



Perceptions of Kahoot! -Based Gamification in English Grammar Learning: A Descriptive Study of Eleventh-Grade Students

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Article Info	Abstract
Received: 2026-04-07 Revised: 2026-05-19 Accepted: 2026-10-06 Keywords: English grammar learning; gamification; Kahoot!; students' perceptions; secondary education DOI: 10.24256/ideas.v14i2.11138 Corresponding Author: Mochammad Dony Aprialdi mochammaddony.2023@stude nt.uny.ac.id Linguistik Terapan, Universitas Negeri Yogyakarta, Daerah Istimewa Yogyakarta	<i>The integration of gamification into English language learning has gained increasing attention. However, empirical evidence regarding students' perceptions of Kahoot! specifically in English grammar learning remains limited, particularly in Indonesian secondary education. This study aimed to describe students' perceptions of Kahoot! as a gamification tool in English grammar learning through five dimensions, namely motivation, engagement, comprehension, interaction, and self-confidence, which represent key aspects of students' learning experiences in gamified learning environments. A quantitative descriptive survey design was employed involving 36 eleventh-grade students selected through total sampling. Data were collected using a validated 15-item Likert-scale questionnaire adapted from Saleh et al. (2025) and analyzed using descriptive statistics. The findings revealed that students held highly positive perceptions across all dimensions, with engagement receiving the highest score ($M = 14.03$; 93.52%), indicating that Kahoot! effectively fostered active participation in English grammar learning. Students also perceived that Kahoot!'s gamification features, including points, leaderboards, challenges, and instant feedback, enhanced grammar comprehension, promoted peer interaction, and strengthened confidence in using English. These findings support Self-Determination Theory by demonstrating that gamified learning environments can promote positive learning experiences through the fulfillment of learners' needs for autonomy, competence, and relatedness. The findings also provide practical implications for English teachers by</i>

highlighting the value of integrating Kahoot! into grammar instruction to create more engaging and student-centered learning environments. Overall, this study contributes to the growing body of research on gamified language learning by providing empirical evidence of the pedagogical potential of Kahoot! in enhancing students' learning experiences in English grammar instruction.

1. Introduction

English language proficiency is one of the essential competencies that students must possess in the 21st century, as it supports global communication, access to scientific knowledge, and the ability to adapt to the developments of globalization. Given English's role as the primary language in education, developing students' communicative competencies has become a priority in education systems across many countries (Shadiev & Wang, 2022). However, students' English proficiency levels in Indonesia remain relatively low. According to EF Education First (2025), Indonesia ranks 80th out of 123 countries or regions with a score of 471, placing it in the "low proficiency" category. These findings indicate that English language learning in Indonesia still faces significant challenges and requires more effective instructional innovations to improve students' language proficiency.

One of the main challenges in learning English relates to mastery of grammar, which is a fundamental component in developing language proficiency. Mastery of grammar enables learners to produce accurate, meaningful communication that conforms to linguistic norms (Hwang et al., 2025). However, grammar is still often viewed as one of the most difficult aspects to learn because it involves abstract concepts and complex grammatical rules (Hwang & Chien, 2022). Various studies also indicate that many students are able to memorize grammatical rules but struggle when applying them in authentic communication (Karakuş, 2025; Lu, 2025; van Rijt et al., 2022). The same problem is found at the secondary education level in Indonesia, where grammar instruction still tends to focus on memorizing rules rather than meaningful language use (Amalia et al., 2024; Purnomo, 2025). As a result, students often lack confidence when using English even though they have studied various grammatical concepts in class.

These characteristics of grammar instruction indicate that conventional teaching approaches have not yet been fully able to meet students' learning needs. Therefore, various instructional innovations have begun to be developed by leveraging technology as a means to create more active, interactive, and meaningful learning experiences (Shen et al., 2024). Technology-based learning environments allow students to receive immediate feedback, collaborate with peers, and actively

participate in the learning process, thereby enhancing the quality of their learning experiences (Zolfaghari et al., 2025). One approach that is increasingly being applied in this context is gamification—the incorporation of game elements into learning activities to boost students’ motivation, engagement, and participation (Li et al., 2023; Zhang & Hasim, 2023). Unlike game-based learning, gamification does not turn learning into a game but rather integrates game elements such as points, badges, leaderboards, challenges, and immediate feedback into the learning process (Fonseca et al., 2023).

