

Research Article

Investigating the Effect of Using Game-Based Learning on EFL Learners' Motivation and Anxiety

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This study intended to examine the effects of game-based learning on Iranian EFL learners' language anxiety and motivation. In order to perform the study, the quantitative research method was applied. In this study, 58 Iranian intermediate EFL participants were selected and divided into two groups: control and experimental. Then, the questionnaires of the Foreign Language Classroom Anxiety Scale (FLCAS) and Motivation Test Battery (AMTB) were administered to the participants of both groups as the pretests of the study. After pretesting, 90 English vocabulary items were trained to the EG by using game-based learning, but the same vocabulary items were taught to the CG traditionally. After teaching the vocabularies, the mentioned questionnaires were administered again as the post-tests of the study. The results of independent samples *t*-tests revealed that implementing game-based learning had the potential of reducing EFL learners' anxiety to improve their English learning. Also, the results indicated that applying game-based learning increased the language motivation of Iranian EFL learners.

1. Introduction

The rapid development of technology has radically changed the paradigm of how English language teaching is conducted in the twenty-first century, especially in English as a foreign language (EFL) learning [1–3]. One of the shifts brought by the advent of technology is the use of digital games in EFL learning. To date, the digital game is not only an amusement tool for people but also has transformed into a means of the present learning and is well known as digital game-based learning [4]. Furthermore, digital game-based learning has colored the practices of ELT with technology in the twenty-first century as marked by some studies in this

area (e.g., [5–8]). Therefore, digital game-based learning is becoming a vital issue in second and foreign language contexts.

Digital game-based learning is seen as a new instructional approach that can bring potential into language learning as it can encourage interactions among the learners [9]. Hitosugi et al. [10] claim that game-based learning game is familiar among the natives, and it has the potential to bring enjoyable and exciting learning experiences to language learners. To support Hitosugi et al.'s claim, Chen and Law [11] argue that language learners can improve their cognitive abilities to synthesize, analyze, and evaluate information in their learning via games.

Digital game-based learning can promote an active learning process and reduce anxiety among EFL learners. Generally, anxiety alludes to “the subjective feeling of tensions, apprehensions, nervousness, and worries related to an excitement of the autonomic nervous system” [11]. The terror to speak in front of people is associated with communicative apprehensions. It is a fearful feeling related to physical feelings that are all unfortunately familiar to those affected-increased heart and breathing rate, rapid reaction, and tensions in the shoulders and neck areas [12–14]. Anxiety is response related to physiology and is often defined as apprehension state and vague fears [15].

Motivation is another psychological variable that can be affected by digital game-based learning. Motivation, derived from the Latin word *movere*, is described as what drives a person to make a specific commitment, participate in an activity, expend effort, and continue in action [16, 17]. Motivation is an important, pervasive behavior determinant of students, teachers, and administrators [18]. According to research, human behavior is influenced by motivation in the selection of a certain activity, the perseverance with it, and the effort invested in it [19–22].

Given the vital impacts of game-based instruction on foreign language learning motivation and anxiety, the current study investigated the effects of game-based learning on Iranian EFL learners’ motivation and anxiety.

2. Review of the Literature

Motivating students has always been a great concern for EFL instructors. However, their efforts to identify the best method of motivating the pupils have not been successful so far, and they are still looking for a solution. Learners’ motivation may be boosted by incorporating games into classroom instruction [23, 24]. Gamification, a relatively new approach to language learning, has gained popularity in the last several years. The game-based advertisement was first utilized in its current form in 2003 when British designer Nick Pelling implemented it in a website called Conundra to advertise consumer goods. Gamification, on the other hand, has begun to grow, although it is still a relatively young concept in TEFL.

As an alternative technique to conventional methods, technology-based learning fosters a more effective language learning environment than the latter. During the COVID-19 pandemic, technology-based methods, tools, and materials have got more common in language teaching and learning [25]. Technology allows students to connect with a broad network and developed communication platforms with educators, parents, and stakeholders [26]. With the growth of technology, games have become more essential in the field of language acquisition. In Hadfield’s [27] words, “classroom gamification” is “an activity characterized by rules, a purpose, and an element of enjoyment.” They provide learners with the opportunity to actively engage in activities while also strengthening their emotive responses such as curiosity, motivation, and readiness to participate. Aside from that, games often concentrate on the communicative and functional components of language [28]. Their beneficial impacts on

active involvement, their ability to foster uniqueness and competitiveness in learning, and their provision of chances to use language abilities in a variety of circumstances are all noteworthy [29, 30]. They can be incorporated into classroom activities to provide a funny yet challenging atmosphere and are especially useful to alleviate students’ overwhelmed assignments and teachers’ monotonous pedagogy.

