



## Examining the Relationship Between Gamification-Based Quizizz Use and English Vocabulary Mastery in Elementary Education

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### ABSTRACT

This study was conducted in response to the growing integration of information and communication technology in English language learning, which has created opportunities to enhance students' vocabulary acquisition through more interactive and engaging instructional media. Vocabulary mastery is a fundamental component of English proficiency, yet many elementary school students continue to experience difficulties in learning new vocabulary through conventional teacher-centered approaches. Therefore, this study aimed to examine the relationship between the use of gamification-based Quizizz and English vocabulary mastery among sixth-grade students at MIN 1 Kota Palu. A quantitative correlational research design was employed, involving 30 students selected through purposive sampling from a population of 63 students. Data were collected using a 15-item Likert-scale questionnaire measuring students' use of Quizizz and a 20-item multiple-choice vocabulary test. The data were analyzed using IBM SPSS Statistics version 30 through normality, linearity, and Pearson Product Moment correlation tests. The findings indicated that the data satisfied the assumptions of normality and linearity. Pearson correlation analysis revealed a very strong positive and statistically significant relationship between Quizizz use and students' English vocabulary mastery ( $r = .892, p < .001$ ), indicating that greater engagement with Quizizz was associated with higher vocabulary achievement. The study concludes that Quizizz has considerable potential as a gamification-based learning medium to foster engaging, interactive, and student-centered vocabulary learning in elementary English classrooms. However, because the study employed a correlational design, the findings demonstrate an association rather than a causal effect between Quizizz use and vocabulary mastery.

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## INTRODUCTION

The rapid advancement of information and communication technology has substantially reshaped educational practices, including the teaching and learning of English as a foreign language. Digital technologies have expanded instructional possibilities beyond conventional textbooks and teacher-centered classroom activities by enabling learners to access interactive content, immediate feedback, and flexible learning resources. In English language education, technology integration has increasingly encouraged teachers to design learning experiences that are more participatory, adaptive, and responsive to students' needs (Al-khresheh, 2024; Bui, 2022; Elmaadaway & Abouelenein, 2023). This transformation is particularly important in elementary education because young learners generally respond more positively to visual, interactive, and experience-based learning activities than to prolonged verbal explanation (Anggraheni & Ertanti, 2025; Hidayat, 2025; Peláez & Solano, 2023). At the same time, early exposure to English can support the gradual development of language awareness, confidence, and readiness to communicate in broader academic

and social contexts (Yan et al., 2024; Yuan, 2024; Zadorozhnyy & Lee, 2025). Since English provides access to global information, scientific knowledge, and intercultural communication, strengthening its instruction from the elementary level remains an important educational concern. Therefore, the use of appropriate digital learning media should be viewed not merely as a technological trend but as part of a broader effort to improve the quality and relevance of early English education.

Among the various components of English proficiency, vocabulary mastery occupies a central position because it supports learners' ability to understand and produce language. Vocabulary knowledge enables students to comprehend spoken and written input, construct meaningful sentences, and participate more confidently in communication activities (Huang, 2021; Tai & Chen, 2024; Taye & Mengesha, 2024). Learners with limited vocabulary frequently experience difficulty understanding classroom instructions, interpreting reading materials, and expressing ideas accurately in oral or written forms (Amalia et al., 2021; Clarin et al., 2023; Suseno, 2024). These challenges are often more apparent among elementary school students, who are still developing basic linguistic awareness and require repeated exposure to new words in meaningful contexts (Chowdhury et al., 2024; Joye et al., 2022; Kieseier et al., 2022). Vocabulary learning at this stage is not limited to memorizing translations, but also involves recognizing word forms, understanding meanings, recalling words, and using them appropriately in simple communicative situations (Arochman et al., 2023; Uchihara et al., 2022, 2025). When these processes are not adequately supported, students may struggle to progress in listening, speaking, reading, and writing. Consequently, vocabulary mastery should be treated as a foundational learning outcome that requires systematic and engaging instructional support.

