

The Effects of Game-based Learning on the Grammatical Accuracy of Iranian High school Students

¹Mostafa Parvin

ID: IJEAP-1802-1180

²Nahid Yarahmadzahi

Received: 01/03/2017

Accepted: 04/12/2017

Available online: 02/02/2018

Abstract

Teaching grammar has always been a problematic area of language teaching. While teachers spend a great deal of time and energy to teach, the students are not eager to learn as they find it a real chore. This study compared two kinds of activities for teaching grammar: games and traditional exercises. It sought to discover the effect of games on the students' grammatical accuracy. For this purpose, 61 students of Nikshahr High School for Gifted Students were chosen to participate in the study. They were assigned to two groups: control and experimental. Prior to the study, all the subjects were given the Nelson Proficiency Test to ensure they were homogenous in terms of language proficiency. Then, the experimental group was set to use grammar games in the practice phase of their classes, while the control group practiced through traditional repetition, fill in the blanks, or multiple-choice exercises. Following that, to measure the effect of the treatment, the subjects were post-tested for grammatical accuracy. Then a series of paired- and independent-samples t-tests were conducted to evaluate the hypothesis of the study. The results indicated that there was no significant difference between the two groups although the experimental group had a small advantage over the control group.

Key words: Games, Grammar, Accuracy, High school Students

1. Introduction

Teaching grammar as a prominent component of language plays a central role in language learning and acquisition. It has been defined from different perspectives by different writers. Nunan (2003) defined grammar as "a set of rules specifying the correct ordering of words at the sentence level" (p. 8). In a traditional and simple view, it has been defined as "the rules by which words change their forms and are combined into sentences" (Richards & Rodgers, 2003, p. 705). Recent years have seen an increased interest in the role of grammar in English language teaching (Nunan (2003), Newby (2006), Ellis (2006)). Azar (2007) stated that without grammar, we only have individual words, sounds, pictures, and body expressions to communicate meaning, and grammar as an essential component of language learning is the wearing that creates the fabric. For many years, a misconception

¹ MA students of TEFL, English department, Chabahar Maritime University, Email: mostafalashari@yahoo.com

² Corresponding Author- Assistant Professor of Linguistics, English department, Chabahar Maritime University
Email: venayahmadi@gmail.com

about the nature of grammar led to ineffective ways of grammar instruction. Grammatical structures were often considered in isolation and taught out of context; as a result, it was difficult for students to apply what they had learned in actual situations (Celce-Murcia & Hilles, 1988). In that era, teachers neglected the fact that the final goal of language teaching was language use, i.e. communication, rather than language usage or knowledge of language. According to Celce-Murcia (2001), what takes a special importance is the fact that rules and forms should be integrated into different communicative tasks to use them meaningfully, since language is for communication. Teachers, Generally, and language teachers, more specifically, have always been looking for ways to simplify and accelerate learning process on the part of the learners. This wish motivated a lot of inventions and creativity in the field of teaching a foreign language to transit language teaching into an era of modernity, easiness, and productivity from a time of antiquity, difficulty, and stagnancy in the 19th century.

The most noticed problem about the traditional way of teaching grammar was that grammar presentation in the textbooks was evaluated as decontextualized and, therefore, not meaningful. As Nunan (1998) stated “learners were given isolated sentences, which they were expected to internalize through exercises involving repetition, manipulation, and grammatical transformation”. (p. 102). Traditionally, grammar was attended to in isolation as it was often taught separately during a lesson. It was observed by language instructors that students being taught the grammatical structures through traditional methods and techniques had a great amount of knowledge about the language usage, but they were not able to use this knowledge appropriately and correctly in production despite a great deal of their attention being devoted to grammatical points. This meant that the students were not able to convey their learnings to a real situation no matter how competent they had become through memorization and drilling.

In junior and senior high schools of Iran, English is taught as a foreign language and there is no exposure to language out of classroom. In the area in which this study has been conducted, students are exposed to the national language of the country, Persian, as well as to their mother tongue (Balochi). In such a situation the authenticity of input for the learners can easily be called into question. Furthermore, in traditional teaching methods that are currently used by high school teachers in Iran, long and often tedious explanations of the intricacies of grammar are provided. The students are expected to memorize the rules and their exceptions. This puts a huge burden on the students' cognition which makes students become less motivated to learn a foreign language as they find it difficult and boring. In such a situation, some students feel lazy in doing tasks.