Moreover, as Norman [31] shows, digital game-based learning environments are often complicated, placing a high strain on the player’s working memory processing abilities. When requirements and matching cognitive working memory resources support the pedagogical learning goals, it is more probable than not that learning will take place. If, on the other hand, the requirements do not support the desired pedagogical approaches, then learning may be hindered or even halted altogether. Consider the following scenario: when acquiring factual information or content comprehension is expected of learners, knowing how to engage with the game world may be inconvenient and may interfere with the desired learning process. Cognitive load theory (CLT) is concerned with the utilization of working memory resources, which is one of its primary concerns [32, 33].

Four principles that support CLT are as follows: (1) working memory with restricted capacity, (2) long-term memory with limitless capacity, (3) schemas in long-term memory, and (4) automating the creation of schemas. Specifically, cognitive load theory highlights the importance of working memory in learning as well as the challenge of dominating working memory with both beneficial and unneeded cognitive activities, which is known as cognitive overload [34, 35]. It is believed that the cognitive processes carried out in working memory are responsible for determining the efficacy of learning. Students may only construct a sufficient schema that will be successfully preserved in long-term memory when data processing continues without interruption.

It is only possible to handle a certain number of information components at once since working memory has a finite capacity. If it is not feasible to rehearse memory objects, they will go away within seconds. Because of the limits of working memory, it is sometimes hard to learn complicated activities [32, 36]. Students must keep numerous components (e.g., principles and states) in working memory at the same time while linking them, which often surpasses the capacity of working memory. Intrinsic, relevant, and extraneous cognitive demands are the three main parts of cognitive load. In most cases, the intrinsic load is presumed to be caused by the complexity of the particular topic, which is proportional to the number of pieces to be taught and their interconnectedness [34].

Some empirical studies were done on the effectiveness of game-based learning on English language learning. Gamification has a long-term effect on university students’ motivation, according to Hanus and Fox [37]. Leaderboard and badges were incorporated into one of the two treatments given by the researchers. Four measures were used to evaluate the participants over the course of the 16-week study. Participants who received gamified teaching were found to be less motivated.

Shirazi et al. [38] scrutinized the effects of employing video games on EFL students' acquisition of speech acts (request and apology). To perform this research, 40 Iranian EFL students at the level of intermediate were chosen by giving the Oxford Placement Test (OPT). A pragmatic competence test was used as the pretest before the targeted speech acts were taught to participants during eight sessions. The data were then analyzed utilizing ANCOVA and Mann-Whitney *U* tests for the post-test of apology and request speech actions. The outcomes showed that the video game-based made a positive development in learning of apology and request speech acts.

Mahayanti et al. [39] intended at examining the effects of digital games on young learners' self-regulated learning and how digital games influence young learners' self-regulated learning. This research was carried out with 144 young students in Indonesia, where English is used as a foreign language. A mixed-method design in the form of explanatory sequential design was used. Post-questionnaire of SRL was administered to know the effects of digital games on the learners' SRL. In addition, interviews and observations were used to support the quantitative results. It was discovered that the digital games utilized in the research had positive effects on young learners' SRL in English learning. By using the game, learners unconsciously developed elements including motivation, metacognition, and strategic actions that happened to be the sources of SRL. In addition, the game was mentioned as a fun, exciting, and engaging activity for young students where they could play and learn at the same time.

Panahandeh and Chalak [40] addressed the design and implementation of gamification as an instrument for doing homework by Iranian EFL students. Two groups of 30 female and male learners were selected for the participants of this research. Both groups took a pretest before receiving the treatment. The CG carried out their homework traditionally, while the EG performed it by using Kahoot. At the end of the treatment, both groups took a post-test. The EG received a gaming survey, in which 10 English teachers were required to complete an attitude survey to check their attitudes toward applying gamification. The findings indicated that the EG outflanked the CG. Utilizing gamification raised the students' motivation, and the teachers appreciated the uses of this strategy.

