the vocabulary knowledge of the participants. The KET test was administered prior to the study. The researchers-made test contains 20 multiple choice items. The source of the questions was the book entitled, "English for School Prospect, junior secondary program". This test was administered as a pretest and posttest in all groups. This test assessed the vocabulary knowledge of the students.

3.3. Data Collection Procedure

The researchers selected one of the Iranian public schools to conduct the study. All subjects were in grade two of junior high school. Three classes were selected for this study. There were 90 students in these classes. In order to assure the homogeneity of classes, the KET test was administered before conducting the study. This test contained 50 multiple choice items, all assessing the L2 vocabulary. In order to homogenize the groups, 18 students were excluded from this study after analyzing the results of KET.

There were 24 students in each group. Because of school limitations, the researchers could not assign the students randomly to different groups, however, the classes were randomly assigned to experimental and control groups. The teacher-made test was given to two experts to evaluate the items in terms of content validity for Iranian beginner students. The test was piloted on 24 similar junior high school students to check the item difficulty and allotted time. In order to investigate the effectiveness of the treatment, the revised researchers-made test was used as a pretest in all groups before the treatment. To obtain the criterion-related validity of the test, the teacher-made test administered concurrently with standard test entitled Key English Test to 20 students. Two sets of scores, obtained from the teacher-made test and the criterion measure, are correlated. Analyzing data through SPSS and using Spearman correlation showed that there is a significant correlation at .71 level between these two tests. The Validity Coefficient of the researchers-made test is .83, which is considered excellent. In order to estimate the reliability of the researchers-made test, the researchers used test-retest. To do so, 30 junior high school students were selected, and then the researchers administered the test to these students twice with the time interval of two weeks, and the correlation between two sets of scores were calculated through SPSS. The reliability coefficient of the researchers-made test was .79, which is considered good. After calculating the reliability and validity of the researchers-made test, the researchers administered the pretest.

After analyzing the results of the pretest, the researchers started the treatment. In control group, new vocabularies were taught through traditional textbook strategies. Different methods of teaching vocabulary such as definition, word memorization, dramatization, synonyms and antonyms were used to teach new words traditionally. In control group, the textbook was used as a main medium of instruction and the students learned new words traditionally.

In one of control groups, new vocabularies were taught through game-oriented instructions. Different vocabulary games such as *Dance of the Ostriches Draw the Picture*, *Eyewitness*, *Four corner*, *What Am I Drawing*, *Slow Reveal*, and *Guess Who* were used to help the teacher to teach new words effectively. In this experimental group, new words were taught exclusively through games as a main medium of instruction. The games were adapted from the book entitled "*English Time Three*, teacher's book".

In the other experimental group, the new vocabularies were taught through both traditional and game-oriented instructions. To do so, first, the new words were taught through traditional text book strategies such as definition, translation, and so on and then game-oriented instructions were used as supplementary activity to promote learning. For example: firstly, the new vocabularies were taught by using pictures and then the teacher used "*Slow Reveal*" game in which the researchers held up a picture card with another card

or piece of paper covering it so that only a small portion of the picture was shown. Students tried to name the picture. Each time a student incorrectly named the picture, he slid the covering card down to gradually reveal more of the picture. The researchers continued sliding the covering down until a student was able to name the picture. The game was continued in the same way with five to seven different cards.

Because of the school regulations, the treatment was administered once a week for three months. The researchers devoted the last thirty minutes in each session to vocabulary teaching. After three months of instruction, the posttest was administered to all control and experimental groups. Then the researchers analyzed the results of posttest and compared the scores of three groups together in terms of vocabulary learning.

After collecting data by administration of pretest and posttest, SPSS 20 was used to analyze the data. Some descriptive and inferential statistics were conducted for data analysis. First, the descriptive statistics were calculated and the mean, standard deviation, minimum, and maximum of students' scores were calculated. Given the pretest and posttest design of study, analysis of covariance (ANCOVA) was used as a statistical tool for data analysis. Since, there was an external factor such as pretest; the researchers used ANCOVA to reduce the amount of variability in the model that was unexplained. By using ANCOVA, the effect of our treatments on three different groups was estimated. The correlations between three groups were also investigated.

4. Results and Discussion

The first research question of this study claims that game-oriented instruction does not have any effect on learning vocabulary of Iranian young beginner students. So in order to investigate the hypothesis; analysis of covariance (ANCOVA) was used. In this method, administrating the pretest will be used as a covariate. After eliminating the effect of pretest on research findings, the differences between experimental and control group in each variable was investigated. The main assumptions of ANCOVA are normality of covariate, homogeneity of regression slopes, and linearity of the correlation between dependent and independent variable. Before analyzing the date through ANCOVA, the assumptions of ANCOVA was investigated.

