The Impact of Games on EFL Iranian Learner's Vocabulary Proficiency in Second Grade of High School

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ABSTRACT:

The present research sought to investigate the effects of different games on Iranian EFL learners in second grade high school's vocabulary improvement. Seventy eight male second grade students of Emam ali high school in Avaj participated in this research. The research was conducted in five sessions in near two months, each session lasted about forty five minutes. The subjects were randomly assigned to two groups; thirty seven subjects in the control group and thirty nine in the experimental group. The participants were administered two tests; a multiple choice test for English language proficiency test (Nelson) to determine the level of the participants and a post-test of their textbook to measure the possible effect of games technique on subjects' vocabulary improvement. T-test procedures were applied to analyze the obtained data. The findings showed that the experimental group performed better on post-test vocabulary proficiency test. There was a significant dependency between the vocabulary proficiency level and games techniques. Therefore, we can claim that applying motivating and entertaining games affects Iranian EFL learners' vocabulary proficiency and such games also influence Iranian EFL learners' language learning motivation to speak better. The findings of the present research may have implications for L2 learners and teachers.

Key terms: game, vocabulary learning, pre and post-test, T-test, proficiency test (Nelson).

1 .INTRODUCTION:

In the past years, English language has played an increasingly key role as the vehicle of communication among people from different countries around the world. This is proved that vocabulary is one of the most significant skills in a foreign language, it boosts fluency in second language learners. Thereupon, most researchers have put their concentration on vocabulary learning. They have administered various methods that game is one the most feasible methods in this area. In recent years language researchers and teachers and designers have changed their focus from improving individual linguistic skills to the use of language to receive the speaker's goals. This new field of focus known as communicative ability, manages language teachers to find task-oriented activities that involves their students in creative language use. Games are task-based and have an objective beyond the production of correct speech, apply as an excellent communicative activities (Saricoban & Metin, 2000). Apparently, the aim of all language games is for students to "use the language"; however, during game play learners also engage the target language to persuade and argue their way to favorite consequences. This process includes the productive and

receptive skills contemporarily. Naturally, most English language researchers and learners are involved in the area. Thailand is no exception (Somsai &Intaraprasert, 2011).

According to Akkakoson (2012), in Thailand where English is used as a foreign language, the ability in using English has become essential for learners as it is the universal language for the sprawl of academic knowledge and it helps transmit the educational experience of countless learners. Therefore, English is not only a subject studied in the classroom, but also a device for social and practical use (Foley, 2005). In the case of the Thai educational system, English is a mandatory subject from the primary school onwards. At the third level, university students are needed to take at least four English courses, i.e. two basic courses and two English for academic (EAP) or specific purposes (ESP) courses (Ministry of Education, 2002).

Li (2005) holds the view that "a good command of vocabulary is indispensable in every stage of English language" (p.168). He argues that memorizing vocabulary is very important for English learning especially in Qatar nowadays where a study of memory strategies for English vocabulary is very essential to improve Scientific English of the secondary school learners. Some statements have confirmed the weaknesses of the students to memorize new vocabulary around conducting survey, questionnaires, interviews and the quizzes.

Learning vocabulary through games had received a lot of attention. Donmus claims that "The value of educational games has been increasing in language education since they help to make language education entertaining "(Donmus, 2010, p.1497). According to Kuzu and Ural findings (as cited in Donmus, 2010, p.1499) "when games and education are combined, it can be educative and education environments can be entertaining. The learners who learned with the use of games, gain positive attitudes and can be more motivated while learning".

In 2007, Al Neyaja reported that vocabulary in English is mostly taught out of context as isolated words, the main criticism of this way of teaching is that vocabulary cannot be learnt in separately. Activities which engage students in thinking critically about the words, like applying games and stories let students to remember the target words more easily.