NNES learners' impressions of English language learning and TOEIC vocabulary growth were investigated by Cheng [41] in the context of incorporating a game-based learning website (i.e., Quizlet) into a first-year English course. Pertaining to this study's purpose, it aimed to determine if learners' motivation and attitude toward English language learning and TOEIC vocabulary development may be significantly lowered or boosted in a game-based learning environment. On the campus of a northern Taiwanese university, a total of 25 non-English major students enrolled in a first-year English course were selected. Upon completion of the course, they were asked to complete a post-course questionnaire in which they answered questions about their own thoughts on English language learning, game-based learning, and TOEIC vocabulary development. The

outcomes of this study indicated that the majority of the participants felt uneasy about their existing English language skills and their ability to get adequate results on their own TOEIC test. However, it appeared that many participants had more favorable perceptions toward using Quizlet to develop their TOEIC vocabulary, had a greater incentive to learn TOEIC vocabulary, and demonstrated that they had much more confidence in their ability to achieve higher grades on their TOEIC exam as a result of using this game-based learning website to prepare for their test.

Shirmardi et al. [42] investigated the effects of playing Spaceteam ESL, a mobile game-based application, on second-language (English) pronunciation, which is a topic that has received little attention in second-language education. It also examined L2 participants' motivated evaluations of the game as a useful instructional tool, as well as their attitudes toward the game. Forty female English as a foreign language (EFL) students at the low-intermediate level from two high school classes were chosen to participate in this study. A total of two groups were formed: the EG and the CG. A pretest consisting of a pronunciation test created by the researcher was administered to the individuals in order to examine their ability to pronounce certain target English sounds. For 10 weeks, the EG participated in the game in addition to other activities in the classroom; the CG participated in activities that were not related to gaming. An evaluation of pronunciation skills was performed as a post-test at the conclusion of the training session. The participants in the EG were interviewed in order to get a better understanding of their impressions of the game-playing experience as EFL students. According to the findings of the *t*-tests, the experimental participants performed significantly better than the control participants in the pronunciation task. The findings of the semistructured interviews revealed that the students had a good attitude about playing the Spaceteam ESL game as well as a high desire to use games in the L2 classroom that might create an enjoyable environment.

A mobile app for exceptional students to help them acquire English vocabulary was developed by Ghobadi et al. [43], and the ESLE app was evaluated by these students and a variety of other specialists as part of their research. The digital game-based learning instructional design paradigm was used to construct the ESLE app as an interactive mobile game. A total of 40 outstanding adolescents with physical and intellectual challenges, all students in grades 7 through 9, were selected for the first stage of the study and split into a CG and an EG. Both the EG and the CG were taught vocabulary using the ELSE program. Prior to and during the intervention, the individuals in both groups were compared. After that, a carefully chosen group of 12 English teachers and computer professionals was assembled. Open-ended surveys were sent to 12 professionals in the field to get their opinion on the application's development. All of the excellent students who participated in the study improved their vocabulary as a result of playing the game. The response from the professionals showed that they were enthusiastic about using the ESLE program to help pupils with their superior English vocabulary knowledge.

After reviewing the related literature, it was found that several studies were conducted in the domain of game-based learning, but the number is still insufficient, particularly concerning its effects on motivation and anxiety. There are several studies in this field, but almost none of them examined the effects of game-based learning on Iranian EFL learners' language learning motivation and anxiety. Therefore, this research may make a great contribution to the literature and supplies valuable implications for teachers who are willing to incorporate game-based methods, into their teaching process. Games might be advantageous as they reduce students' anxiety and give them opportunities for real communication. In spite of their advantages, the incorporation of games into formal language learning is still scarce, and various challenges have been identified. The most prominent problem is that there is little acceptance of games as an instructional tool among most EFL instructors [44]. Besides, some teachers regard games as a leisure time activity without any educational value.

Regarding the mentioned problems, the current research aimed to examine the effects of game-based learning on Iranian EFL learners' language learning motivation and anxiety; accordingly, two research questions were formulated:

RQ1: Does using game-based learning increase Iranian EFL learners' language learning motivation?

RQ2: Does using game-based learning reduce Iranian EFL learners' language learning anxiety?

3. Method

3.1. Participants. Depending on the outcomes of the Oxford Quick Placement Test (OQPT), 58 participants were selected from 74 respondents to participate in the present study. They were chosen from among students at an English language school in Ahvaz, Iran's capital city. Respondents aged from 18 to 33 years old with an average level of English proficiency. They had at least 5 years of English instruction. For some reason, only male students were included in this research. EG and CG were randomly assigned to the targeted respondents.