4.1. Normality of Sample Group

In order to investigate the normality of sample distribution in experimental and control group, the Kolmogorov-Smirnov tests were used. In this test, the confirmation of the zero assumption indicated that the samples were distributed normally.

Table 1
Kolmogorov- Smirnov Test of Normality

<i>Group</i>	<i>Kolmogorov-Smirnov</i>	<i>Sig</i>
Experimental-Game	pretest	.826
	posttest	.794
Experimental- Mixed	pretest	1.149
	posttest	1.302
Control- Traditional	pretest	.867
	posttest	.847

As it was presented in the table 1, the significance level of Kolmogorov-Smirnov's test for learning variable in pretests and posttests are higher than .05 in all groups. Since the violation of assumption of normal distribution is rejected, we can conclude that the samples are distributed normally in all groups.

4.2. *Test of Homogeneity of Variances*

In order to investigate the homogeneity of variances in experimental and control group, the Levine's test was used to test whether the variance in scores is the same for each of three groups. The results of the Levine's test were reported in Table 2.

Table 2
Test of Homogeneity of Variances

	<i>Levine's statistics</i>	<i>Df1</i>	<i>Df2</i>	<i>Sig</i>
pretest	2.306	2	69	.086
posttest	.653	2	69	.524

As it can be seen in the above table, the significance value (Sig) of Levine's test in pretest and posttest is greater than .05. Therefore, we can conclude that we have not violated the homogeneity of variance assumption and the variance in score is the same for each of three groups.

4.2.1. *The Correlation between the Pretest and the Treatment*

Because of the fact that the administration of pretest can affect the results of the study, we analyzed the pretest as a covariate. After eliminating the pretest effect, the differences between the experimental and control group would be investigated. The results of covariance analysis were presented in Table 3.

As it was shown in table 3, the F value of pretest is 27.050. The significance value of pretest is lower than .001, so we can conclude that the administration of pretest can affect the results of the posttest. Therefore, the effect of pretest on the final results will be overlooked in covariance analysis.

As it was presented in the above table, the F value for mean score of control and experimental group is 7.825. Because of the fact that the significance value of the posttest is lower than .01, we can conclude that there is a significance difference between three groups. The Eta squared shows that, 19 percent of existing changes in posttest score are related to the administration of the pretest and its effect on the mean score of the posttest. Thus the first hypothesis which states that Game-oriented instruction does not have any effect on learning vocabulary of Iranian young beginner students was rejected.

Table 3
Test of Covariance Analysis

<i>Source</i>	<i>Sum of square</i>	<i>DF</i>	<i>Mean square</i>	<i>F</i>	<i>Sig</i>	<i>Partial Eta square</i>
Pretest	316.865	1	316.865	27.050	.000	.285
Group*Posttest	183.318	2	91.659	7.825	.001	.187
Error	796.552	68	11.714			
Total	14434	72				

The second research hypothesis states that there is no difference between learning vocabulary through textbook, learning new vocabulary through game as a supplementary activity, and learning new vocabularies through game as a main medium of instruction. In order to test the second research question, i.e., comparing the three groups together, multiple tests of Bonferroni-adjusted pairwise comparisons were run. The results of these tests are reported in the following table.

The mean differences between experimental and control group as well as standard deviation and the significance value between three groups are reported in Table 4. As it was presented in the above table, the significance value of experimental-game and control group was greater than .05, so we can conclude that there is no significance difference between them.

As it was shown in the above table, the significance value between experimental- game and experimental-mixed groups was lower than .05, so we can conclude that there is a significant difference between these two groups and the experimental- mixed group was superior to the experimental-game group. The significance value between experimental-mixed group and the control group was greater than .01, so we can conclude that, there is a significant difference between these two groups and teaching vocabulary through game as a supplementary activity is more effective than teaching through traditional text-book methods.

