# Game-Based Tasks for Foreign Language Instruction: Perspectives on Young Learners' Vocabulary Acquisition

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### Abstract

The present study attempted to investigate the impact of language games on the vocabulary achievement of Iranian learners. The study also examined the possible differences between male and female participants in terms of their vocabulary learning in game-based tasks. To this end, 40 young language learners (comparison group = 20 and experimental group = 20) were selected. They were administered the KET, after which homogeneity of the participants according to their proficiency level (i.e., elementary level) was ascertained. Four types of games including 'hangman', 'flash card memory game', 'bingo', and 'odd man out' were used in the experimental class, each of which lasting for five sessions. After twenty sessions of total treatment, the participants in both groups were given a teacher-made proficiency test which included 30 items. After ensuring the psychometric properties of the post-test and the assumptions of independent samples T-test, the analyses were carried out. Results of T-test for the first research question showed statistically significant differences between the comparison and the experimental groups. However, the results of the Ttest for the second research question were statistically non-significant. The discussions of the findings are further discussed in detail.

Keywords: vocabulary learning, task-based teaching, games, gender

## 1. Introduction

Orientations in teaching second language vocabulary are often metaphorically specified as a twisting pendulum, with the approaches in favor getting exposed to continuous serious evaluations and being progressively substituted by the new (however, mostly, in their nature, old) good approaches. And, it is at least risky to assume that we are advancing another step if we do not look back to consider how far we have walked. Vocabulary has aroused the attention of researchers in the field, while it was overlooked before 1980 (Meara, 1980). One reason of this attention is the abrupt growth of some specialized language teaching textbooks in the years after 1980 (e.g., McCarthy & O'Dell 1994; Rudzka, Channell, Ostyn, & Putseys, 1981; Seal, 1991). The second reason is the development of a number of research articles and books dedicated to the area of vocabulary teaching and to the using of various vocabulary-teaching techniques (e.g., Allen, 1983; Coady & Hukin, 1997; Gairns & Redman, 1986; Nation, 2001; Schmitt & McCarthy, 1997). Many second language teachers assume that students can learn new words incidentally and on their own, through reading or other related activities (Zimmerman, 1994).

The use of games as an approach in the teaching of vocabulary focuses on the issue of tasks in language classrooms. Task-based teaching attends to the accomplishment of significant tasks in the learning process. It is formed by the idea that if learners center on the completion of a task, they are just as likely to learn language as they are if they are concentrating on language forms. Instead of language syntax and function to be acquired, learners are presented with a task they have to carry out or a problem they have to solve.

"The current task-based approaches to second language (L2) instruction encourage the use of small group work (including pair work) in the L2 classroom as a means of providing learners with more opportunities to use the L2" (Storch & Aldosari, 2013, p. 39). When teaching is aimed at promoting the communicative competence, classroom interaction assumes a significant role. Interaction and communication are isomorphic, the existence of which implies the existence of the other. If interaction does not exist, communication does not either. Tamah (2007) argues that "in classroom interaction, students use language to negotiate meaning. They get the chance to make use of all they have of the language. This implicitly means that it is crucial for the teacher to provide more chance for the students to interact for the sake of real-life exchanges" (p. 6). According to this definition, learners should be provided with numerous opportunities to engage in interactive activities rather than passive learning. Games pave the way towards reaching this objective. In line with the significance of task-based teaching in the promotion of language learning and the importance of games for teaching language to young learners, the present study is aimed at the comparison of games and traditional approaches in learning. The study set out to seek answers to the following research questions:

- 1. Do games have any effect on young language learners' vocabulary learning?
- 2. Is there any significant difference between male and female young language learners in terms of vocabulary learning by means of games?

