



Recreational Roblox Usage and English Language Learning Engagement Among University Students

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Abstract

This study investigates the relationship between recreational Roblox usage and English language learning engagement among university students, addressing a gap in literature focused largely on younger learners or structured pedagogical settings. Within the framework of technology-enhanced language learning (TELL), the research examines how this immersive gaming platform shapes the language learning concentration and academic motivation of EFL university students. Employing a Sequential Explanatory Mixed-Methods Design, the study collected data from 53 university students via questionnaires and semi-structured interviews. This data were then analyzed using descriptive statistics and Spearman rank correlation. The results indicate that Roblox usage is predominantly social and recreational rather than compulsive. Although 58.5% of respondents spend more than two hours per session, the majority maintain functional boundaries by prioritizing English assignments over gaming. Crucially, no participants reported severe psychological dependency, though a segment admitted to occasional procrastination. Furthermore, the platform's English-dominant interface and collaborative gameplay expose students to authentic language input, fostering informal second language acquisition (SLA) through peer interaction. Ultimately, the study concludes that while severe concentration disruption is uncommon, subtle procrastination remains a self-regulation challenge. These findings highlight the need for targeted digital wellness frameworks and pedagogical guidance, which can help EFL students harness immersive recreational gaming as a language learning tool while preserving academic focus.

Keywords: Roblox, English Language Learning, Technology-Enhanced Language Learning (TELL), Sequential Explanatory Design, Spearman Correlation

1. Introduction

Gaming platforms have quietly reshaped how university students spend their discretionary time, with Roblox emerging as a primary example. With millions of daily active users recorded globally, the platform functions as an immersive metaverse where users build, socialize, and engage in continuous reward-driven experiences. What makes this particularly significant for English as a Foreign Language (EFL) university students is its deeply English-mediated nature. English dominates the Roblox platform. The interface, in-game instructions, community forums, chat systems, and the vast majority of user-created game content are all in English. For EFL students in Indonesian universities, regular engagement with Roblox therefore constitutes an extended and largely voluntary exposure to authentic English language input, a dimension of the platform's educational significance that the existing literature has not fully examined.

Within the field of technology-enhanced language learning (TELL), there is a growing recognition that digital environments beyond formal classroom instruction can serve as powerful sites of incidental language acquisition. Research in informal digital learning has demonstrated that students who regularly engage with English-medium digital platforms (including games, social media, and streaming services) develop measurable gains in

vocabulary, reading fluency, and communicative competence (Sundqvist & Sylvén, 2016; Reinhardt & Sykes, 2014). Roblox, with its combination of English-only text-based communication, collaborative problem-solving, and socially negotiated gameplay, represents a particularly rich informal language learning environment. Unlike passive consumption of English media, Roblox demands active production and comprehension of English in real-time social contexts, a feature that aligns closely with communicative language teaching (CLT) principles and interaction-based theories of second language acquisition (SLA).

At the same time, the immersive nature of the platform raises important questions about its consequences for the academic concentration and language study habits of university EFL students. Research has consistently shown that students who engage in prolonged online gaming experience deteriorating academic performance, reduced motivation, and diminished ability to concentrate on their studies (Ani et al., 2023). Sun et al. (2023) found that online games addiction and executive function difficulties significantly account for variances in students' academic engagement. When these applied to immersive, socially engineered platforms like Roblox, these risks are highly relevant for EFL university students as they must balance autonomous language study with recreational screen time in an unsupervised learning environment.

Although scholarship on Roblox and language learning is beginning to emerge, it remains limited. Jin (2024) investigated the effect of experiential learning through the Roblox metaverse platform on English language learners' learning flow and academic achievement. Research on elementary students found that the Roblox mobile game influenced academic performance, enabling students to listen attentively in class, communicate effectively, and learn to speak English through gameplay (Callada et al., 2024). Han, Liu, and Gao (2023) conducted a systematic review and found that Roblox is widely applied in socialized teaching. Abdullah and Abdullah (2025) further examined how Roblox-based gamification supported the development of 21st-century skills, with a particular emphasis on English communication competencies in higher education settings.

