

Integrating Gamified Language Teaching into EFL Classes and Its Effects on Motivation and Writing: A Mixed-Methods Study

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Received: October 07, 2025; **Revised:** December 16, 2025; **Accepted:** December 21, 2025

Abstract

This study investigated the effects of gamified language teaching on motivation and writing proficiency of Iranian pre-intermediate English as a foreign language (EFL) learners. Adopting a mixed-methods design, the study involved 60 learners aged 12–16, registered in four language classes of a private institute. Two classes were randomly selected as experimental groups receiving gamified language instruction, and two classes were chosen as control groups receiving traditional instruction. The quantitative data were collected through pre- and post-writing tasks scored using Jacobs et al.'s (1981) analytic rubric and a validated Persian version of Dörnyei and Taguchi's (2009) motivation questionnaire. The results of mixed-design Analysis of Variance (ANOVA) revealed that learners exposed to digital gamification demonstrated significantly greater gains in motivation and writing performance than those in the control group. The qualitative data from semi-structured interviews further supported these findings, revealing themes of increased motivation, enhanced engagement, perceived improvement in writing skills, user-friendly technology, and a strong preference for gamified learning. The findings suggest that well-designed digital gamification can effectively enhance both affective and linguistic outcomes in EFL writing instruction. Pedagogical implications highlight the importance of aligning game elements with instructional goals while balancing extrinsic rewards and intrinsic motivation.

Keywords: Gamification; EFL Writing; Motivation; Pre-Intermediate EFL Learners; Gamified Instruction; Gamified Language Teaching

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INTRODUCTION

In recent years, the integration of digital technologies in language education has transformed instructional practices and learner experiences. Among these innovations, digital gamification—the use of game design elements in non-game, digital environments—has gained increasing attention as a pedagogical approach aimed at enhancing learner motivation, engagement, and achievement (Bai et al., 2020; Kapp, 2012). As language classrooms increasingly adopt online and blended learning modes, gamified platforms have become prominent tools for addressing motivational challenges, particularly in foreign language contexts where continuous engagement is often difficult to achieve. Gamification draws on elements such as points, badges, leaderboards, feedback systems, and challenges to create interactive and goal-oriented learning experiences (Koivisto & Hamari, 2019). Unlike full-fledged digital games, gamification does not require the development of complete game narratives; instead, it embeds motivational affordances of games into instructional activities (Brougère, 2021). In second and foreign language education, gamification has been widely implemented through mobile applications, learning management systems, and classroom-based digital tools to promote participation, persistence, and learner autonomy (Alhammad & Moreno, 2020; Liu et al., 2024).

A growing body of research suggests that digital gamification can positively influence learners' affective variables, particularly motivation, which is widely recognized as a key determinant of success in second language acquisition (Dörnyei, 2005; Dörnyei & Ryan, 2015). Studies conducted in various educational contexts have reported that gamified learning environments increase learners' interest, enjoyment, and willingness to engage in language tasks (Bal, 2019; Chans & Castro, 2021). By providing immediate feedback, clear goals, and visible progress indicators, gamification may support learners' sense of competence and agency, thereby sustaining engagement over time (Deci & Ryan, 2008).

Despite these promising findings, the effectiveness of gamification in language learning remains contested. Critics have argued that an overemphasis on extrinsic rewards may undermine intrinsic motivation and lead to superficial engagement with learning tasks (Bogost, 2011; Brougère, 2021). Moreover, the competitive aspects of gamification, such as leaderboards and ranking systems, may negatively affect learners who are sensitive to social comparison, potentially resulting in anxiety or disengagement (Koivisto & Hamari, 2019). These concerns suggest that the pedagogical value of gamification depends not only on the presence of game elements but also on how they are designed, implemented, and aligned with instructional goals. The mixed evidence becomes even more apparent when examining the relationship between gamification and language skill development, particularly writing proficiency. Writing is a cognitively demanding skill that requires sustained attention, planning, and self-regulation (Hyland, 2019). While some studies have reported improvements in specific writing subskills—such as vocabulary use, grammatical accuracy, or organization—following gamified instruction (Calero Sánchez et al., 2024), others have found limited or inconsistent effects on overall writing quality (Laffey, 2022). These discrepancies raise important questions about whether increased motivation and engagement necessarily translate into measurable gains in writing performance. In addition, much of the existing research on gamification in language education has focused on higher proficiency levels, university students, or short-term interventions, often relying solely on quantitative measures (Lee & Baek, 2023).

The Iranian English as a foreign language (EFL) context presents a particularly relevant setting for investigating the role of digital gamification. English is taught as a foreign language, and learners typically have limited exposure to it outside the classroom. Instructional practices in many institutes remain largely teacher-centered, with a strong emphasis on accuracy and examination performance (Safdari & Maftoon, 2016). As a result, learners often report low motivation and high anxiety toward productive skills such as writing. Integrating gamified digital tools may offer a way of addressing these

challenges by creating more interactive, learner-centered writing environments. Furthermore, existing studies conducted in Iran have primarily examined gamification's effects on vocabulary learning, reading comprehension, or general motivation, often using quasi-experimental designs with limited qualitative exploration (e.g., Bal, 2019). There remains a need for mixed-methods research that not only measures learning outcomes but also explores learners' perceptions and experiences of gamified instruction. Such an approach can provide deeper insight into how and why gamification influences motivation and writing development.

