The Impact of Gamification-Assisted Language Learning on EFL Students' Acquisition of Phrasal Verbs

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***Abstract*—The aim of this study was to examine the impact of Gamification-Assisted Language Learning (GALL) on learning English as a Foreign Language (EFL), with a specific focus on its influence on EFL students' acquisition of phrasal verbs. Despite their frequent use in spoken and written English, learning phrasal verbs is perceived as highly problematic and challenging for EFL learners due to their complex syntactic and semantic properties. This study employed a mixed-methods approach. Quantitative data were collected through pre- and post-tests to measure learning outcomes, while qualitative data were obtained via a structured questionnaire designed to explore participants' perceptions of GALL. Divided into experimental and control groups, 52 EFL students were introduced to phrasal verbs either through GALL or the conventional approach. The results revealed a significant difference in phrasal verb acquisition between the two groups, with the experimental group exhibiting superior performance in the post-test. Furthermore, participants in the experimental group expressed overwhelmingly positive perceptions towards GALL, which highlights its efficacy in enhancing performance, increasing motivation, reducing anxiety, while also improving interaction, monitoring progress, and fostering a sense of competition. The significant potential of the GALL approach in overcoming the challenges encountered by EFL learners while acquiring phrasal verbs provides empirical evidence of its ability to create engaging and meaningful learning contexts, and offers practical implications for educators, curriculum developers, and researchers.**

***Keywords*—English as a Foreign Language (EFL), Second Language (L2), Gamification-Assisted Language Learning (GALL), Computer Assisted Language Learning (CALL), Mobile Assisted Language Learning (MALL)**

I. Introduction

Learning in the 21st century is increasingly shaped by Information and Communication Technology (ICT), which enables learners to communicate, collaborate, and interact through digital devices. Today's learners, often referred to as *digital natives* or the *Net Generation*, spend a significant portion of their time engaging with digital devices and playing digital games [1]. ICT has also transformed the landscape of teaching and learning English as a foreign language and has resulted in the development of Computer-Assisted Language Learning (CALL) and Mobile-Assisted Language Learning (MALL). The integration of gamification into EFL classrooms has further given rise to a specialized field known as Gamification-Assisted Language Learning (GALL) [2–5].

A review of the EFL literature highlights the benefits of gamification in enhancing various aspects of language learning. Studies have shown that GALL improves overall learning performance, language proficiency, and vocabulary retention, while also increasing motivation, promoting interaction, reducing anxiety, and fostering self-regulation and self-awareness [6–14]. However, challenges such as inadequate technology, unreliable Internet access, potential distractions, and insufficient support for personalized learning have also been reported [15–19]. Despite these challenges, gamification holds significant promise for addressing complex linguistic constructs such as phrasal verbs, which are integral to achieving fluency in the target language yet are notoriously difficult for EFL learners due to their complex syntactic and semantic properties.

This study investigates how a game-based tool, as a component of GALL, influences EFL learners' acquisition of phrasal verbs. Understanding phrasal verbs is critical for effective communication in English, as they are frequently used in both spoken and written contexts. GALL offers unique features—such as immediate feedback, interactive tasks, and engaging environments—that are hypothesized to facilitate the acquisition of phrasal verbs by reducing cognitive load, enhancing motivation, and promoting active participation [6–10]. By exploring these dynamics, this study seeks to bridge gaps in the existing literature and offer practical insights for educators aiming to enhance EFL learners' linguistic proficiency. It is worth noting that the terms "learning" and "acquisition" are used interchangeably in this study without strict adherence to Krashen's [20] distinction between the two.