Despite its importance, vocabulary acquisition remains a persistent difficulty in many elementary English classrooms. Students commonly struggle to retain unfamiliar words, distinguish similar lexical forms, and apply newly learned vocabulary beyond isolated exercises. These difficulties may be intensified when instruction relies heavily on repetition, translation, note-taking, and decontextualized memorization, which provide limited opportunities for active processing and meaningful use (F. Ahmed et al., 2026; Shahidipour, 2025; Wahyuni & Nissa, 2026). Conventional activities may also reduce learners' attention when they are presented in repetitive formats that do not correspond to the developmental characteristics of young students. Furthermore, teacher-centered learning can position students as passive recipients of information rather than active participants who explore, respond, and receive feedback during the learning process (Al-Shehri & Alaudan, 2024; Martin-Alguacil et al., 2024; Tang, 2023). In such conditions, vocabulary lessons may be perceived as monotonous and cognitively demanding, resulting in low participation and weak retention. This situation indicates that the problem of vocabulary mastery is not solely related to students' ability, but also to the quality of the instructional environment in which vocabulary is introduced and practiced.

The need to address these difficulties has encouraged educators to consider technology-supported and gamification-based learning as alternative approaches. Gamification refers to the use of game-related elements, such as points, challenges, rewards, levels, competition, and immediate feedback, in non-game learning contexts (Luo, 2022; Sailer & Sailer, 2021; Zainuddin et al., 2024; Zhang & Huang, 2024). When appropriately designed, these elements can increase learners' attention, participation, persistence, and willingness to complete academic tasks (Bowden et al., 2021; Daniel et al., 2024; Lasekan et al., 2024). In vocabulary learning, gamified activities may provide repeated practice without creating the same sense of monotony often associated with conventional drills. They can also create a low-risk environment in which students respond to questions, identify errors, and improve their understanding through direct feedback (Li & Kim, 2024; Shafiee Rad, 2024). For elementary learners, this combination of repetition, interaction, and enjoyment is particularly relevant because it aligns learning tasks with their preference for short, responsive, and visually stimulating activities. Thus, gamification offers a pedagogical rationale for integrating digital tools into vocabulary instruction rather than using technology only as an

additional classroom feature.

Quizizz is one of the digital platforms frequently used to implement gamification in educational settings. The platform allows teachers to organize quiz-based activities supported by automated scoring, rankings, time limits, visual displays, and immediate response feedback. These features can transform vocabulary practice into an interactive activity in which students repeatedly recognize meanings, recall word forms, and respond to contextualized questions. Previous research has suggested that Quizizz can enhance students' motivation, engagement, classroom participation, and positive attitudes toward language learning (Anak Yunus & Hua, 2021; Degirmenci, 2021; Diah Wulansari Hudaya et al., 2025; Fahada & Asrul, 2024; Munawir & Hasbi, 2021; Ridhwan, 2023). Studies on digital vocabulary platforms have also reported that game-supported activities can facilitate vocabulary retention, repeated exposure, and active involvement among language learners (Aswita et al., 2025; Ciğerci et al., 2025; Panmei & Waluyo, 2023). Other findings indicate that technology-based gamification may reduce anxiety and provide a more encouraging environment for learners who are reluctant to participate in conventional classroom interaction (A. A. A. Ahmed et al., 2022; Topçu & Doğan, 2026; Zhou & Wu, 2026). In addition, Quizizz has been associated with more flexible assessment and practice because students can receive direct information about the correctness of their answers. Collectively, these studies demonstrate that gamified digital platforms possess considerable potential to support English vocabulary learning.