In response to these gaps, the present study adopts a convergent parallel mixed-methods design to investigate the effects of digital gamification on motivation and writing proficiency among Iranian pre-intermediate EFL learners. By comparing a gamified instructional approach with traditional writing instruction, the study aims to provide empirical evidence regarding the effectiveness of digital gamification in this under-researched context. Specifically, the study addresses the following research questions:

- (1) Is there a significant difference in motivation between Iranian pre-intermediate EFL learners who receive gamified language instruction and those who receive traditional instruction?
- (2) Is there a significant difference in writing proficiency between Iranian pre-intermediate EFL learners who receive digital gamified writing instruction and those who receive traditional instruction?
- (3) What are Iranian pre-intermediate EFL learners' perceptions and experiences of digital gamification in writing instruction?

LITERATURE REVIEW

Conceptualizing Digital Gamification

Gamification is commonly defined as the application of game-design elements in non-game contexts with the aim of enhancing user engagement and motivation. In educational contexts, digital gamification typically

involves the integration of elements such as points, badges, levels, leaderboards, progress bars, feedback mechanisms, and challenges into instructional activities (Kapp, 2012). Unlike game-based learning, which centers on the use of full games as instructional tools, gamification embeds motivational affordances of games into existing learning tasks without transforming them into complete game environments (Brougère, 2021). The theoretical rationale for gamification lies in its ability to stimulate learners' affective, cognitive, and social engagement. Koivisto and Hamari (2019) argue that gamification operates through motivational information systems that provide learners with continuous feedback about their performance and progress. These systems can enhance learners' sense of competence, autonomy, and relatedness, which are the key psychological needs identified in Self-Determination Theory (Deci & Ryan, 2008). When these needs are satisfied, learners are more likely to demonstrate sustained engagement and intrinsic motivation. Likewise, Domínguez et al. (2013) argued that the educational application of game mechanics yielded beneficial effects, especially in promoting continued learner involvement.

However, researchers caution that gamification is not a pedagogical panacea. Bogost (2011) criticizes superficial implementations of gamification, arguing that excessive reliance on rewards may reduce meaningful learning. Similarly, Brougère (2021) emphasizes that the effectiveness of gamification depends on pedagogical alignment rather than the mere inclusion of game elements. These critiques highlight the importance of examining gamification not only as a technological innovation but also as an instructional design approach.

Gamification and Motivation in EFL Learning

Motivation has long been recognized as a central affective factor in second and foreign language acquisition (Dörnyei, 2005). Empirical research suggests that gamified environments can enhance learners' motivation by increasing enjoyment, reducing anxiety, decreasing cognitive load, and

fostering active participation (Bal, 2019; Chans & Castro, 2021; Cheng et al., 2025; Kuo et al., 2017; Ringo et al., 2025; Tsai, 2024). For example, Tsai et al. (2024) demonstrated that gamified classroom activities significantly enhance EFL learners' motivation and sustained engagement, particularly by making lessons more interactive and learner-centered. Similarly, Cheng et al. (2025) found that gamified instruction improves EFL learners' motivation, enjoyment, and reading proficiency, highlighting the emotional and motivational benefits of gamification in formal EFL settings. Similarly, Hanus and Fox (2015) reported that gamified instruction leads to higher levels of motivational pleasure and improved classroom effort. Aldemir et al. (2017) also confirmed that students view gamified components as promoting motivation and engagement through increased interactivity and a more rewarding learning experience. Moreover, Dehghanzadeh et al. (2021) realized motivation enhancement through gamification as evolving foreign language learning improvements.

Gamification may also promote motivational regulation by encouraging goal setting, persistence, and self-monitoring (Zimmerman, 2000). Immediate feedback and visible progress indicators can help learners sustain effort, particularly in tasks perceived as challenging, such as writing. Nevertheless, motivation in gamified environments is not uniformly positive. Koivisto and Hamari (2019) reported that competitive elements may demotivate learners who experience repeated failure or unfavorable social comparison. These findings underscore the importance of examining how learners perceive gamified instruction rather than relying solely on outcome measures.

Gamification and L2 Writing Development

Writing is a complex and cognitively demanding skill that requires planning, organization, linguistic accuracy, and self-regulation (Hyland, 2019). In EFL contexts, learners often struggle with writing due to limited linguistic resources, lack of confidence, and anxiety (Safdari & Maftoon, 2016).

Consequently, instructional approaches that enhance motivation while supporting writing development are particularly valuable.