II. Literature Review

A. Gamification-Assisted Language Learning

The term "gamification" is defined as "the use of game design elements in non-game contexts" [21]. This definition is further elaborated to emphasize its purpose as "the process of game-thinking and game mechanics to engage users and solve problems" [22], and it is additionally characterized as "the process of making activities more game-like" [23]. More specifically, the concept of "gamification" refers to applying the three game design elements: Mechanics, Dynamics, and Aesthetics (MDA) to non-game applications in which users are provided with obstacles to overcome, problems to solve, or decisions to make in order to promote their learning, increase their motivation, raise their engagement, and stimulate their problem-solving [21, 24–26]. The game mechanics (including points, badges, and leaderboards) describe the major components of a game that guide users and limit the ways in which the game can be played based on established rules, tools, and obstacles. The game dynamics (including reward, achievement, and status) describe the

user's behaviors stimulated by their interactions with the game mechanics. The game aesthetics (including fantasy, discovery, and fellowship) describe the user's emotional responses triggered by their interactions with the game dynamics [27].

Since gamification has become increasingly popular and widely adopted among young learners, the integration of gamification into the learning process has allowed new research to emerge such as Digital Game-Based Learning (DGBL) and Mobile Game-Based Learning (MGBL). Similarly, EFL researchers and teachers have been reconsidering games as potential language learning and teaching tools [28]. EFL literature suggests numerous terminologies to describe the integration of games into EFL learning and teaching such as Gamification-Assisted Language Learning (GALL), Digital Game-Based Language Learning (DGBLL), Mobile Game-Based Language Learning (MGBLL), and Game-Mediated Second and Foreign Language (GML2) [29]. The common denominator among all these terminologies is the utilization of games in EFL learning and teaching contexts. However, the term "game-based" might imply that instructors/teachers and other forms of teaching methods play a less important role in such settings [30]. For the scope of this study, the term Gamification-Assisted Language Learning has been adopted because it provides a more comprehensive concept of employing game design elements in EFL learning and teaching.

GALL is defined as the design and use of digital games to learn a second or foreign language [31]. It is relatively a new field of research and the use of gamification in EFL settings is still in its infancy. While the field continues to expand, certain areas remain insufficiently explored, particularly the influence of digital games on Second Language (L2) learners [32]. Several types of digital learning environments and gamification tools (e.g. *Kahoot, Quizlet, Quizizz, Quizalize, Gametize, Gimkit, Duolingo, Wordwall, JeopardyLabs, Memrise, Babble*) have been employed to gamify EFL classrooms. Positive learning outcomes for GALL have been reported on vocabulary, grammar, listening, speaking, reading, and writing, as well as positive affective outcomes such as engagement, motivation, efficiency, and satisfaction [9, 10]. The game design elements (mechanics, dynamics, & aesthetics) embedded in gamification have been found to increase language learner's motivation, decrease their language learning anxiety, and enhance their positive language behavior [8].

B. Learning Phrasal Verbs

Vocabulary knowledge has been widely recognized as the most reliable predictor of academic success across various subject areas, particularly in EFL learning [33, 34]. It plays a crucial role in developing language skills, aids in comprehension and communication, and distinguishes native from non-native speakers by the size of their vocabulary repertoire [35, 36]. As the ability to construct grammatical sentences holds little value without the necessary vocabulary to express intended meaning, the lexicon, rather than syntactic principles, is considered the most challenging aspect of language learning [37]. Vocabulary errors, more than grammatical ones, are more likely to cause confusion [38]. It has been argued that "without grammar very little can be conveyed; without vocabulary nothing can be conveyed" [39], emphasizing that "lexis is where we need to start from, with syntax serving the words, not the other way around" [40].

Phrasal verbs, a subcategory of English vocabulary, represent an important component in L2 acquisition. In its broadest sense, a phrasal verb is a multiword, composed of either a verb + an adverb (e.g., look out) or a verb + a preposition (e.g., look at) or a verb + an adverb + a preposition (e.g., get away with), which behaves as a single syntactic and semantic unit [41]. Researchers proposed several categorizations for phrasal verbs. From a syntactic perspective, phrasal verbs were classified as either transitive/intransitive [42]; separable/inseparable [43]; adverbial/prepositional [44]. From a semantic viewpoint, phrasal verbs were categorized as either idiomatic/non-idiomatic [45]; literal/figurative [46]; compositional/non-compositional [47]; transparent/ semi-transparent/opaque [48]; literal/idiomatic/ aspectual [48]; literal/figurative /completive [49]. Research studies [46, 48, 50, 51] showed that EFL learners prefer using literal, transparent, and non-idiomatic rather than figurative, opaque, and idiomatic phrasal verbs.