A longitudinal study by Ubreman (1998) on learning English vocabulary has expressed that learning vocabulary is a hard work, therefore an attempt is required to understand, produce and manipulate the target vocabularies. Games help and encourage many learners to learn target language more simply. They also help teachers to conduct contexts in which the target words are useful and meaningful; they also bring fun for students, thus help them learn and retain new words more quickly. In other words, game-based learning can create a meaningful context for language learning process. After learning and practicing new vocabulary through games, students have the opportunity to use language in a stress-reliever way. Sorayai (2012) did another study on this field that goes on games are advantageous and effective in learning vocabulary. They are motivating because they usually involve friendly competition and create cooperative learning environment, so students have an opportunity to work together. They improve students' communicative skills and they have a chance to use the target language" .Therefore, vocabulary games bring real world context into the classroom, and increase students' use of English in a flexible, feasible, communicative method. The role of games in teaching and learning vocabulary cannot be disclaimed.

Riahipour and saba (2012) believe, however, in order to achieve the most from vocabulary games, it is important that more suitable and practical games be chosen. Whenever a game is to be applied, the proficiency level and cultural background of the students should be taken into account, and also it should be useful for students with lower language ability and should be easily applied in the class. Many experienced textbook and methodological manual writers have expressed that games are not just time-filling activities but have a great educational value. This paper offers the rationale for implementing games as a stress-reliever medium of learning words. It is believed that games can have the potentiality to contextualize learning vocabularies.

2. METHOD:
2.1 The main Research Question:
This study is an attempt to provide answers to the following question:
Do games help and motivate the students to acquire new vocabulary efficiently?

2.2 Participants
Seventy eight second grade high school students studying in a high school in Avaj participated in this study. All subjects were male with ages between 16 and 17.
2.3 Materials
The vocabulary learning materials consisted of four different passages selected from lessons of their high school grade two textbook sources. The passages were controlled for their difficulty level in terms of vocabulary and grammatical structure. They were selected so that they would easily lend themselves to games' format. The texts were interesting and informative since the participants were able to play the roles and learn vocabulary more through the games. The research has attempted to shun repetitive texts for the students at this special level.

2.3.1. Nelson's Proficiency Test

In order to make a distinction between the students' mastery level in English, a test was developed based on the content of inter-mediate level. The concept of proficiency for Iranian students is, in practice, irrelevant, as the concept has to encompass a wider range of competencies at a higher level than the level of these students. The objective was just to distinguish between their levels of mastery in English so as to examine the effects of different games on vocabulary development. The test consisted of 50 multiple choice items. The purpose of the test was to measure the proficiency level of students before researcher's treatment.

2.3.2. Role-play discussion

An interesting topic is selected by the teacher (students can also take part in the decision procedure, it draws their interest about the topic prior to discussing it), the topic should be interesting enough for the participants to discuss. Kamila (2010) describes that the class is broken into groups. It is usually divided into two groups but may be more if more than two important ideas on the topic are possible. It is desirable not to reflect on the students' real ideas on the topic. The groups have to be given needed time before the discussion itself to provide their arguments. It may be really useful if each group has a dictionary at their access. During the discussion itself, the numbers of the groups take turns and try to define and make reason about their point of view. Kamila also expresses that the main goal of this activity is not to make students argue; on the contrary, apart from applying the target language actively,

they need to adopt techniques of expressing their view with confidence and yet without getting into quarrel and accepting other peoples' opinions. What is more, by standing for a different opinion than is their own, they learn to understand others rather than judge and deprecate them.

2.3.3. Outburst

Koprowski (2006) defines this kind of game clearly. In the game the participants are divided into two teams, Teams A and B. The teacher offers each team a specific subject (e.g. sports, vehicles, things in an office) which is to be kept secret from the other team. Each team consults for five minutes in private and collectively provides a list of ten items related to the subject. After the lists are made, the game starts off. The teacher offers team A the name of team B's subject. Next Team A has one minute to try to guess correctly; they receive a point. After the points are recorded, it is team B turn to guess. Further rounds can be performed with different subjects offered by the teacher. The first team to score X number of points. The game was performed in different classes and it had desirable results.