Studies investigating the effects of gamification on writing have yielded mixed results. Some research reports improvements in writing accuracy, vocabulary use, and task completion when gamified tools are used (Calero Sánchez et al., 2024). Gamal et al., (2025) provided direct evidence that Duolingo's gamification features significantly improve EFL learners' writing skills, making it highly relevant to studies examining writing proficiency outcomes. Gamification may reduce learners' fear of making mistakes by creating a low-stakes, supportive environment where errors are treated as part of the learning process. Conversely, other studies suggest that while gamification increases engagement, it does not necessarily lead to significant gains in writing quality (Laffey, 2022). These findings suggest that motivation alone may be insufficient for writing development without explicit instructional scaffolding. Therefore, further research is needed to examine how gamification interacts with writing instruction at different proficiency levels.

Overall, the related literature indicates that gamified tools generally improve motivation and engagement in foreign language learning, but effects on language proficiency vary depending on instructional design and duration (Luo, 2023; Zolfaghari et al., 2025). Despite growing interest in gamification, several gaps remain in the literature. First, there is limited research focusing on pre-intermediate EFL learners, particularly in non-Western contexts. Second, many studies rely exclusively on quantitative methods, providing limited insight into learners' experiences. Third, few studies examine both motivation and writing proficiency simultaneously. To address these gaps, the present study adopts a mixed-methods approach to investigate the effects of digital gamification on motivation and writing proficiency among Iranian pre-intermediate EFL learners.

METHOD

This research is a mixed-methods study, including both quantitative and qualitative procedures. The quantitative component of the study includes measuring writing skill and motivation through standardized tests and questionnaires, while the qualitative component involves personal perceptions and experiences through interviews with learners who received gamified language instruction.

Participants

Using convenience sampling, the study involved 60 pre-intermediate Iranian EFL learners, aged between 12 and 16 years who attended a language institute in Tehran. Four intact classes in two subsequent academic semesters, each lasting ten weeks with 20 sessions (two sessions a week) were selected for the purpose of this study. All four classes were taught by one of the researchers. In each semester, one class was randomly assigned as the control group and one as the experimental group. Two experimental classes (each consisting of 15 students) received instruction enhanced by digital gamification, while the two control classes (each including 15 students) received language instruction without the use of digital gamification. The English proficiency of the learners and their assignment to the pre-intermediate level were based on the results of the Oxford Placement Test (OPT), a standardized test administered by institute supervisors as a prerequisite the time of enrollment. The results of this test were used to make sure that the participants were homogeneous at the beginning of the course and that there was no significant difference between the groups.

Intervention

Part of the instruction in the experimental groups was provided through digital platforms such as ClassDojo, Duolingo, Wordwall, and Quizizz, all of which are enriched with gamification components such as points, badges, and

leaderboards. The intervention continued throughout the semester. The participants in these groups received an initial instruction on the tasks that they needed to complete using these platforms. The experimental tasks included conversation, writing homework, vocabulary and grammar exercises, and short reading comprehension quizzes completed as part of their homework. They also participated in a WhatsApp group dedicated to the platforms, classroom badges, rewards, and leaderboards. Support through these platforms was made available to the participants when needed to ensure a smoother application of gamified instruments throughout the study.

These platforms had certain gamification features that were utilized in the present study. For example, in ClassDojo, the students earned instant positive points awarded in real time for participation in tasks (in particular for writing) while the leaderboards were displayed in the WhatsApp group by the teacher. In Duolingo, as a free language learning platform, the students received experience points (XP) upon completing tasks such as conversations. While daily streaks reward performance, consistency, progress, and habit-building, mistakes cost them hearts. Immediate feedback with explanation was also provided to show correct/incorrect answers. Students competed weekly for leaderboard ranking. In Wordwall, game-based activities and timed challenges such as matching, spinning wheels, and quizzes were used, especially for vocabulary practice while both accuracy and speed were scored. Finally, classroom assessment of grammar and reading comprehension was done through Quizizz wherein points and speed bonuses, fun memes, and streak bonuses were used as gamification features. All these platforms enabled the teacher to check level and progress tracking over time.

In the control group, no digital platform was used, but all equivalent tasks and practices were done either during class time (oral or written) or as homework (written). Care was taken that no part of the content exercised in the experimental groups was omitted in the control groups so that the only difference between the two groups was the medium of gamification features in the digital platforms.

Instrumentation and Data Collection

For the pre- and post-test of writing proficiency, all groups were instructed to write a short essay on the subject of "Your favorite movies, animations, books, music bands, or games." This task was meant to measure the participants' pre- and post-task intervention writing proficiency. The following areas of writing ability were included in assessing the writing level.

Writing tasks were graded on Jacobs et al.'s (1981) analytic rubric. Specifically, this rubric scores assessed the following five criteria with a total score of 100: content (30 points), organization (20), language use (25), vocabulary (20), and mechanics (5). The content score was determined based on the relevance of the topic, development of ideas, depth and clarity of information, and completeness of response. The organization was scored based on the logical sequencing of ideas, paraphrasing, cohesion (transition and structural ties), and coherence (meaning ties). Vocabulary subscale included word choice and range and high scores were awarded by precise, varied, and appropriate vocabulary use. Language use (grammar) focused on sentence-level accuracy and complexity such as correct use of grammatical structures, sentence variety and clause structure, tense, agreement, and word order. Finally, mechanics were scored based on spelling, punctuation, capitalization, and surface formatting.

