

## Exploring Mobile Legend Game Effects on Students English Vocabulary Acquisition Second Language

**Haritsah Ni'matul Khoiriyah<sup>1\*</sup>, Istiqomatus Sa'diyah<sup>2</sup>, Nurul Afidah<sup>3</sup>**

<sup>1,2,3</sup>English Department, Universitas KH. A. Wahab Hasbullah

\*Email: [nurulafidah@unwaha.ac.id](mailto:nurulafidah@unwaha.ac.id)

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### ABSTRACT

*This study aims to analyze the contribution of Mobile Legends: Bang Bang to English vocabulary acquisition among EFL learners through a Systematic Literature Review (SLR) approach. Referring to the Prisma guidelines, this study selected nine empirical articles published between 2020 and 2025 and focused on the use of Mobile Legends or similar online games as a medium for vocabulary learning. The results of the review show that most studies found a positive increase in students' vocabulary mastery through repeated exposure to English terms, instructions, and expressions in the game. Multimodal features such as visual text, character narration, and voice commands were found to aid vocabulary comprehension and retention. However, the vocabulary acquired tended to be specific to the game context and did not always transfer to broader language competence without pedagogical support. In addition, student motivation and engagement levels increased significantly when using games as a learning medium, although increased motivation did not always correlate directly with vocabulary achievement. The results of this study confirm that Mobile Legends can be an effective additional tool to support incidental vocabulary learning, provided that pedagogical integration and teacher guidance are still necessary to maximize learning outcomes.*

**Keywords:** Mobile Legends; English Vocabulary; EFL Learners; Online Games; Vocabulary Learning

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### INTRODUCTION

Vocabulary is one of the core components of language proficiency and a crucial element in mastering English as a second or foreign language. According to Nation (2001), vocabulary knowledge enables learners to understand input, express ideas, and communicate effectively. Without sufficient vocabulary, students will face difficulties in developing their listening, speaking, reading, and writing skills. However, many EFL learners still struggle with vocabulary learning, as traditional methods such as memorization, drills, and dictionary-based learning often make the process monotonous and less meaningful. This challenge has encouraged researchers and educators to seek more engaging and effective approaches that can support vocabulary acquisition through interactive and authentic experiences.

In recent years, the rapid advancement of technology has significantly influenced language learning practices. One of the most notable innovations is the integration of digital games as learning tools. Game-based learning allows students to acquire new vocabulary incidentally while engaging in enjoyable and meaningful activities. Gee (2003) highlighted that video games create learning environments where players must process language, solve problems, and make decisions, which can lead to natural language acquisition. Similarly, Krashen (1982) emphasized that language learning occurs most effectively when learners receive comprehensible input—that is, language exposure that is slightly above their current level of understanding and presented in a low-stress, enjoyable environment. Digital games, with their combination of visuals, narratives, and real-time interaction, provide precisely such conditions.

One of the most popular online games that has attracted millions of players worldwide, particularly in Indonesia, is Mobile Legends: Bang Bang (MLBB). This multiplayer online battle arena (MOBA) game requires players to cooperate in teams, follow strategic instructions, and communicate using English-based terminology. Terms such as attack, defense, cooldown, victory, defeat, and ultimate skill appear frequently during gameplay, giving players repeated exposure to English vocabulary in context. According to Sundqvist and Sylvén (2012), repeated and contextualized language exposure in gaming environments can strengthen learners' vocabulary retention and usage. Moreover, the game encourages collaboration and communication between players from various linguistic backgrounds, creating opportunities for authentic language interaction.

Motivation is another key factor that connects online gaming with language learning. Deci and Ryan's (2000) Self-Determination Theory explains that intrinsic motivation—derived from enjoyment, autonomy, and competence—plays a central role in sustaining learning behavior. In the case of Mobile Legends, players are intrinsically motivated to understand in-game English expressions and instructions to perform better and communicate effectively with teammates. This motivation enhances learners' engagement, which in turn facilitates vocabulary acquisition in an unintentional yet meaningful way. Research by Peterson (2010) also found that multiplayer online games foster real-time communication and cooperative learning, providing learners with opportunities to use English actively rather than passively.

Despite its potential advantages, the use of games in language learning has several limitations. Schmitt (2008) pointed out that vocabulary acquired through gaming contexts tends to be domain-specific, focusing on terms related to game mechanics rather than broader linguistic competence. Excessive gaming may also lead to negative effects such as distraction or gaming addiction (Kuss & Griffiths, 2012). Furthermore, without proper pedagogical guidance, students might fail to transfer the vocabulary learned from games into academic or real-life language use. Therefore, while digital games like Mobile Legends can serve as supplementary tools for language learning, their implementation should be carefully designed to ensure educational effectiveness.