Nevertheless, the existing literature remains dominated by studies examining students' perceptions, motivation, engagement, satisfaction, or the effectiveness of gamification through experimental comparisons. Several studies have focused on university or secondary school populations, while evidence from elementary EFL contexts remains comparatively limited (Ferguson & Leeming, 2025; Geng et al., 2022; Tong et al., 2024; Vonkova et al., 2021). Other studies have investigated digital flashcards, Quizlet, or broader game-based learning applications rather than specifically analyzing Quizizz use in relation to vocabulary mastery (Al Shihri et al., 2025; NADHIYA, 2026; Ramadan et al., 2025; Siti, 2026). Research involving Quizizz has often emphasized learners' responses to the platform or changes in achievement after an instructional intervention, but has provided less attention to the statistical relationship between students' level of Quizizz use and their actual vocabulary performance (Brahmana, 2022; Liu et al., 2025; Pham, 2023a, 2023b). Consequently, it remains insufficiently understood whether students who report more active, motivating, and feedback-rich experiences with Quizizz also demonstrate stronger vocabulary mastery in an elementary school setting. This limitation is important because a positive perception of a digital platform does not necessarily correspond to measurable language competence. The present study addresses this gap by examining the relationship between gamification-based Quizizz use and English vocabulary mastery among sixth-grade elementary students.

Accordingly, this study aims to determine whether there is a positive and statistically significant relationship between gamification-based Quizizz use and English vocabulary mastery among sixth-grade students at MIN 1 Kota Palu. The study does not attempt to establish a causal effect, but rather investigates whether variation in students' experiences and involvement with Quizizz is associated with variation in their vocabulary achievement. Theoretically, the findings are expected to extend the literature on technology-mediated gamification by providing correlational evidence from an elementary EFL context that has received relatively limited scholarly attention. The study may also clarify how interactive features, participation, rewards, and immediate feedback are related to students' vocabulary learning outcomes. Practically, the results can assist English teachers in evaluating the relevance of Quizizz as a supplementary medium for vocabulary practice. Educational institutions may use the findings as a basis for supporting more purposeful integration of digital learning platforms in elementary English instruction. In addition, the study can provide a reference for future researchers who intend to investigate gamification, vocabulary learning, and educational technology across broader populations and research designs.

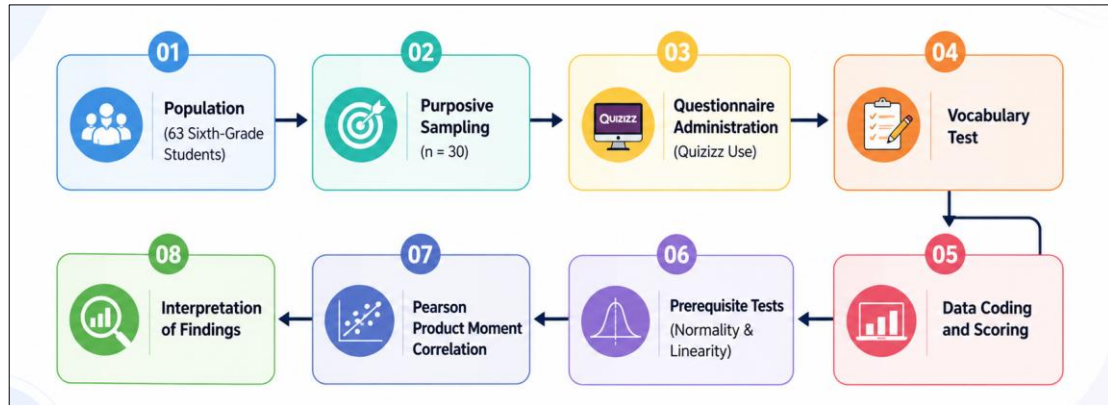
## **METHOD**

This study employed a quantitative approach using a correlational research design to examine the relationship between students' use of gamification-based Quizizz and their English vocabulary mastery. A correlational design was considered appropriate because the study aimed to determine the strength and direction of the relationship between two naturally occurring variables without manipulating the learning process or providing experimental treatment (Indahsari, 2025). In this study, the independent variable was the use of gamification-based Quizizz, while the dependent variable was students' English vocabulary mastery. Rather than investigating causal effects, the research focused on identifying whether students who demonstrated higher levels of engagement with Quizizz also tended to achieve better vocabulary learning outcomes. The research was conducted at MIN 1 Kota Palu, Indonesia, involving sixth-grade students who had previously participated in English learning activities using Quizizz during classroom instruction.

