



The Adoption of Digital Game-Based Learning (DGBL) and EFL Students' Motivation and Attitude towards Learning English: A Correlational Study

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Abstract: The purpose of the current correlational study was to determine whether any significant relationship exists between Iranian EFL university students' adoption of DGBL and their motivation for learning English within the framework of the Technology Acceptance Model (TAM). The study also sought to examine the EFL students' attitudes towards DGBL. To this end, eighty-six EFL students were selected from a university in Iran. Questionnaires were distributed to all participants by providing them with a link to answer the items via social media. Spearman's correlation and descriptive statistics were used to analyze the data. The results showed that there was a statistically significant and positive relationship between the adoption of DGBL and motivation for learning English among Iranian EFL students. The findings also indicated the positive attitudes of EFL students towards DGBL. They agreed on several benefits of digital games, including delivering active learning, accomplishing learning tasks, helping students gain control over their learning process, assisting students in understanding English better, recalling information more efficiently, allowing comfortable self-expression, and attracting greater student attention. The results of the current research could aid teachers in developing their professional skills by showing that spending time on digital gameplay may encourage them to render teaching and learning more effectively.

Keywords: Attitude, Digital game-based learning (DGBL), Motivation, Technology Acceptance Model (TAM)

1. Introduction

With the rapid advancement of emerging technologies, a significant portion of language learning and teaching is now occurring through digital devices. As a result, the role and impact of these devices in education warrant close examination from various perspectives (Balchin & Wild, 2022). One notable development is the growing accessibility of computer-based games, which have increasingly been integrated into classrooms as effective pedagogical tools (Yang et al., 2020). Digital games are omnipresent, found on smartphones, tablets, consoles, and PCs, and have recently attracted considerable research interest in educational contexts. Terms such as 'game-based learning' and 'educational games' reflect this rising trend (Al-Azawi et al., 2016). These tools have the potential to create engaging, motivating, and interactive learning environments that can enhance students' educational success (Ninaus et al., 2017).

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According to Blume (2020), games have the ability to focus learners' attention on the learning process, as students do not feel the same pressure as they might in traditional learning settings. In fact, games can reduce anxiety, thereby facilitating the acquisition of knowledge (Richard-Amato, 1988). The fun and entertaining nature of games also offers shy students the opportunity to express themselves more freely (York & deHaan, 2018). Ultimately, games' appeal lies in their capacity to attract students to learn English by offering opportunities to experiment, discover, and interact in a dynamic environment (Blume, 2020).

Digital game-based learning (DGBL) has become an increasingly popular approach to language education in recent years (Wan et al., 2021). DGBL involves the use of digital games as educational tools to enhance learning, promoting a more interactive and immersive experience (Aguilera & de Roock, 2022; Ninaus et al., 2017). The integration of DGBL has garnered significant attention in educational fields, including English language teaching, where it has been shown to boost student motivation (Cheng et al., 2013; Ninaus et al., 2017). DGBL offers several advantages, such as increasing student engagement and improving information retention (Kuang et al., 2023). By making learning enjoyable and interactive, DGBL helps students connect more meaningfully with educational content, making the experience both enjoyable and memorable (Wan et al., 2021).

Motivation plays a key role in language learning outcomes (Alamer & Al Khateeb, 2023). Motivated students are more likely to engage with the material, persist in their studies, and succeed in language learning. Extant literature (e.g., Chen et al., 2016; Dörnyei & Ushioda, 2011; Falout et al., 2009) have consistently emphasized the importance of motivation in English as a Foreign Language (EFL) learning. Motivation is also a crucial factor in the effectiveness of DGBL (Pulido Salcedo, 2023; Wang & Cai, 2021; Yeh et al., 2017). Understanding how the adoption of DGBL is associated with learners' motivation and how students perceive this approach is essential for educators and policymakers to effectively incorporate DGBL into language classrooms (Blume, 2020; Dele-Ajayi et al., 2019).

DGBL has emerged as a powerful platform for learning English, yet the key issue is whether the acceptance of DGBL correlates with EFL students' motivation and attitudes towards learning or not. Previous studies have shown a connection between students' motivation, attitudes, and the use of digital games in L2 learning. This issue has gained increasing relevance in light of recent research exploring the role of affective factors in DGBL. While earlier research has examined the impact of DGBL on students' motivation for learning (Chen, 2023; Tisza et al., 2021; Yeh et al., 2017), little is known about how students' adoption of this approach is related to their motivation levels and attitudes towards learning English. As such, this research focused on examining the relationship between the adoption of DGBL and EFL students' learning motivation and explored their perceptions about this approach.