Despite their high frequency, phrasal verbs are usually overlooked, perceived as highly problematic, and pose significant difficulties for EFL learners due to their complex syntactic and semantic features [49]. The difficulty of phrasal verbs is brought up by several factors such as their frequency (i.e., their frequent use by native speakers in both spoken and written English), unpredictability (i.e., their meanings can be literal or idiomatic), polysemy (i.e., they might have double/multiple meanings), and non-universality (i.e., some languages do not have phrasal verbs) [52]. In the case of Arab EFL learners, this challenge is heightened because, while Arabic uses prepositions with verbs, they do not function like English phrasal verbs, where a verb and particle combine to form an entirely new, often idiomatic meaning. Instead, Arabic relies on verb derivation and root manipulation to express different meanings, which makes it difficult for learners to understand and use English phrasal verbs naturally. Such complexity often leads learners to misinterpret information or avoid using phrasal verbs, choosing instead single word verbs [41]. Several studies attributed EFL learners' avoidance of using phrasal verbs to different factors such as L1 and L2 differences, exposure to L2, level of proficiency in L2, learning context, task type, and phrasal verb type [53].

In order to facilitate learners' acquisition of phrasal verbs, several approaches have been proposed by EFL researchers and practitioners [49, 54–56]. The traditional approach views phrasal verbs as arbitrary, non-compositional units in which there is no room for conceptualizing and analyzing the meaning of the verb and its particle alone or in combination; therefore, they should be taught mechanically in lists with their definitions and have to be memorized by heart [54, 55]. The conceptual approach, on the other hand, stresses the importance of identifying the core meaning of each word and posits that metaphorical meaning is conveyed through the

verb, its particle, or both; thus, the component parts of phrasal verbs should be conceptualized and analyzed and then a logical relationship within a specific context should be established [54, 55]. Building on these instructional approaches, recent research has explored the impact of gamified and technology-enhanced methods on EFL learners' vocabulary and phrasal verb acquisition.

C. Previous Research Studies

Several studies investigated the influence of gamified and technology-enhanced approaches on EFL learners' vocabulary acquisition, with consistent findings supporting their effectiveness. For instance, Chen *et al.* [2] designed a mobile English vocabulary learning application, with game-related functions (for the experimental group) and without game-related functions (for the control group), to examine its impact on learners' performance and perceptions. They reported that the performance of the experimental group was significantly higher than that of the control group in vocabulary acquisition and retention. They also concluded that the gamified features improved interaction, reduced boredom and repetition, enhanced motivation, and stimulated active involvement. In addition, Fithriani [3] evaluated the effectiveness of a gamified learning environment on EFL learners' vocabulary outcomes, and explored their perceptions of its benefits. The study concluded that the students in the experimental group outperformed their counterparts in the control group and confirmed the benefits of mobile-assisted gamification for vocabulary learning in three aspects: learning outcomes, enjoyment, and motivation. Similarly, Li [57] compared the effects of two methods, the game-based vocabulary learning approach versus the conventional paper-based wordlist learning approach, on students' vocabulary learning achievement, motivation, and self-confidence. Results demonstrated that EFL students who used the game-based vocabulary learning approach showed higher vocabulary learning achievement, motivation, and self-confidence than those using the conventional wordlist learning approach. More specifically, Siahpoosh and Ilkhani [58] compared the effect of two modalities of instruction (game-based vs teacher-based) on the development of phrasal verbs among intermediate EFL learners and reported a significant effect on the development of knowledge of phrasal verbs among those learners who received game-based instruction. In the same vein, Shahrokhi and Kamyabi [59] examined the influence of mobile assisted language learning on learning phrasal verbs in EFL context on two groups (class-based instruction versus MALL-based instruction) and concluded that MALL-based instruction was more effective than class-based instruction.