The population consisted of all sixth-grade students enrolled at MIN 1 Kota Palu, totaling 63 students distributed across three classes (VI-A, VI-B, and VI-C). From this population, 30 students were selected through purposive sampling because they fulfilled the inclusion criteria established for the study. Specifically, the selected participants had received English instruction and had previous experience using Quizizz as part of vocabulary learning activities. This sampling technique was chosen to ensure that all participants possessed sufficient familiarity with the digital learning platform being investigated (Saputra et al., 2024). Consequently, the selected sample was considered capable of providing reliable information regarding the relationship between Quizizz use and vocabulary mastery within the research context.

Data were collected using two research instruments, namely a questionnaire and an English vocabulary test. The questionnaire consisted of fifteen statements measured on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). It was designed to measure students' experiences in using Quizizz during English learning, covering indicators such as learning engagement, motivation, classroom participation, reward systems, and immediate feedback. Meanwhile, students' vocabulary mastery was assessed using a twenty-item multiple-choice test that evaluated word meaning recognition, word form identification, and vocabulary use in simple contextual sentences. Both instruments were developed based on the research variables and were intended to measure students' perceptions of Quizizz use and their English vocabulary achievement. Before data collection, the questionnaire and vocabulary test were reviewed to ensure that the items corresponded appropriately to the objectives of the study and adequately represented the intended constructs.

The overall research procedure is presented in Figure 1. Initially, permission to conduct the research was obtained from the school administration. Eligible participants were subsequently identified based on the predetermined sampling criteria. The questionnaire was then administered to collect information regarding students' experiences with Quizizz during English learning activities. Afterward, participants completed the vocabulary test individually under the supervision of the researcher to ensure that the obtained scores reflected their actual vocabulary competence. Upon completion of both instruments, all responses were checked for completeness, coded, and entered into the statistical database before the analysis stage.



**Figure 1.** Research Procedure

Figure 1 illustrates the sequence of activities undertaken throughout the study, beginning with participant selection and ending with statistical interpretation. The procedure demonstrates that both variables were measured independently before the correlational analysis was performed, thereby ensuring that the relationship identified in this study was based on students' observed responses and vocabulary test performance rather than on experimental manipulation.

The collected data were analyzed using IBM SPSS Statistics version 30.0. Prior to hypothesis testing, prerequisite analyses consisting of normality and linearity tests were conducted to verify the assumptions required for parametric statistical analysis. The normality of the data distribution was examined using the Shapiro–Wilk test because the sample size was relatively small, whereas linearity was assessed through the deviation from linearity test. After these assumptions were satisfied, the Pearson Product Moment correlation analysis was employed to determine the strength and direction of the relationship between Quizizz use and English vocabulary mastery (Wong et al., 2024). Statistical decisions were made at a significance level of 0.05. The null hypothesis was rejected when the probability value was less than 0.05, indicating a statistically significant relationship between the two variables. Furthermore, the magnitude of the correlation coefficient was interpreted to classify the strength of the observed relationship and to provide a meaningful explanation of the statistical findings in relation to the research objectives.

## RESULTS AND DISCUSSION

### Results

Before examining the relationship between the research variables, prerequisite analyses were conducted to determine whether the data satisfied the assumptions required for parametric statistical analysis. The analyses consisted of normality and linearity tests, followed by the Pearson Product Moment correlation analysis. The results of each analysis are presented sequentially in the following sections.

#### Normality Test

The normality test was performed to determine whether the distributions of the Quizizz use scores and English vocabulary mastery scores met the assumption of normality. Since the study involved 30 participants, both the Kolmogorov–Smirnov and Shapiro–Wilk statistics were generated using IBM SPSS Statistics version 30.0. The normality test results are presented in Table 1.

**Table 1.** Results of the Normality Test

|                    | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|--------------------|---------------------------------|----|------|--------------|----|------|
|                    | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| Quizizz            | .102                            | 30 | .200 | .965         | 30 | .416 |
| Vocabulary Mastery | .112                            | 30 | .200 | .944         | 30 | .118 |

As shown in Table 1, both variables satisfied the assumption of normality. The Shapiro–Wilk significance values were .416 for Quizizz use and .118 for English vocabulary mastery, both exceeding the criterion of .05. These findings indicate that the distributions of the two variables did not significantly deviate from normality. Therefore, the data were considered appropriate for subsequent parametric analyses.