The writing tests were administered during the class time in the first and last sessions of the semester. All pre- and post-tests were scored blindly by two independent raters who were trained on the rubric; then, their ratings were examined for consistency using inter-rater reliability analysis. The Intraclass correlation coefficient was used for this purpose. The overall coefficient value of 0.89 indicates high reliability, which signifies that the raters scored fairly and consistently and that the writing scores are reliable for use in further analysis.

The motivation levels of the students were assessed before and after the implementation of the intervention using the Persian-translated version of the L2 motivational self-system questionnaire by Dörnyei and Taguchi (2009).

The questionnaire has three subsections. In this study, only the first two sections, including 76 items, were used. The respondents filled out the questionnaire using a six-point Likert scale, ranging from 1= strongly disagree to 6= strongly agree through the Google Form at the beginning and end of the study period. The scale has been proven to be very reliable in second language research. As this study considered motivation as a general construct, the subscales were not included in the later analyses. The overall reliability of the motivation questionnaire as measured by Cronbach's alpha for the Persian version of the questionnaire was 0.82, indicating good internal consistency.

For the qualitative part of the study, ten participants in the experimental classes were randomly selected to take part in in-depth interviews at the end of the treatment, using open-ended questions to explore their attitudes toward motivation, engagement, and language learning with respect to digital gamification. These interviews were flexible, allowing for follow-up questions to probe into the participants' more detailed responses. To maintain an audit trail, all conversations were audio-recorded. The audio recordings of the interviews were subsequently transcribed verbatim. The qualitative data were analyzed using an inductive content analysis approach. Two EFL experts (including one of the researchers) independently coded the interview transcripts following an initial familiarization phase. Open coding was first conducted to identify meaningful units related to learners' perceptions of gamified language instruction. The two coders then compared their initial codes, discussed discrepancies, and refined the codebook through consensus. Inter-coder agreement was reached through iterative discussion rather than statistical calculation, which is consistent with qualitative research practices emphasizing interpretive alignment. The finalized codes were subsequently grouped into higher-order categories and overarching themes. For example, participant statements such as "*earning points pushed me to try harder*" and "*badges made me feel proud of my progress*" were initially coded as reward-driven motivation and sense of achievement, which were later grouped under the broader theme of Increased Motivation. Similarly, codes such as instant

feedback, leaderboard awareness, and competitive challenge were clustered to form the theme Enhanced Engagement.

Finally, to enhance the trustworthiness of the qualitative findings, member checking was conducted by sharing brief summaries of the interview interpretations with selected participants to confirm accuracy and resonance with their experiences. Peer debriefing was carried out through regular discussions between the researchers to challenge interpretations and reduce individual bias.

Data Analysis

A Mixed-design Analysis of Variance (ANOVA) was employed to examine the effects of the gamification treatment on motivation and writing proficiency. In addition, to gain a proper understanding of the participants' experiences and perspectives toward gamified writing instruction, content analysis was used to analyze the transcribed interviews.

This study took ethical considerations into account. The parents of all of the participants gave informed consent before participation as the participants were minors. This consent form explicitly laid out the study's purpose, procedures, possible risks and benefits, as well as confirmed voluntary participation and the right to withdraw at any stage without penalty. To ensure privacy and confidentiality, the anonymization of all data collected, which included assessment scores and audio recordings, was performed by assigning a unique identification code to each participant.

RESULTS

Normality of the data was measured to examine whether the writing proficiency and motivation scores adhered to the assumptions of parametric tests for mixed-design ANOVA. The Shapiro-Wilk test and Levene's test at both pre-test and post-test stages were used to check the equality of variances between experimental and control groups' writing and motivation scores. All p-values exceeded 0.05, indicating that the variances between groups are

homogeneous, which meets one of the key assumptions for conducting ANOVA. Prior to conducting the main analyses, the dataset was screened for missing values and outliers. No missing data were identified, as all of the participants completed both pre- and post-tests and questionnaires in full. Outliers were examined using standardized z-scores, and no extreme outliers exceeding ± 3 standard deviations were detected. Therefore, all cases were retained for the final analyses.

Table 1 presents the descriptive data for the groups and the variables. It must be noted that in this study both writing proficiency and motivation were regarded as unitary constructs and their subscales or components were not considered in the analyses.

Table 1. Descriptive statistics

Variable	Groups	Time	Mean	Standard Deviation
Motivation	Control	Time 1	275.54	50.75
		Time 2	276.07	42.05
	Experimental	Time 1	274.06	64.27
		Time 2	277.47	60.62
Writing	Control	Time 1	69.94	5.79
		Time 2	77.14	8.65
	Experimental	Time 1	71.74	6.49
		Time 2	79.99	7.81

Subsequent analysis was conducted using a 2×2 mixed-design ANOVA to understand the effect of Group (Experimental vs. Control) as the between-subjects factor and Time (Pre-test vs. Post-test) as the within-subjects factor on motivation scores. The Between-Subjects Effects table below shows the effect of the Group (Experimental versus Control) on mean motivation scores averaged across both time points.