Despite these contributions, critical empirical gaps persist in the literature. First, existing studies predominantly examine Roblox as a strictly controlled pedagogical intervention, rather than as an organic behavioral variable in students' daily lives. The far more common real-world scenario of EFL students engaging with the platform recreationally on their own time remains largely unexplored. Second, no research has critically evaluated recreational Roblox use as a source of incidental English acquisition among Indonesian university students, with limited access to authentic out-of-class English communication. Third, prior research fails to consider the potential language learning benefits against concrete self-regulatory risks, such as procrastination and attention displacement, leaving a fragmented understanding of the platform's holistic impact.

This study is designed to address these gaps directly by pursuing two primary objectives: first, to measure and describe the intensity of recreational Roblox usage among EFL university students in terms of frequency and duration ; and second, to explore the relationship between that usage intensity and students' engagement with English language learning.

To comprehensively examine how recreational digital environments intersect with language acquisition and academic behaviors, this study is structurally anchored within three complementary frameworks: Krashen's Input Hypothesis, Long's Interaction Hypothesis, and the Digital Game-Based Language Learning (DGBLL) framework.

Krashen's (1985) Input Hypothesis posits that second language acquisition occurs incidentally when learners are exposed to "comprehensible input" ($i + 1$), which is language data just slightly beyond their current proficiency level, encountered within a low-anxiety environment. When playing Roblox, students naturally navigate an English-only environment featuring game mechanics and default narratives. Because this exposure is voluntary, highly contextualized by structural visual cues, and free from the anxieties of a formal classroom, it effectively lowers the affective filter. Consequently, it creates optimal cognitive conditions for incidental vocabulary and structural acquisition.

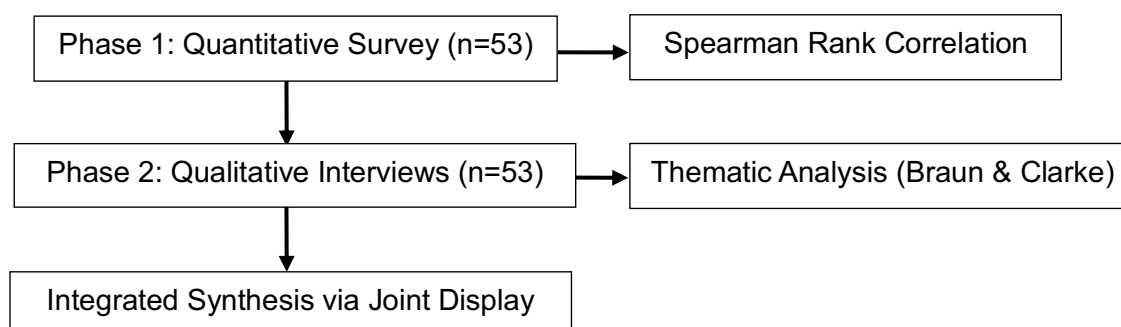
While passive exposure provides a necessary foundation, language development accelerates when learners transition into active participation, a shift central to Long's (1996) Interaction Hypothesis. Long argues that language acquisition is deeply enhanced by the negotiation of meaning during collaborative communication. When breakdowns occur, interlocutors are forced to clarify input, adjust conversational structures, and use corrective feedback to restore mutual understanding. Cooperative tasks in Roblox demand this exact type of active written production and comprehension. To complete quests or coordinate team strategies, Indonesian EFL students must interact in real time with international peers, engaging in the precise meaning-focused negotiation critical for developing pragmatic and communicative competence.

This dynamic combination of comprehensible input and active interpersonal negotiation is ultimately operationalized within the broader Digital Game-Based Language Learning (DGBLL) framework. By synthesizing interactive gaming mechanics with modern pedagogical principles, DGBLL emphasizes that immersive digital games provide highly situated, goal-directed environments that foster deep cognitive investment (Reinhardt & Sykes, 2014). Within this framework, a distinction exists between intentional game-based learning, which relies on tailored educational software, and extramural, recreational gaming. Applying the DGBLL framework, this study traces how the structural reward loops, narrative immersion, and social affordances of recreational Roblox usage incidentally drive language practice. Simultaneously, it addresses how this immersive environment introduces behavioral risks, such as procrastination, that demand robust learner self-regulation.