### Linearity Test

A linearity test was subsequently conducted to verify whether the relationship between Quizizz use and English vocabulary mastery was linear. This assumption is essential because Pearson Product Moment correlation analysis requires a linear relationship between the variables. The results of the linearity analysis are presented in Table 2.

**Table 2.** Results of the Linearity Test

|                         |                   |                                | Sum of Squares | df | Mean Squre | F      | Sig. |
|-------------------------|-------------------|--------------------------------|----------------|----|------------|--------|------|
| Vocabulary<br>Mastery * | Between<br>Groups | (Combined)                     | 5899.167       | 15 | 393.278    | 5.647  | .001 |
|                         |                   | Linearity                      | 5463.850       | 1  | 5463.850   | 78.455 | .000 |
|                         |                   | Deviation<br>From<br>Linearity | 435.317        | 14 | 31.094     | .446   | .928 |
|                         | Within<br>Groups  |                                | 975.000        | 14 | 69.643     |        |      |
|                         | Total             |                                | 6874.167       | 29 |            |        |      |

The results presented in Table 2 demonstrate that the relationship between Quizizz use and English vocabulary mastery satisfied the assumption of linearity. The significance value for the deviation from linearity was .928, which was greater than .05, indicating that no significant deviation from a linear relationship was detected. In addition, the linearity significance value was below the established significance level, confirming the presence of a statistically significant linear relationship between the two variables. Based on these findings, the linearity assumption was fulfilled, allowing the Pearson Product Moment correlation analysis to be performed.

### Pearson Product Moment Correlation Analysis

After confirming that the assumptions of normality and linearity had been satisfied, Pearson Product Moment correlation analysis was conducted to examine the relationship between Quizizz use and English vocabulary mastery. The results of the correlation analysis are presented in Table 3.

**Table 3.** Pearson Product Moment Correlation Analysis

|                    | Quizizz             | Vocabulary Mastery |
|--------------------|---------------------|--------------------|
| Quizizz            | Pearson Correlation | .892**             |
|                    | Sig. (2-tailed)     | .000               |
|                    | N                   | 30                 |
| Vocabulary Mastery | Pearson Correlation | .892**             |
|                    | Sig. (2-tailed)     | .000               |
|                    | N                   | 30                 |

Note.  $p < .01$  (2-tailed).

Table 3 indicates a strong positive relationship between the use of gamification-based Quizizz and students' English vocabulary mastery. The Pearson correlation coefficient was  $r = .892$ , indicating that higher Quizizz use was associated with higher vocabulary mastery scores. Furthermore, the significance value was  $p < .001$ , demonstrating that the observed relationship was statistically significant. Based on the hypothesis-testing criteria established in this study, the null hypothesis ( $H_0$ ) was rejected, while the alternative hypothesis ( $H_1$ ) was accepted. These findings indicate that a statistically significant positive relationship exists between students' use of gamification-based Quizizz and their English vocabulary mastery among sixth-grade students at MIN 1 Kota Palu.

## Discussion

The strong positive relationship between gamification-based Quizizz use and English vocabulary mastery indicates that students who reported greater involvement in Quizizz-supported learning also tended to demonstrate higher vocabulary achievement. This finding should not be interpreted as direct evidence that Quizizz alone caused the improvement, because the study employed a correlational rather than experimental design. Nevertheless, the magnitude of the association suggests that students' experiences with the platform were meaningfully connected to their vocabulary learning outcomes. From a gamification perspective, this relationship can be explained by the way points, challenges, rankings, and immediate feedback structure students' participation around clear goals and visible progress. Gamified environments may strengthen behavioral involvement by encouraging learners to respond repeatedly, remain attentive, and complete tasks that might otherwise appear monotonous (Luo, 2022; Sailer & Sailer, 2021; Zainuddin et al., 2024). The finding is consistent with evidence that Quizizz-supported learning can increase engagement and improve learning outcomes in EFL contexts (Munawir & Hasbi, 2021; Anak Yunus & Hua, 2021). It therefore extends previous research by showing that these motivational and participatory features are not only associated with students' attitudes toward the platform but also with measurable differences in vocabulary mastery.