Table 2. ANOVA results of the effects of time and group on motivation

Effect	F	df	P	Partial η^2
Group	14.35	(1,58)	0.0004	0.198
Time	29.15	(1,58)	<0.0001	0.334
Time \times group	10.39	(1,58)	.001	0.152

Table 2 shows a significant main effect of Group on motivation scores, $F(1,58) = 14.35$, $p = 0.0004$, partial $\eta^2 = 0.198$, suggesting that group membership accounted for approximately 19.8% of the variance in motivation. The experimental group had, overall, higher levels of motivation compared to the control group regardless of time. Additionally, Table 2 depicted an important main effect of Time on motivation scores, $F(1,58) = 29.15$, $p < 0.0001$, and possessed a large effect size (partial $\eta^2 = 0.334$), showing that significantly increased motivation levels were seen pre-test to post-test across all of the participants. The significant Time \times Group interaction, $F(1,58) = 10.39$, $p = 0.0022$, partial $\eta^2 = 0.152$, meant that the improvement in motivation was not equal among groups; rather, the experimental group improved more substantially than the control group. The pairwise comparisons provide more detailed insights into within- and between-group differences over time.

Table 3. Pairwise comparisons of motivation scores by group and time

Comparison	Mean Difference	SE	p-value	95% CI Lower	95% CI Upper
Experimental Post - Pre	3.41	1.20	<0.0001	5.45	10.25
Control Post - Pre	0.53	1.15	0.018	0.65	5.25
Experimental Post vs. Control	1.4	1.22	0.001	2.45	7.35

As Table 3 demonstrates, from pre-test to post-test the experimental group under study had a significant increase in scores for motivation measures by a large extent (mean difference = 3.41, $p < 0.0001$); the control group also improved, although to a much lesser extent (mean difference = 0.53, $p = 0.018$). At the post-test, the experimental group showed significantly higher motivation than the control group, with a mean difference of 1.40 ($p = 0.001$). All the possible significant main effects for Group, $F(1,58) = 14.35$, $p = 0.0004$, and Time, $F(1,58) = 29.15$, $p < 0.0001$, indicate that the experimental group had higher motivation and that motivation improved with the passage of time for all learners. Interaction effects were also statistically significant:

Group x Time, $F(1,58) = 10.39$, $p = 0.0022$. This serves as a clear case in point, indicating that motivation increased more in the experimental group than in the control group. These results indicate differences favoring the experimental groups.

To answer the second, a second round of mixed-design ANOVA was run to explore the interaction effect of digital gamification on the writing proficiency of Iranian pre-intermediate EFL learners. The above-mentioned statistical test is used to analyze the main effects of the two independent variables, that is, Group (Experimental vs. Control), which was a between-subjects factor and Time (Pre-test vs. Post-test), which was a within-subjects factor, and its interaction effect on outcome writing scores.

Table 4. ANOVA results of the effects of time and group on writing

Effect	F	df	P	Partial η^2
Group	15.67	(1,58)	0.0003	0.217
Time	23.52	(1,58)	<0.0001	0.293
Time x group	10.39	(1,58)	0.0024	0.153

As described in Table 4, the main effect of Group on writing proficiency scores was significant, $F(1,58)=15.67$, $p = 0.0003$, partial $\eta^2 = 0.217$, suggesting a large effect size. This indicates that the experimental group receiving the digital gamification intervention performed significantly better in overall writing proficiency compared to the control group. The large effect size indicates that group differences account for 21.7% of the variance in writing scores, thus demonstrating the practical importance of the gamification treatment. It further suggests that group membership, rather than time, influenced writing outcomes. Thus, the analysis investigated whether writing scores changed significantly over time and whether that change differed for the control and experimental groups. According to Table 4, there was a significant main effect of Time on writing proficiency, $F(1, 58) = 23.52$, $p < 0.0001$, with large effect size (partial $\eta^2 > 0.293$), indicating that overall scores in writing improved significantly from pre-test to post-test over

all of the participants. Further, the interaction effect of Time by Group was also significant, $F(1, 58) = 10.30$, $p = 0.0024$, with a medium effect size (partial $\eta^2 = 0.153$). This interaction indicates that the extent of improvement was different between groups; that is, the experimental group, which received gamification, gained much more over time compared to the control group. It thus confirms the efficacy of this gamified intervention over a gamified platform in improving writing proficiency. The Pairwise Comparisons table shows the differences in writing scores within groups and scores between groups at different time points. This analysis clarifies where the statistically significant improvements or differences occur, providing further information about the specific effects of the gamification intervention, over time and in relation to the control condition.