The use of gamification in English language learning is growing alongside the emergence of various digital platforms designed to support more interactive learning activities. One of the most widely used platforms is Kahoot!, which offers features such as timed quizzes, a scoring system, leaderboards, challenges, and immediate feedback (Özdemir, 2025). Through these features, Kahoot! enables students to apply grammatical concepts directly while receiving immediate feedback on their answers (Pham et al., 2025). This process not only helps students identify their mistakes but also encourages them to reflect on their understanding of grammatical concepts. Furthermore, the use of Kahoot! aligns with the implementation of the Merdeka Curriculum, which emphasizes learner-centered learning, technology integration, meaningful interaction, and the development of 21st-century competencies (Haan et al., 2025; Nisa, 2023; Novitasary, 2023). Thus, Kahoot! has the potential to be a learning alternative capable of addressing various challenges in English grammar instruction.

This potential has been supported by various previous research findings. Wang and Tahir (2020) concluded that the use of Kahoot! can enhance students’ motivation, engagement, and interaction during the learning process. Chen (2022) also explained that the platform creates a more enjoyable learning atmosphere while encouraging students’ active participation in English language learning. More recent research indicates that Kahoot! has a positive impact on students’ motivation, engagement, and collaborative learning (Kurniawan et al., 2024; Salsabila & Apoko, 2024). Furthermore, Mahbubah and Anam (2022), followed by Cahyaningtyas & Chakim (2023), demonstrated that grammar instruction supported by gamification can enhance student participation, conceptual understanding, and the quality of the learning experience, particularly when learning activities are combined with immediate feedback and interactive challenges. These findings suggest that gamification has great potential to enhance the effectiveness of grammar instruction.

Nevertheless, studies on the use of Kahoot! in English language learning still leave some research gaps. Most previous studies have focused more on English language learning in general, vocabulary acquisition, reading skills, or learning motivation, rather than on grammar instruction, which requires conceptual understanding and accurate language use. Furthermore, research on students’ perceptions of Kahoot! generally emphasizes only one or two affective aspects, such as motivation or engagement, and thus does not provide a comprehensive

picture of students' learning experiences. As a result, there is still very little research that simultaneously examines how students view Kahoot!-based grammar instruction in terms of motivation, engagement, comprehension, interaction, and self-confidence. In fact, these five aspects represent complementary cognitive, affective, and social dimensions that shape students' learning experiences.

To gain a more comprehensive understanding of these perceptions, this study uses Self-Determination Theory (SDT), proposed by Deci and Ryan (1994), as its theoretical foundation. This theory explains that students' intrinsic motivation develops when their three basic psychological needs—autonomy, competence, and relatedness—are met (Ryan & Deci, 2020). In the context of gamified learning, these needs can be facilitated through challenges, immediate feedback, healthy competition, interactions among students, and opportunities to monitor learning progress (Russell, 2023; Spitzer et al., 2025; Ambady & K. V., 2026). Therefore, Self-Determination Theory provides a relevant conceptual framework for explaining how the gamification elements in Kahoot! shape learners' perceptions of English grammar instruction.

Based on the above description, this study aims to analyze students' perceptions of the use of Kahoot!-based gamification in English grammar instruction. To ensure the study is well-focused, five research questions were formulated as follows: (1) What is the motivation of 11th-grade students toward the use of Kahoot! in English grammar instruction? (2) What is the level of engagement of 11th-grade students during the use of Kahoot! in English grammar instruction? (3) What is the level of interaction among 11th-grade students through the use of Kahoot! in English grammar instruction? (4) What is the understanding of 11th-grade students regarding grammatical concepts through the use of Kahoot!; and (5) What is the self-confidence of 11th-grade students after using Kahoot! in English grammar instruction? This study is organized into five main sections: an introduction covering the background, theoretical review, and research objectives; research methods; results and discussion; and conclusions and recommendations.

2. Method

This study employed a quantitative approach using a descriptive survey design. This design was chosen because the purpose of the study is to describe students' perceptions of the use of Kahoot!-based gamification in English structure instruction without manipulating the research variables. The descriptive survey approach allows researchers to systematically collect and analyze numerical data to describe trends in students' perceptions within a specific learning context (Creswell, 2018).