2. Method

This study employs a Sequential Explanatory Mixed-Methods Design (Creswell & Plano Clark, 2018), a rigorous two-phase framework where quantitative data analysis occurs first to establish baseline patterns of gameplay intensity and reported concentration impacts. Subsequently, qualitative data is collected to explain and enrich the statistical trends, contextualizing individual self-regulation strategies, contextual exposure, and experiential nuances during interpretation.

Figure 1. Methodology Scheme



2.1. Sampling Strategy and Sample Description

The study employed a purposive maximum variation sampling strategy (Merriam & Tisdell, 2025) to recruit a diverse sample of 53 non-English major students at University Hasanuddin Makassar, capturing a wide range of academic years and disciplines. By targeting these students, the study isolates authentic, incidental out-of-school exposure to English, effectively minimizing the confounding variable of specialized academic language training. To ensure the direct relevance and currency of the data, the inclusion criteria required that all participants:

- 2.1.1. Were actively enrolled undergraduate students.
- 2.1.2. Had played Roblox recreationally at least once within the three months prior to the data collection window.
- 2.1.3. Voluntarily agreed to complete the digital survey instruments and potentially participate in follow-up qualitative protocols.

2.2. Questionnaire Instrument: Validity and Reliability

To collect quantitative data we use a 19-item, web-based on Google Forms. The instrument featured closed-ended categorical (*Ya/Tidak*), and multiple-choice questions designed to measure the core variables. To ensure academic precision, three senior researchers specializing in technology-enhanced language learning (TELL) and educational psychology evaluated the survey for content and construct validity, specifically aligning the items with Indonesian university contexts. Following that, we conducted a pilot test with 15 student gamers who met the inclusion criteria but were excluded from the final sample. This confirmed the survey's readability, clarity and an ideal completion time of 10–15 minutes. Finally, item reliability was calculated using Kuder-Richardson Formula 20 (KR-20). The resulting coefficient of 0.81, confirmed strong internal consistency and psychological measurement accuracy.

2.3. Interview Instrument and Qualitative Analysis

In the second phase of the sequential design, we used a semi-structured interview protocol with nine open-ended questions designed to explore participants' lived experiences, individual triggers, and contextual language gains. To ensure comprehensive qualitative depth, all 53 participants completed the interviews. Individual sessions lasted 30 to 45 minutes, were audio-recorded with explicit consent, and transcribed verbatim.

We systematically analyzed the qualitative data following Braun and Clarke's (2006) six-phase thematic analysis framework. The operational steps included: (1) immersing ourselves in the data by repeatedly reading the transcripts; (2) generating initial systemic

codes across the text; (3) aggregating these codes into broader potential themes; (4) reviewing and refining candidate themes against the entire dataset; (5) formally defining and naming the finalized themes; and (6) writing the narrative report using illustrative excerpts. To ensure qualitative trustworthiness (Lincoln & Guba, 1985), we use member-checking protocols; , transcribed text and synthesized thematic summaries were returned to a subset of participants to verify that the interpretations accurately reflected their authentic experiences.

2.4. Ethical Considerations

This study strictly adhered to institutional research ethics protocols. Prior to data collection, all participants received a comprehensive digital consent form detailing the study's aims, risks, and voluntary nature. Explicit permission was required and obtained for all voice-recorded qualitative sessions. To ensure complete privacy and protection, all identifying information was removed from the datasets, and participants were assigned unique alphanumeric codes (e.g., Respondent P1 through P53). All digital data files were securely stored in password-protected cloud storage, accessible only to the primary research team.