On the other hand, other studies reported no significant difference when using GALL in EFL classroom settings. For example, the investigation of Karatekin [60] examined whether gamification would affect students' learning new vocabulary in the target language. Although the study found gamification helpful for motivating students to do the tasks on time, encouraging them to take part in activities, adding fun to the course, competing with others, and being aware of their own progress as well as their peers' performance, there was no significant difference between the control and experimental groups' post-test results. The insignificant difference, as indicated in the study, could be attributed to the fact that the control group relied on memorization and recall activities and there was no time gap between education and the post-test. Another study by Reynolds and Taylor [9] reported no significant effect of gamification, using *Kahoot*, on students' vocabulary learning outcomes. Despite the positive influence of *Kahoot* in creating a more enjoyable and exciting learning environment, gamified vocabulary learning proved insignificant in students' vocabulary knowledge. The lack of significance could be ascribed to the small sample size and the short duration of conducting the experiment. The same results were observed by Kim [61] who investigated the effectiveness of using two gamified platforms (*Kahoot* and *Socrative*) on grammar learning for college students and revealed that there was no significant difference between the control and experimental groups in terms of their grammar learning.

Given the mixed findings from previous research, GALL offers a promising yet underexplored approach for addressing the challenges associated with learning phrasal verbs. Phrasal verbs represent a crucial yet complex aspect of English vocabulary due to their syntactic and semantic diversity, which makes them particularly difficult for Arab EFL learners to master. To address these challenges, this study investigates how GALL, specifically through the use of the game-based tool *Kahoot*, can influence EFL students' acquisition of phrasal verbs. The study is driven by three key considerations: the complexity of phrasal verbs for Arab EFL students, the limited research on GALL's role in phrasal verb acquisition, and the inconclusive results of prior studies on gamified learning environments [41, 49, 52, 53]. Accordingly, this study seeks to answer the following questions:

1) Are there significant differences in the learning outcomes of students using the GALL approach compared to those using the conventional approach for learning phrasal verbs?
2) How do students perceive the use of GALL in learning phrasal verbs?

III. Materials and Methods

A. Research Design

The present study employed a quasi-experimental research design since intact classes, rather than random assignment of students, were used. The study was conducted with a mixed methods research design combining both quantitative and qualitative data. Quantitative data was collected through pre and post-tests while qualitative data was collected through a questionnaire.

B. Participants

Two classes, taught by the same researcher, were selected to conduct the study. One class, comprising 27 students, was assigned as an experimental group while the other class, comprising 25 students, served as a control group. The total participants in this study were 52 males, first-year, college-level EFL students, aged between eighteen and twenty years old. All participants were studying EFL at a

public university and shared the same cultural and linguistic background, with Arabic as their mother tongue and English as their second language. Based on the University English Placement Test, the participants were homogeneous at the pre-intermediate and intermediate proficiency levels.

C. Data Collection

1) Pre-Test: To measure the participants' background knowledge on phrasal verbs, a pre-test of English phrasal verbs was administered to the two groups at the beginning of the semester (week 1). The pre-test included 30 multiple-choice items extracted from the course textbook and was conducted during class hours. Then, in the following weeks, the two groups were exposed to the target phrasal verbs in two different approaches: the Experimental Group (EG) via the GALL approach and the Control Group (CG) via the conventional approach.

2) Post-Test: A post-test was carried out at the end of the semester (week 15) to check the target phrasal verbs acquired by the participants in both groups. The post-test consisted of 30 multiple-choice questions derived from the course textbook and was administered during class hours. The post-test was delivered after the experimental group had been taught using the GALL approach, while the control group received instruction through the conventional method.

