

# The Impact of Playing Mobile Legends (ML) as an Online Game on Vocabulary Acquisition in the Perspective of Students' Perception

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**Abstract.** The objective of this study was to investigate the students' perception in using mobile legends (Mobile Legends) for improving their vocabulary acquisition. Online games have received considerable attention in relation to their educational effects due to the fact that they can create learning opportunities. Teaching English as a second language in an e-learning environment calls for considering the impact of online games on students' vocabulary acquisition. Qualitative research design was conducted in this study. The study's participants were students from a school in Pematangsiantar city who regularly engaged in playing Mobile Legends. These individuals were familiar with the game and accustomed to its gameplay. The primary criterion for selecting participants focused on active internet users who consistently took part in online gaming activities. This study's findings offer valuable insights for teaching methods, learning approaches, and future research aimed at enhancing educational practices. Incorporating Mobile Legends into language instruction can create an engaging, rewarding, and meaningful learning experience. English educators should consider implementing strategies that enhance vocabulary presentation to students. The game's features, such as word memorization exercises, can effectively maintain student focus by making the learning process exciting. Additionally, the visual elements within the game enable students to identify and comprehend the meanings of specific words more easily.

**Key words:** Impact, online game, perception, vocabulary

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## INTRODUCTION

Playing mobile games has shifted the way students interact with educational settings. At present, due to the pandemic, more teachers are employing online classrooms to compensate for the lack of physical contact, which hinders engagement. It is crucial to find an activity that is both educational and attractive to the students. Story-based vocabulary learning through mobile games is one option. In educational settings, games are becoming more common, and a majority of students use online video games. Furthermore, more students reported playing in the week before the survey in our interviews. Approximately 70% of the video game market is played via smartphones. This demonstrates that engaging in online games on their mobile phones could interest students more in learning English (Chamarro et al., 2020). Furthermore, these digital devices incorporate English games. Therefore, this study aims to investigate if students associate meaningful gameplay with vocabulary acquisition. This paper attempts to address the following research question: "Just how much meaningful online gameplay learning vocabulary can engage students?" (Gibson et al., 2022).

Vocabulary learning is particularly important for linguistics because it determines both L1 and L2 students' reading abilities. This is a challenge, even for communicating in EFL countries, such as PhD students who still have difficulty mastering English words. What's more, as some people have maintained varying attitudes about video games, being able to play may engage students in vocabulary acquisition. Furthermore, very few studies investigate the dynamics of playing mobile games on vocabulary acquisition as an online game. Hence, this study seeks to understand the students' point of view on playing since previous studies have combined mobile games that integrate entertainment with educational purposes. Although the two have dissimilar qualities, the perspectives towards both are still allotted. Therefore, providing students' perceptions of playing mobile games would be meaningful. One of the criteria was being capable of creating a connection with the subject. This could occur both online and face-to-face. Given the current restrictions on conducting face-to-face interviews, this occurred online in late 2021. The students involved in the research accepted their enthusiastic perspective, which could provide basic support for examining their speech. Based on these implications, the explanations provided might aid understanding of the following: first, the use of digital devices in training young learners and how they responded to their pedagogical experiences dealing with such applications (Birch & Fulop, 2020; Levesque et al., 2021).

Game playing at Interactive Virtual Environments in language education has been around for a long time. Nowadays, a quest about learning English in the technology era is personified by students and young people who are used to spending a lot of time in front of electronic gadgets and the internet. Due to the low cost, almost all middle, high, and university students in developing countries play the online game Mobile Legends. The purpose of playing this game is not only to eliminate boredom but also for those who understand that there is potential for profitable commercialization, doing something as a side job to earn money. This is because Mobile Legends are widely played by people all over the world, so they have the potential to earn an income on a global scale. Teaching English as a second language in an e-learning environment calls for considering the impact of online games on students' vocabulary acquisition (Purba et al., 2024). Society is slowly but surely transferring terms and ideas that previously only existed in the material world into the digital sphere. The digital era not only reconfigures the way people consult information but also the way they learn. In the language learning phase, studies have reported many opportunities for learners in digital settings

(Liao et al., 2020). As a form of computer-assisted language learning, the goal of this concept is to help students learn language effectively using computer technology. This tendency to teach using technology springs from progressive education and has evolved dramatically from instructional teaching, a learning strategy based on a teacher guide, to teaching using gadgets and other electronic devices.