One of the suggested ways to make learning a language in general and grammar in particular more fun, fascinating, and motivating is using games in order to lead students to participate in class activities, and hence have a chance to practice or use the new language items they have just learnt eagerly and willingly instead of being forced to do the tasks unwillingly. According to Wright, Betteridge and Buckby (1984) “Language learning is hard work. Effort is required at every moment and should be maintained over a long period of time. Games may help and encourage many learners to sustain their interest and work.”

(p. 4). Regarding the interactive nature of game-based language teaching, it seems that it is necessary to conduct a study in Iran's English as a Foreign Language (EFL) context where traditional way of teaching grammar is dominant to find whether or not such instruction is adaptable to its system of language education especially in a bilingual community such as Baluchistan. Therefore, this study in particular seeks to investigate whether or not games have any significant effect on the grammatical accuracy level of Iranian senior high-school students.

2. Literature Review

Teaching Grammar which means teaching the rules and patterns of a language which are essential for communication and language use has been a controversial issue for decades. For quite a time, it was widely believed that linguistic knowledge led to communication, but this issue was challenged in the early 1970s. Some scholars found that linguistic competence is just a part of communicative competence. To be competent in the use of the language, only mastery of grammatical rules is not enough but grammar principles should be integrated into a communicative framework because the fundamental purpose of language is communication (Richards & Renandya, 2002). In the history of language teaching, based on differing linguistic and psychological approaches, different methods of grammar teaching appeared including traditional, communicative and post communicative methods. Each aimed to compensate for the shortcomings and pitfalls of previous methods. Soon, scientists learned that there is not a panacea method to teach grammar in all situations and to all language students with different backgrounds and purposes. Hence there was the emergence of eclectic era of language teaching, in general, and grammar teaching, in particular.

Gaming is a characteristic of human nature; hence it can be claimed that the history of gaming goes back to the beginning of the history of human being (Demirbilek, Yilmaz, & Tamer, 2010), however games didn't appear in the field of language teaching very early. They can be traced back to humanistic theory of 'Desuggestopedia' where the students engaged in activities such as dancing, singing, dramatizations and, of course, games to desuggest limitations to language learning. Also, in CLT, games were used frequently. It was thought that games were important because they had certain features in common with real communicative events. Also, the speaker received immediate feedback from the listener on whether or not he or she had successfully communicated. In this way they could negotiate meaning (Larsen-Freeman, 2000).

Various studies probed the effect of Gaming on the learning of different areas of a language. Among them, Yu (2005) studied the effects of games on the acquisition of some grammatical features of German as a second language. She concluded that games as teaching-learning strategies were fun and created a non-threatening learning environment that encouraged interactions between students and teachers, enhanced communication and teamwork, encouraged active participation and enabled students to demonstrate and apply previously or newly acquired knowledge and skills. In another study carried out by Thomas & Austin (2005) designed for college students to reinforce grammar in the college writing

system, the effect of games was explored. The researcher, at the end of the experiment, decided that providing a combination of games provided a friendly and cooperative surrounding among the students when mastering the grammatical concepts.

In Iranian context also, many researches were conducted to investigate the role of games on learning English over the last decade. The majority of these studies probed the effect of games on vocabulary learning and achievement while a few explored the impact of games on learning grammar. In a study, Eskandari et al (2014) investigated the effect of using games on the grammar of Iranian young learners of English. The results showed that the participants of the experimental group outperformed the control group significantly. In another study, Jalali and Dousti (2012) evaluated the effect of computer games on grammar and vocabulary gaining. The results demonstrated that computer games were not able to enhance grammar and vocabulary attainment on the part of the students.

3. Method

This research followed the principles of quasi-experimental design. Research question was quantitative, and its hypothesis was non-directional or null in nature. The purpose of the present study was to investigate the effect of the games on learning English grammar in comparison with traditional grammar classrooms where grammar is taught deductively. It was hypothesized that games had no effect on the accuracy level of grammatical structures on the part of the students. There were two groups: group A was the experimental group in which grammar was taught using games, while in group B – the control group – traditional method of teaching was applied. There was one independent variable: the games. The dependent variable was the grammatical accuracy of Iranian learners of English as a Foreign Language.