3) Post-Questionnaire: A questionnaire, adapted from Hew *et al.* [62], was also employed to investigate the perceptions of the experimental group toward using GALL in learning phrasal verbs. The questionnaire consisted of 10 items with each item rated on a 5-point Likert scale (5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree). Before administering the questionnaire, the researcher described its purpose to the experimental group and explained its items in order to avoid any confusion. The questionnaire aimed to assess students' perceptions of gamification in learning English, specifically focusing on its motivational and interactive aspects. It targeted constructs such as students' enjoyment and excitement in learning new phrasal verbs, the perceived effectiveness of gamified exercises and quizzes in enhancing English learning, and the role of gamification in fostering engagement. It also explored the importance of progress tracking, peer performance awareness, and the impact of specific game mechanics—such as points, badges, and leaderboards—on stimulating participation, task completion, and competitive motivation. In general, the questionnaire sought to capture how gamification influenced learners' attitudes and behaviors toward mastering phrasal verbs.

4) Validity & Reliability: To ensure the validity of the pre/post-tests and the questionnaire, they were revised by three EFL college teachers, who made modifications to enhance clarity. To ensure the reliability of the pre/post-tests and the questionnaire, they were pilot tested on another group of students in a similar class with the same cultural and linguistic background and the same language proficiency level. The Cronbach's Alpha reliability coefficients of the three instruments: pre-test ($\alpha = 0.89$), post-test ($\alpha = 0.92$), and questionnaire ($\alpha = 0.88$) indicated a high internal consistency.

D. Procedures

The present study was carried out over a period of 15 weeks in which classes met two times a week (two hours each time), with a total of 60 h. Over the course of the semester, students were introduced to and taught a total of 65 phrasal verbs, integrated into the lessons to enhance their practical vocabulary skills.

The two classes were required to study Cambridge's English Vocabulary in Use: Pre-intermediate and Intermediate, which was intended for EFL learners at the upper A2 level and B1 level on the Common European Framework of Reference (CEFR). The Cambridge Learner Corpus was used to select the words and phrases for this textbook which were presented and explained either in text, tables, lists, pictures, diagrams and then contextualized in sentence examples [63]. Both classes were taught the same content with different teaching approaches: the experimental group was taught phrasal verbs via the GALL approach while the control group was taught phrasal verbs via the conventional approach.

By applying the GALL approach, the experimental group was required to access a gamification platform, *Kahoot*, in order to do some pre-designed, gamified exercises and quizzes on the target phrasal verbs. *Kahoot* is an educational, gamification-based platform where teachers can create interactive quiz-games, discussions and surveys using videos, images, and diagrams to increase learners' motivation and engagement and decrease their anxiety and boredom. During the first week of the study, the experimental group was introduced to *Kahoot* in order to learn how to access and use it during class sessions. Because the intervention with *Kahoot* required an Internet access, experimental group was allowed to access the University's Wi-Fi via their smartphones, tablets, or laptops at the end of class sessions in order to practice exercises and do quizzes on the target phrasal verbs. However, access was limited to the experimental group and governed by the teacher's permission. Students were introduced to various quiz modes, including multiple-choice and True/False questions, which were tailored to reinforce their understanding of phrasal verbs. The quizzes featured diverse formats, such as identifying synonyms and antonyms, matching phrasal verbs with their meanings, and completing sentences with the correct phrasal verbs. Students received immediate and automated feedback on their performance, which allowed them to identify areas of strength and improvement. In addition, they could monitor their own progress and compare it with their classmates' performance through game mechanics like points, badges, and leaderboards, which fostered a competitive and engaging learning environment.

By adopting the conventional approach, on the other hand, the control group was presented with the target phrasal verbs during class sessions in a traditional class-based approach, i.e., in text, pictures, or diagrams. The target phrasal verbs in each chapter were covered through definitions and sentence completion exercises. The control group was required to learn the meaning of the target phrasal verbs and use them in meaningful contexts, which involved exercises designed to encourage students to apply the phrasal verbs in realistic sentences and scenarios. These contexts included sentence

completion tasks, gap-filling exercises, and short dialogues that prompted students to use the phrasal verbs in situations reflective of everyday interactions. By practicing the vocabulary within these structured yet relevant contexts, students developed a clearer understanding of each phrasal verb's practical usage, even without the gamified or interactive techniques provided to the experimental group.