Table 4
Bonferroni Test

Group 1	Group 2	Mean Differences (1-2)	Std. Error	Sig	95% confidence Interval for differences	
					Lower Bound	Upper Bound
Experimental-game	Control traditional	1.086	.988	.827	-1.340	3.511
	Experimentalmixed	-2.711	.988	.023	-5.136	-.285
Experimental-mixed	Control- traditional	3.796	.989	.001	1.370	6.223

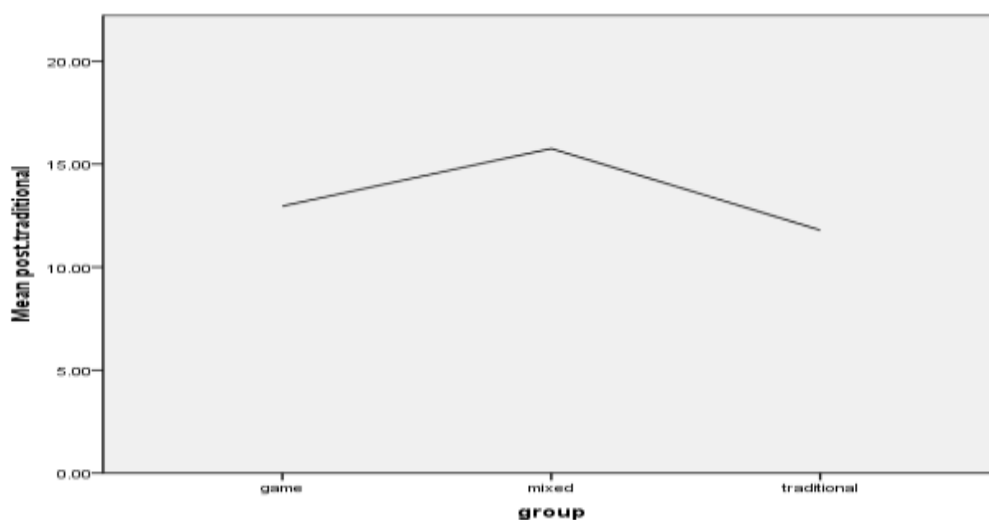


Figure 1. The comparison between mean score of three groups

Figure 1, shows the mean score of three groups graphically. This diagram highlights the differences between three groups more effectively. As depicted in this diagram, there is a significant difference between the experimental-mixed and control groups. There is also a significant difference between experimental game and experimental mixed groups. It was also shown that there is a little difference between experimental game and control groups.

A one-way between groups analysis of covariance was conducted to compare the effectiveness of three different methods of teaching designed to increase the amounts of the students' vocabulary learning. The independent variable was the type of intervention (three different methods of teaching vocabulary), and the dependent variable consisted of scores on the vocabulary

test administered after the intervention was completed. The students' scores on the pretest were used as the covariate in this study.

Preliminary checks were conducted to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of pretest scores and reliable measurement of the covariate. After adjusting for pretest scores, there was a significant difference between these three groups on posttest scores on vocabulary test, $F = 7.825$, $p = .001$, partial eta squared = .187. There was also a strong relationship between the pretest and posttest scores on vocabulary test as indicated by a partial eta squared value of .285. Therefore the second hypothesis of the study which claims that there is no difference between learning vocabulary through textbook, learning new vocabulary through game as a supplementary activity, and learning new vocabularies through game as a main medium of instruction was rejected.

The main purpose of the current study was to investigate the effectiveness of teaching vocabulary through game. To do so, the researchers selected three groups of Iranian young beginner students at public school including one control and two experimental groups. In experimental groups, new vocabularies were taught through using game and combinations of game and traditional methods. In control group, traditional textbook methods were used. After treatments and administration of posttest, three groups were compared with each other in terms of their vocabulary learning.

It is believed that, game has an important role in learning new vocabularies. Since the traditional methods of teaching vocabulary mostly focused on word memorization and rote learning, the teacher should use lots of innovative methods to motivate learners to learn more effectively. As Thornbury (2002) states, in order to help students to transfer new vocabulary to their long term memory, new knowledge should be integrated to old knowledge.

The teacher should provide lots of opportunities for the learners to compare, combine, match, store, visualize, and reshuffle their own old knowledge. Therefore, the students should be exposed to varieties of activities that challenge their mind and help them to promote their own critical thinking and decision making. Kyriakon (1998) points out that, activities must elicit and sustain the students' interest and motivation. So, as the findings of the presents study prove that game can help the learners to participate in vocabulary learning activities and it can also sustain their willingness for learning.

The findings of the present research are in agreement with the claims made by Ersoz (2000), Schwienhorst (2002), and Calxton (2008) who all assert that game has a stimulating role in vocabulary learning. It is also proved that games are highly beneficial due to their interest, motivation, and amusement and they can be used as a tool for practicing all four skills and sub- skills. Games can provide realistic sociocultural atmosphere in which language learning will take

place with ease. Games also encourage students and provide lots of opportunities for them to play the active roles in the processes of vocabulary learning.