3.2 Participants

The participants of the study were 61 high school students of the first grade who had studied English for three years. Their school was located in the city of Nikshahr, Iran. They were all male and native speakers of either Persian or Balochi. Their age range was 14 to 16. They were students of two already assigned classes except for seven students who were transferred from one class to the other in order to have groups of almost the same number. Their homogeneity in terms of English language proficiency was checked by Nelson English Proficiency Test. This ensured that the learners selected for the main study were almost at the same level of language proficiency prior to the treatment.

3.3 Instrumentation

In this study two pre-tests, twelve games, the names and descriptions of which will follow, and finally a post-test were used to collect data and to validate the findings.

3.3.1. Homogeneity Test

Nelson English Proficiency Test was used as a pre-test for examining the participants' prior knowledge of general English. It was administered at the beginning of the study to see whether the subjects in both groups were of the same level of grammatical proficiency.

The level of the participants in the present study was elementary, so Nelson English Proficiency Test (050 A) was deemed appropriate for controlling their proficiency level. The test consisted of 50 items which tested the grammar knowledge of participants. The total time allotted for the test was 50 minutes for both groups.

3.3.2. *Grammatical Accuracy Pre-test*

Prior to the experiment, to control students' Grammatical Accuracy level, an achievement test was given to the students of both groups. This test included 40 items which were equally distributed among five grammatical structures instructed to the subjects during this study, namely Present Simple, Present Progressive, Past simple, Simple adjectives, and comparative and superlative adjectives. To be as valid and reliable as possible, this Achievement test included items which were chosen from Gaj books which were especially designed and published by experts for testing grammatical structures. Each item had a score of one point. So, the maximum score was 40 and the minimum score was 0.

3.3.3. *Grammar Games*

The key instruments of the researcher to conduct the research procedure were the grammar games. These games were adopted from Grammar Practice Activities by Ur (1988) and Fun with Grammar by Woodward (1997) that corresponded to the current level of the participants.

Learners in the experimental group participated in meaningful and communicative games which drew their attention to the linguistic form. The elementary level participants were provided with games in which opportunities for language use were provided and also certain points of grammar were focused. These games were used to push the learners to produce the target language structures.

3.3.3.1. *Clue*

Materials: None

Grammar Focus: Making interrogative present simple tense

Procedure: one student was chosen to come to the front of the class. He was given an identity and was supposed to give clues to the class. The class would need to guess the identity from the clues and could only ask yes/no questions. If the class could guess the identity of the student correctly, it won. If the class couldn't guess the identity after 10 clues the student won.

Example: Identity: baseball, SAMPLE CLUES: Many people like me. You can watch me. It is (or I am) done outdoors. I am a game/sport. You need a mitt to play.

3.3.3.2. *Animal Habits*

Materials: None

Grammar Focus: use of present simple to describe habitual actions; composition of simple sentences;

Procedure: For this activity, students worked in pairs or small groups to prepare a description of an animal of their choice. Once students had prepared their descriptions, each group took turns telling its description to the rest of the class, who would then try to guess what the animal was.

Example: A possible description of a rabbit could include, “It lives in a hole. It eats plants and vegetables. It has a lot of babies. It runs very fast”.

3.3.3.3. *How often?*

Materials: None

Grammar Focus: Using frequency adverbs with present simple tense

Procedure: The class was divided into pairs. Each student was given a copy of the worksheet. Students interviewed each other, writing the answers on their worksheet. For the second phase of this activity students read the story in the worksheet and answered the questions. At last, the answers were shared with the entire class and the students discussed the incorrect forms.

Example: Q: How often do you go to the movies? A: Once a week. Q: How often do you play soccer? A: We play soccer three times a week.

3.3.3.4. *Relay*

Materials: None

Grammar Focus: distinguishing between regular and irregular verbs and transforming them to past tense

Procedure: The class was divided into two teams and lined up on either side of the classroom. The same list of verbs (regular and irregular verbs were mixed) was written on each side of the board but listed in different order. The first student from each line went to the board and chose one verb to write in the past form. As soon as he was done, he gave the marker to the next student in line. Each student was allowed to do only one new past form but could correct any of the answers previously written (Spelling counted). The object was for the team to write the past forms for all the simple forms. The first team to finish correctly won.