3.2. Instruments. The OQPT was the first tool used by the researchers in this investigation. It was decided to use this exam in order to make the participants more similar to one another. Identifying the participants' skill levels (elementary, pre-intermediate, intermediate, and advanced) might be beneficial to the study's findings. Based on this test, students with scores of 0 to 10 were considered beginners; those with scores of 10 to 29 were considered elementary; those with scores of 30 to 39 were considered pre-intermediate; those with scores of 40 to 47 were intermediate; and students with scores of 50 or more ranked as very advanced learners. As a result of the exam, 58 intermediate school pupils were chosen to be the subjects of the present investigation.

The second and the main instrument for collecting the data was a questionnaire, Foreign Language Classroom Anxiety Scale (FLCAS), designed by Horwitz et al. [11]. There

were 33 items in this five-point Likert scale test examining the anxiety level of the participants. The validity of the FLCAS was confirmed by a panel of English experts, and its reliability was calculated by Cronbach's alpha ($r=0.83$). It should be mentioned that the mentioned instrument was used as the pretest and posttest of the research to assess the anxiety of the subjects. After the instruction, the questionnaire of FLCAS was used again to measure the effects of using the game-based instruction on reducing the anxiety of the students.

One of the instruments used in this study was an AMTB questionnaire, which was taken from Gardner's [45] worldwide version of the AMTB, which measures the attitudes and motivations of study participants. Scales comprising 104 items from the original test battery were combined into 6 variables. A total of 74 questions were used in this study to assess students' attitudes regarding learning settings and their own intrinsic motivation as well as integrative and instrumental motivation. From "strongly disagree" to "strongly agree," respondents were asked to rate their agreement or disagreement on a Likert scale of 1 to 5. Cronbach's alpha ($r=0.86$) was used to test the AMTB's validity and reliability, which was confirmed by various English specialists. As a pre- and post-test, the AMTB was used in this study. This is important to note.

3.3. Procedures. As a preliminary step in conducting this research, a test known as the OQPT was given to check the participants' proficiency level. Then, 58 homogenous respondents were selected for the target population of the current study and were randomly divided into two equal groups: experimental and control. Afterward, both groups were pretested by administering two questionnaires: FLCAS and AMTB. The FLCAS was administered in one session, and the AMTB was administered in a separate session. After administering the mentioned questionnaires as the pretests, the participants of the EG received the treatment by using game-based instruction. Spaceteam ESL (English as a second language)—a crazy and fun English learning game that the students play with their classmates using phones or tablets—was used to teach vocabularies to the EG. When students played Spaceteam ESL, they needed to say the vocabularies in the game to their teammates, and their teammates needed to listen to them. The game had a place where the students could practice slowly saying and listening to all of the words that were in the game.

On the other hand, the CG received traditional instruction. The teacher attended the class and taught new vocabularies to the students without using any games. The students were provided with a pamphlet containing 90 English vocabulary items, and in each session, 10 vocabularies were trained for this group. The meanings, synonyms, explanations, and definitions of the word were provided for the students. In addition, the words were used in a sentence to help the students learn the words in a related context. After teaching all words, the questionnaires of the FLCAS and the AMTB were readministered as the post-tests of the study to assess the effects of the treatment on the subjects' motivation and anxiety.

4. Results

For analyzing the gathered data, the researchers used the SPSS software and presented the results in the tables.

As displayed in Table 1, the CG's mean score is 62.93, and the EG's mean score is 64.34. To discover if the difference between the pretests of both groups was significant, an independent samples *t*-test was run in Table 2.

As we can see in Table 2, the Sig. value is 0.78 that is greater than 0.05; therefore, there is not a significant difference between the anxiety pretests of the CG and the EG. We can say that both groups were at the same level of anxiety before starting the treatment.

It is indicated in Table 3 that the mean scores for both groups on the anxiety post-tests are 66.27 and 125.41 for the CG and EG, respectively. Without a doubt, the experimental individuals performed much better than their peers in the control group on the anxiety post-test. It is possible to validate this assertion by using an independent samples *t*-test, as shown in Table 4.

Based on the outcomes presented in Table 4, we can say that the EG did outstandingly better than the CG in the anxiety post-test since the Sig. value (0.00) is less than 0.05. The treatment helped the EG reduce their anxiety level.

As depicted in Table 5, the CG's mean score is 117.72, and the EG's mean score is 119.27 on the motivation pretest. Their mean scores seem almost equal on the motivation pretests. This means that both groups had an almost equal level of motivation before receiving the instruction.

As the results of the independent samples *t*-test shown in Table 6, there is not a significant difference between the motivation pretests of the CG and the EG. They had the same level of motivation before conducting the game-based treatment.