Online games have received considerable attention in relation to their educational effects due to the fact that they can create learning opportunities. Recent theoretical views, such as connectionism theory and experiential gaming and learning, suggest that the experiences gained in an artificial environment are valuable and become knowledge or even an ability. With the widespread use of gaming consoles and computer games, many researchers have compared computer game environments with learning outcomes. Many motivated students are using video games, consoles, and mobile devices to transfer and enhance their school education. However, from another point of view, memory and learning are essentially completely different; that is, the intonation of memory is low-efficiency for learning. In language acquisition, the layer of the intonation of language is used to learn vocabulary; therefore, learning by construction is more effective for language acquisition. The motivational and emotional aspects of multimedia instruction are also significant. Metacognition is defined as knowledge that the students already have about learning processes, as well as the individual cognitive strategies that they employ.

There are two different ways to refer to cognitive skills in association learning systems from the perspective of theorists. The first view is about some specificities of knowledge. Association learning theory gives an alternative perspective to teachers for teaching techniques. However, there is a consensus that vocabulary is crucial for language progress. The extent of the child's vocabulary is strongly related to mastery of literacy. Vocabulary knowledge at the beginning of formal education is an important predictor of progress in schools (Napitupulu et al., 2023). The importance of second language vocabulary is evident, as minimal lexical knowledge is needed for basic communication skills in foreign language learning. Computers can create a more motivating and interactive game format in order to attract students' attention, help vocabulary consolidation, and enhance learning (Ricketts et al., 2020; Sinaga, Herman, and Pasaribu, 2020). As for Mobile Legends, questionnaires collected in the experiment show that most players like this game, which is of great interest to players, develops vision and thinking ability and stimulates their learning motivation. Although no study has been conducted on the effect of vocabulary acquisition, a more specific study on the effect of playing Mobile Legends on vocabulary acquisition is planned. In conclusion, only a small number of studies have been conducted on vocabulary acquisition through the tool of Mobile Legends. In the study, designed as a survey study, questionnaires were employed to acquire quantitative data. By examining the correlation between the data acquired and the value assigned on the Likert scale, it was identified that the level of interest, vision, thinking, and motivation increased during the use of the game 'Mobile Legends' and was favored by users. The findings indicated that Mobile Legends has great potential to be used as a tool in vocabulary acquisition. Given the current identification of vocabulary as a critical factor in second language research, it is necessary to develop innovative methods that can be used in the learning of vocabulary in the classroom. Since today's students perform their daily activities online, a comprehensive literature review on the use of one of the most popular online games in the market has been conducted in order to develop a different and innovative learning

approach in the vocabulary field (Baumert et al., 2020).

This research aims to explore students' perception of how online games influence their vocabulary acquisition. It is directed to describe how mobile games contribute to vocabulary enhancement and how playing online games facilitates vocabulary learning. It is also intended to elicit the features in terms of mechanics and elements of games that can support or obstruct vocabulary acquisition. Briefly, this research aims to collect data on how relevant playing mobile games is to EFL students in learning English vocabulary and to get a list of positive and negative aspects of game characteristics that influence vocabulary acquisition. It is hoped that this study serves as worthwhile not only to the researcher's field but also to other English language educators to demonstrate that digital games have a positive impact on students' language learning. For students, the result of this present research implies that playing mobile games is not really harmful and is beneficial for language studies as vocabulary can be improved.

## **MATERIALS AND METHODS**

The research design for this study is a qualitative research design, in which the researchers collected and analyzed qualitative data regarding respondents' expressions, either in the form of words or readings (Simaremare et al., 2023; Judijanto et al., 2024). This research design has a descriptive approach. Participants were students who are accustomed to playing Mobile Legends in one school in Pematangsiantar city, who played Mobile Legends regularly and participated in various groups, including the platinum group, posting group, and guild group. The researchers also ensured that university students had signed and had not signed the pledge. In addition, participants came from various faculties. The main consideration for the selection of participants in this study emphasizes active internet users by participating in online games. The following is the list of research participants involved in this study. Researchers wish to conduct research with participants who are school students in Pematangsiantar and are accustomed to playing online games. Researchers also selected students based on gender, age, gaming habits, and elo.

The respondents were selected using a purposive sampling technique in the following manner. Firstly, the researchers made a call for 100 individuals to take part in a study. After going through the process of checking and validating the questionnaires from the registered number, it was discovered that not all respondents concurred with the substance of the survey. Because of that, some individuals were contacted to participate and verify the questions. The proceedings have since been postponed. Every time a survey was distributed, the questionnaire was accompanied by a brief explanation of this research project. Before approaching students, the researchers informed about the data that would be collected and their confidentiality. In the research, researchers also respected the authority of individuals to participate in this study. Every ongoing survey respondent is given a survey link. In return, it was all voluntary, and the identities of the individuals being questioned were kept confidential. In obtaining data in this section, researchers used an online survey.