The observed relationship may also be interpreted through the role of repeated retrieval and immediate corrective feedback in vocabulary acquisition. Vocabulary knowledge develops when learners encounter lexical items repeatedly, retrieve their meanings, distinguish their forms, and apply them under varying task conditions. Quizizz facilitates these processes by presenting multiple opportunities to recall words and by informing students immediately whether their responses are correct. Such feedback can help learners detect misunderstandings before incorrect associations become stable, while repeated quiz participation can strengthen access to previously learned vocabulary. This explanation is compatible with research showing that frequency of exposure contributes to the acquisition of spoken word knowledge and that vocabulary development involves recognition, recall, semantic judgment, and increasingly automatized access (Uchihara et al., 2022; Uchihara et al., 2025). Similar benefits have been reported in digital game-based vocabulary learning, particularly when tasks combine repetition, interaction, and response feedback (Chowdhury et al., 2024; Liu et al., 2025). Accordingly, the present findings suggest that the relationship between Quizizz use and vocabulary mastery may be partly mediated by opportunities for active retrieval rather than by entertainment alone.

A further interpretation concerns the motivational function of gamified learning in reducing the emotional and attentional barriers that often accompany foreign-language learning. Elementary students may hesitate to participate when vocabulary tasks are dominated by memorization, public correction, or fear of giving incorrect answers. Quizizz creates a more playful and comparatively low-risk environment in which errors are embedded within a continuing game sequence rather than treated as isolated failures. This condition may support persistence, willingness to respond, and sustained attention, all of which are closely related to academic engagement and achievement (Wong et al., 2024). Previous studies have similarly shown that game-based learning can enhance EFL motivation while reducing anxiety, and that students often perceive Quizizz as motivating and engaging (Ahmed et al., 2022; Brahmana, 2022; Fahada & Asrul, 2024). However, the current study adds an important qualification to this literature by linking the platform not only to affective responses but also to vocabulary performance. The implication is that motivational benefits become educationally meaningful when they lead students to invest more cognitive effort in repeated language practice.

The findings also support a student-centered interpretation of technology integration in elementary English instruction. Unlike conventional teacher-centered vocabulary teaching, which often emphasizes explanation, copying, and memorization, Quizizz requires students to make frequent individual responses and receive immediate information about their performance. This

shifts part of the learning process from passive reception toward active decision-making, self-monitoring, and task completion. Student-centered learning does not eliminate the teacher's role, but reorganizes it so that teachers design meaningful tasks, interpret learner responses, and provide follow-up support rather than controlling every step of the activity (Tang, 2023; Martin-Alguacil et al., 2024). The positive association found in this study is consistent with the view that active participation contributes to stronger academic engagement and achievement. It also aligns with evidence that digital technologies can expand classroom interaction when they are integrated purposefully rather than used as decorative tools (Bui, 2022; Daniel et al., 2024). Thus, Quizizz appears most valuable when it functions as part of an active learning sequence rather than as a stand-alone testing application.

At the same time, the strength of the correlation should be interpreted in relation to the instructional and contextual conditions of MIN 1 Kota Palu. The participants were selected because they had already experienced Quizizz-supported English learning, which means that their responses may reflect not only the platform itself but also the quality of teacher guidance, task design, internet access, and familiarity with digital quizzes. Research on educational gamification has repeatedly shown that its effectiveness varies according to instructional design, learner characteristics, feedback quality, and the alignment between game mechanics and learning objectives (Luo, 2022; Zhang & Huang, 2024). Similarly, digital learning tools do not automatically produce better outcomes when teachers lack the pedagogical knowledge needed to integrate them effectively (Elmaadaway & Abouelenein, 2023; Al-khresheh, 2024). An alternative explanation is therefore that students with stronger initial vocabulary ability were also more confident, more active, and more positive toward Quizizz, which could contribute to the high relationship observed. The study cannot fully separate these reciprocal influences, but it demonstrates that Quizizz use and vocabulary mastery were strongly connected within this particular elementary EFL context. This contextual reading prevents the findings from being generalized as evidence that the platform will produce identical results in every school.