E. Data Analysis

The Statistical Package for Social Sciences (SPSS) software was utilized to analyze the collected data. Initially, descriptive statistics, including means and standard deviations, were computed to summarize the central tendencies and variability of the pre-test and post-test scores for both the experimental and control groups. These descriptive measures provided an overview of the participants' performance and facilitated preliminary comparisons between the two groups. Subsequently, inferential statistical analyses were conducted to determine the significance of observed differences. This involved performing two independent samples t-tests to compare the mean pre-test scores and mean post-test scores between the experimental group using the GALL approach and the control group employing the conventional approach. These tests assessed whether the two groups differed significantly in their baseline knowledge and their final performance after the instructional interventions. In addition, two dependent samples t-tests were carried out to evaluate within-group changes by comparing the pre-test and post-test scores for each group separately. This allowed for the examination of learning outcomes within the experimental group and within the control group. All statistical analyses were performed at a significance level of $p < 0.05$ to ensure the reliability of the results. Prior to conducting the t-tests, assumptions such as normality and homogeneity of variances were verified to validate the appropriateness of the chosen statistical methods. Effect sizes were also calculated to provide a measure of the magnitude of differences observed. Moreover, the data obtained from the post study questionnaire regarding the perceptions of the experimental group toward using GALL to learn phrasal verbs was calculated with SPSS using descriptive statistics (means and standard deviations) with scores ranging from: 0 to 2.5 = a negative attitude, 2.51 to 3.5 = a neutral attitude, 3.51 to 5 = a positive attitude.

IV. Result and Discussion

To investigate whether there was a significant difference in the mean scores of *pre-tests* between the experimental group (GALL approach) and the control group (conventional approach), an independent samples t-test was conducted. According to the results (Table 1), the mean pre-test scores of the experimental group (M = 19.11, SD = 2.40) and the control group (M = 18.42, SD = 2.95) were not significantly different, $t(50) = 0.928$, $p = 0.357$, $d = 0.25$. These findings indicate that both groups had similar levels of background knowledge in phrasal verbs prior to the intervention.

Table 1. An independent samples t-test of pre-test results for both experimental & control groups

Group	N	M	SD	t	df	p
GALL Approach	27	19.11	2.40	0.928	50	0.357
Conventional Approach	25	18.42	2.95			

To further examine whether there was a significant discrepancy between the mean scores of *pre-* and *post-tests* within the *experimental* group, a dependent samples t-test was carried out. The results (Table 2) yielded a significant difference between the mean scores of the pre-test (M = 19.11, SD = 2.40) and the post-test (M = 25.61, SD = 5.22); $t(26) = 13.375$, $p = 0.0001$, $d = 1.59$, which implies that the GALL approach was very effective in enhancing students' learning of phrasal verbs.

Table 2. A dependent samples t-test of pre- and post-tests results for the experimental group

GALL Approach	*N*	*M*	*SD*	*t*	*df*	*p*
Pre-test	27	19.11	2.40	13.375	26	0.0001
Post-test	27	25.61	5.22			

Another dependent samples t-test was conducted to investigate whether there was a significant discrepancy between the mean scores of *pre-* and *post-tests* within the *control* group. The analysis (Table 3) produced a significant difference between the mean scores of the pre-test (M = 18.42, SD = 2.95) and the post-test (M = 20.13, SD = 6.57); $t(24) = 13.236$, $p = 0.0001$, $d = 0.33$, which denotes that the conventional approach had also a significant effect on students' acquisition of phrasal verbs.

Table 3. A dependent samples t-test of pre- and post-tests results for the control group

Conventional Approach	N	M	SD	t	df	p
Pre-test	25	18.42	2.95	13.236	24	0.0001
Post-test	25	20.13	6.57			

To determine whether there was a significant difference in the mean scores of *post-tests* between the *experimental* group and the *control* group, another independent samples t-test was performed. The findings (Table 4) revealed a very significant difference in the mean scores between the experimental group (M = 25.61, SD = 5.22) and the control group (M = 20.13, SD = 6.57); $t(50) = 3.342$, $p = .001$, $d = 0.92$. These results indicate that both groups were different in their knowledge of the target phrasal verbs after conducting the experiment and suggest that the GALL approach was significantly more effective in developing students' acquisition of phrasal verbs.