3. RESULTS:

3.1. Investigation of the Research Question

3.2. Reliability Statistics

As represented forth in Table 3.1, the reliability value for Placement Test comprising 40 items was assessed 0.89 using KR-21 method. In addition, the reliability index for pre-test and post-test of vocabulary consisting of 20 items each turned out to be 0.83 and 0.85 respectively using KR-21.

Table 3.1

Reliability Statistics

Instrument	No. of items	Reliability Method	Reliability Index
Placement Test	40	KR-21	0.89
Vocabulary Pre-test	20	KR-21	0.83
Vocabulary Post-test	20	KR-21	0.85

3.3. Testing Assumptions

According to Field (2009), four assumptions (interval data, independence of subjects, normality and homogeneity of variances) should be met before one intends to perform parametric tests. In this study, the first assumption is not violated as the present data are measured on an interval scale. Furthermore, Bachman (2005, p. 236) points out that the assumption of independence of subjects is met when "the performance of any given individual is independent of the performance of other individuals". Moreover, the third

assumption concerns the normality of the data which was checked through of one-sample Kolmogorov-Smirnov test. Table 3.2 summarizes the results of normality analysis.

Table 3.2

One-Sample Kolmogorov-Smirnov Test of Normality

Test	Group	N	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
Homogeneity	Experimental	30	0.522	0.948
	Control	30	0.585	0.883
Pre-test	Experimental	30	0.683	0.739
	Control	30	0.781	0.575
Post-test	Experimental	30	0.656	0.782
	Control	30	0.919	0.368

As it can be seen in the Table 3.2, the two sets of placement test scores for both experimental group ($p = .94$, $p > .05$) and control group ($p = .88$, $p > .05$) have normal distribution. In addition, the table shows that the two sets of vocabulary pre-test scores for both experimental group ($p = .73$, $p > .05$) and control group ($p = .57$, $p > .05$) are normally distributed. Besides, according to Table 3.2, the two sets of vocabulary post-test scores for both experimental group ($p = .78$, $p > .05$) and control group ($p = .36$, $p > .05$) have normal distribution. Consequently, parametric independent samples *t*-test was used to test the hypothesis of the current study.

3.4. Placement test results

As mentioned in chapter three of the present study, we used convenient sampling in the present study; hence the placement test was given to both experimental and control groups to ensure that the both groups are homogeneous regarding English language proficiency. The descriptive statistics for both groups' proficiency scores are set forth in Table 3.3.

Table 3.3

Descriptive Statistics of the Two Groups' Placement Test Scores

Group	N	Mean	SD	Std. Error Mean
Experimental	36	23.58	5.277	.880
Control	37	24.46	5.378	.884

Table 3.3 reflects that the mean score and standard deviation of the placement test scores for experimental group ($\bar{x} = 23.58$, $SD = 5.27$) are not very far from the control group ($\bar{x} = 24.46$, $SD = 5.37$).

We performed independent sample t-test to compare the experimental and control groups' proficiency test scores; the results of which are represented in Table 3.4 below. As the table shows, the hypothesis of equal of variances is not violated since the significance level associated with Levene's test (.80) is greater than the selected significance level for this research (.05).

Table 3.4
Independent Samples T-test for Two Groups' Placement Test Scores

	Levene's Test for Variances		T- test for Means		Sig. (2 tailed)	Mean Diff.
	F	Sig.	t			
Equal variances assumed	.063	.803	-.702	71	.485	-.876
Equal variances not assumed			-.703	70.994	.485	-.876

Independent sample t-test (Table 3.4) revealed that there is not any statistically significant difference (t (71) = .70, p = 48, $p > .05$) in the proficiency test measures for the experimental ($\bar{x} = 23.58$) and control ($\bar{x} = 24.46$) groups, in which the t-observed is less the t-critical (2.00). In fact, it suggests that the students in the experimental and control groups are homogeneous regarding English language proficiency.