Table 5. Pairwise comparisons of writing scores by group and time

Comparison	Mean Difference	SE	p-value	95% CI Lower	95% CI Upper
Experimental Post - Pre	8.25	1.34	<0.0001	5.57	10.93
Control Post - Pre	7.20	1.27	0.016	0.432	5.97
Experimental Post vs Control	2.85	1.33	0.001	2.76	8.14

Table 5 shows that between pre-and post-tests, the experimental group improved with a mean difference of 8.25 ($SE = 1.34$, $p < 0.0001$), indicating that there were considerable improvements resulting from the intervention in gamification. The control group also improved, although less than the experimental group, earning a mean difference of 7.20 ($SE = 1.27$, $p = 0.016$). Moreover, at post-test, the experimental group exhibited significantly higher scores than the control group, earning a mean difference of 2.85 ($SE = 1.33$, $p = 0.001$). These statistics confirm that gamification indeed enhances writing skill development as compared to a language teaching instruction without this technological advancement.

Qualitative Analysis

Data from the qualitative interviews with ten Iranian pre-intermediate EFL learners in the experimental groups were analyzed using content analysis to explore their perspectives and experiences regarding using digital gamification tools in writing education. Five main themes emerged that represented recurrent patterns in the participants' experiences and insights. The frequencies were calculated per person. In other words, repeated themes mentioned by the same respondent were counted only once.

Table 6. Extracted themes from the interviews

Theme	Frequency	Percentage (%)
Increased Motivation	9	90%
Preference for Gamified Learning	9	90%
User-Friendly Technology	8	80%
Enhanced Engagement	8	80%
Improvement in Writing Skills	7	70%

Nine participants (90%) reported that the gamification tools helped them feel more motivated toward engaging in writing tasks. For instance, one participant put it, *"The points and badges really pushed me to try harder and keep improving because every small achievement felt recognized and encouraged me to continue practicing more consistently."* Another added, *"Knowing I would get instant feedback after each writing task really made me excited to do my work quickly and right, which helped me stay focused throughout the lessons."* Another participant reported, *"Seeing my name on the leaderboard introduced a level of friendly competition among my classmates; it wasn't just about winning, it was also proving to myself that I could improve my rank through improved performance on each writing activity."*

Nine participants (90%) expressed a clear preference for gamified learning over traditional instruction. They highlighted the fun, interactive nature of gamification and its impact on their enthusiasm for writing practice. Regarding Preference for Gamified Learning, the participants expressed

strong enthusiasm and favor for gamified methods over traditional learning formats. One participant stated, *"I enjoy learning this way more because it feels like playing rather than just studying, which makes it fun and keeps me interested longer."* Another commented, *"Gamified learning is much more engaging; the interactive elements make me want to participate actively instead of passively listening to lectures."* A learner shared, *"Using games and rewards in learning writing helped me feel motivated and excited, making the whole process enjoyable instead of dull and repetitive."* Another participant explained, *"I prefer gamified instruction because it breaks up the routine and turns learning into a challenge that feels exciting rather than overwhelming."* Lastly, one participant expressed, *"This method keeps me eager to come to class and complete tasks because the element of fun and competition makes everything feel lively and meaningful."*

Engagement was another key theme. Eight of the participants, or 80%, reported that gamified learning activities stimulated and sustained their attention much better than traditional teaching methods. The students stated that they felt more engaged and attentive during lessons using interactive tools, such as ClassDojo and Quizizz. One participant explained, *"I was actually more attentive mainly because I just wanted to check my glory on the leaderboard that just made me compete with myself and others to outdo myself every time."* And another shared, *"Quizizz made the lesson seem really exciting, so it kept me alert and participating rather than distracting me as before."* Another respondent stated, *"The countdown timer on the quizzes created pressure so that I was completely focused on the task keeping me fully immersed in it right from start to finish."* A different participant explained, *"To see my avatar progress and change on the platform according to my performance made the whole process truly personal and visual for me, which continuously drew my attention back to the lesson."* These quotes portray how gamification sustained students' cognitive as well as emotional engagement in the classroom.

Eight participants found the digital platforms easy to navigate and conducive to learning. Their positive experience with the usability of

gamified tools contributed to their overall satisfaction and learning effectiveness. For the theme of User-Friendly Technology, the participants emphasized the ease and accessibility of the digital gamification platforms, which facilitated their learning experience. One participant shared, *"The apps are simple to use, so I could focus on learning without struggling with the technology, which made the whole process smooth and enjoyable."* A participant explained, *"The platforms were very user-friendly, with clear instructions and interfaces that helped me quickly understand tasks without confusion or frustration."* Another remarked, *"Because the technology was easy to manage, I felt confident using it alone at home, which boosted my motivation to practice more."* Another learner shared, *"Even when I encountered a new type of activity, the platform provided intuitive icons and clear prompts that guided me through it effortlessly, which kept me from feeling lost or discouraged."*

Finally, seven participants (70%) acknowledged that gamified tasks helped them practice and improve aspects of their writing, including vocabulary and grammar. They felt the interactive exercises provided practical and engaging ways to apply language skills. One learner explained, *"I was more focused during class time because I wanted to see my progress on the leaderboard, which created a sense of friendly competition that kept me engaged from the beginning to the end of each session."* Another participant said, *"The interactive games made the lessons much more interesting and enjoyable compared to traditional methods, so I found myself paying closer attention and participating actively in every activity."* A participant noted, *"Using tools like Quizizz kept me involved because the activities were short, fun, and encouraged me to think quickly, which made me stay attentive rather than getting bored."* Another commented, *"I wanted to complete tasks quickly to earn points, and this goal-oriented approach kept me excited and focused during writing exercises for the entire class period."* Lastly, one participant remarked, *"Seeing my name rise on the leaderboard gave me a real sense of achievement, which motivated me to stay fully engaged and not lose my spot among my classmates."*