The population of this study consisted of 752 students at SMAN 3 Yogyakarta during the 2025/2026 academic year. The study sample comprised 36 11th-grade

students selected using purposive sampling based on their experience participating in English structure lessons using Kahoot!. This number of participants is considered adequate for a descriptive study aimed at depicting students' perceptions within a specific context and not intended to generalize to a broader population. Furthermore, the students involved in this study are a group that has directly experienced the implementation of Kahoot!-based gamification, making them suitable for the study's objective of understanding their perceptions of that learning experience.

Data collection was conducted using a questionnaire designed to measure students' perceptions of the application of gamification in English grammar instruction. This research instrument was adapted from a questionnaire developed by Saleh et al. (2025), which examined students' perceptions of gamification in language learning. The questionnaire was then adapted to the context of English grammar instruction at the high school level. The instrument consists of 15 statements measured using a Likert scale and covers five research dimensions, namely: (1) motivation, (2) engagement, (3) understanding, (4) interaction, and (5) self-confidence. Examples of statement indicators include students' interest and willingness to participate in Kahoot!-based learning (motivation), active participation during learning activities (engagement), improved understanding of English structural concepts (comprehension), interaction and collaboration with peers during learning activities (interaction), and increased confidence in using English language structures (self-confidence).

Instrument validation was conducted through expert judgment to ensure the appropriateness, clarity, and relevance of each item to the research objectives and the theoretical framework used. The validation process involved experts in the field of English language education who assessed the instrument's content, construction, and readability. Based on feedback from the experts, several revisions were made to the wording of the items to better align the instrument with the characteristics of the students and the research context. The validity test results showed that all 15 items met the validity criteria. In addition, the reliability test results showed a Cronbach's Alpha value of 0.802. This value is above the minimum acceptable reliability threshold, namely $\alpha > 0.70$; therefore, the instrument was deemed to have good internal consistency and is suitable for measuring students' perceptions of the use of Kahoot!-based gamification in English structure instruction.

The research data were analyzed using descriptive statistics, including the minimum score, maximum score, mean, percentage, and standard deviation for each research dimension. The percentage results were then categorized to describe students' perceptions of Kahoot! use based on five categories: very positive, positive, neutral, negative, and very negative. These categories were determined based on percentage intervals from the instrument's ideal scores so that the data could be interpreted systematically.

This study also took into account research ethics during the data collection and analysis process. Before the study began, the students were briefed on the

study's objectives, data collection procedures, and their rights as participants. Participation was voluntary, and the students' identities and responses were kept confidential. The research data were used solely for academic purposes and to advance research on English language learning.

3. Result

This study aims to describe students' perceptions of the use of Kahoot!-based gamification in teaching English grammar. Data were collected through a questionnaire consisting of 15 statements and administered to 36 11th-grade students. Descriptive analysis was conducted based on five dimensions of student perception: motivation, engagement, understanding, interaction, and self-confidence. Each dimension consisted of three items on a 1–5 Likert scale, so the maximum possible score for each indicator was 15. Before interpreting the results, the categories of student perceptions were determined based on the percentage of scores obtained. The categorization criteria are shown in Table 1 below.

Table 1. Criteria for Interpreting Students' Perception Percentages

Percentage	Categories
81–100%	Very Positive
61–80%	Positive
41–60%	Neutral
21–40%	Negative
0–20%	Very Negative

The results of the descriptive analysis of the five indicators of student perceptions are presented in Table 2 below.

Table 2. Results of the Descriptive Analysis of Student Perception Indicators

	N	Mean	Std. Deviation	Range	Minimum	Maximum	Percentage	Categories
Motivation	36	13.222	1.31173	4	11	15	88.15%	Very Positive
Engagement	36	14.0278	1.05522	4	11	15	93.52%	Very Positive
comprehension	36	13.7222	1.34400	4	11	15	91.48%	Very Positive
Interaction	36	13.6111	1.27117	4	11	15	90.74%	Very Positive
self-confidence	36	13.9722	1.13354	4	11	15	93.15%	Very Positive

Based on Table 2, all aspects of students' perceptions regarding the use of Kahoot! in English grammar instruction fell into the "very positive" category. The indicator with the highest percentage was engagement, with a score of 93.52%, followed by self-confidence at 93.15%, comprehension at 91.48%, interaction at 90.74%, and motivation at 88.15%. These findings indicate that Kahoot! is primarily perceived as capable of increasing student engagement during the learning process, creating more engaging learning activities, and encouraging active participation through game features such as points, rankings, challenges, and immediate feedback.