In spite of the common thought, games are not limited only to beginner levels. Learners at elementary and upper levels can also take the advantages of playing language games and learn more vocabulary. Games add interest to what students might not find very interesting. Sustaining interest can mean sustaining effort (Thiagarajan, 1999; Wright, Betteridge, & Buckby, 2005). Game-based tasks provide a stress free and joyful environment for learning more vocabulary and a longer retention. Game-based tasks also help the teacher to create a context in which vocabulary is useful and meaningful. The variety and intensity that games offer may lower anxiety (Richard-Amato, 1988) and encourage shyer learners to take part in interactions (Uberman, 1998). The emotions aroused when playing games add variety to the sometimes dry, serious process of language instruction (Bransford, Brown, & Coking, 2000). This is especially useful for teaching young learners in the sense that they cannot tolerate the strict and less enjoyable tasks and may not learn the target subject as is expected. Using concrete tasks is in line with the capacities and abilities of young learners. The use of game-based activities and tasks presents an effective way of teaching vocabularies concretely to the young language learners who do not have the advantage of thinking abstractly. Therefore, teaching can be accomplished by telling and persuading, by showing and demonstrating, guiding and directing the learners' efforts or by a combination of these actions or it might rely on professionally prepared materials, resource people, or the combination of talents, skills and information already present in learners (Lefrancois, 1991).

This meaningful communication provides the basis for comprehension input (Krashen, 1989), i.e., what students understand as they listen and read interaction to enhance comprehensibility, e.g., asking for repetition or giving examples (Long, 1981), and comprehensible output, speaking and writing so that others can understand (Swain, 1993). Gardner has suggested the idea of communication as a dynamic process to stimulate communication in the classroom through task-based activities and techniques such as role playing and information gap activities and techniques which can be considered as the core of language games. Larsen-Freeman (1986) supported the impact of games on error correction in ESL classroom such that games are important because the speaker receives immediate feedback from listener on whatever or how he has successfully communicated. In attempt to provide more information about the efficiency of games in the language learning of young learners, the present study was carried out.

### 2. Method

### 2.1. Participants

Participants of this study consisted of 40 Iranian male and female young learners at Kish English Language institute. They were all elementary level learners according to the results of the key English test (KET) which was administered before the conduction of study. Their age varied from 10 to 15 and they had never been in an English speaking country before the study.

### 2.2. Instruments

### 2.2.1. KET

Key English test was used as the test of proficiency for homogenization purposes. Only the reading section of the test was employed since the major goal of the present study was to evaluate the vocabulary knowledge of participants. The test consisted of 35 questions evaluating the participants' reading and vocabulary competences.

### 2.2.2. Teacher-made Vocabulary Test

A teacher- made vocabulary test was designed to evaluate the experimental group students' vocabulary achievement. The test was examined for its psychometric property of reliability and it was found to have an acceptable estimate.

# 2.2.3. Course Book

The book entitled "Happy Earth 1" (by Bowler & Parminter, 2002) was taught at this level according to the syllabus of the language school. The book consists of 8 units and the total units are normally covered in 4 terms (2 units each term). Each unit works on vocabulary, grammar, speaking, reading, and listening activities. The book has an audio CD for listening parts as well as the activity book and a work sheet. Since this book puts heavy emphasis on the learning of new vocabulary items by young learners and because the book is successful in providing the vocabularies in very attractive ways to children, it has been considered as an appropriate course book to be used in the present study. It should also be mentioned that there has been no other additional sources used alongside this book.

## 2.2.4. Procedure

For the purpose of the present study, four games for vocabulary instruction were adopted from "Games for Young Learners" book. New vocabulary items in "Happy Earth 1" (Bowler & Parminter, 2002) were taught and practiced via four games with the first group in the last 20 minutes of every session. Since the whole treatment took 20 sessions, every game was practiced for 5 sessions. The games were: hangman, flash card memory game, bingo, and odd man out. The games required the learners to interact with each other to achieve the end product. When considered necessary, learners were arranged into small groups randomly and were given the planned games to carry out. In the first 5 sessions, hangman games were played by the students. In this game the teacher put blanks on the board as many as the number of the new word students have learned, then in groups they should guess the letters one by one, at the end the first group made a correct guess of the word goes to the board and completes the blanks then takes another hangman card from the teacher. The group that had the more correct guesses was the winner. In the second 5 sessions, memory flashcards game was played (again in groups). The teacher brought some photo flashcards from newly learnt words. She showed them to all of the students and then covered them. One person from every group came over to the front and tried to remember the photos (words). The group could help if necessary. At the end, the group with more words was the winner. The third 5 sessions went on with Bingo game. The teacher had 16 photo cards. She drew a chart with 16 spaces (called Tic Tac Toe). The class formed two groups from which one participant came over to the front of the class and the teacher showed the photo, if the learner could say what it was, the group got a number in the chart. A group that first filled a row of numbers was the winner. The last 5 sessions continued with odd man out. Again, the teacher had some cards with 4 words from newly learnt vocabulary. Each group should guess which word was not related to the others and circle it. At the end, the group with more cards and logical reasons for their choice was the winner. Throughout these games, the instructor monitored the process and after the completion of the tasks asked the learners to provide their answers and give reason for their answers. This technique helped develop the

interactional patterns among them and indirectly led to the development and learning of vocabulary items.