5. Conclusions and Implications

The present study investigated the effect of game on learning vocabulary of Iranian young beginner students. Based on the results obtained from this study we can come to this conclusion that game by itself does not have the great effects on learning vocabulary of Iranian young beginner students. After data analysis, it revealed that there is not a significance difference between the group who were taught vocabularies through game as a main medium of instruction and those who learned vocabulary through traditional text book methods.

It also was revealed that there is a significance difference between learning vocabulary of those students who were taught vocabularies through using game as a supplementary activity and those who learned new words traditionally. It means that using game as a supplementary activity had the greatest effect on learning vocabulary of Iranian young beginner students. In this method the students first learned new vocabulary through traditional techniques and then they found lots of opportunities to practice these vocabularies through games. So game as a supplementary activity can help the learners to learn new vocabularies more effectively.

The current research suggested that students' vocabulary improvement is not associated with using game exclusively but it is associated with how to use game more perfectly to help learners to develop their own vocabulary learning. It means that using game as a main medium of instruction does not have the significance effect on the students' vocabulary learning, since the students may not take the course seriously but if they firstly encountered to ordinary methods of teaching and then they use game as a supplementary activity, it can be more beneficial and the students can learn new words easily. Furthermore, the fun and relaxing environment of using supplementary games will accelerate process of transferring new words into their own long term memory.

One of the limitations of this study was using teacher-made achievement test instead of standardized English proficiency test for pretest and posttest. Since the participants of this study were chosen from Iranian Junior public school, the researchers should follow the school regulations and curriculum. So this measure may not be a strong predictor of the participants' actual proficiency level. Another limitation was that, because of the school's regulations, the researcher could not be able to assign participants to different groups randomly; however the selection of three groups as control and experimental groups was done randomly. There were almost 30 students in each class including participants of this study and excluded students, and the noisy students

sometimes prevented the researchers from achieving their optimal goals specially, when game was used as a main medium of instruction. This may be because of the fact that in fun and relaxing environment of using game as a main medium of instruction, some noisy students did not take the course seriously.

It is suggested that further research should use different materials and teaching aids in order to investigate the effectiveness of game on learning vocabulary in the context of Iranian students. This research used multiple choice tests for data collection; further research should use different data collection procedures such as questioner, interview, or observation. They also can use combination of above-mentioned data collection procedures to investigate the issue more effectively. The participants of the current study were male students; further research should use female students or the combination of male and female students to investigate the effect of gender and game on learning vocabulary of Iranian young beginner students. Participants of this study were young beginner students, further research should use age factor in their studies and compare the different age groups such as young and adult students to investigate whether age moderates the relationship between game and vocabulary learning in the Iranian EFL context.

References

- Aslanabadi, H., & Rasouli, G. (2013). The effect of games on improvement of Iranian EFL vocabulary knowledge. *International Review of Social Sciences and Humanities*, 6(1), 186-195.
- Atake, K. (2003). *Using game to teach English in Japanese junior high school*. Retrieved November 3, 2015, from ERIC database (ERIC Document Reproduction Service No. ED479748).
- Black, P. J., & Wiliam, D. (1988). *Inside the black box: Raising standards through classroom assessment*. London: King's College London School of Education.
- Bodrova, E., & Leong, D. J. (2003). The importance of being playful. *Educational Leadership*, 60(7), 50-53.
- Chan, Y. C., & Lin, L. C. (2000). *Competitive and cooperative games in EFL elementary school classroom*. Proceedings of ROCMELLA 2000, National Taipei University of Education, 123-147.
- Chen, J. L. (2007). *Using games in teaching English to preschool students*. Unpublished master's thesis, National Dong Hwa University, Haulin, Taiwan.
- Claxton, N. (2008). *Deliberating across the curriculum: Using deliberative techniques in the English as a foreign language classroom*. New York, NY: IDEBATE Press.