Game-based learning has been increasingly recognized as an alternative to traditional teaching methods. Richards and Renandya (2002) argue that vocabulary instruction should not only emphasize memorization but also meaningful and communicative use. Games provide learners with opportunities to use vocabulary in dynamic, goal-oriented contexts that mimic real-life communication. Compared to conventional classroom instruction, which often relies on passive learning, game-based environments allow students to be active participants who learn by doing, observing, and interacting. Thus, integrating games such as Mobile Legends into language learning contexts aligns with modern constructivist and experiential learning theories.

Several previous studies have examined the link between gaming and vocabulary development. Sundqvist and Wikström (2021), in "Extramural English and Vocabulary Learning through Digital Games," found that playing English-based digital games contributes significantly to vocabulary expansion among EFL learners. Alqahtani and Alzahrani (2022) revealed that students who played online games regularly showed higher vocabulary retention and motivation compared to those using traditional learning methods. Meanwhile, Utami and Fitria (2023) specifically investigated the use of Mobile Legends in EFL classrooms and found a notable improvement in vocabulary recognition and contextual understanding. However, their study mainly focused on short-term learning outcomes and did not address the cognitive or sociolinguistic processes involved in vocabulary acquisition.

Other studies, such as those by Aulia et al. (2023) and Dharmawati et al. (2024), also highlighted that online games can increase students' learning motivation and reduce anxiety when using English. However, these studies often employ small sample sizes and descriptive designs, limiting the generalizability of their findings. In addition, most research on game-based learning in Indonesia remains fragmented and lacks systematic synthesis. This indicates the need for a more comprehensive analysis that can integrate and evaluate the findings from multiple studies.

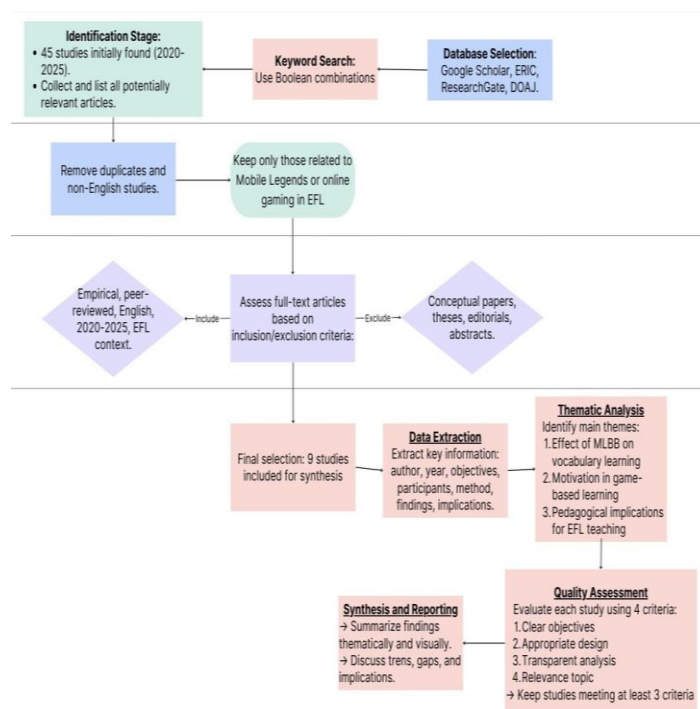
Although many studies have explored the role of digital games in vocabulary learning, several significant gaps remain unaddressed. First, most existing research has focused on Western or non-Indonesian contexts, which may not represent the sociolinguistic characteristics of Indonesian EFL learners. Second, there is a lack of systematic comparison across studies that investigate Mobile Legends specifically as a medium for vocabulary acquisition. Third, while previous research has discussed the positive impacts of gaming on vocabulary learning, few studies have synthesized the findings to identify consistent patterns, theoretical implications, and methodological weaknesses across studies. Finally, existing research has yet to provide a comprehensive overview of how Mobile Legends contributes to English vocabulary learning from psycholinguistic, motivational, and pedagogical perspectives.

Therefore, this study employs a Systematic Literature Review (SLR) approach to analyze and synthesize previous empirical findings related to the effects of Mobile Legends gameplay on students' English vocabulary acquisition. The study aims to identify emerging trends, recurring themes, and research patterns, as well as to highlight the limitations and implications of existing research. By systematically reviewing previous studies, this research seeks to provide a broader understanding of how game-based learning, particularly through Mobile Legends, can support vocabulary development among EFL learners. The findings are expected to serve as a valuable reference for educators, researchers, and practitioners interested in integrating digital games into language learning environments.