3. Results

The results should summarize the scientific findings of the study, rather than detailing raw data extensively. This section should be written in clearly and concisely. Authors may choose to separate or combine the Results and Discussion sections. If the result is divided into subsections, it should use the following format :

3.1. Findings

3.1.1. Questionnaire Findings

3.1.1.1. Respondent Demographic Profile

To maintain transparency and cross-sectional consistency across all reported metrics, the structured demographic distributions of the active sample are systematically presented in Table 1.

Table 1. Respondent Demographic Profile (n=53)

Demographic Attribute	Categorical Sub-dimension	Frequency (n)	Percentage (%)
Age Bracket	18–20 Years	9	17.6
	21–23 Years	44	82.4
Year of Study	Year 1 (Semesters 1–2)	22	41.5
	Year 2 (Semesters 3–4)	25	47.2
	Year 3-4+ (Semesters 5+)	6	11.3
Roblox Status	Played within past 3 months	47	88.7
	No recent play history	6	11.3

3.1.1.2. Roblox Usage Intensity (Independent Variable X)

Tables 2 and 3 outline the empirical baseline distributions for frequency and duration.

Table 2. Frequency of Play — Sub-dimension B1 (n=53)

No	Item	Yes (n)	Yes (%)	No (n)	No (%)
B1.1	I play Roblox at least once every day	12	22.6	41	77.4.
B1.2	I play Roblox on weekdays, including class days	25	47.2	28	52.8
B1.3	I play Roblox during study hours or while class is in session	3	5.7	50	94.3
B1.4	I play Roblox late at night, affecting my sleep before class	16	30.2	37	69.8

Table 3. Duration of Play — Sub-dimension B2 (n=53)

No	Item	Yes (n)	Yes (%)	No (n)	No (%)
B2.1	I spend more than 2 hours per day playing Roblox	31	58.5	22	41.5
B2.2	I lose track of time and play longer than planned	25	47.2	28	52.8
B2.3	I continue playing despite pending assignments or deadlines	6	11.3	47	88.7
B2.4	I find it very difficult to stop once I have started	9	17.0	44	83.0

3.1.1.3. Academic Concentration and Language Learning Engagement (Dependent Variable Y)

Tables 4 and 5 display the quantitative metrics mapping reported academic study focus and task motivation dimensions.

Table 4. Academic Concentration — Study Focus (n=53)

No	Item	Yes (n)	Yes (%)	No (n)	No (%)
C1.1	I find it hard to focus on studying English after playing Roblox	6	11.3	47	88.7
C1.2	My mind wanders to Roblox while attending English class or studying	6	11.3	47	88.7
C1.3	I feel restless or distracted when I have not played Roblox	0	0.0	53	100.0
C1.4	I struggle to maintain attention during English lectures after long sessions	6	11.3	47	88.7

Table 5. Academic Concentration — Academic Motivation (n=53)

No	Item	Yes (n)	Yes (%)	No (n)	No (%)
C2.1	I delay or postpone studying because I want to play Roblox first	12	22.6	41	77.4
C2.2	Playing Roblox reduces my motivation to complete my English tasks	9	17.0	44	83.0
C2.3	I feel mentally exhausted after a long session and cannot study effectively	6	11.3	47	88.7
C2.4	My English performance has been negatively affected by time spent on Roblox	9	17.0	44	83.0

To the statistical relationship between the variables beyond basic descriptive statistics, a Spearman rank correlation coefficient (ρ) was calculated. This non-parametric test analyzed the association between global Roblox Usage Intensity (X) and total English Language Learning Engagement/Concentration Impact (Y).

The analysis revealed a weak, non-significant correlation ($\rho = 0.18, p > 0.05$). This indicates that an increase in recreational gaming frequency or duration does not reliably lead to a decline in language learning concentration or academic motivation. Ultimately, usage intensity alone is an insufficient predictor of academic impairment, pointing instead of toward complex variables such as individual self-regulation capacity and localized social dynamics.

3.1.2 Interview Results

The thematic analysis of the transcripts generated from all 53 participants yielded five primary structural themes. To anchor these insights directly in empirical proof, each theme is supported by verbatim narrative data linked to anonymous participant alphanumeric codes.