In the control group, the participants were not given any task-based instruction including games. The teacher initiated the instruction and explained the new words and grammatical points to the learners. The target language of the learners was used primarily but when learners had comprehension problems their native language was also utilized. After the 20 sessions of treatment, both control and experimental groups were given the vocabulary post-test to measure their attainments in vocabulary learning.

## 3. Results

### 3.1. Piloting Vocabulary Test Used for Homogenization

In order to estimate the reliability index of the vocabulary pre-test, the Cronbach's alpha was used. The reliability value of the pretest was 0.87 which showed a high and acceptable index (Table 1).

## Table 1.

Reliability Estimate of the Vocabulary Pretest Used for Homogenization

| Cronbach's | N of  |
|------------|-------|
| Alpha      | Items |
| .874       | 30    |

In order to provide an answer to the first research question, the ANCOVA test was run. But, since one of the assumptions of ANCOVA (i.e., the homogeneity assumption) was violated, an independent samples T-test was used to examine the question. Prior to the conduction of the independent samples T-tests, the assumptions of normality of distribution were tested through the histograms, Kolmogorov-Smirnov tests, and box plots. First, the histograms for each of the experimental and comparison groups are illustrated in figure 1.



Figure 1. Histogram results for vocabulary post-test performances

Below the results of the Kolmogorov-Smirnov test for post-test vocabulary scores are indicated.

#### Table 2.

One-Sample Kolmogorov-Smirnov Test for Post-test Vocabulary Scores

|                                |                | Post-test |
|--------------------------------|----------------|-----------|
|                                |                | scores    |
| Ν                              |                | 40        |
| Normal Parameters <sup>a</sup> | Mean           | 6.7750    |
|                                | Std. Deviation | 2.76876   |
| Most Extreme                   | Absolute       | .092      |
| Differences                    | Positive       | .092      |
|                                | Negative       | 082       |
| Kolmogorov-Smirnov Z           |                | .581      |
| Asymp. Sig. (2-tailed)         |                | .888      |
|                                | 1              |           |

a. Test distribution is Normal.

The results of the table show that the distribution of scores are normal (p > 0.05). As the last test of normality, the box plot for the post-test scores is shown in graph 2 below.



Figure 2. Box plot results for post-test vocabulary scores

Having ascertained the assumptions of independent samples T-test as a parametric test, the next step was to conduct the T-tests. Table 2 below demonstrates the descriptive statistics of the vocabulary performance of the two groups.

#### Table 2.

Descriptive Statistics Results for Groups' Differences on Vocabulary Post-test

|                      | groups       | Ν  | Mean   | Std. Deviation | Std. Error Mean |
|----------------------|--------------|----|--------|----------------|-----------------|
| Vocabulary post-test | comparison   | 20 | 4.9500 | 1.93241        | .43210          |
|                      | experimental | 20 | 8.6000 | 2.23371        | .49947          |

As the mean and standard deviation scores in table 2 show, there are differences between experimental (M = 8.60, SD = 2.23) and comparison (M = 4.95, SD = 1.93) group learners' performance in the vocabulary post-test. However, in order to get more accurate and reliable results, an independent samples T-test was run, the results of which are displayed in table 3.

# Table 3.

|                         |                                      | Leve<br>Test<br>Equa<br>of<br>Vari | ene's<br>for<br>ality<br>ances | t-test f | for Equa | lity of M              | leans              |                          |                                       |                         |
|-------------------------|--------------------------------------|------------------------------------|--------------------------------|----------|----------|------------------------|--------------------|--------------------------|---------------------------------------|-------------------------|
|                         |                                      | F                                  | Sig.                           | t        | df       | Sig.<br>(2-<br>tailed) | Mean<br>Difference | Std. Error<br>Difference | 95%<br>Confide<br>Interval<br>Differe | ence<br>l of the<br>nce |
| Vocabulary<br>post-test | Equal<br>variances<br>assumed        | .13                                | .71                            | -5.52    | 38       | .000                   | -3.65              | .66                      | -4.98                                 | -2.31                   |
|                         | Equal<br>variances<br>not<br>assumed |                                    |                                | -5.52    | 37.22    | .000                   | -3.65              | .66                      | -4.98                                 | -2.31                   |