## **METHOD**

This study employed a Systematic Literature Review (SLR) method to comprehensively analyze empirical studies on the use of Mobile Legends: Bang Bang in English vocabulary learning. The SLR approach, guided by the PRISMA framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), ensures a structured and transparent review process. The review followed four stages: identification, screening, eligibility, and inclusion. In the identification stage, relevant studies were gathered from academic databases such as Google Scholar, ERIC, ResearchGate, and DOAJ using specific keywords and Boolean combinations ("Mobile Legends," "game-based learning," "vocabulary acquisition," "EFL learners," and others). The screening phase removed duplicates and non-English studies, while the eligibility phase assessed the full-text articles based on predefined inclusion and exclusion criteria. Finally, the inclusion stage selected only those studies that met the quality and relevance standards for synthesis.

The inclusion criteria covered peer-reviewed empirical articles published between 2020 and 2025, written in English, and directly related to online or Mobile Legends-based vocabulary learning in EFL contexts. Non-empirical works such as conceptual papers, editorials, theses, or conference abstracts were excluded. After this rigorous process, nine studies were retained for final analysis. Each study was examined for author, year, objectives, participants, methods, findings, and implications. The data were synthesized thematically to identify patterns related to the effects of gameplay on vocabulary acquisition, learner motivation, and pedagogical applications. This systematic procedure ensured that the review produced valid, reliable, and up-to-date insights into how Mobile Legends supports English vocabulary learning.



**Figure 1** Prisma-based Flow Diagram of Study Selection

## RESULT AND DISCUSSION

The review of nine selected studies revealed that Mobile Legends has generally shown a positive impact on English vocabulary acquisition among EFL learners, although the extent of improvement varied across education levels and research contexts. Most studies reported that exposure to in-game English expressions, terminology, and instructions contributed to incidental vocabulary learning and recognition, especially in frequently used game-related terms. The majority of the learners perceived Mobile Legends as a useful medium for enriching vocabulary, which indicates that online gaming functions as an accessible, informal learning environment where English input is repeatedly encountered during gameplay.

Another important finding concerns the nature of vocabulary learned. Several studies highlighted that most vocabulary items acquired through Mobile Legends were technical game-related words (such as skills, commands, and battle expressions), while studies involving broader online game contexts (not only Mobile Legends) demonstrated a wider range of vocabulary, including general expressions and communicative phrases. This suggests that although Mobile Legends can enhance vocabulary knowledge, the scope of vocabulary development tends to depend on the nature of the game content as well as the level of learner engagement with in-game language. In addition, a number of studies showed that multimodal game features such as character dialogues, visual text, and voice commands support vocabulary comprehension through repeated exposure and contextual cues.

The reviewed studies also consistently reported increased motivation and learner engagement through online gameplay. Mobile Legends was viewed as enjoyable and familiar, which encouraged learners to interact more with English content and maintain interest in learning. Motivation, however, does not always translate into a high level of vocabulary mastery. Some studies indicated that while motivation increased, vocabulary improvement remained limited unless combined with structured learning activities or teacher guidance. This highlights the need for instructional mediation to maximize vocabulary gain from online gaming.

Furthermore, the results indicated differences in vocabulary outcomes depending on learner characteristics and learning settings. Studies in senior high school settings showed higher reported motivation and vocabulary growth compared to elementary school contexts, where vocabulary acquisition tended to remain basic and context-specific. This implies that age, exposure frequency, and learners'

familiarity with English may influence the effectiveness of Mobile Legends as a vocabulary learning resource. Additionally, studies using experimental methods demonstrated more measurable gains than perception-based studies, showing that research design plays a role in how vocabulary outcomes are reported.

Overall, the evidence suggests that Mobile Legends provides meaningful exposure to English vocabulary and supports incidental language learning through contextual and repeated input, although its impact varies depending on learners' levels, vocabulary type, and instructional support. Most of the vocabulary learned remains domain-specific and may not automatically transfer into broader language competence without further guidance, indicating that Mobile Legends is best positioned as a supplementary learning tool rather than a stand-alone instructional method. Therefore, while online gaming can contribute positively to vocabulary development in SLA contexts, structured classroom integration and pedagogical mediation remain necessary to optimize and sustain learning outcomes.

## CONCLUSIONS

Based on the results of a systematic review of the nine studies analyzed, it can be concluded that Mobile Legends: Bang Bang contributes positively to English vocabulary acquisition in EFL learners. Repeated exposure to English in the context of the game—through instructions, technical terms, and team interactions—encourages incidental vocabulary learning. The game's multimodal features also help students understand the meaning of vocabulary through visual and auditory contexts. However, the vocabulary acquired is mostly specific to the game domain and does not always develop into more comprehensive language skills without instructional intervention. In addition, the game has been shown to increase student motivation and engagement, although this motivation needs to be balanced with structured learning activities in order to have a maximum impact on learning outcomes. Overall, Mobile Legends is effective as a supporting medium in vocabulary learning, but it cannot function as a single learning method without adequate pedagogical guidance.

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