Theme 1: Roblox as Social, English-Mediated Recreation

Participants consistently framed their engagement as a highly social, peer-driven experience rather than an isolated habit. Furthermore, they noted interacting with English-only interfaces as a completely natural aspect of play.

"I usually play Roblox when I am free or when a friend invites me. I rarely play alone." (Respondent P12).

"I play 2–3 times a week, usually for refreshing after finishing assignments or when I want to socialize casually with friends." (Respondent P34).

"During semester holidays I played almost every day, but since classes started again I rarely play. What motivates me is playing together with friends, without them, there is no fun." (Respondent P45).

Theme 2: Moderate to High Session Duration with Limited Self-Regulation Difficulty

The narratives suggested that while immersive group dynamics frequently extended sessions beyond two hours, students generally maintained the capacity for detachment.

"Usually one session lasts 1–3 hours. What makes it hard to stop is the varied gameplay and the interaction with friends, time passes without you realizing it." (Respondent P05).

"Usually about 2 hours, but the longest session I ever had was 9 hours, what made it hard to stop was getting really into it with friends." (Respondent P22).

Theme 3: Minimal Direct Academic Disruption but Occasional Boundary Blurring

Although students effectively isolated gaming from active study time, prolonged short break occasionally occurred, resulting in targeted procrastination on language tasks.

"I have opened Roblox in between classes or before doing a task, I only intended to play for a moment, but because the gameplay is engaging and I was interacting with friends, the playing time ended up longer than planned." (Respondent P19)

"Yes, I once forgot to submit an assignment because I was playing Roblox." (Respondent P08).

Theme 4: Self-Regulation Strategies and Perceived Academic Impact

A structural pattern of task sequencing emerged, where the majority of participants intentionally resolved language tasks prior to executing gameplay.

"I only play after all assignments are done. If there is still unfinished work, I focus on that first." (Respondent P41)

"Before and during midterm and final exams, I always delete the Roblox app from my phone so I can stay focused on studying." (Respondent P14).

Theme 5: Incidental English Language Exposure Through Gameplay

In direct alignment with TELL parameters, participants noted that real-time textual and strategic interactions pushed them to keep learning outside of class.

"Roblox is not just entertainment, through it, I have built connections with many people and even earned some income. If used wisely, the platform can be beneficial for developing relationships, even internationally." (Respondent P50)

"Playing Roblox helps me because everything is in English, I have to read the instructions, understand other players' messages, and respond quickly. It is different from studying English in class, but I think it still helps." (Respondent P29).

3.1.3. Mixed-Methods Synthesis

To fulfill the rigor of a Sequential Explanatory Design, Table 6 provides a formal Joint Display to explicitly demonstrate how the quantitative data trends converge, complement, or expand upon the qualitative interview insights.

Table 6. Mixed-Methods Synthesis Joint Display

Quantitative Finding (n=53)	Qualitative Theme & Supporting Narrative Evidence	Integrative Synthesis (Convergence/Divergence)
5.7% (n=3) play during class hours; 47.2% (n=25) play on weekdays.	Theme 1 & 3: Play is restricted to social downtime or post-assignment breaks. <i>"I play... for refreshing after finishing assignments"</i> (P34).	Convergent: Both datasets confirm strict structural separation between formal class hours and recreation, keeping direct distraction minimal.
58.5% (n=31) spend >2 hours/session; 47.2% (n=25) lose track of time.	Theme 2: Group socialization and collaborative mechanics naturally drag out sessions. <i>"What makes it hard to stop is the... interaction with friends"</i> (P05).	Complementary: The qualitative narratives explain <i>why</i> the quantitative duration is high: it is driven by peer engagement, not isolated compulsion.
22.6% (n=12) report procrastination; 100% (n=53) deny restlessness without play.	Theme 3 & 4: Delaying study is used as temporary mood regulation, but students retain high structural control. <i>"I only play after all assignments are done"</i> (P41).	Convergent: Confirm total absence of clinical dependency or withdrawal symptoms (100%: No), pinpointing procrastination as a behavioral choice rather than an addiction.
Spearman Correlation (rho = 0.18, p > 0.05) indicates no linear impairment.	Theme 5: Gameplay requires active English literacy and real-time negotiation. <i>"Everything is in English — I have to read... and respond quickly"</i> (P29).	Expansion: Explains the lack of linear negative correlation: the academic risks of gameplay duration are counterbalanced by the linguistic gains of immersive TELL exposure.