*T-test Results for Groups' Differences on Vocabulary Post-test* 

The results show that the significance level of Levene's test is p = 0.71, which means that the variances for the two groups (experimental and comparison) are *the same*. The results of independent samples T-test show statistically significant differences (t (38) = -5.52, p < 0.05) between the experimental and comparison groups in the posttest. The descriptive statistics, too, point to the same finding showing that learners in the experimental group (M = 8.60, SD = 2.23) outperform those in the comparison group (M = 4.95, SD = 1.93).

In order to examine the differences between male and female learners' performances in the vocabulary post-test, an independent samples T-test was run. First, the results of descriptive statistics are shown.

### Table 4.

Descriptive Statistics Results for Vocabulary Achievement Differences across Gender

|              | gender | Ν  | Mean   | Std. Deviation | Std. Error Mean |
|--------------|--------|----|--------|----------------|-----------------|
| experimental | male   | 10 | 8.7000 | 2.31181        | .73106          |
|              | female | 10 | 8.5000 | 2.27303        | .71880          |

As table 4 shows, the mean differences between the male (M = 8.70, SD = 2.31) and female (M = 8.50, SD = 2.27) participants in the experimental condition are not very high. T-test results are shown in table 5 below.

# Table 5.

|              |                                      | Leve<br>Test<br>Equa<br>Varia | ne's<br>for<br>lity of<br>inces | t-test | for Equ   |                       |                        |                              |   |                                   |
|--------------|--------------------------------------|-------------------------------|---------------------------------|--------|-----------|-----------------------|------------------------|------------------------------|---|-----------------------------------|
|              |                                      | F                             | Sig.                            | t      | df        | Sig.<br>(2-<br>tailed | Mean<br>Differ<br>ence | Std. Error<br>Differenc<br>e | 95% Cor<br>Interval<br>Different<br>Lower | nfidence<br>of the<br>ce<br>Upper |
| experimental | Equal<br>variances<br>assumed        | .13                           | .71                             | .19    | 18        | .84                   | .20                    | 1.02                         | -1.95                                     | 2.35                              |
|              | Equal<br>variances<br>not<br>assumed |                               |                                 | .19    | 17.9<br>9 | .84                   | .20                    | 1.02                         | -1.95                                     | 2.35                              |

*T-test Results for Vocabulary Achievement Differences across Gender* 

The results show that the significance level of Levene's test is p = 0.71, which means that the variances for the two groups (male and female) are *the same*. The results of independent samples T-test show statistically non-significant differences (t (18) = 195, p > 0.05) between male and female participants in the experimental group.

#### 4. Discussion and Conclusion

The findings of the present study showed that the game based experimental group outperformed the comparison group in vocabulary achievement. In fact, the results of the present study are logical and acceptable given the fact that the participants of the study were at the elementary level of proficiency and therefore were more at ease with the game-based approach. In other words, the elementary level learners can have extreme difficulties in receiving and retaining the abstract and complex facts and issues than more concrete and tangible ones. Game-based approach provides a sort of task-based approach in which learners cooperate and work together to achieve the end result. They use the language subconsciously as a means towards the end.

Uberman (1998), for example, observed the enthusiasm of her students in learning through games. She considers word games a way to help students not only enjoy and entertain with the language they learn, but also practice it incidentally. Whither (1986) states that word play and verbal humor provide excellent opportunities for teaching inferencing as students interpret or intelligently guess at the author's meaning. Warnock (1989) holds that the appropriate use of pun is a powerful tool that can help adult educators positively affect changes in people's knowledge, attitudes, skills, and aspirations and the didactic process.

The findings of the present research are in line with the abovementioned studies, therefore, encourage an implicit and task-based approach to teaching vocabularies centering especially on the games.

In addition, the results of the statistical analyses for the second research question of the present study indicated no significant differences between male and female language learners. In other words, both could benefit from the use of games in the classroom regardless of their gender.

Further studies can be conducted to examine and compare the advantages associated with different types of games. Also, it would be more logical to investigate if the performance of the participants in the groups differs with regard to their individual characteristics such as level of proficiency, age, educational background and so forth.

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