2. Literature Review

2.1. The Application of TAM in DGBL

TAM was developed by Davis (1986) and has its roots in Fishbein and Ajzen's (1975) Theory of Reasoned Action (TRA). From the end user's perspective, this model focuses on variables that influence behavioral intentions to use technology (Davis, 1989). According to TAM, individuals' intentions to use technology are influenced by perceived usefulness, ease of use, and behavioral intention (Cheng et al., 2013). In some cases, TAM also takes into account other factors called exogenous variables, such as user education, system characteristics, user involvement, and the nature

of the implementation process. TAM is one of the most cited models in the field of technology acceptance (Toraman, 2022). This theory has received significant empirical support in the past few decades. As TAM ignores the social impact of adopting new technology, its use outside the workplace is limited.

Acceptance of DGBL refers to the intention of individuals to adopt digital games as a medium for language learning (Kuang et al., 2023). Acceptance is a critical factor in the success of DGBL as it determines whether learners will be receptive to using games as a tool for learning (Wan et al., 2021). Acceptance is influenced by several factors, including the learners' prior experience with games, their perception of the game's usefulness for learning, and the level of interactivity and engagement provided by the game (Ninaus et al., 2017). Adopting DGBL is crucial for its successful implementation in educational settings (Abdul Ghani et al., 2019). By addressing learners' concerns and providing a positive learning experience, DGBL can become a valuable tool for enhancing learning outcomes and promoting student engagement (Rabu & Talib, 2017; Saleh et al., 2014).

Recent research has shown that adopting digital games can result in the motivational pull of language learning and have a significant effect on the learners' performance. In this respect, Ninaus et al. (2017) explored learners' acceptance of game-based learning, their intrinsic motivation (e.g., interest, self-efficacy), and the quality of game experience for success in game-based instruction. The results showed that game-based learning was effective. Moreover, students' learning success and the quality of their game experience were predicted by measures of acceptance of game-based learning and intrinsic motivation to learn. This study was limited due to considering few user experience variables in technology adoption and its small sample size. In another attempt, Huang (2021) studied the effects of technology acceptance factors in DGBL on 108 freshmen students' learning motivation, attitude, and satisfaction. It was indicated that usefulness had a positive influence on learning motivation, attitude, and satisfaction, while ease of use had no effect on the aforementioned factors.

In a mixed-methods study, Tawafak et al. (2023) examined the role of technology integration through digital gameplay to improve EFL students' motivational behavior at the college level. It was revealed that technology integration via digital games significantly affected EFL students' behavioral intention, namely their motivation for language learning, engagement, and self-efficacy. They also found that the learners held positive attitudes towards the benefits and challenges of using digital gameplay, indicating that it has great potential for improving language skills, enhancing social interaction, and developing autonomy among students. The study was restricted in its findings owing to limited external validity and applicability of results to other linguistic situations, and educational and cultural contexts.

2.2. Learning Motivation and Attitude in DGBL

The literature has indicated that motivation and DGBL go hand in hand (e.g., Ebrahimzadeh & Alavi, 2017; Gamlo, 2019; Shahriarpour & Kafi, 2014; Shakhmalova & Zotova, 2023; Yeh et al., 2017). Shahriarpour and Kafi (2014) studied the effect of digital games on the motivation of intermediate EFL learners to learn English vocabulary. Data were collected through interviews and observations. The results showed that digital games increased learners' motivation to learn, shifting from rote learning to intentional learning. In a similar study, Chen et al. (2018) conducted quasi-experimental research on integrating augmented reality and DGBL to increase motivation and develop English vocabulary among 46 second-graders. The findings demonstrated that DGBL was significant in improving students' motivation and vocabulary learning. Additionally, Shakhmalova and Zotova

(2023) investigated the effect of educational digital games on 114 Russian university students' motivation and performance in English grammar. It was revealed that the students taught grammar using educational games outperformed the ones taught with a traditional approach. The questionnaire results also indicated that the educational games increased students' motivation to learn English.

