Exposure to e-Sports and the Reading Level of the English Language Learners

LJ Grace Francisco Banda[1] and Eliza Cabuyoc Gregorio[2]

[1]Faculty, Nazuni Summit Comprehensive National High School, Iloilo, Philippines

[1,2]Student, Iloilo State University of Fisheries Science and Technology, Iloilo, Philippines

Abstract— This study explored the connection between how often learners play online mobile games and their reading levels. By using a descriptive-correlational research design, the study gathered data on learners' gaming frequency and reading level. Respondents were categorized into non-players, occasional players, and frequent players of online mobile games, with reading levels assessed using the Philippine Informal Reading Inventory (Phil IRI). The findings revealed no significant relationship between the amount of time spent playing online mobile games and learners' reading level. While the study did not find any harmful effects, it highlights the need for further research to consider factors like self-regulation and socio-economic background, as well as to adopt a long-term approach. It also points to the potential benefits of game-based learning in improving academic skills like reading. Ultimately, this study adds to the ongoing conversation about how gaming impacts learning, suggesting that online mobile games may not be as harmful to academic performance as often thought.

Keywords— Exposure, Mobile Gamer, online mobile game, playing frequency, reading level.

I. INTRODUCTION

Mobile technology has rapidly transformed how students engage with both entertainment and education. Among the many popular mobile games, online mobile games stand out as a global phenomenon. For many, online mobile games offer not just entertainment but also a means to connect with friends and build teamwork skills (Haidar, 2022).

Despite its popularity and entertainment value, concerns have emerged about the impact of excessive gaming on students' academic performance. Several studies have pointed to potential negative effects, especially regarding focus and academic outcomes. Haidar (2022) found that students who played online mobile games frequently tended to show lower academic results, suggesting that too much screen time may interfere with their studies. Similarly, Razon (2024) observed that excessive gaming could reduce students' motivation to study, leading to a decline in academic achievement. Moreover, research by Prichard and Salmon (2010) has shown that excessive gaming can disrupt sleep patterns, leading to fatigue and difficulty concentrating in class, which can negatively impact academic performance. This disruption of sleep can significantly affect a student's ability to focus and retain information, ultimately impacting their academic progress.

However, not all research presents gaming in a negative light. Some studies suggest that when used thoughtfully, games like online mobile games can enhance certain academic skills. For instance, Qothrunnada, Ardiansyah, and Wijayanti (2024) found that students who played the game improved their English narrative writing skills. Additionally, Kobis and Tomatala (2020) highlighted the benefits of mobile gaming in enhancing students' English vocabulary and communication skills, while Elfika (2022) noted that online mobile games could help students expand their vocabulary when integrated into language learning. Furthermore, Green, Bavelier, and Rensink (2010) have demonstrated that certain games can improve cognitive skills such as problem-solving, critical thinking, and decision-making. These enhanced cognitive abilities can directly translate to improved academic performance, as they are crucial for success in various subjects.

Considering these mixed findings, this study aimed to investigate the effects of playing online mobile games on the reading level of students. To ensure the privacy of all respondents, all data collected was anonymized. By focusing on this specific relationship, the study seeks to provide valuable insights into how gaming habits might influence reading level of the students, while also offering recommendations for balancing recreational gaming with academic responsibilities.

II. METHODS

This study aimed to determine the overall reading levels of the learners and to compare the reading level of those classified as non-players, occasional players, and frequent players of online mobile games. Research on

online gamers often categorizes players based on their frequency of play. Occasional players, who might play a few times a week or less, treat gaming as a casual pastime. In contrast, frequent players integrate gaming significantly into their daily lives, often playing every day or even multiple times a day. This distinction between casual and frequent play has important implications for understanding player behavior and experiences (Lobel, A., & Reed, D. 2014). Additionally, the study investigated whether there was a significant relationship between the frequency of online mobile games gameplay and the students' reading level. Data was collected from all 108 junior high school learners. "Take-all sampling," often referred to as a census, offers the significant advantage of eliminating sampling error (Lohr, 2010). Additionally, by collecting data from every single member of the population, researchers can obtain the most accurate and comprehensive picture of the population's characteristics, minimizing the risk of biases that may arise from studying a subset of the population. This allows for detailed analysis and identification of even the smallest subgroups within the population, providing a more nuanced understanding of the phenomenon under investigation.