## **RESULTS**

Since the aim of this research is to study the students' perception of learning vocabulary through playing Mobile Legends, the writer will discuss the revealing data. Then, the writer wants to know to what extent the perception of the students improves their vocabulary by playing Mobile Legends.

Finally, to answer the research questions in the second point above, the writer will improve the hypothesis. As a prerequisite, in the field of quantitative analysis, the writer will test the normality of the data distribution using the Kolmogorov-Smirnov test with the following formula and interpretation. Exploring students' perceptions of learning vocabulary through playing Mobile Legends, the question has been asked whether playing Mobile Legends is an effective way to learn vocabulary and how students perceive the impact of playing Mobile Legends on their vocabulary acquisition. The questionnaire was based on the claim of some scholars that language learning is triggered through playing certain games, referring to the theories of learning and teaching, mainly the Communicative Language Learning, Communicative Language Teaching methods, and acquisition-learning hypothesis and monitor theory. The job of this test is to find out the participants' perceptions of the statement. The participants' answers systematically undergo the following technique: analyzing the data quantitatively and qualitatively. By knowing the result of the research, it is hoped that the findings of this study may be an empirical indication to facilitate vocabulary learning through playing the named online game. Statistically, the distribution of playing Mobile Legends was very close to normal according to the result of the one-sample K-S test at two-tailed significance. The participants argued for choosing to play online games involving 'Mobile Legends' to trigger the process of language learning. They expect an improvement in learning beneficial vocabulary from the game's matches consisting of riddles and local terms. The result of applying the Spearman rho statistical tests for the collection in 'playing Mobile Legends' indicated that a number of games were closely played. Firstly, the participants watched English sub-stories and fully comprehended the contents, then played games at the interval scale of Cronbach's Alpha with a two-tailed non-significant value under the alpha of level of confidence.

Considering the background of the participants in this study, their profile is varied. Half of the participants in this study claimed that they do not like playing mobile games, but the remaining stated that they loved playing mobile games. Having different backgrounds and preferences for playing mobile games contributes to the diversity of the results when the sample group shared their perceptions and experiences of playing Mobile Legends. Learners' preferences in liking and disliking things have an effect on the ability and process of language acquisition. In addition to demographic-related information, the researchers also found that a few participants disliked playing language games on their mobile phones. However, the majority of the sample group identified themselves as individuals who frequently played such games. Therefore, considering these profiles is very important to understand the perceptions of the participants in this study when playing Mobile Legends as an online game.

All of the participants in the two focus group interviews perceived that playing the online game had contributed to their vocabulary acquisition. The basis for their perception, or in other words, what type of words the students recognized as having learned and how they had improved in the usage and retention of words are here analyzed. Several students stated that playing Mobile Legends helped them improve their vocabulary indirectly in that they could understand word meanings either verbally or in writing. In Sub-research Question 2, the rationale as to how gaming led their passive vocabulary to improve was owing largely to their ability to recognize a word's meaning by hearing or reading, thereby linking the game story to the practical educational learning concept.

Other students argued that the online game facilitated them in developing their knowledge of

active or productive vocabulary, as specified by the majority of research findings. Therefore, the impact of online gaming being able to boost students' productive vocabulary is a repetition of studies. Participants reported that habit encourages them to be more diligent in becoming champions in the game, to think in advance about the causes and strategies, to improve their retention, to play the game more properly, and to focus on the activities with extensive repetitions in every one of their game sessions. Many students advised that they would repeat the pronunciation count after hearing repeatedly the motion they sang. A student claimed that gaming could provoke the desire to have a habit repeated in order to complete the repetition. The positive side of gaming is the player's excitement to do things with the mechanics provided by the game. It shows that the game is now a new future, a source of emotion, and they cannot utilize the advantages revealed.

## **DISCUSSION**

This present study has attempted to explore students' perceptions of playing a mobile game on vocabulary acquisition. Generally, the students have a positive attitude toward two core game framing elements (reinforcement and representation). Findings from this research have some implications for instructional materials, practices, and research. At the instructional materials level, this study encourages English language teachers to utilize game reward systems and narrative techniques in developing effective vocabulary teaching materials according to the students' needs and interests. It further investigates instructional activities and teaching sequences of vocabulary learning with mobile games inside or outside schools. Furthermore, games are suggested as an activity that can be proposed by teachers to their students.