Example: Walk (regular) Walked (past tense)

Think (irregular) Thought (past tense)

3.3.3.5. *Detective*

Materials: Worksheet (Appendix E)

Grammar Focus: asking questions in past tense

Procedure: the class was divided into groups of four. Each group contained a “detective” and three “witnesses.” Each “witness” was given a section of worksheet that contained the situation and a witness statement, all three of which were different. The “detective” was

given the situation and the list of suspects. The detective questioned the witness (using the past tense) to determine who was the “thief.”

Example: how did the thief look like? When did he come out?

3.3.3.6. *Piling up Events*

Materials: None

Grammar Focus: Use of past tense for narrative; repetition and construction of simple sentences on given past forms

Procedure: the class was divided into groups of five and six. Each group was given some verbs in the past tense. Then the teacher started a simple chain of events with a sentence.

Then each group tried to make a story with the words given. The groups were permitted to choose either let every student take care of one or two verbs or work in group to make their story. Finally, all groups shared their stories and the group who made the best story won.

Example: for example, the teacher starts: Yesterday I went to town, I bought a loaf of bread. Then the students carried on: Yesterday I went to town, I bought a loaf of bread and sat on a park bench then stood at the bus stop ...

3.3.3.7. *Act it out*

Materials: None

Grammar Focus: Use of Present Progressive for description

Procedure: the class was divided into several teams. A student from each team came to the front of the class and acted out an activity found in the worksheet silently. If the team guessed correctly in the allotted time, they scored a point.

Example: He is jumping on his left foot. He is opening the door.

3.3.3.8. *Picture Sentences*

Materials: worksheet (Appendix F)

Grammar Focus: Use of Present Progressive for description

Procedure: the class was divided into groups of three and four. All groups were given the same picture. The groups were instructed to describe the picture in as many sentences as possible in the time allowed, using present progressive tense. The sentences had to be grammatically correct and accurately depict what was happening in the picture. All groups read their sentences. The group with the most correct sentences won.

3.3.3.9. *Description*

Materials: None

Grammar Focus: position of adjective(s) before nouns

Procedure: Each student was asked to write a one-sentence description of a classmate on a piece of paper, using at least one adjective in the description. The students took turns reading the descriptions aloud. The rest of the class tried to guess who was being described. Because they were competing to guess the identity of their classmates, the students were asked to use descriptions as particular as possible.

Example: She has long curly hair. He is wearing a black leather jacket.

3.3.3.10. *On-the-Spot Reports*

Materials: None

Grammar Focus: position of adjective(s) before nouns

Procedure: two of the students were chosen to participate in a role play. One of the actors played the “thief” and the other the “victim”. At the beginning of class, the “victim” came in and walked in front of the class. The “victim” had a purse for the “thief” to steal. The “thief” rushed in behind the “victim” and grabbed the purse. Both exited, with the “victim” chasing the “thief.” The students were arranged in small groups and were asked to prepare “statements” for the police. The statements described what they witnessed, details about what the “thief” was wearing, and a description of the stolen object. The students read their statements aloud and, finally, the teacher decided which group came closest.

Example: the thief was wearing white clothes. He was tall ...

3.3.3.11. *Comparison Cards*

Materials: worksheet (appendix G)

Grammar Focus: Use of comparative adjectives to compare subjects

Procedure: The worksheets were cut up into cards to make sets for each group. The class was arranged into groups of three or four and each group was given a set of cards. One student in each group drew a card and made a comparative sentence using the two nouns and adjective on the card. The other students in the group judged whether the sentence used the correct comparative form and decided if it was correct. The students kept score in their groups to see who made the most correct sentences.

Example: My legs (short) Your legs

Student sentence: My legs are shorter than your legs.

3.3.3.12. *Classmate Questionnaire*

Materials: Worksheet (appendix H)

Grammar Focus: Use of superlative adjectives to compare subjects

Procedure: Students were put into pairs. Each pair was given a copy of the handout. Students were asked to answer the questions in complete sentences. Some students were able to answer without talking to their classmates, but others required asking their

classmates questions. To be a competitive game, at last, the teacher determined who had written the correct answer and assigned one point for every correct answer.

Example: Who has the longest shoe in the class? Hassan has the longest shoe.