Figure 3.1 displays the English proficiency test results for the both groups. The figure illustrates that the students in the two groups have acted almost the same on the placement
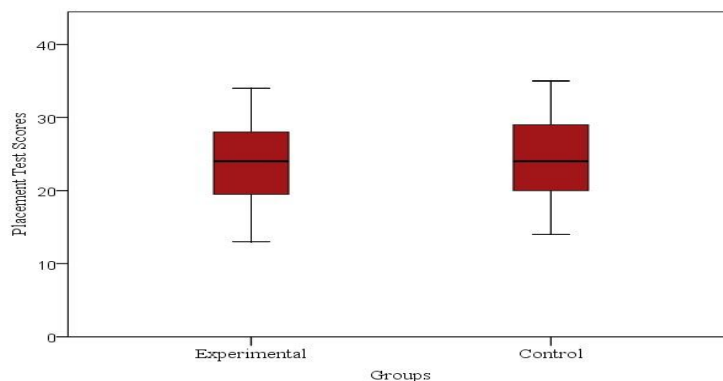
test.

Figure 4.1 Two groups' English proficiency means

3.5. Investigation of Research Question

The research questions of this research aimed at finding out whether games are effective on students' motivation to learn more vocabulary (RQ1). In order to investigate these research questions, independent sample *t*-test was applied. Before discussing the results of *t*-test, the related descriptive statistics were computed (Table 3.5).

Table 3.5
Descriptive Statistics of Two Group's Scores on the Vocabulary Pre-test

Group	N	Mean	SD	Std. Error Mean
Experimental	36	5.72	3.122	.520
Control	37	6.14	3.368	.554

As can be seen obviously in Table 3.5 above and Figure 3.2 below, the mean and standard deviation of the experimental ($\bar{x}$ = 5.72, *SD* = 3.12) and control ($\bar{x}$ = 6.14, *SD* = 3.36) groups do not differ greatly on pre-test of vocabulary.
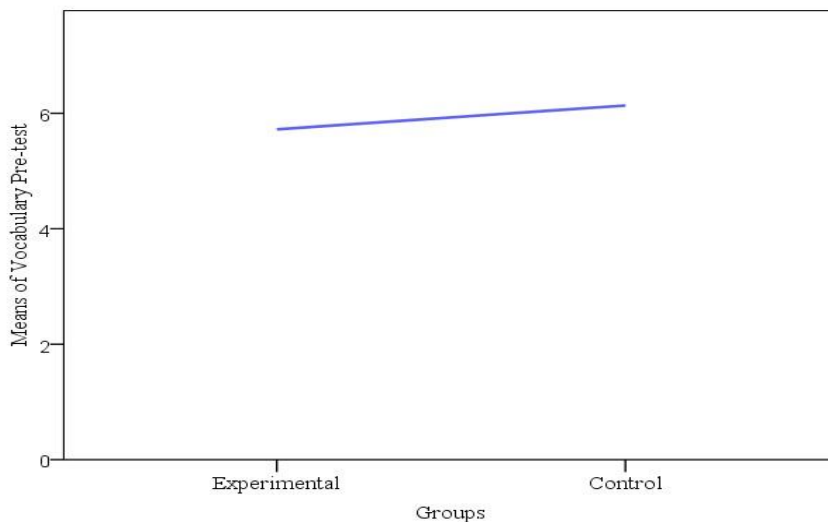
*Figure 3.2 T*wo groups' means on vocabulary pre-test

Table 3.6 summarizes the result of independent *t*-test that was used to compare control and experimental groups' vocabulary scores on the pre-test. As Table 3.6 indicates, the significance level for Levene's Test (.83) exceeds the selected significance level (.05), therefore the assumption of equal of variances is not violated.