3.2. Discussion

The empirical findings across both data strands demonstrate that recreational Roblox usage among university students is predominantly socially driven and recreationally motivated, rather than compulsive or addictive. The majority of respondents play when invited by peers and describe the platform as a tool for refreshment. This finding partially diverges from the broader gaming addiction literature, which routinely characterizes online gaming among higher education students as a significant risk behavior (Kuss & Griffiths, 2019; Sun et al., 2023). The distinction in this sample lies in the social-contextual framing of

Roblox use. Specifically, respondents play with friends, stop when sessions reach a natural conclusion, and rarely engage with the platform in solitary circumstances. This social structure functions as an organic behavioral regulator, limiting isolated excessive play.

The questionnaire findings indicate that most respondents do not experience significant disruption to their academic concentration. The unanimous lack of psychological restlessness (Item C1.3) is particularly significant, as restlessness when not gaming is a primary behavioral indicator of dependency (Griffiths, 2021). However, this findings should not be interpreted as dismissing risk entirely. Procrastination was reported by 22.6% of respondents, and the interview data reveals episodes of boundary-blurring. These instances are consistent with research demonstrating that unmanaged gameplay can shift study habits and increase distractibility (Punzalan et al., 2025; Demir & Kutlu, 2018).

The most trustworthy finding for TELL scholarship is the participants' consistent self-reporting of incidental English language exposure through recreational Roblox gameplay. The platform's English-dominant interface, English-only communication channels, and English game instructions create sustained, meaning-focused exposure to authentic English language input that aligns with Krashen's (1985) Input Hypothesis. Several respondents explicitly identified their Roblox gameplay as a valuable source of English vocabulary and communicative practice. Although these represent perceived language gains rather than empirically measured acquisition outcomes, this aligns with a growing body of research on digital game-based language learning (DGBLL) and out-of-school English exposure. For instance, Sundqvist and Sylvén (2016) demonstrated that students who regularly engaged with English-medium digital games outperformed peers on vocabulary measures, while Reinhardt and Sykes (2014) identified games as rich environments for authentic language use and the negotiation of meaning. The present study extends these findings to the Indonesian EFL university context, suggesting that recreational Roblox engagement can serve as an informal complement to formal instruction, a possibility that warrants further investigation with objective language outcome measures.

Among all concentration items, procrastination recorded the highest affirmative response at 22.6% (n=12). For EFL students in particular, this delay is consequential. Language learning requires consistent and cumulative practice, and even moderate breaks from reading, writing, or listening tasks can hinder language fluency development. The interview data provides valuable context: respondents do not typically frame procrastination as a loss of control, but rather as a deliberate mood-regulation strategy. They use Roblox to improve their psychological state before returning to language study. While this strategy may work well for students with strong self-discipline, it can cause more serious disruption for those struggle for self-regulation.

This dual role of Roblox relationship to English learning functioning simultaneously an informal language environment and a distraction, — has clear implications for EFL pedagogy. To capitalize on these insights, EFL instructors in Indonesian universities must break the deficit-based paradigm that dismisses gaming as a distraction. Instead, they should adopt an integrative framework that leverages out-of-school TELL exposure through three actionable strategies:

3.2.1. Informal Game-Based Vocabulary Logs: Educators can implement low-stakes formative tasks where students document 5–10 unfamiliar vocabulary words, idiomatic expressions, or slang phrases encountered during recreational Roblox sessions. Students record the structural context in which the word appeared and present it in peer circles, bridging informal acquisition with formal morphological analysis.