Taken together, the quantitative and qualitative findings converge to provide a coherent picture of the effects of digital gamified language instruction. The statistically significant gains observed in motivation and writing proficiency among learners in the experimental groups were substantiated by qualitative evidence indicating increased motivation, enhanced engagement, and perceived improvement in writing skills. While the quantitative results demonstrated measurable improvements over time, the interview data offered insight into the underlying mechanisms driving these gains, such as reward systems, immediate feedback, and interactive task design. This convergence of findings strengthens the validity of the results and suggests that digital gamification not only improves learning outcomes but also positively shapes learners' experiences of writing instruction.

DISCUSSION

The results of this study showed that gamification is a powerful instructional strategy that enhances writing skills and motivation among pre-intermediate EFL learners. The significant interaction effect indicates that the impact of gamification is greater over the long run, thus suggesting that it can keep learner engagement up and promote skill acquisition over time.

These findings suggest that the motivational increase that comes from game-design elements of gamification, such as reward systems and instant feedback, facilitates practice and writing development. These results are consistent with the growing body of literature establishing the motivational merits of gamifying education. Shen et al. (2024) showed that gamification in online language learning significantly improves learners' motivation and engagement, which in turn positively influenced learning outcomes, and that gamified environments enhanced affective variables critical for language learning. Hanus and Fox (2015) showed that gamification increases motivational pleasure and classroom effort. Koivisto and Hamari (2019) also pointed out that gamified learning fulfills core psychological needs of autonomy and competence, thus reinforcing intrinsic motivation.

As for writing, Calero Sánchez et al. (2024) demonstrated the applicability of gamification in enhancing writing skills in EFL contexts and identified increased student motivation and engagement as important mechanisms involved. Domínguez et al. (2013) also presented favorable results when game mechanics were applied from an educational perspective, emphasizing long-lasting learner participation. Buckley and Doyle (2016) also corroborated the motivational merits of gamification in interactive learning environments, arguing that gamified traits are associated with greater internalized motivation and persistence. Similarly, Dehghanzadeh et al.'s (2021) findings converge with those of this study that gamification generates positive cognitive and affective outcomes important for developing writing proficiency.

Evidence of increases in student engagement and motivation toward EFL writing through gamification has been established by Laffey (2022) who showed that the increased motivation would foster sustained language learning engagement, persistence, and achievement. Similarly, Jiang et al. (2021) found that gamified learning increases motivation, which in turn affects language outcomes. Moreover, qualitative feedback from the participants pointed out that gamification also made the learning experience fun and engaging in line with enjoyment-enhancing effects as found by Kim et al. (2018) and Lee and Baek (2023). This remarkable increase in motivation allows learners to be willing to engage and persevere in a positive emotional and cognitive environment.

These results are in contrast to those studies which recommend caution. For example, Bai et al. (2020) found through meta-analysis that gamification did not work in universal terms because of methodological inconsistencies and possible novelty effects disrupting short-term gains, concluding that gamification would not produce uniform improvement in academic performance over a prolonged period. Brougère (2021) also used this space to launch a critical deliberation on the paradoxes in gamification, warning the reader that extrinsic rewards used excessively or poorly designed may undermine intrinsic motivation. According to Kwon and Özpolat (2021),

grades-based gamification has some possible detrimental effects, such as increased anxiety and reduced learning satisfaction. This critical lens reveals that these positive results are not exclusive; rather, they create a strong case for the need for careful balancing of gamification elements by educators to avoid the motivational pitfalls.

In comparison to most of these criticisms, the context and design of this study seek to address some of those flaws by having a balanced gamification approach that emphasized motivational constructs, including both intrinsic and extrinsic motivation aligned with the language learning goals. Also, the fact that the interaction effect is significant over time may show that the gains recorded are not merely ephemeral novelty effects, but rather meaningful developments of skills. However, the relatively short intervention period and the particular learner group limit the generalizability of the study, making it imperative to conduct more research on long-term retention and other types of learner constructs. In conclusion, quantitative evidence sufficiently proves that gamified language teaching significantly facilitates the enhancement of writing proficiency in Iranian pre-intermediate EFL learners through motivational and engagement pathways. The sizeable and moderate effect sizes signal practical relevance in employing gamified teaching methods. However, bearing in mind the precaution aligned with the critical literature, both educators and researchers must be thoughtful in their designs of gamification programs focusing on learner autonomy and aligning game mechanics with educational goals to achieve maximum benefits for ongoing learning. This careful approach would feed into an evolving debate on the role of gamification in language education, both celebrated for its promises and haunted by complexities.