Table 4. An independent samples t-test of post-test results for both experimental & control groups

Group	N	M	SD	t	df	p
EG (GALL Approach)	27	25.61	5.22	3.342	50	0.001
CG (Conventional Approach)	25	20.13	6.57			

To assess the experimental group participants' perceptions of using GALL in learning phrasal verbs, a questionnaire was administered following the experiment. Descriptive statistics, including means and standard deviations, derived from the questionnaire indicate that EG students hold positive perceptions regarding the use of GALL (see Table 5).

Based on the study findings, the results revealed a significant difference within the *experimental* group between the mean scores of the pre- and post-tests. The students' post-test scores were significantly higher than their pre-test scores, which demonstrates a substantial improvement in their performance after the implementation of the GALL approach. Likewise, the results indicated a significant

difference within the control group between the mean scores of the pre- and post-tests, which implies significant progress in their performance after applying the conventional approach. However, there was a significant difference between the experimental group (*GALL approach*) and the *control* groups (*conventional approach*). The participants in the experimental group, who used GALL for learning phrasal verbs, performed significantly better than those in the control group, who were taught using the conventional approach.

Table 5. Descriptive statistics for EG participants' perceptions toward GALL

No.	Item	*M*	*SD*
1.	I felt motivated to learn English with gamification.	4.69	0.78
2.	I enjoyed learning new phrasal verbs with gamification.	4.86	0.82
3.	I think gamified exercises & quizzes enhanced my English learning.	4.33	0.89
4.	I think learning with gamification was fun and exciting.	4.15	0.91
5.	I think it was necessary to know my own progress.	4.82	1.01
6.	I think it was necessary to know my peers' performance.	3.40	1.21
7.	I think collecting points stimulated me to participate.	4.49	0.88
8.	I think the badges encouraged me to complete tasks on time.	3.78	1.11
9.	I think the leaderboards motivated me to compete with others.	4.20	0.81
10.	I think that points, badges, & leaderboards motivated me to learn more about phrasal verbs.	4.91	0.92

The questionnaire results regarding the experimental group's perceptions of GALL indicate that EFL learners hold positive views of the approach, especially for learning vocabulary and phrasal verbs. According to the participants' responses, GALL facilitated their phrasal verbs acquisition as they enjoyed learning new phrasal verbs using gamification. Students were also excited to do the gamified exercises and quizzes because they found them convenient and fun. Using game mechanics (points, badges, and leaderboards), as reported by the participants, motivated them to learn more about phrasal verbs and they were more stimulated with collecting points. In addition, students were very curious to know about their progress as well as their peers' performance. They thought that GALL helped them get more active and more engaged in class activities.

The results of this study are consistent with prior research [2, 3, 57, 58, 59] which emphasized the effectiveness of gamification and technology-enhanced approaches in language learning. These studies demonstrated improved vocabulary acquisition, retention, motivation, and active involvement among EFL students when utilizing game-based or mobile-assisted learning methods. They collectively highlighted the advantages of gamification and technology-enhanced approaches in language learning. However, the findings of this study contrast with previous research [9, 60, 61, 64] which found no significant differences when using GALL in EFL classrooms. While these studies acknowledged that gamification increased motivation and engagement, they did not consistently show significant improvements in learning outcomes. Factors such as the teaching methods used in the control groups, sample size, and experiment duration may have influenced these outcomes. For instance, the effectiveness of gamification might be more pronounced in longer studies where students have more time to adapt to the gamified learning environment. In addition, the nature of the control group's instruction can influence the comparative results, as more engaging or interactive traditional methods might reduce the observed benefits of gamification.