- 3.2.2. Reflective Digital Communication Diaries: Students can maintain brief written reflections detailing real-time communicative interactions or strategic problem-solving scenarios executed on international servers. This task encourages meta-cognitive awareness of pragmatic adjustments and negotiation of meaning (Long, 1996), elevating invisible play into intentional literacy development.
- 3.2.3. Targeted Digital Wellness Self-Regulation Modules: Language departments should integrate short, interactive digital wellness workshops within introductory courses. These modules should guide students to deploy practical self-regulation habits. Example, include using hard time-blocking apps, deleting gaming apps during high-stakes examination weeks (as highlighted in Theme 4), and practicing deliberate task sequencing (such as completing language tasks before opening game clients) to preemptively mitigate the risks of procrastination.

As an exploratory inquiry, several empirical limitations and internal/external validity threats must be explicitly reported to contextualize the generalizability of the insights:

- 3.2.1. Sample Scale and Scope: The study's sample is confined to 53 undergraduate students at a single institution, utilizing a purposive approach targeting non-English majors. While optimal for descriptive mixed-methods depth, the sample size limits direct statistical generalizability to larger, macro-level university populations across Indonesia.
- 3.2.2. Self-Report and Social Desirability Bias: The data relies on self-reported survey instruments and face-to-face qualitative interviews. This introduces potential internal validity threats via recall bias or social desirability bias, where students might underestimate their total weekly gameplay hours or downplay the perceived negative impacts of gaming on their academic performance.
- 3.2.3. Game-Context and Server Variability: Roblox is not a monolithic game, but a sprawling metaverse containing thousands of custom, user-generated servers. The specific density, quality, and nature of English language exposure vary dramatically depending on whether a student frequents complex text-heavy roleplaying servers or fast-paced, mechanically driven mini-games requiring minimal textual interaction.

4. Conclusion

This study examined the relationship between recreational Roblox usage intensity and English language learning engagement among 53 university students. By employing a mixed-methods design, combining a dichotomous (Yes/No) questionnaire with semi-structured interviews, . The research resulted three main conclusions. First, university EFL students use Roblox primarily for social and recreational purposes. This informal engagement act as a natural behavioral moderator, naturally limiting the severe academic disruption which often associated with compulsive gaming. Second, rather than causing addiction or total concentration loss, the most important academic risk of Roblox is its tendency to blur boundaries. It quietly produces subtle patterns of procrastination in self-regulated academic environments. . Third, and most significant for the TELL field, recreational Roblox engagement may serve as a rich, informal site for incidental English language exposure. The platform's English-dominant interface, real-time text communication, and meaning-focused interactive gameplay appear to provide authentic language input and output that go unnoticed by students and language educators. Consequently, this positions recreational Roblox not merely as a behavioral variable to be managed, but as a language learning phenomenon warranting for further empirical investigation, acknowledgement, and pedagogical integration into EFL.

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Declaration of AI Use/Disclosure Statement

Artificial Intelligence (AI) tools, specifically large language models, were utilized during the final preparation phase of this manuscript solely for language optimization, editing support, and structural alignment with the journal template formatting requirements. The core conceptual development, research methodology design, field data generation, and analytical interpretations remain completely the original work and intellectual responsibility of the authors.