- Crookal, D. (1990). *Simulation, gaming, and language learning*. New York; Newbury House.
- Dickey, M. D. (2005). Engaging by design: How engagement strategies in popular computer and video games and inform instructional design. *Educational Technology Research and development*, 53, 67-83.
- Dolati, R., & Mikaili, P. (2011). Effects of instructional games on facilitating of student's vocabulary learning. *Australian Journal of Basic and Applied Sciences*, 5(11), 1218-1224.
- Ebrahimi, F., & Zamanian, M. (2014). Practical games: Implementing practical game on Iranian early EFL learners. *International Journal of English and Education*, ISSN: 3(2), 2278-4012.
- Ersoz, A. (2000). *Six games for the EFL/ESL classroom, in the internet TESL Journal*. Retrieved July 13, 2015 from <http://iteslj.org/lessons/Ersoz/Games.html>.
- Gee, J. P. (2009). Deep learning properties of good digital games: How far can they go? In U. Ritterfeld, M. Cody, & P. Vorderer (Eds.), *Serious games: Mechanisms and effects* (pp.67-82). New York, NY: Routledge.
- Ginsburge, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Social and Behavioral Sciences*, 2, 3700-3705.
- Hadfield, J. (1984). *Elementary communication games*. London: Nelson.
- Harmer, J. (2001). *The practice of English language teaching*. London: Longman.
- Hellay, (1971). *Teaching for children*. New Jersey: Practical Hall.
- Hemmati, F., Teimoori, M., & Jafarigohar, M. (2013). A comparison of pictorial story -telling and playing games on Iranian kindergarteners' vocabulary recognition. *International Journal of Learning and Applied Linguistics World*, 4(1), 167-180.
- Holden, W. R. (1999). Learning to learn: 15 vocabulary acquisition activities. *Modern English Teacher*, 8(2), 42-47.
- Honarmand, B., Rostampour, M., & Abdorahimzadeh, J. (2015). The effect of game Tic Tac Toe and flash cards on zero beginners' vocabulary learning. *International Journal of Educational Investigations*, 2(3), 27-41.
- Huyen, N. T., & Nega, K. T. (2003). Learning vocabulary through games. *Asian EFL Journal*, 5(4), 90-105.
- Jacques, R., Preece, J., & Carey, T. (1995). Engagement as a design concept for multimedia. *Canadian Journal of Educational Communication*, 24(1), 49-59
- Kee, F. (2009). *A qualitative meta-analysis of computer games as learning tools*. London: Longman.

- Kelly, R. (1991). The Greaco Latin vocabulary of formal English: some pedagogical implications. *RELC Journal*, 2, 269-83
- Kerka, S. (2000). *Incidental learning: Trends and issues alert*. New York, NY: Peter Lang.
- Kilickaya, F., & Krajka, J. (2010). Comparative usefulness of online and traditional vocabulary learning. *TOJET*, 9(2), 55-63.
- Kim, B., Park, H., & Baek, Y. (2009). Not just fun, but serious strategies: Using meta-cognitive strategies in game-based learning. *Computers & Education*, 52, 800-810.
- Kyriacou, C. (1998). *Essential teaching skills*. Cheltenham: Nelson Thorne.
- Lepper, M. R., & Malone, T. W. (1987). Intrinsic motivation and instructional effectiveness in computer-based education. In R. Snow & M. Farr (Eds.), *Aptitude, learning, and instruction, vol. 3: Cognitive and affective process analysis* (pp. 214-229). Hillside, NJ: Lawrence Erlbaum Associates.
- Lightbown, F. M., & Spada, N. (1999). *How languages are learned*. Oxford University.
- Marzano, J. (2010). Using games to enhance students' achievement. *Education Leadership*, 5(67), 71-72.
- Mccarthy, Michael, (1990). *Vocabulary*. Oxford University Press.
- Nation, I. (1983). *Teaching and learning vocabulary*. Wellington Victoria University.
- Nation, I. (2001). *Learning vocabulary in another language*. Cambridge, UK: Cambridge University Press.
- Nunan, D. (1991). *Language teaching methodology*. London: Prentice Hall International.
- Pound, L. (2005). *How children learn*. London: Step Forwarded Publishing, Ltd.
- Roohani, M., & Pourgharib, B. (2013). The effect of games on learning vocabulary. *International Research Journal of Applied and Basic Sciences*, 4(11), 3540-3543.
- Schmitt, N., & Carthey, M. (1997). *Vocabulary in language teaching*. New York: Cambridge University Press.
- Schwienhorst, K. (2002). Why virtual, why environment? Implementing virtual reality concepts in computer assisted language learning. *Simulation and Gaming*, 33(2), 196-209.
- Seker, Sezginsoy, B., & Sohin, G. (2012). Sample game application in social studies teaching. *Procedia- Social and Behavioral Sciences*, 46, 1679-1683.
- Slavin, R. E. (2006). *Educational psychology (8th ed.)*. Boston MA: Allyn and Bacon.

Sorayaie, A. (2012). The effect of game on EFL learner's vocabulary learning strategies. *International Journal of Basic and Applied Science*, 1(2), 252-256.

Thornbury, S. (2002). *How to teach vocabulary*. United Kingdom: Pearson Education.