The results for the motivation indicator show that students have a positive perception of Kahoot! as a tool capable of increasing their interest and motivation in grammar lessons. Although it received the lowest score compared to the other indicators, the score of 88.15% still falls within the "very positive" category. This suggests that while the game-like elements in Kahoot! are effective at capturing students' attention, learning motivation is also influenced by other factors such as the difficulty level of the material, prior learning experiences, and students' individual needs.

Regarding the engagement indicator, students demonstrated the highest level of perception, at 93.52%. The lowest standard deviation ($SD = 1.05$) indicates that student responses in this aspect were relatively consistent. These findings suggest that Kahoot!'s interactive features—such as score-based competitions, time limits, and real-time feedback—are effective in fostering more equitable engagement throughout the learning process.

The comprehension indicator scored 91.48% with the highest standard deviation ($SD = 1.34$). These results indicate that most students felt Kahoot! helped them understand English grammar concepts. However, the greater variation in responses compared to other indicators suggests that not all students perceived Kahoot! as equally effective in supporting their understanding of the material. Some students may need additional explanations from the teacher to gain a deeper understanding of grammar concepts.

The interaction indicator scored 90.74%, indicating that Kahoot! is effective in fostering student interaction during learning. Quiz- and competition-based activities encourage students to engage in discussions, compare answers, and interact with their peers throughout the learning process.

Meanwhile, the self-confidence indicator scored 93.15%, indicating that the use of Kahoot! has a positive impact on students' self-confidence in learning English grammar. A learning environment that provides opportunities to practice, receive feedback, and correct mistakes allows students to feel more comfortable using English grammar.

Overall, the research findings indicate that students have a very positive perception of using Kahoot! as a gamification tool in learning English grammar. The five aspects studied—motivation, engagement, comprehension, interaction, and

self-confidence—all showed high levels of positive perception. These findings indicate that Kahoot! functions not only as an assessment tool but also as a learning medium capable of creating a more interactive and meaningful learning experience that supports students' psychological needs from the perspective of Self-Determination Theory.

4. Discussion

The results of the study show that the use of Kahoot!-based gamification in teaching English grammar received very positive feedback from students across five dimensions: motivation, engagement, comprehension, interaction, and self-confidence. These findings indicate that Kahoot! not only serves as an assessment tool but is also capable of creating a learning experience that is more interactive, participatory, and student-centered. These results reinforce previous research showing that integrating game elements into language learning can enhance the quality of the learning experience. Wang and Tahir (2020) found that Kahoot! can increase students' motivation, engagement, and interaction through engaging and competitive learning activities. In line with this, Chen (2022) explains that Kahoot! can create a fun learning atmosphere and encourage students' active participation in English language learning.

Students' positive perceptions of Kahoot! can be explained through the perspective of Self-Determination Theory developed by Deci and Ryan (1994). This theory explains that motivation and engagement in learning can develop when students' three basic psychological needs are met: autonomy, competence, and relatedness. In the context of this study, Kahoot! features such as challenges, scores, rankings, and immediate feedback provide students with the opportunity to monitor their learning progress and see the results of their efforts. These conditions support the need for competence, as students gain a sense of success in completing tasks. Additionally, collaborative quiz activities also support the need for relatedness through interaction and positive competition with peers. This explanation aligns with the research by Wang and Tahir (2020) and Salsabila and Apoko (2024), which shows that Kahoot! is capable of increasing students' motivation and engagement through interactive learning activities.

In terms of motivation, students expressed a very positive perception of the use of Kahoot! in learning English grammar. Although it received the lowest score compared to other dimensions, the results indicate that Kahoot! still contributes to increasing students' interest in learning grammar. However, these findings also indicate that motivation is a complex aspect and is not influenced solely by the use of instructional media. Other factors, such as learning objectives, prior experience, interest in English, and the difficulty level of the material, can influence student motivation (Dörnyei, 2020). In grammar instruction, the abstract and rule-oriented nature of the material can pose a unique challenge for students. Therefore, although the game-based elements in Kahoot! can increase interest in learning,

sustaining motivation still requires the support of appropriate learning strategies. These findings expand upon the results of previous studies Kurniawan et al. (2024) and Salsabila and Apoko (2024) by showing that the impact of Kahoot! on the learning experience can vary across different aspects of learning.