This study used a descriptive-correlational research design to explore the relationship between playing online mobile games and the reading level of students. The descriptive approach allowed for a deeper understanding of learners' gaming frequency and their reading level, while the correlational aspect looked at whether there was a connection between how often learners played the game and their reading proficiency.

Meanwhile, the researcher used the Philippine Informal Reading Inventory (Phil IRI) to collect data on the students' reading levels. The said instrument was categorized into three level the Independent Reader 97-100%, Instructional Reader 90-96% and Frustration Reader 89% and below and was conducted during English hour. The statistical tools employed in this study were frequency and percentage to describe the distribution of students across reading levels and online mobile games usage categories, and the Chi-Square test of independence to determine if there is a statistically significant relationship between these two variables.

III. RESULTS

This section presents the results of the study. Table 1 shows the overall distribution of students' reading levels. Table 2 presents the distribution of reading levels among non-players, occasional players, and frequent players of Mobile Legends. Table 3 presents the results of the Chi-Square test, which was conducted to determine if there is a statistically significant relationship between the frequency of Mobile Legends gameplay and students' reading levels.

Table 1. *Reading level, frequency and percentage*

Reading Level	Frequency	Percent	Valid Percent	Cumulative Percent
Independent	36	33.3%	33.3%	33.3%
Instructional	46	42.6%	42.6%	75.9%
Frustration	26	24.1%	24.1%	100.0%
Total		100%		

Table 1 revealed that most learners (42.6%) were reading at the instructional level, followed by those at the independent level (33.3%) and the frustration level (24.1%).

Table 2. *Frequency and Reading Level*

Frequency	Reading Level		Total
	Independent	Instructional	
Non-player	15	18	
Occasional player	13	20	
Frequent player	8	8	
Total	36	46	

The table shows the frequency distribution of learners across different reading levels (independent, instructional, frustration) and their corresponding online mobile game usage categories (non-player, occasional player, frequent player).

Table 3. Chi-Square test, Reading Level and Mobile Usage Frequency

Statistic	Value	df	Sig.
Pearson-Chi-Square	2.293a	4	.628
Likelihood Ratio	2.294	4	.628
Linear-by-Linear	1.296	1	.255
Association			
N of Valid Cases	108		

The Chi-Square test results showed no statistically significant association between reading level and online mobile game usage frequency, Pearson Chi-Square = 2.293, df = 4, p = .682.

IV. DISCUSSION

Reading is one of the most important skills a person can develop. It is the foundation of learning, allowing us to understand, interpret, and apply information in countless ways. Whether for academic success or personal growth, reading helps sharpen our thinking, improve our language skills, and expand our vocabulary (Cunningham & Stanovich, 1998).

But reading is much more than just a practical skill—it opens the door to new worlds, ideas, and perspectives. Through reading, we can connect with stories and experiences from different cultures, develop empathy for others, and even gain a deeper understanding of ourselves (Mar, Oatley, & Peterson, 2009). It also strengthens our minds, improving memory, focus, and critical thinking, which are essential for navigating life's challenges (Snowling & Hulme, 2011).

In today's fast-paced digital age, reading remains just as important, though the way we engage with it has changed. Traditional books now share space with e-books, articles, and other digital formats. However, with distractions like social media and online games becoming more common, encouraging a love for reading, especially among students, has become more important than ever (Rideout, et al., 2010).

This study assessed the effects of mobile legends on the reading level of the learners using the Philippine Informal Reading Inventory. The study revealed that there is no significant relationship between students' reading levels and their frequency of playing online mobile games. This outcome challenges some previous research, such as Haidar (2022), which identified a correlation between frequent online mobile games gameplay and lower academic performance. The discrepancy highlights the complexity of the relationship between gaming and academics. While

Haidar's study suggests potential negative effects, the current research indicates that, within this specific context, playing online mobile games may not have a significant impact—positive or negative—on students' reading proficiency. Nevertheless, these findings should be interpreted with caution, keeping in mind the limitations of this study.

Interestingly, this study aligns with broader research suggesting that, when used thoughtfully, games can have neutral or even positive effects on academic skills. For instance, Green, et al., (2010) demonstrated that certain games could enhance cognitive abilities like attention, spatial reasoning, and decision-making—skills that are crucial for academic success. Although these cognitive benefits were not directly measured in this study, it is possible that they could indirectly support reading comprehension and fluency. For example, improved attention spans might help students focus better on reading tasks, while sharper decision-making skills could aid in navigating complex texts and drawing meaningful inferences.