References

- Abdullah, A., & Abdullah, N. F. (2025). Gamification in Digital Learning via Roblox Platform: A pathway in Developing 21st Century Skills at Higher Education Level. *International Journal of Research and Innovation in Social Science (IJRISS)*, IX(XXV), 203-208. DOI: 10.47772/IJRISS.2025.925ILEIID000038
- Alhasan, K., Alhasan, K., & Al Hashimi, S. (2023). Roblox in Higher Education: Opportunities, Challenges, and Future Directions for Multimedia Learning. *International Journal of Emerging Technologies in Learning (iJET)*, 18(19), 32-46. DOI: <https://doi.org/10.3991/ijet.v18i19.43133>
- Alzahrani, A. K. D., & Griffiths, M. D. (2025). Problematic Gaming and Students' Academic Performance: A Systematic Review. *International Journal of Mental Health and Addiction*, 23, 4062–4095. DOI:10.1007/s11469-024-01338-5
- Ani, S., Ghazali, N., Ali, M., Shin, K., Subramaniam, M., & Shafii, N. (2023). The Effects of Online Games on Student's Academic Performance. *International Journal of Academic Research in Business and Social Sciences*, 13. DOI:10.6007/IJARBSS/v13-i7/17383
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Busto, Hannah Aurora & Fabila, Crislan & Ortiz, Gwyneth Selwyn Zoe & Gamo, Marvin & Mag-Isa, Joan. (2025). Impact Analysis of Playing Roblox on the Problem-Solving Skills and Emotional Regulation of Children. *Cognizance Journal of Multidisciplinary Studies*. 5. 10.47760/cognizance.2025.v05i10.021.
- Callada, E. J., De Luna, M. A. A., Jabal, D. D. A., Padilla, A. J. B., & Rapsing, A. N. (2024). Effects of Roblox mobile game on the academic performance of selected elementary students at Rosa L. Susano Elementary School. *Ascendens Asia Singapore — Bestlink College of the Philippines Journal of Multidisciplinary Research*, 3(2). Retrieved from : <https://ojs.aaresearchindex.com/index.php/aasgbcjpmra/article/view/13418>
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Thousand Oaks, CA: SAGE .
- Demir, Y., & Kutlu, M. (2018). The relationship between loneliness and depression: Mediation role of internet addiction. *Educational Process: International Journal*, 7(1), 13–24. DOI: 10.12973/edupij.2016.52.1

- Han, M., Liu, Y., & Gao, X. (2023). Learners in the metaverse: A systematic review on the use of Roblox in learning. *Education Sciences*, 13(3), 296. DOI:10.3390/educsci13030296
- Jin, S. (2024). Experiential learning through the Roblox metaverse platform: Investigating its effect on English language learners' learning flow and academic achievement. *English Language & Literature Teaching*, 30(2), 153–172. DOI:10.35828/etak.2024.30.2.153
- Karlina. (2026). Roblox and Education: A Possibility or a Danger for the Digital Age. *Journal of Education and Applied Teaching (JEAT)*, 2(2), 167–175. Retrieved from : <https://journal.horizonedukasipublisher.com/jeat/article/download/37/34>
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. London:Longman.
- Kuss, D. J., & Griffiths, M. D. (2019). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), 311. Retrieved from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC5369147/>
- Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 413-468). New York:Academic Press.
- Merriam, S. B., & Tisdell, E. J. (2025). *Qualitative research: A guide to design and implementation* (5th ed.). USA: John Wiley & Sons.
- Ratinho, E., & Martins, C. S. (2023). The role of gamified learning strategies in student's motivation in high school and higher education: A systematic review. *Heliyon*, 9(8), e19033. <https://doi.org/10.1016/j.heliyon.2023.e19033>
- Reinhardt, J., & Sykes, J. M. (2014). Special issue commentary: Digital game and play activity in L2 teaching and learning. *Language Learning & Technology*, 18(2), 2–8. Retrieved from: <https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/85cf7351-7317-43e5-b8e2-dd0a30c9b466/content>
- Sun, R. Q., Sun, G. F., & Ye, J. H. (2023). The effects of online game addiction on reduced academic achievement motivation among Chinese college students: The mediating role of learning engagement. *Frontiers in Psychology*, 14, 1185353. <https://doi.org/10.3389/fpsyg.2023.1185353>
- Sundqvist, P., & Sylvén, L. K. (2016). *Extramural English in teaching and learning: From theory and research to practice*. Palgrave Macmillan. <https://doi.org/10.1093/elt/ccy051>
- Zhang, H., Liu, Y., & Chen, W. (2024). Effects of digital game-based learning on student's problem-solving ability: A three-level meta-analysis. *Journal of Computer Assisted Learning*, 40(2), 456–478. DOI:10.1111/jcal.70002