Based on Table 7, the CG's mean score is 129.73, and the EG's mean score is 234.10 on the motivation post-test. It is crystal clear that the experimental participants obtained higher scores on their motivation post-test. In the following table, an independent samples *t*-test was used to show if the differences between the motivation post-test were significant or not.

Table 8 indicates that the differences between both groups are significant at ($p < 0.05$) since Sig. (0.00) is less than 0.05. In fact, the EG outflanked the CG on the motivation post-test. This betterment can be ascribed to gamed-based instruction.

5. Discussion

As stated before, the current research examined the effects of using game-based learning on Iranian EFL learners' foreign language motivation and anxiety. The gained results revealed the superiority of game-based learning over conventional learning. The findings indicated that the EG who received their treatment based on game-based learning had better performance than the CG who received traditional instruction. The motivation of the EG developed after the treatment; also, their anxiety level reduced based on the outcomes of the questionnaire.

TABLE 1: Descriptive statistics (anxiety pretest of both groups).

	Group	N	Mean	Std. deviation	Std. error mean
Scores	CG	29	62.93	19.43	3.60
	EG	29	64.34	20.08	3.72

The results of our research are in line with the results gained by Boulaid and Moubtassime [46], Ciaramella [47], Putri [48], and Taheri [44] who confirmed the effectiveness of the game-based learning (Kahoot) on learning English vocabulary. In addition, our research findings are backed up by Shirardini et al. [42], who inspected the effects of a mobile game-based application (Spaceteam ESL) on students' pronunciation. The results of the study showed that the experimental participants gained higher scores than the control participants on the pronunciation post-test. Our study is in agreement with Reinders and Wattana [49] who inspected the effects of digital games on developing interactions among 30 Thai EFL students. Their results indicated playing games increased interactions among the participants of the study.

Also, the results gained in our research lend support to Ghobadi et al. [43], who examined the effects of a game-based application on enhancing exceptional students' English vocabulary learning and concluded that all exceptional learners developed their vocabulary skills after training via the game-based application. Moreover, the outcomes of the present study agree with Shirazi et al. [38] who investigated the effects of utilizing video games on EFL students' speech act learning. Their research findings showed that video game-based learning had a positive impact on learning speech acts among EFL students. In addition, our study is advocated by Grimshaw and Cardoso [50] who stated that playing the Spaceteam ESL game developed the willingness to communicate and the oral fluency among Canadian ESL students.

Furthermore, the results of this study are congruent with the results of Mahayanti et al. [39] who investigated the effects of digital games on young students' self-regulated learning. The results of his research demonstrated that using digital games could help the participants develop their self-regulated learning. On the other hand, the outcomes of the current study contradict the outcomes of Hanus and Fox [37] who observed less motivation among the learners who received a game-based instruction. In addition, the results of our research are different from Hoffman and Nadelson [51] who stated that the games' motivational involvement cannot be transferred to the instructional contexts.

One reasonable explanation for the obtained results can be that the experimental participants were motivated to win the games; as a result, they tried more and learned the language more successfully. Motivation is always a great agent that can drive learners to perform different tasks. Games can motivate EFL learners to learn English in a competitive situation; consequently, this competition can lead to better language learning. Chen et al. [52] stated that games can encourage language learning among EFL learners and increase their language motivation.

Competition to win the games can be the other reason why the EG outperformed the CG on the post-tests. One

TABLE 2: Inferential statistics (anxiety pretest of both groups).

		Levene's test for equality of variances		t-test for equality of means				
		<i>F</i>	Sig.	<i>t</i>	<i>D_f</i>	Sig. (2-tailed)	Mean difference	Std. error difference
Scores	Equal variances assumed	0.26	0.60	0.27	56	0.78	-1.41	5.18
	Equal variances not assumed			0.27	55.94	0.78	-1.41	5.18

TABLE 3: Descriptive statistics (anxiety post-test of both groups).

	Group	<i>N</i>	Mean	Std. deviation	Std. error mean
Scores	CG	29	66.27	18.94	3.51
	EG	29	125.41	13.99	2.59

TABLE 4: Inferential statistics (anxiety post-test of both groups).

		Levene's test for equality of variances		t-test for equality of means				
		<i>F</i>	Sig.	<i>t</i>	<i>D_f</i>	Sig. (2-tailed)	Mean difference	Std. error difference
Scores	Equal variances assumed	7.07	0.01	13.52	56	0.00	-59.13	4.37
	Equal variances not assumed			13.52	51.54	0.00	-59.13	4.37

TABLE 5: Descriptive statistics (motivation pretest of both groups).