Ebrahimzadeh and Alavi (2017) investigated the effect of digital video games on language learning motivation of 241 male EFL high school students who were randomly assigned to three treatment groups, including story readers of the game, players, and watchers who were watching their classmates play the interactive video games. As a pre-test, a language learning scale was given to the participants and field notes were also taken. As a result, they noticed that the motivation to learn the language increased significantly over time. But in the end, watchers showed much higher motivation than readers. Likewise, in an experimental study, Yeh et al. (2017) tried to enhance university students' academic achievement and learning motivation in an English course via DGBL. The results indicated that the DGBL approach was effective in improving the students' English learning performance and English learning motivation. Gamlo (2019) investigated the effect of mobile game-based language learning applications on the motivation of EFL learners using questionnaires. The results showed that the students were excited about learning English through a mobile game-based approach, yet their affective motivation was high because this course was compulsory and they needed to get a high grade to start studying their desired subject.

In another study, Abdulhussain and Alimardani (2021) investigated the effects of using story-based video games on motivation of 40 Iraqi EFL learners. The results showed that there were statistically significant differences between the two groups in terms of motivation. Using a similar design, Yang and Ghadir (2018) investigated the extent to which flow experience of gaming influenced the motivation of 50 Taiwanese third-graders when learning English. They found that gaming flow experience was a significant predictor of English learning motivation, where the students with high gaming flow experience were six times more likely to have high learning motivation.

In a correlational study, Ustaoglu and Çelik (2023) examined 100 Turkish high school students' perceptions of video game involvement and language learning motivation. The results showed that integrative and instrumental motivation types were insignificantly correlated with video game involvement in Turkish. On the contrary, there was a significant relationship between playing video games in English and the motivation types.

Previous research has also demonstrated that DGBL can have a contributory role in the learners' attitude towards English. Blume (2020) reported that German pre-service EFL teachers held positive beliefs about DGBL. Similarly, Hofmeyr (2023) found that Japanese university students reported favorable attitudes towards DGBL before receiving treatment on a cooperative digital game. They even held stronger positive attitudes after the treatment was over. Alhebshi and Halabi (2020) also investigated the perceptions of 56 ESL students and teachers in Saudi Arabia. The findings showed that most participants preferred to use digital games to achieve more in their teaching and learning efforts. It was also found that engagement with learning and teaching, acceptance of DGBL and the effects of DGBL on learning English were significantly interrelated.

Although these studies have dealt with the role of DGBL in motivating learners to achieve success in English, much uncertainty still exists about the relationship between EFL students' adoption of DGBL and their attitudes and motivation for learning English. To this end, to address the aims of the current study, the following research questions were considered:

RQ1. Is there any significant relationship between Iranian EFL students' acceptance of digital game-based learning and their motivation for learning English?

RQ2. What are the students' attitudes toward the digital game-based learning method?

3. Methodology

3.1. Research Design

A quantitative, correlational design was used to determine the relationship between the adoption of digital game-based learning and EFL students' motivation for learning English in Iran. Correlational studies are a type of non-experimental study in which researchers measure two variables and the statistical relationships (i.e., correlations) between them (Creswell, 2012). There are two main reasons why researchers are interested in statistical relationships between variables. First, they do not believe that statistical relationships are causal. Second, statistical relationships of interest are considered causal, but independent variables are unmeasurable, unrealistic, or unethical.

3.2. Participants

The participants of the current research were 86 Iranian BA students majoring in ELT. The participants were selected using a convenience sampling method. The age range of the participants was between 18 and 28 years. Table 1 presents the demographic characteristics of the respondents.

Table 1. Demographic profile of participants

Characteristic	Sub-Category	N
Gender	Male	21
	Female	65
Major	English Language Teaching	86
Year of Study	Freshman	56
	Sophomore	11
	Junior	14
	Senior	5
Age Range	Min	18
	Max	28

3.3. Instruments

The Web-based survey contained two main sections: the demographic profile of the respondents and three questionnaires to collect the required data. The demography included items on gender, year of study, and age range. The questionnaires gathered data on the adoption behavior with regard to DGBL, motivation for learning English, and attitude towards DGBL.

The technology acceptance questionnaire was an adaptation of Davis et al.'s (1989) TAM by excluding the external variables and the actual system use factor. Factors such as perceived usefulness, perceived ease of use, attitude towards use, and behavioral intention to use were considered in this scale. Learners had to respond to 16 items, which consisted of a five Likert-type linear scale ranging from 'strongly disagree' to 'strongly agree'. Item seven was reverse-coded. The language style of the questionnaire was suitable for the participants' level of proficiency because they were all studying English at the university. As for English learning motivation, the respondents had to respond to a modified form of Bicen and Kocakoyun's (2018) learning motivation scale which was used in Almusharraf's (2021) study. This Likert-type questionnaire was a validated and reliable instrument designed for measuring student motivation for learning English and contained seven items. As the third

questionnaire, the attitude towards DGBL scale also originated from Almusharraf's (2021) research on EFL students' perceptions of a game-based approach, which included 11 items and asked about how the participants perceived DGBL in different situations.