That said, it is essential to acknowledge the limitations of this study. The relatively small sample size may have constrained the statistical power to detect subtle relationships. A larger sample would improve the generalizability of the findings and allow for a more robust analysis. Furthermore, the cross-sectional design of this study provides only a snapshot of the relationship between gaming and reading at a single point in time. A longitudinal approach, following students over an extended period, would offer more insights into the long-term effects of playing online mobile games on reading skills and academic performance.

Additionally, the study did not account for individual differences among students, such as personality traits (e.g., impulsivity or self-regulation), motivation levels, prior academic performance, or socio-economic background. These factors could significantly influence both gaming habits and reading outcomes. For instance, students with strong self-regulation and intrinsic motivation may find it easier to balance gaming with

academics, maintaining good reading habits. On the other hand, students with low self-regulation or high levels of stress and anxiety might be more vulnerable to the negative effects of excessive gaming. Future research should incorporate these individual factors to better understand the nuanced relationship between gaming, personal characteristics, and academic performance.

Moreover, this study focused primarily on the potential negative effects of playing Mobile Legends. Future research could also explore the possible benefits of game-based learning approaches to enhance reading comprehension and fluency. Integrating elements of game design such as interactive storytelling, challenges, and rewards into educational tools could make reading more engaging and motivating for students. For example, educational games that weave reading exercises into interactive narratives might offer an enjoyable and effective way to practice reading skills.

V. CONCLUSION

This study found no significant relationship between the frequency of playing online mobile games and students' reading levels, suggesting that gaming may not directly affect reading proficiency. While some studies, such as Haidar (2022) and Razon (2024), have linked gaming to lower academic performance, these findings align with research showing that moderate gaming can have neutral or even positive cognitive effects (Green & Bavelier, 2012).

Future studies should explore this connection further by using larger sample sizes, considering individual differences such as self-regulation and socio-economic background, and adopting a longitudinal perspective to better understand the long-term effects. There is also potential in exploring how game-based learning might incorporate the engaging elements of gaming to enhance academic skills, such as reading. While this study did not find negative effects of online mobile games, it highlights the importance of maintaining a balanced approach and finding ways to leverage gaming as a positive tool for learning.

REFERENCES

[1] Haidar, M. (2022). Exploring the relationship between mobile game addiction and academic performance: A study on Mobile Legends. Journal of Educational Research, 35(2), 145-158.

[2] Razon, J. (2024). The impact of Mobile Legends on students' motivation and academic performance. International Journal of Social Sciences and Humanities Research, 12(3), 89-102.

[3] Qothrunnada, I., Ardiansyah, R., & Wijayanti, T. (2024). The use of Mobile Legends to facilitate English narrative writing skills development: Students' perceptions. Journal of Language Learning and Teaching, 9(1), 23-40.

[4] Kobis, S., & Tomatala, R. (2020). Students' perceptions of Mobile Legends: Bang Bang as a medium to learn English. Journal of Educational Media and Technology, 15(4), 55-67.

[5] Elfika, F. (2022). The effect of using Mobile Legends game toward learning vocabulary mastery at eighth grade. Journal of Linguistic Studies, 28(1), 100-120.

[6] Rizal, S. M., & Sarker, P. (2023). Prevalence and underlying factors of mobile game addiction among university students in Bangladesh. Psychiatric Research and Academic Development, 45(7), 567-580.

[7] Cunningham, A. E., & Stanovich, K. E. (1998). What reading does for the mind. American Educator, 22(1-2), 8-15.

[8] Mar, R. A., Oatley, K., & Peterson, J. B. (2009). Exploring the link between reading fiction and empathy: Ruling out individual differences and examining outcomes. Communications, 34(4), 407-428.

[9] Snowling, M. J., & Hulme, C. (2011). Evidence-based interventions for reading and language difficulties: Creating a virtuous circle. British Journal of Educational Psychology, 81(1), 1-23.

[10] Rideout, V. J., Foehr, U. G., & Roberts, D. F. (2010). Generation M²: Media in the lives of 8- to 18-year-olds. Kaiser Family Foundation.

[11] Haidar, R. (2022). The impact of online gaming on student performance: A case study on Mobile Legends: Bang Bang. Educational Technology Journal, 8(3), 45-56.

[12] Green, C. S., & Bavelier, D. (2012). Learning, attentional control, and action video games. Current Biology, 22(6), R197-R206.

[13] Razon, S. (2024). Effects of online gaming on student motivation: Insights from secondary education. Journal of Digital Learning, 11(1), 72-89.