3.4. Grammatical Accuracy Post-test

After the experiment was done, to learn how much of grammatical structures were internalized accurately, an achievement test was given to the students of both groups. This test, like that of pre-test, included 40 items which were equally distributed among five grammatical structures instructed to the subjects during this study, namely Present Simple, Present Progressive, Past simple, Simple adjectives, and comparative and superlative adjectives. To reduce the effect of pre-test on post-test, the items of grammatical accuracy post-test were replaced, although they tested exactly the same grammatical structure as pre-test.

3.5. Procedure

This study was carried out on High School senior students in Nikshar, From April to June 2014. In order to pursue the purpose of the study, the following procedures were implemented. In the first step of the study, Nelson English Proficiency Test was administered to 61 participants to ensure their homogeneity in terms of their overall proficiency. The test contained 50 items of grammar. The participants had 50 minutes to answer the test. Moreover, the students took a test of grammatical accuracy prior to the experiment. Both groups participating in this study were taught by one of the researchers; however, different methods of practicing grammatical structures were applied. The instructional treatment was implemented during twelve 30-to-45-minute sessions. The target structures, in this study, were present simple, present progressive, past simple, and simple comparative and superlative adjectives which were taught through games to the experimental group. On the other hand, the students in the control group were instructed deductively, that is, the teacher started the lesson with the presentation of grammar rules, principles, and concepts which were followed by some examples and exercises in which these target structures were to be applied. After the experiment was over, they were given an achievement test to assess their level of accuracy with grammatical structures.

4. Data Analysis

In order to find the answer to the question formulated in this study, the following data analyses were performed. Prior to the experiment, for the purpose of homogenization, an independent t-test was conducted to examine the students' performance in the Nelson Proficiency test. After the experiment, to examine the differences in the performance of experimental group and control group on grammatical accuracy some quantitative analyses were done; the quantitative analyses of the collected data were conducted with the aid of computer. SPSS (Statistical Package of Social Science, version 19) was used for this purpose. The statistical procedures utilized in this study were two forms of t-tests, namely independent-samples t-test and paired-samples t-test. The standard of $P < .05$ was used in order to determine the significance of the results throughout the study.

5. Results of the study

Before investigating the results for the research question of this study, the comparability of all students in the two groups needed to be ensured by analyzing the students' scores on the Nelson Proficiency Test. Moreover, to acquire students' grammatical accuracy level before the experiment, a grammatical accuracy test was given to the participants of the study.

5.1. Performance of the Subjects on the Nelson Proficiency Test

The results of control and experimental groups on the Nelson Proficiency Test were analyzed and compared to make sure the two groups were homogenous and comparable accordingly. For this purpose, an independent-samples t-test was run. The results of the t-test in Table 1 indicate that the two groups obtained comparable scores in their proficiency test: the mean score of the control group was 31.129 and the mean score of the experimental group was 30.200. The results also denoted that the scores for the control group deviated 5.22 points around the mean while the scores for the experimental group were less dispersed, having a standard deviation of 4.42.

Although, at the first glance, the results showed a supremacy in favor of control group, there was no statistically significant difference between the two groups as the p-value for the independent-samples t-test mounted higher than 0.05. ($P > 0.05$)

Table 1: Independent-samples t-test results on Nelson proficiency test in the experimental group and the control group

Variable	N	Mean	SD	T	P
Experimental	31	31.12	5.22	0.748	0.457
Control	30	30.20	4.42		

5.2. Performance of the Subjects on the Grammatical Accuracy pre-test

According to table 2 which denotes the results for the performance of students in the two groups on grammatical accuracy, the mean score of the control group for the grammatical accuracy pre-test was greater ($M=13.76$) than the mean score of the experimental group ($M=13.54$). Similarly, the scores of the students in the control group deviated more widely from respective mean than the scores of the experimental group (5.66 versus 5.27). However, as the P-value mounted higher than 0.05 ($P > 0.05$) the two groups showed to be homogeneous in terms of grammatical accuracy.