Validity of the questionnaires was ensured through consulting with two ELT experts with an orientation to educational technology to examine whether the items were appropriate in terms of both content and relevance. Based on their feedback, several minor changes were made in the TAM questionnaire to reflect the idea of DGBL by replacing *technology* and *system* with terms used for digital games. The other questionnaires were also slightly modified to fit the context of the current study. Analyzing the reliability of the instruments based on Cronbach's alpha formula also showed that they enjoyed high consistency. This was achieved by running a small-scale pilot study to see whether the instruments were reliable enough to be used in the main study. Table 2 exhibits the indices for the three scales.

Table 2. Reliability of the questionnaires

Scale	Number of Items	Cronbach's Alpha
Acceptance of DGBL	16	.94
Learning Motivation	7	.89
Attitude towards DGBL	11	.92

3.4. Data Collection and Analysis Procedure

In order to achieve the goal of the study, convenience sampling was used to select the participants. Due to the ease of accessibility, the EFL students were informed about participating in the research project during their course of study. A group was created on Telegram to collect the data so that the students could refer to their social media accounts to receive the link which was created via Google Forms. The form contained the items related to the variables of the study and demographic items such as the respondents' gender, age, and year of study. The response format was limited to only one response per student so that they would not reply more than once. Having obtained their consent for voluntary participation, the purpose of the study was explained. After ensuring the participation of the intended number of EFL students, they completed and submitted the form. They were given one week to return the survey.

In order to answer the research questions of the study both descriptive and inferential statistics were employed. Data were collected quantitatively through a web-based survey and analyzed using IBM SPSS (version 26). A non-parametric statistical test – Spearman's rho correlation was utilized to examine the correlation between the acceptance level of digital game-based learning and learners' motivation for learning English. The learners' attitudes towards digital game-based learning were examined as well based on different descriptive statistics, mainly means, standard deviations, variances, etc. Moreover, the normality of the data was examined on all the variables using skewness and kurtosis indices.

4. Results

The first research question of the study sought to explore any statistically significant relationship between Iranian EFL students' acceptance of digital game-based learning and their motivation for learning English. To address this research question, first, the frequency and descriptive statistics for acceptance of DGBL and motivation for learning English are presented. Next, the correlation between the students' level of acceptance of DGBL and their motivation is calculated. Table 3 presents the descriptive statistics and skewness and kurtosis indices for acceptance of DGBL and motivation for learning English.

Table 3. Descriptive statistics and skewness and kurtosis indices

	N	Min	Max	M	SD	V	Skewness		Kurtosis	
	Stat	Stat	Stat	Stat	Stat	Stat	Stat	Std. E	Stat	Std. E
DGBL	86	18	80	53.27	13.24	175.45	-.52	.26	-.18	.51
Motivation	86	7	35	23.75	5.97	35.74	-.60	.26	.25	.51

As demonstrated in Table 3, the skewness and kurtosis ratio values for acceptance of DGBL and motivation for learning English are above $+/\sqrt{2}$ 1.96, indicating that the normality assumption is violated (Pallant, 2020). Hence, Spearman's correlation was run to explore a significant relationship between acceptance of DGBL and motivation for learning English among Iranian EFL students. Table 4 displays the related results.

Table 4. Spearman's correlation results of DGBL acceptance and learning motivation

			Acceptance of DGBL	Motivation
Spearman's rho	Acceptance of DGBL	Correlation Coefficient	1.00	.86**
		Sig. (2-tailed)	.	.000
		N	86	86
	Motivation	Correlation Coefficient	.86**	1.00
		Sig. (2-tailed)	.00	.
		N	86	86

**Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 4, there is a statistically positive and significant relationship between acceptance of DGBL and motivation for learning English among Iranian EFL students ($r = .86$, $n = 86$, $p = .000 < 0.01$).