In relation to previous studies, the present findings occupy a distinct position between perception-based research and intervention-based research. Earlier work has frequently examined how students perceive Quizizz, whether it increases motivation and participation, or whether an instructional intervention improves post-test performance (Degirmenci, 2021; Ridhwan, 2023; Pham, 2023). Other studies have reported benefits for vocabulary acquisition and engagement, including among elementary or rural learners (Chowdhury et al., 2024; Liu et al., 2025). The current research supports these general patterns, but its contribution lies in demonstrating a strong statistical association between students' Quizizz-related experiences and their actual vocabulary scores without introducing an experimental treatment. This perspective extends the literature because positive perceptions of a platform do not necessarily guarantee stronger linguistic competence. By connecting the experiential dimension of Quizizz use with vocabulary performance, the study provides evidence that engagement, feedback, and repeated participation may operate together as a broader learning mechanism. It therefore helps bridge the gap between studies that focus primarily on learner attitudes and those that focus only on achievement outcomes.

The findings have both conceptual and practical implications for technology-supported English learning. Conceptually, the study suggests that gamification should not be understood solely as the addition of entertaining features, but as an instructional structure that can coordinate motivation, participation, retrieval practice, and feedback. This interpretation expands conventional gamification theory by positioning vocabulary mastery as the outcome of interacting cognitive and affective processes rather than of game elements in isolation. Practically, English teachers may use Quizizz to reinforce vocabulary after explicit instruction, diagnose misunderstandings, and provide repeated practice in formats that sustain elementary students' attention. However, its use should be accompanied by carefully selected vocabulary items, meaningful sentence contexts, appropriate time allocation, and follow-up explanation after incorrect responses. Because the study involved only 30

sixth-grade students from one school, the findings remain context-specific and should not be generalized beyond similar settings without further evidence. Future research should therefore employ larger samples, longitudinal designs, experimental comparisons, and mediation analyses to determine whether engagement, motivation, feedback, or prior vocabulary knowledge explains the relationship more precisely. Within these limits, the study contributes a new correlational perspective to the global literature on gamified language learning by showing that students' use of Quizizz is closely associated with vocabulary mastery in an underrepresented elementary EFL context.

## CONCLUSIONS

This research demonstrates that there is a strong positive and statistically significant relationship between the use of gamification-based Quizizz and English vocabulary mastery among sixth-grade students at MIN 1 Kota Palu ( $r = 0.892$ ,  $p < 0.001$ ). The statistical analysis confirms that the null hypothesis ( $H_0$ ), which assumed that there was no significant relationship between Quizizz usage and students' vocabulary mastery, was rejected, while the alternative hypothesis ( $H_1$ ) was supported. These findings indicate that the integration of gamification elements in Quizizz is closely associated with students' vocabulary learning outcomes, as its interactive features, such as Quizizz, scoring systems, feedback, and game-based activities, can encourage students' active participation in learning. However, the results of this research should not be interpreted as evidence of a direct causal relationship between the two variables. Students' vocabulary mastery may also be related to various learning factors, including students' motivation, previous learning experiences, instructional approaches, and classroom environments. Therefore, the findings provide an understanding of the relationship between gamification-based Quizizz and vocabulary mastery based on correlational analysis rather than determining direct influence.

From a practical and pedagogical perspective, this research highlights the potential use of gamification-based Quizizz as a supportive learning medium in English as a Foreign Language (EFL) classrooms, particularly at the elementary school level. Teachers can incorporate Quizizz into vocabulary learning activities to develop a more engaging, interactive, and student-focused learning atmosphere. Nevertheless, effective implementation requires proper teacher guidance and alignment with learning objectives. Future studies may further investigate the relationship between gamification-based learning media and other aspects of English language learning in different educational settings.

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