Table 3.6

Independent Samples Test for Two Groups' Scores on Vocabulary Pre-test

			T-test for Means			
Levene's Test for Variances						
			t	*df*	Sig. (2 tailed)	Mean Diff.
Factor	*F*	*Sig.*				
Equal variances assumed	.045	.833	-.543	71	.589	-.413
Equal variances not assumed			-.543	70.838	.589	-.413

As displayed in Table 3.6, *t* value and significance level (t (71) = .54, p = .58, p > .05) are indicative of no significant difference in vocabulary scores for experimental ($\bar{x}$ = 5.72) and control ($\bar{x}$ = 6.14)

groups. In fact, the *t*-observed is lower than the *t*-critical of 2.00; hence, we conclude that the students in the two groups have approximately similar vocabulary knowledge before the course starts.

Before discussing the results of *t*-test on the post-test, the related descriptive statistics were calculated (Table 3.7).

Table 3.7
Descriptive Statistics of Two Group's Scores on the Vocabulary Post-test

Group	N	Mean	SD	Std. Error Mean
Experimental	36	15.58	3.083	.514
Control	37	13.51	3.429	.564

Table 3.7 indicates that the students in the experimental group ($\bar{x}$ = 15.58, *SD* = 3.08), who have learned the new vocabularies through games, have outperformed those in the control group ($\bar{x}$ = 13.51, *SD* = 3.42) on post-test of vocabulary.

The results of independent *t*-test that was run to compare experimental and control groups' vocabulary scores on the post-test are laid out in Table 4.8. As can be seen in Table 4.8, the assumption of equal of variances is met (*p* = .63, *p* > .05).

Table 3.8

Independent Samples Test for Two Groups' Scores on Vocabulary Post-test

	Levene's Test for	Variances		T-test for Means MmmddmeemMeans		
Factor	*F*	Sig.	*t*	*df*	Sig. (2 tailed)	Mean Diff.
Equal variances assumed	.226	.636	2.710	71	.008	2.070
Equal variances not assumed			2.714	70.569	.008	2.070

3.6. Investigation of the research hypothesis

Independent *t*-test (Table 3.8) detected a statistically significant difference (t (71) = 2.71, p = .008, $p < .05$) in vocabulary measures for experimental group ($\bar{x}$ = 15.58) and control ($\bar{x}$ = 13.51) group, in which the *t*-observed was above the *t*-critical of 2.00. Consequently, we strongly reject the null hypotheses of the present study that point out, "Games are not effective on the students' motivation, and games do not help the Iranian EFL students to acquire more new vocabularies" and claim that games help the Iranian EFL students to acquire more new vocabularies and also games motivate students to learn new vocabularies. We made a bar graph (Figure 3.3) to demonstrate the results of both pre-test and post-test graphically. As illustrated in the figure, the students in the experimental group, who have been taught the new vocabularies via games, have revealed significantly better performance than those in the control group in view of new vocabulary learning in the condition that they had been in the same level of grammatical knowledge on the pre-test.
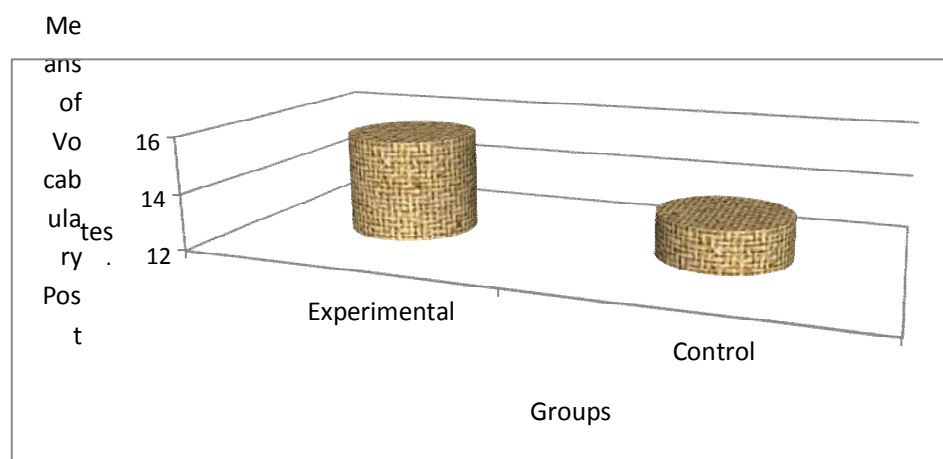