	Group	<i>N</i>	Means	Std. deviations	Std. error means
Scores	CG	29	117.72	13.40	2.48
	EG	29	119.27	14.68	2.72

TABLE 6: Inferential statistics (motivation pretest of both groups).

		Levene's test for equality of variances		t-test for equality of means				
		<i>F</i>	Sig.	<i>t</i>	<i>D_f</i>	Sig. (2-tailed)	Mean difference	Std. error difference
Scores	Equal variances assumed	0.31	0.57	0.42	56	0.67	1.55	3.69
	Equal variances not assumed			0.42	55.53	0.67	1.55	3.69

TABLE 7: Descriptive statistics (motivation post-test of both groups).

	Group	<i>N</i>	Means	Std. deviations	Std. error means
Scores	CG	29	129.37	28.01	5.20
	EG	28	234.10	39.87	7.53

more reason may be the fact that the game-based learning setting is a more relaxing and comfortable experience for EFL learners than they have never had in a traditional context. Another justification for the gained results in our study is that game-based learning can provide a more student-centered learning situation that can result in language learning development. The attractiveness and the applicability of the games can be the other reasons for increasing Iranian EFL learners' motivation.

The findings of this study indicated the positive effects of using games on decreasing the anxiety levels of Iranian EFL learners. Peer interactions, teamwork, and a fun atmosphere produced via utilizing the games helped lower level of anxiety among Iranian EFL learners in the EG. As Grimshaw and Cardoso [50] maintained, the fun aspects of the instructional games can assist students to have less anxiety levels that is important for developing English language learning.

TABLE 8: Inferential statistics (motivation post-test of both groups).

		Levene's test for equality of variances		t-test for equality of means				
		F	Sig.	t	Df	Sig. (2-tailed)	Mean difference	Std. error difference
Scores	Equal variances assumed	9.14	0.00	11.50	55	0.00	-104.72	9.10
	Equal variances not assumed			11.43	48.28	0.00	-104.72	9.15

6. Conclusions and Implications of the Study

This research scrutinized the effectiveness of game-based learning on Iranian EFL students' motivation and anxiety. As stated previously, the results showed that using game-based learning was an effective strategy to increase and decrease Iranian EFL learners' motivation and anxiety, respectively. Based on the promising results, the implementation of different types of instructional games is strongly recommended in Iranian EFL contexts. Educational games are significant for teaching English since they can provide EFL learners with an amusing and funny learning situation that can contribute to better English learning. In conclusion, using games is vitally important in language teaching and learning since games have the potential to provide a relaxed setting for EFL students and teachers.

The promising and positive results of this research bring about some implications for EFL teachers, learners, researchers, and material developers. Using games is an effective strategy that can motivate learners to develop their English skills and subskills in a more student-centered learning setting. Games are effective instruments for EFL students to learn English with more fun and amusement. In addition, instructional games permit learners to learn English via their mobile devices in different places, and at any time, they like.

The findings of this research can aid researchers to extend game-based learning studies to other skills and subskills of the English language. The results can help English teachers utilize different instructional games as a supplement to other instructional materials in their teaching process. The findings recommend that instructors can use the games along with other visual and audio educational materials to improve L2 learning. In this way, teachers can help their students participate actively in the learning process. Additionally, teachers can use games in order to provide a more entertaining, relaxing, and pleasant situation for the students to reduce their anxiety and stress. Teachers can use games to persuade students to work cooperatively and subject them to interactive and cooperative learning.

The results of this survey can have an implication for the material developers who design courses and prepare educational materials for EFL students. Based on the obtained results, it is suggested that syllabus developers, material writers, and course designers pay more attention to the roles of game-based tasks and activities in L2 teaching/learning and improve corresponding curriculums and materials.

The current empirical research is affected by some unavoidable limitations. The main limitation of this study is

referred to its small size participants that was limited only to 58 Iranian EFL learners. Next, researchers can select more participants to validate the effectiveness of the game-based learning on learning different kinds of English language skills and subskills. The other main drawback of the current research is the participants' age range that was between 18 and 33 years old. Therefore, the gained results should be generalized to other age groups cautiously. One more limitation is that only quantitative data were collected to answer the research questions; in order to boost the validity and reliability of the results, other researchers are recommended to gather both quantitative and qualitative data. The other limitation of the study refers to the time of the treatment that lasted only two months; other researchers are offered to expand the treatment time to help the quality of their studies.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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