The results in Table 5 indicated the positive attitudes of EFL students towards DGBL. The students had a general agreement on the benefits of DGBL, such as effectiveness of learning English, active learning, accomplishing learning tasks, effective collaborative learning, having control over learning process, helping students understand English better, recalling information more efficiently, allowing comfortable self-expression, taking on more responsibilities to become more successful in English, attracting greater student attention, and feeling better by sharing scores of games on social media.

Table 5. EFL students' attitudes towards DGBL

Items	N	Min	Max	Sum	Mean	SD	Variance
Digital games are effective in learning English.	86	1.00	5.00	321.00	3.73	1.13	1.28
Digital games enable active learning.	86	1.00	5.00	307.00	3.56	1.04	1.09
Digital games allow me to accomplish learning tasks more efficiently.	86	1.00	5.00	291.00	3.38	1.09	1.20
Using digital games makes for more effective collaborative learning.	86	1.00	5.00	294.00	3.41	1.11	1.23
Digital games provide me with greater control over my learning process.	86	1.00	5.00	274.00	3.18	1.12	1.25
The use of a learning method blended with digital game-based learning helps me understand English better.	86	1.00	5.00	295.00	3.43	1.05	1.11
Information can be recalled more efficiently using a digital game-based learning method.	86	1.00	5.00	303.00	3.52	.97	.95
Digital games allow for comfortable self-expression.	86	1.00	5.00	288.00	3.34	1.01	1.03
Digital game-based learning makes me take on more responsibilities to become more successful in English.	86	1.00	5.00	280.00	3.25	1.05	1.11
Using videos in digital games attracts greater student attention.	86	1.00	5.00	313.00	3.63	1.067	1.12
Sharing the score I obtain in digital games on social media makes me feel better.	86	1.00	5.00	273.00	3.17	1.19	1.41

5. Discussion

This study set out with the aim of exploring the relationship between acceptance of DGBL and motivation for learning English among Iranian EFL students and examining their attitudes towards DGBL. The current study found that there was a positive and significant correlation between DGBL and students' motivation for learning English and that they viewed digital games as positive and beneficial.

As expected, these findings indicate that games are very popular with the young generation in their efforts to learn English because they provide a fun and stimulating way of learning, which can increase students' interest and motivation (Chen, 2023; Yeh et al., 2017). Students are more likely to be engaged in learning when they are having fun and enjoying the process (Yu et al., 2023).

Based on the research findings, there was a strong, positive correlation between adoption of DGBL and language learning motivation, which is similar to the results derived from Ninaus et al. (2017), Yang and Ghadir (2018), Shakhmalova and Zotova (2023), Tawafak et al. (2023), and Ustaoglu and Çelik (2023). This finding supports the literature that adoption of technology is under the influence of its ease of use and usefulness as the two main factors of TAM (Abdul Ghani et al., 2019; Huang, 2021; Yu et al., 2023). It is assumed that if users of digital games find them useful and easy to use, there is a stronger possibility of adopting the games, and as a result, they are more motivated to use them for learning purposes. This research has also acknowledged that students who are motivated to learn a language are more likely to accept digital-game based learning as a medium for language learning.

There are, however, other possible explanations for the obtained result. DGBL offers a unique opportunity for students to interact with the language in a natural and authentic way, which can increase their learning motivation. In addition, it provides immediate feedback, which can help students identify areas where they need to improve (Kuang et al., 2023). This feedback can be motivating for students as it helps them see their progress and achievements (Yu et al., 2023). Students who receive positive feedback are more likely to be motivated to continue learning and improving their language skills (Alamer & Al Khateeb, 2023; Chen et al., 2018; Rabu & Talib, 2017). Additionally, technology allows for individualized learning which can increase students' motivation to learn at their own pace and focus on areas that they find challenging (Kuang et al., 2023). This personalized approach to learning can help students feel more in control of their learning, which can increase their motivation (Yang & Ghadir, 2018).

The current study showed that the EFL students viewed digital games as positive and beneficial. Such a finding is in line with Alhebshi and Halabi (2020), Blume (2020), and Hofmeyr (2023), who indicated that EFL students generally felt enjoyment from DGBL. This result may be explained by the fact that digital games are effective in recalling information, attracting attention, and promoting collaborative work when learning English.

Overall, to promote the adoption of DGBL, it is essential to provide learners with clear instructions on how to use the game, offer support, and assistance when needed, and ensure that the game aligns with their learning goals and objectives (Gamlo, 2019). Additionally, incorporating elements such as rewards, feedback, and social interaction can enhance learners' motivation and engagement with the game (Wan et al., 2021).