*Figure 3.3 T*wo groups' means on vocabulary post-test

3.7. Discussion of the results

Regarding the research question of the research, the following null hypothesis was tested: game as a vocabulary learning strategy does not have any impact on EFL learners' proficiency level. The results of the present research showed that game as a vocabulary learning strategy enhances the students' comprehension of written and spoken texts. It can be argued that the subjects after being trained in game learned to focus on important information of the text. Also, game may have helped them understand the texts more easily through enhancing the integration of incoming information and the information they have already encountered. Despite of these findings students enjoy playing games while learning a number of vocabularies as well as improving their speaking skill conscious or unconsciously. The results of the research do justify an optimism with respect to the game strategy's future utility. In general, the study should encourage educators to continue to experiment with similar interesting tools and to combine games with other strategies, as it is should be admitted that game is not an "ideal tool" when used alone.

4. DISCUSSION:

It was believed that attention to the vocabulary of a text would lay the foundations for the speaking performance which would enable further learning of coherent text rather than the process of shifting to re-reading (Hadfield, 1990). It was speculated that this would result in better vocabulary proficiency of the passage as a whole.

Addressing the first research question of the research, the following null hypothesis was tested: game as a vocabulary learning strategy does not have any impact on EFL learners' proficiency level. The results of the present study showed that game as a vocabulary learning strategy enhances the students' comprehension of written texts. It can be argued that the subjects after being trained in game learned to focus on important information of the text. Also, game may have helped them understand the texts more easily through enhancing the integration of incoming information and the information they have already encountered.

The results of the study are in accord with a number of studies which found that game enhances vocabulary development (e.g., Calhorun, 1986, Jaonne, 1984). Therefore, it can be concluded, as these studies also have reported, that game strategy may increase the readers' capacity to comprehend the materials.

Since the information collected in a game is presented in an entertainment fashion, the subjects familiar with the strategy might have gained a consciousness that by using game playing technique and trying to understand the interrelationships between various vocabularies presented in a text, they can improve their level of vocabulary proficiency level.

Therefore, Oxford's (1990) suggestion can be reemphasized that game is not just a good memory strategy but also useful as a pre-reading strategy for aiding vocabulary learning.

The research may also support Jonassen's (1996) contention that game technique forces students to take part actively about the words domain in order to identify and verify important vocabularies, describe the relationship between words in a text and its meaning.

The present research shows that game will help produce a better encoding of the text. This will help students to perform better on learning tasks. Strategies like games, therefore, should be viewed as a powerful instrument of learning. It may help both skilled and less skilled EFL readers construct meaning from text.

According to the national curriculum games can be a good teaching method and games, such as role playing games, imitation games, theatrical expression and problem solving activities are especially fitting for all stages of language learning (Aalnamskra, grunnskala, Erlend mál.2007.p. 12). As Biggs (2003) states "being active while learning is better than being inactive" (p.79). So the results of the research support the mentioned studies.

Teaching strategy to improve vocabulary knowledge is developing in vast amount. One of the most famous strategy is games instruction which was applied in the present research. The findings of the present research are accordance with Howard Gardner (2006) who maintains that humans have eight intelligences, argues that when exploring a certain topic in school it can, and should, be approached in six different ways in order to increase the chances of reaching all students in the classroom. One of these strategies is "the personal strategy", where the final objective is to see if it is possible to approach a specific topic by using, for example, role play in a game, or other activities (Gardner.2006.p 142).

The assumption of the present thesis, therefore, was that the provision of this additional help may be greater if the game corresponds to the key learning of words. That is, it was

assumed that when the subjects are trained in game strategy, the assessment of their vocabulary proficiency through a game technique rather than a traditional instruction and treatment would have positive effects on the level of their text understanding.