Table 2: Independent-samples t-test results on grammatical accuracy test in the experimental group and the control group

Group	N	Mean	SD	t	P
Control	31	13.54	5.27	-0.156	0.877
Experimental	30	13.76	5.66		

5.3. Post- test results

This study investigated whether subjects' playing games instead of traditional practices had improved students level of accuracy in respective grammatical structures and, if yes, was this improvement statistically significant or not. In order to find out whether the game-based practice was making any significant difference during the 12-session treatment period, the results of the final examination were collected from the two groups. To answer this research question, the following null hypothesis was formulated:

H. Playing games in practice phase of a grammar classroom had no significant effect ($p < 0.05$) upon the grammatical accuracy of FL learners.

To test this null hypothesis, an Independent-samples t-test was conducted to compare the performance of the two groups with regard to their achievement test.

5.3.1. Intra-group Comparison of the Experimental and Control Groups on Grammatical Accuracy;

This part aims to clarify the differences existing within the groups before and after the experiment with regard to grammatical accuracy.

The results indicated that the average student in the control group had made a progress of almost 11 scores after 12 sessions of learning. The mean score of the control group in pre-test was 13.548 and that of post-test was 24.225 (MD= 10.677), $t(30) = -40.45$, $P < 0.005$. Moreover, the control group's scores before and after the experiment deviated almost equally around respective means (SD for pre-test = 5.271, SD for post-test = 5.625). Table 3 denotes the descriptive statistics of grammatical accuracy in the control group:

Table 3: Paired-samples t-test on grammatical accuracy in the control group

Test	N	Mean	SD	t	df	P
Pre-test	31	13.548	5.271	-40.458	30	0.00
Post-test	31	24.225	5.625			

These results suggested that the instructional program used for the control group, which used a traditional approach towards practicing grammatical structures, was effective enough for the subjects to make significant progress in their grammatical accuracy.

The results of the paired-samples t-test for the experimental group revealed the following digits. The mean of post-test score ($M = 25.46$) was significantly higher than the mean of pre-test score ($M = 13.76$). The scores in post-test deviated 6.53 points around the mean ($SD = 6.53$) while those of pre-test were less scattered ($SD = 5.66$). The t observed value was -47.71 for a freedom degree of 29. And, finally, the p-value was smaller than 0.05 (sig. = 0.00) which showed a significant improvement of scores in grammatical accuracy post-test of the experimental group. Table 4 indicates the statistics holistically:

Table 4: Paired-samples t-test results on grammatical accuracy in the experimental group

Test	N	Mean	SD	t	df	P
Pre-test	30	13.76	5.66	-47.71	29	0.00
Post-test	30	25.46	6.53			

Considering the two paired t-tests, one finds out that both control group and experimental group have made a progress. So, the answer to the first question of this study relies on the amount of progress made in the respective groups. The first group of this study, i.e. the control group enjoyed a mean progress of 10.68 (MD = 10.68) while the average student in the second group, i.e. the experimental group progressed 11.7 scores (MD = 11.7). These results showed that the experimental group had a small advantage over the control group with regard to grammatical accuracy. But this advantage was not significant enough.

5.3.2. Inter-group Comparison of the Experimental and Control Group on Grammatical Accuracy

Table 5 indicates the results of control and experimental group on the grammatical accuracy inpre-test in comparison to post-test. In pre-test, the variances from respective means were not significant. That is, the scores obtained from post-test grammatical accuracy test were homogenous. The control group had a mean score of 13.54 and the average experimental group score was 13.76. The control group had a standard deviation of 5.27 while the experimental group was less dispersed, having a standard deviation of 5.66. And, finally, the p-value was 0.87 which indicated the two groups were not significantly different. In post-test, similarly, no significant difference was found. The control group obtained a mean score of 24.22 while the experimental group gained a mean score of 25.46. The standard deviations for the control group and the experimental group were 5.62 and 6.53, respectively. And, the P-value for the independent- samples t-test was 0.42 which implied the two groups were homogenous.