Unlike motivation, engagement was the aspect with the highest perceived value in this study. These findings indicate that Kahoot!'s main strength lies in its ability to encourage active student participation throughout the learning process. Game elements such as time limits, a point system, rankings, and immediate feedback help students stay focused and encourage them to participate in learning activities. These results support Wang and Tahir (2020), who state that Kahoot! can increase student engagement through interactive activities and immediate feedback on answers. Furthermore, Chen (2022) explains that the game-like features in Kahoot! create a more engaging learning environment, encouraging students to participate more actively in the learning process. In the context of English grammar, these findings suggest that gamification can serve as an alternative to counter the perception that grammar instruction tends to be monotonous and focused solely on memorizing rules.

In terms of comprehension, students demonstrated a positive perception of Kahoot!'s role in helping them understand grammatical concepts. This indicates that quiz activities accompanied by immediate feedback can help students identify errors and improve their understanding of the material being studied. This finding aligns with the research by Mahbubah & Anam (2022), which states that gamification in language learning can enhance conceptual understanding when learning activities involve interactive challenges and rapid feedback. Nevertheless, the use of Kahoot! cannot replace the teacher's role in explaining grammatical concepts in depth. Understanding language structure is not only about the ability to select the correct answer but also about understanding the reasons for using a particular structure in a communicative context. Therefore, Kahoot! is more effective when combined with explanations, discussions, and reflections led by the teacher.

In addition to fostering understanding, Kahoot! also contributes to increased interaction and self-confidence among students. The activities of answering questions, receiving immediate feedback, and discussing with peers create a safer learning environment for students to participate. These findings support the research by Chen (2022), Mahbubah and Anam (2022), and Kurniawan et al. (2024), which show that Kahoot! is capable of enhancing student interaction and learning experiences in English language instruction. From a Self-Determination Theory (SDT) perspective, these conditions indicate the fulfillment of the needs for relatedness and competence, as students not only receive social support from the learning environment but also experience success that can boost their confidence in their abilities. Thus, Kahoot! can help create a more communicative approach to grammar instruction and reduce students' anxiety when using English.

Overall, this study reinforces the findings of previous research that Kahoot!-

based gamification has great potential to improve the quality of English language learning, particularly in the area of grammar. However, this study makes an additional contribution by demonstrating that, in the context of English grammar instruction at the high school level, the strongest effect of Kahoot! is observed in student engagement during the learning process, not merely in motivation. Thus, Kahoot! can be viewed as a learning medium that supports students' psychological needs based on Self-Determination Theory, while also creating a more active, interactive, and meaningful learning experience. Nevertheless, this study is still limited to students' perceptions and therefore cannot yet objectively demonstrate improvements in grammar proficiency. Future research is recommended to use an experimental design or a mixed-methods approach to examine the relationship between the use of Kahoot!, students' perceptions, and language skill development more comprehensively.

5. Conclusion

This study concludes that students' perceptions of the use of Kahoot!-based gamification in English grammar instruction fall into the "very positive" category based on five dimensions: motivation, engagement, comprehension, interaction, and self-confidence. These findings indicate that Kahoot! has the potential to create a more interactive, participatory, and student-centered approach to grammar instruction. Engagement emerged as the most dominant aspect, indicating that Kahoot!'s primary strength lies in its ability to encourage students' active participation during the learning process. Meanwhile, although motivation received the lowest score compared to the other dimensions, it still fell within the "very positive" category, suggesting that Kahoot! can support learning motivation, even though motivation is also influenced by students' internal and external factors.

The research findings support the application of Self-Determination Theory in explaining gamified learning experiences. Kahoot!'s features—such as points, leaderboards, challenges, and immediate feedback—are perceived as supporting the fulfillment of learners' psychological needs, namely competence, autonomy, and relatedness. However, this study does not show that Kahoot! directly improves students' grammar skills because the data obtained only reflect students' perceptions. Therefore, Kahoot! should be understood as a learning support tool that can enrich the learning experience when combined with appropriate teaching strategies.

This study contributes to the field of gamification in English language learning by highlighting the use of Kahoot! specifically in teaching English grammar at the high school level. However, the results of this study have limitations because they involved a small number of participants and were conducted in only one school setting. Future research is recommended to use an experimental or quasi-experimental design to objectively test the effect of Kahoot! on improving grammar skills. Additionally, a mixed-methods approach involving a wider variety of school

contexts is needed to gain a deeper understanding of the effectiveness, challenges, and sustainability of gamification in English language learning.

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