The present research also confirms Lewis (1999) who holds the view that games are fun and learners specially kids like to play them. Through games children experiment, discover, and interact with their environment. He believes that song games in the classroom is vital because many children do not have enough opportunity to play during their spare time, which can be traced to the fast changes in the world. Every year cities are getting bigger and traffic is getting heavier which means that more and more parents hesitate to let their children play outside. In 1989, Masheder states that passive and steady activities such as watching TV, or the computer monitor are also seen as being more exciting than actually physically and mentally playing, so today the sight of children playing different games in teams outside is becoming much more rare than it was 10, 15 or 20 years ago. This is not a good growth, and it can have several harmful consequences for our society. One possible result is that the lack of movement can cause health problems because even though not all games are physical some definitely are.

The finding of the research reveal that when the participants in the study were trained in classmate game strategy, their knowledge in vocabulary would be improved, so the traditional method wouldn't make any significant difference in the subjects' level of vocabulary learning, leaving a major role for the impact of games on the usefulness of game as a stress reliever strategy.

Based on the results of the research, games made more of a difference for the upper-level proficiency students. This may lead us to conclude that games motivate to compete with their partners, that is game creates a competition atmosphere amongst students. If a teacher is capable to provide the atmosphere in class, he will be extremely successful in teaching in any field.

5. CONCLUSION:

In the present research, it is not claimed, by any means, that the format of the developed game strategy was the ideal one, or that the vocabulary learning of next generation will be of the type presented here. This attempt, rather, was a beginning attempt to distance a bit from traditional vocabulary learning strategies that has dominated our learning and teaching world for now more than a few of decades.

It is believed that after so many years of being taught by traditional methods of vocabulary learning, it takes time for the students to get used to new methods of vocabulary improving like interesting games. As the results of this research show, interaction was found between game training and vocabulary learning indicating that after being taught games and reading materials, the students had little problem in answering the items of the same format. This may suggest, as Coady et al. (1997) stated that because the game tool is easy and interesting to use, it quickly becomes transparent to the students.

This finding would mean that teachers and instructors should continue to try new methods of vocabulary improvement instead of confining themselves to traditional methods of learning as the only ways of improving their students' learning. As Lowis (1999) suggests there is nothing written in stone that says traditional methods like memorizing must be used from grade school through university, and perhaps in time even national achievement will utilize games such as online games as a powerful vocabulary learning tool.

The present study reconfirms Biggs who stated that a large number of reasons exist that games apply a place in the language class. First of all, games represent lots of advantages over the traditional teaching methods.

5.1. Pedagogical Implications

An important implication of the results of the present study is that since games are enjoyable for students, they are enjoyed learning through game process. As Calhoun (1980) expresses the view that games are pleasurable and interactive and learners answer naturally to this type of learning dynamic. If learning is to happen, students must be motivated to learn. Games have the effect of offering learners safety in numbers when the games go on a paired or grouped basis.

The next level which will encourage learners is social or dependence needs and games naturally represent a medium for developing and satisfying learners' social needs. They are naturally drawn together and bond in the convenient competitive environment of the game, it is almost impossible to be passively and not become engaged in games, specially, when they are entertaining. Ruben (1999) demonstrates the authors claim that games can motivate learners to learn from a social or dependent need when he claims that games represent a chance to improve collaboration and reasons active learning. The comfortable and relaxing competitiveness of the game offers a motivating incentive for learners at the next level of Maslow's theory, ego or self-esteem. So in respect to all mentioned ideas and the result of the study, games are dramatically effective on learning, specially, in vocabulary area.

The results of the research do justify an optimism with respect to the game strategy's future utility. In general, the research should encourage educators to continue to experiment with similar interesting tools and to combine games with other strategies, as it is should be admitted that game is not an 'ideal tool' when used alone.

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