Table 5: Independent-samples t-test results on grammatical accuracy pre- and post-test

Group	N	Mpre/Mpost	SDpre/SDpost	tpre/tpost	Ppre/Ppost
Control	31	13.54/24.22	5.27/5.62	-0.15/-0.79	0.87/0.42
Experimental	30	13.76/25.46	5.66/6.53		

5. Discussion

As was stated in the Introduction, this research was undertaken in order to compare the effects of applying games as practices in a grammar classroom instead of a traditional practicing approach on students' level of grammatical accuracy. Returning to the research question posed earlier, it is now possible to state that game-based practices are more effective in the development of grammatical accuracy in comparison to traditional practices, although this effect may not be significant. The preliminary results of the

comparisons between the mean scores of the experimental group and the control group on the pre-test and post-test indicated no significant improvement in the subjects' grammatical accuracy level, although there was a slight supremacy in favour of the experimental group. Thus, the results confirmed the null hypothesis of the study that predicted playing games had no significant effect on the development of subjects' grammatical accuracy. The results of this study on grammatical accuracy is in line with the findings of Yu (2005) on the learners of German as a foreign language. Miller (1992), also, in his study of three classes of Japanese language university students in America found no significant differences among two game groups and one traditional control group on any of the three tests after four semesters, although the game classes outperformed the control class on all three tests by the fourth semester. But, on the other hand, these results contradict the findings of Cortez (1974) on non-English-speaking 3rd graders in Puerto Rico which showed that games made a significant difference between the control and experimental group in acquisition of vocabulary. They also contradict the findings of Issacs (1979) study on High school students of Hebrew language in the U.S.A. which, likewise, revealed that games made a significant difference between the control and experimental group in terms of listening-comprehension..Dolati and Mikaili (2011) employed instructional games as facilitating learning factors to improve various language skills of EFL learners and came up with rewarding results. Widodo (2006) considered instructional games as a vehicle servicing conscious learning of grammar rules. Clarke (2009) argued that "teachers and students using games in speaking classes derive affective benefits similar to those from real language situations" (p.91). Another study conducted using 17 elementary students in Greece arrived at the same conclusions (Dourda, Bratitsis, Griva, & Papadopoulou, 2014). The participants were randomly assigned to teams of three or two to play a detective video game called Whodunit for a period of eight weeks. The results of pre-test, post-test, observational data and analyses of student journals indicated that playing the game contributed to improving the participants' English language skills in the areas of vocabulary, reading and language learning strategies. The researchers also noted that collaboration was effective during the entire game play period as the students assumed different roles such as computer user, team manager and journal keeper.

As was mentioned above, the results confirmed the null hypothesis for the research question posed in this study. That is, the game-based practicing was found to have no significant effect on students' grammatical accuracy. The researcher believes this failure may be due to some aspects of either this study or those of students participating in it. A brief interpretation of these points is presented in the following lines.

Firstly, there is a possibility that the students of the control group enjoyed more benefits, compared to the experimental group, with respect to the format of the tests given. As you know, the tests for this experiment were of written, paper-based type which were very similar to the sort of traditional practices the control group made use of throughout the study. Perhaps adopting a method of testing which is a halfway between what the control group and the experimental group are used to and which is at the same time objectively quantifiable could be more appropriate and would lead to different results.

Secondly, one could say the students participating the experimental group of this study fell short of expectancy simply because they were accustomed to traditional ways of practicing grammatical structures. The Iranian learners of English as a foreign language, especially those acquiring English in high schools, are used to practicing language traditionally. This, again, could have had a positive effect on the students of the control group. And, on the other hand, a sudden shift to game-based practicing in the experimental group could have had a debilitating impact on them.

A brief look at the results of this study and the likes divulges that using games in teaching a foreign language, whatever the skill or sub-skill, has never been useless. It has proved to be significantly effective or, at least, capable of making a small improvement in the students. So, they are always a good option for replacing traditional techniques of language teaching.

6. Conclusion and implications

The present study aimed to determine the effect of games on grammatical accuracy of Iranian high school students. It used a pretest and also a posttest to measure the effect of games on the grammatical accuracy of the subjects. After analyzing the obtained data, it was concluded that there were no significant differences between experiment and control groups, although the group which practiced through games scored slightly higher. Even though games failed to boost students' grammatical accuracy significantly, at least in this study, the researchers learned that games were a good break from boring grammar classes. The students seemed to be more motivated and active. To assert on scientific grounds, similar studies can be done to explore the effect of games on motivation of the students to learn language in general or grammar in particular. If right, games will prove to be helpful in the course of language learning, and, in long run may lead to higher language acquisition.