The findings of this study emphasize the critical importance of incorporating games into the classroom, as they can foster enjoyment, engagement, and heightened motivation among students. Games serve as a valuable strategy for alleviating the anxiety associated with learning the target language, which helps create a more comfortable learning environment. Integrating games into language learning is indispensable as they enable students to enjoy themselves while simultaneously honing their language skills. The findings of this research emphasize the significance of games as teaching aids in EFL classes, particularly in cultivating a relaxed atmosphere conducive to learning. When games are employed with educational objectives in mind, they benefit both students and instructors, which in turn contributes to a more enriching learning environment. The findings of this study not only validate the positive influence of GALL on EFL students' performance but also confirm, through questionnaire responses, that its emotional features are significant tools for motivation, engagement, and competition.

V. Conclusion

This study was designed to examine the influence of Gamification-Assisted Language Learning on EFL students' acquisition of phrasal verbs. Two groups (experimental and control) were assigned to two different instructional approaches (GALL versus conventional) to learn phrasal verbs. The two groups were introduced to the same target phrasal verbs and were allocated the same time and same number of sessions but were asked to practice exercises and quizzes in two different modes: the experimental group via the gamified tool, *Kahoot*, while the control group via the conventional class-based and textbook-based instruction. The findings of this study revealed significantly improved learning outcomes for the students in the experimental group, which confirms the effectiveness of GALL in acquiring English phrasal verbs. Regarding students' perceptions of using GALL to learn phrasal verbs, the results indicated that the utilization of the game mechanics offered by *Kahoot* effectively boosted participants' motivation, enhanced their performance, and created a fun, interactive, and competitive learning environment.

A. Implications of the Study

The findings of this study may provide valuable insights and practical implications for EFL teachers on the impact of utilizing GALL in EFL classrooms. By employing GALL, EFL teachers can create more motivating, engaging, and meaningful contexts for teaching and learning English. To effectively meet the needs of their digitally native students in the digital era, EFL teachers should possess sufficient knowledge of GALL as an instructional tool. EFL students may also find this study of great benefits. By using GALL, students can increase their learning motivation, reduce their

learning anxiety, monitor their progress, and enhance their interaction. The results of the current study may also offer EFL curriculum developers deeper and broader views on the potentials as well as challenges of implementing gamified platforms in EFL settings in order to integrate GALL into EFL curriculum and courses. The findings of this research may encourage EFL researchers to do more experimental studies on the effectiveness of different gamified platforms on learning English phrasal verbs.

B. Limitations of the Study

The study's findings, while promising, are accompanied by several limitations that influence the validity and generalizability of the results, which highlight areas for improvement and future research. Relying solely on a single tool, such as *Kahoot*, could significantly limit the generalizability of the findings. This is because the results would reflect the effectiveness of that specific tool rather than offering broader insights into the use of game-based learning or other interactive technologies in education. Without incorporating a variety of tools or instructional methods, it becomes challenging to determine whether the observed outcomes are attributable to the unique features of *Kahoot* or are more generally applicable to similar platforms. Therefore, employing multiple tools could provide a more comprehensive understanding of how different types of gamified tools impact learning phrasal verbs.

When comparing the implementation of the GALL approach with the conventional approach, there appears to be a likely difference in the time allocated to tasks. Participants involved in the GALL approach engaged in a wider array of interactive activities, including exercises, quizzes, and feedback, which allowed them to explore phrasal verbs in various ways compared to the conventional approach. This disparity in time allocation presents a potential limitation. Another limitation affecting the validity of the results was the extended duration between the pre-test and post-test. To enhance validity and generalizability, reducing the time gap between these tests or employing multiple post-tests to track changes over time would have been beneficial.

C. Recommendations for Further Research

Future research could be conducted across various EFL settings—including graduate, undergraduate, and high school levels—to evaluate the impact of GALL on diverse language skills such as listening, speaking, reading, and writing, as well as on language competencies including vocabulary, pronunciation, and grammar. This study was carried out at a single university with a limited sample size of 52 participants, which may not be representative of the broader university student population. Therefore, utilizing a larger and more diverse sample could enhance the generalizability of the findings. Since the current study focused on a specific age and gender group, subsequent research may include participants from different age ranges and gender backgrounds to obtain more reliable and comprehensive results.

Conflict of Interest

The author declares no conflict of interest.

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