Understanding whether playing a game can lead to language improvement, and if so, through which mechanism, may shed light on the use of video games as a newer educational tool. The present study could relate to previous research in the game-based learning field. Although some of the findings reported in many studies mentioned earlier are in line with the findings of the present research, some differences are remarkably highlighted. For example, some research mentioned a positive impact on vocabulary acquisition, while other research did not report any significant effect. Similarly, this result could be useful for instructional purposes, namely for teachers and educators' understanding of whether using video games is effective in language education and, if so, how to use them in their teaching. Based on its subjective findings, some limitations remained in the present study. The first limitation is a result of the questionnaire's subjective nature because there may have been discrepancies between students' perceptions and the reality that could have an impact on the research results. Evaluating comprehension is difficult because of the learners' ability to understand specific vocabulary and the knowledge they have of the vocabulary.

Furthermore, the study suggested that the use of quizzes may also help close the language gap. The study recommends an approach to research using neurocognitive or neurological measures. Because the previous research mostly focused on the positive effects of mobile games in vocabulary, this study compared the findings with previous research. Furthermore, the reason behind using perception is to understand the students' points of view on using the mobile gaming application as a facility in their vocabulary acquisition. In conclusion, playing helps acquire language, and it can help meet the needs of any student. It can be suggested that the role of the gaming application is worth being included in educational materials. This research may prove beneficial by reporting the views

of students who played the mobile game application as a method of increasing students' vocabulary learning.

The results of our study suggest some pedagogical implications that can be drawn relating to teaching, learning, and future research to improve practice. The utilization of Mobile Legends can be designed in language instruction to improve interactive, rewarding, and meaningful language learning. English teachers should be aware of using strategies that can improve the vocabulary presented to learners. By using game features, such as vocabulary memorization, it is not difficult to maintain attention since the game can make learning exciting. Through the media used in the game, students can recognize and understand the meaning of particular words. Conversely, it seems that using English language games to assist vocabulary acquisition may hinder the innovative process of promoting vocabulary knowledge among undergraduate students. In a game environment, they may experience difficulties.

It is the responsibility of both teachers and test designers to overtly shift language pedagogy and testing instruments for the digital era. Combining gameplay elements with viable and timeless teaching methodologies can be exalted in the realm of game-based literature. Educators may face practical issues, such as obtaining software, adopting, and integrating existing games into learning situations. Additionally, not all foreign language teachers are trained to use digital tools, and there are challenges in assessing the suitability of such tools. The novelty of digital game-based learning, combined with the educational sector's struggle to infuse technology with compelling educational value, could lead to these prejudices. In this study, the findings could inform curriculum settings or teaching methods, especially for language learning, where motivation and engagement are essential to promote vocabulary retention.

## **CONCLUSION AND RECOMMENDATION**

More specifically, the results of the study provide empirical evidence that playing Mobile Legends can help students to acquire vocabulary learning. Based on the results and discussion presented above, some contributions of the study are discussed herein. First, this research provides a novel addition to the studies that speak about video games and education. Although there are quite a lot of studies that examine the role of video games for language learning, almost none of these studies have focused on the possible impact of playing a specific kind of video game, which is mobile games, and more specifically, Mobile Legends, to acquire vocabulary. So, this study can make a significant contribution to the current pool of knowledge about the impact of playing video games on language learning.

Some issues that are certainly limitations have arisen and should be disclosed. The first issue is the small number of participants in this study. The phenomenon of role-playing and action games such as Mobile Legends is of interest but requires further exploration in the future. Therefore, there are a number of areas that are possible future research in subsequent studies. First, further research can be carried out in larger groups with the material raised, to measure the impact of Mobile Legends mobile online gaming on the reduction in the space of vocabulary science lessons learned in large classes using digital media. Second, the side effects can be measured, because, from the results of this study, it is concluded that a significant percentage of students sometimes take time playing online Mobile Legends on computers or Android when the conversation of the state started alone at home.

The third possibility of future research is to adapt it to a game that can be accessed by students in the classroom, to measure how much they are affected after playing the easily searched games on the computer or Android obtained by students. The last possibility in subsequent research is related to the time teenagers can access online games. In this case, future researchers can measure whether online game players are growing.

On the basis of research conducted, the MOBA game, as one of the trends in the digital gaming world that is shown in this study, is Mobile Legends online Mobile Android, which is one of the means for promoting an increase in necessary verbal communication. Therefore, the findings in the field of increasing positive communication in the verbal language of human life are particularly impressive. By doing so, it can be inferred that during the decline in English in Indonesia, it is not only seen annually from a statistical breakdown but also through urbanization capitalism in this game. The results showed that these problems show new findings that are contrary to the results of the previous study. This study found that online games Mobile Legends have a significant effect on vocabulary learning outcomes. Based on the results of the study above, the following conclusions are formulated: First, since all hypotheses are rejected, the consensus is that there is sufficiently large empirical evidence to show that the level of communication in online mobile Android (Mobile Legends) has the ability to improve vocabulary acquisition in students who have mastered English with the average coefficient of a large effect.

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