The findings of this study have serious implications for ELT curriculum producers who design courses for L2/FL learners with different levels of ability. It is suggested that, in designing courses for language learners, they incorporate communicative activities like games to let the students enjoy their positive effects. In doing so, they need to bear in mind to include games which are engaging and take as much effort as possible on the part of the students. A further important implication is for Iranian Ministry of Education, which has, for a long time, based its curriculum and textbooks on traditional methods of language teaching. Ministry of Education needs to consider the use of communicative activities, like games, to raise motivation and language gain in students.

References

- Azar, B. (2007). Grammar-Based Teaching: A Practitioner's Perspective. *TESL-EJ*, 11(2), 1-12.
- Celce-Murcia, M., & Hills, S. (1998). *Techniques and resources in teaching grammar*. Oxford: Oxford University Press.
- Celce-Murcia, M., Brinton, D., & Snow, M. A. (2001). *Teaching English as a second or foreign language*. Boston: National Geographic Learning.
- Clarke, P. (2009). *Supporting children learning English as a second language in the early years (birth to six years)*. Victoria: Victorian Curriculum and Assessment Authority.
- Cortez, E. G. (1974). *Games for second language learning: A comparison of two approaches for teaching English to Puerto Rican children*. Unpublished Ph.D. dissertation, Temple University, PA.
- Demirbilek M., Yilmaz E., Tamer S. (2010). Second language instructors,, perspectives about the use of educational games. *Procedia Social and Behavioral Sciences*, 9, 717-721.
- Dolati, I., & Mikaili, P. (2011). Effects of instructional games on facilitating of students' vocabulary learning. *Australian Journal of Basic and Applied Sciences*, 5(11), 1218-1224.
- Ellis, R. (2006). "Current issues in the teaching of grammar: An SLA Perspective", *Tesol Quarterly* 40/1, 83-107. <http://dx.doi.org/10.2307/40264512>
- skandari, Z. (2014). The effect of using games on English grammar with focus on Iranian young learners of English. *International Journal of Language and Linguistics*, 5(1), 458-471.
- Gardner, D. (1987). Communication games: Do we know what we're talking about? *ELT Journal*, 41(1), 19-24.
- Jalali, S., & Dousti, M. (2012). Vocabulary and grammar gain through computer educational games. *Gema Online Journal of Language Studies*, 12(4), 1077-1088.
- Larsen-Freeman, D. (2000). *Techniques and Principles in Language Teaching*. Teaching Techniques in English as a Second Language (2nd Ed.). Oxford: Oxford University Press.
- Miller, M. C. (1992). *Two experimental studies of the effectiveness of interactive game-playing in the acquisition of Japanese by Americans*. Unpublished doctoral dissertation, University of Delaware.
- Newby, D. (2006). "Teaching grammar and the question of knowledge", in A.B. Fennerand and D.Newby (eds.) *Coherence of Principles, Cohesion of Competences: Exploring Theories and Designing Materials for Teacher Education*. Graz/Strasbourg: European Centre for Modern Languages/Council of Europe Press, 1-11.
- Nunan, D. (2007). *Task-Based Language Teaching*. Cambridge: Cambridge University Press.
- Nunan, D. (2003). *Practical English Language Teaching: Grammar*. New York: McGraw-Hill Higher Education.
- Nunan, D. (1998). Teaching grammar in context. *ELT Journal*, 52 (2), 101-109.

- Richards, J. C., & Renandya, W. A. (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge: Cambridge University Press.
- Richards, J. C. & Rodgers, T. (2001). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.
- Thomas, K.M. & Austin, M. (2005). Instructional Note: Fun with Fundamentals-Games and Electronic Activities to Reinforce Grammar in the College Writing Classroom. *Teaching English in the Two-Year College*, 33(1), 62-69.
- Ur. P. (1988). *Grammar practice activities*. Cambridge: Cambridge University Press
- Widodo, H. P. (2006). Approaches and procedures for teaching grammar, *English Teaching: Practice and Critique*, 5(2), 122-141.
- Wright, A., Betteridge, D., & Buckby, M. (2005). *Games for language learning* (3rd ed.). New York: Cambridge University Press.
- Woodward, S.W. (1997). *Fun with grammar*. New Jersey: Prentice-Hall, Inc.
- Yu, S. Y. (2005). *The effect of games on the acquisition of some grammatical features of L2 German on students' Motivation*. Doctorate dissertation. Retrieved from <http://dlibrary.acu.edu.au/digitaltheses/public/adt-acuvp98.29052006/02whole.pdf>