In sum, understanding and promoting the acceptance of technology is crucial for the successful implementation of DGBL in educational settings. By addressing learners' concerns and providing a positive learning experience, DGBL can become a valuable tool for enhancing learning outcomes and promoting student engagement.

This research suffered several limitations, the first of which was that the questionnaires may not have fully covered all aspects of DGBL in EFL. Another limitation is concerned with time constraint and the number of participants. The study covered only eighty-six students' perceptions towards DGBL and learning motivation. Thus, the generalizability of findings is in question.

6. Conclusion and Implications

The study provided information on Iranian EFL students' adoption behavior towards DGBL and their motivation for English learning; It also focused on their attitudes towards benefits of digital gameplay. The majority of students held positive attitudes towards DGBL in the course of their English language learning.

The finding of this study showed that DGBL can be regarded as one of the most decisive factors in EFL students' motivation for learning English and the learning benefits it can provide to the learners in English are undeniable. Therefore, the use of digital games should be increased and developed in the process of English language learning in order to raise student motivation to higher levels.

The findings of the current study could be useful for EFL teachers, materials writers, mentors, educational administrators, and curriculum developers because they can consider the importance and effect of digital games on English teaching and learning to enrich the efficiency of educational technology, to improve learners' English skills, and to increase their motivation. The results of the present research can assist teachers in developing their professional skills due to the fact that spending time on the issue can encourage them to render teaching and learning more effectively. Materials developers can use the results of the study to tailor their projects to the needs and attitudes of students. These results can be fruitful for policymakers of education programs to increase their awareness of DGBL. In addition, curriculum experts can cooperate more with teachers by using the results of this study to gear digital games to language learners' educational needs. Public and private language schools, learners, teachers, and future researchers benefit from this study to achieve their technological aims in light of game-based learning environments.

Future research could involve a larger sample with more EFL students along with interviews to dig deeper into their perceptions and attitudes regarding the effectiveness of digital games in increasing motivation level of students. This type of study may offer an opportunity to compare different students' attitudes in relation to their acceptance of digital games in order to gather further reliable data. Experimental research is required to investigate the effect of DGBL on students' motivation. Further inquiry can be conducted on a specific digital game to explore other EFL students' attitudes towards utilizing DGBL.

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Appendix A. Acceptance of Digital Game-Based Learning (DGBL)

Perceived Usefulness

- 1. I find digital games useful for learning English.
- 2. Using digital games enables me to accomplish language learning goals more quickly.
- 3. Using digital games increases my performance in language learning.
- 4. If I use digital games, I will enhance the effectiveness of learning.

Perceived Ease of Use

- 5. My interaction with digital games is clear and understandable.
- 6. It is easy for me to become skillful at using digital games.
- 7. I find digital games difficult to use. (R)
- 8. It will be easy to get digital games to carry out my learning plan.

Attitude toward Use

- 9. I think digital games make learning easier for me.
- 10. I have a favorable attitude toward using digital games.
- 11. I like the idea of using digital games for language learning.
- 12. Using digital games provides me with a lot of enjoyment.

Behavioral Intention to Use

- 13. I will use digital games in my future language learning.
- 14. I plan to use digital games in the future.
- 15. I intend to use digital games in the future.
- 16. I intend to use digital games as often as possible.

Appendix B. Motivation for Learning English

- 1. Digital games motivate me to learn English.
- 2. Digital game-based learning increases my interest in English.
- 3. Rewards associated with digital game-based learning motivate me.
- 4. The formation of a competitive environment through DGBL increases my motivation.
- 5. Digital games enable me to learn difficult topics while having fun.
- 6. I want digital game-based learning to be used in all aspects of language learning.

7. Digital game-based learning increase classroom competition.

Appendix C. Attitude towards Digital Gamed-Based Learning

1. Digital games are effective in learning English.
2. Digital games enable active learning.
3. Digital games allow me to accomplish learning tasks more efficiently.
4. Using digital games makes for more effective collaborative learning.
5. Digital games provide me with greater control over my learning process.
6. The use of a learning method blended with digital game-based learning helps me understand English better.
7. Information can be recalled more efficiently using a digital game-based learning method.
8. Digital games allow for comfortable self-expression.
9. Digital game-based learning makes me take on more responsibilities to become more successful in English.
10. Using videos in digital games attracts greater student attention.
11. Sharing the score I obtain in digital games on social media makes me feel better.