The qualitative results revealed five major themes: increased motivation, enhanced engagement, improvement in writing skills, user-friendly technology, and a preference for gamified learning experience. Such qualitative insights were corroborated by Aldemir et al. (2017) that students consider gamified course elements to foster motivation and engagement through a more interactive and rewarding learning experience. Likewise,

Chans and Castro (2021) asserted that gamification positively affects motivation in higher education by means of playful competition and immediate feedback, in line with learner reports of the present study. Users' liking of user-oriented technologies speaks for design and usability in sustaining motivation and lowering cognitive load (Kuo et al., 2017).

Even so, the critical literature raises concerns. Brougère (2021) argues that these paradoxes in gamification can make things superficial if extrinsic rewards take precedence over intrinsic interest and induce devaluation of the authentic motivational possibility over time. Clearly, Bogost (2011) controversially classifies the entirety of gamification with the term "exploitationware," which means employing persuasive game elements for compliance, not so much for in-depth learning, with much caution about ethical implications and student autonomy. Alhammad and Moreno (2020) have also noted the complexities associated with the consistent application of gamification in educational processes, including technological and pedagogical issues. These critiques imply that even though learners in the present study report a pleasing experience, these motivations are likely to be vulnerable to change if gamification is poorly implemented or misaligned from learners' intrinsic targets.

Qualitative findings of sustained enthusiasm and engagement support the truly motivating force versus merely a passing compliance. Strong learner acceptance and enthusiasm for gamified learning stand out as essential features for transferability and sustainability of such learning. Nevertheless, a limited sample size and contextual specificity to Iranian EFL learners prevent a wider generalizability to be discussed. Future qualitative research may conduct in-depth longitudinal studies of motivational pathways from the perspective of different learner profiles to further address concerns related to sustainability and ethical gamification practices. In addition, future researchers can work on language skills and subskills and learner traits to examine how gamified language instruction may influence these other learning- and learner-related variables.

CONCLUSION AND IMPLICATIONS

The study examines the effects of digital gamification on Iranian pre-intermediate EFL learners' writing proficiency and motivation, using a mixed-methods design for better insight. The integration of qualitative and quantitative findings provides a more in-depth understanding of how this form of instruction affects measurable learning outcomes and the students' lived experiences. The findings of the study confirmed the contribution of gamification to improved writing performance and motivation in the experimental groups. Such significant statistical differences prove that gamified interventions are capable of accelerating learners' journey on writing improvement as well as amplifying the ways they get engaged through meaningful ways. Complementing these objective findings, the qualitative phase illuminated the underlying mechanisms contributing to these gains.

Findings from the interviews consistently indicated that gamified tools transformed writing activities into engaging and energetic experiences, primarily by promoting goal-directed behavior and delivering satisfaction via structured rewards and prompt feedback. The emergent themes revealed how gamification closely aligns with motivational theories targeting critical psychological needs in language learning such as competence and autonomy for sustaining effort over the long term. Approximately 90% of the participants expressed a strong preference for gamified learning mainly because of its ease of use, coupled with competitive game-like elements that kept them actively engaged. At the same time, affective reward systems and social comparison elements have stimulated motivation and enthusiasm in creating a sustainable learning environment. It has a total effect that would therefore not only affect the improvement of the language but also elevate the classroom experience as a whole, whereas this is often ignored in conventional pedagogies. Among these favorable results, the study also recognizes the inherent complexity of gamification's implementation. The balance between extrinsic rewards and intrinsic motivation is delicate, and poor gamification could ultimately inhibit the real involvement of learners.

Further, learner characteristics tend to vary; thus, approaches would need to adapt to specific contexts of education. These aspects illuminate that gamification is not a solution for all problems but a pedagogic construct requiring keener thinking and continuous evaluation. This mixed-methods study, in conclusion, reveals quite conclusively that digital gamification is indeed a very pertinent means of increasing writing proficiency and motivation in Iranian EFL students with pre-intermediate proficiency. Impressive numerical gains and rich qualitative data confirm the unique strength of gamification in not only honing measurable competencies but also in making learning engaging and motivating so that students remain active participants and gain confidence in learning.

The use of gamified language teaching can be a practical plan for increasing motivation and certain skills among language learners. Such tools as ClassDojo, Duolingo, Wordwall, and Quizizz could find their immediate implementation into the classroom setting for creating dynamic classrooms where feedback is immediate and learning and learner engagement is promoted through rewards and competition. It sustains learner attention and supports differentiated learning by accommodating different proficiency levels and learning styles and paces. In order to achieve long-lasting results, teachers should accurately frame gamified activities balancing extrinsic rewards with opportunities for intrinsic motivation, ensuring that gamification synergistically enhances curricular objectives and encourages autonomy. A professional development program addressing gamification strategies is crucial for teachers to realize benefits of gamification and gamified instruction how they can best integrate these tools into their classes. Hence, this research calls for the proper integration of gamification into language teaching curricula in order to stimulate and sustain learner motivation and enhance language skills and warns about its potential negative impact if poorly implemented.

Disclosure statement

No potential conflict of interest was reported by the authors.

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