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THE NEXUS BETWEEN MOBILE GAME USAGE AND STUDENT ACADEMIC PERFORMANCE OF MANAGEMENT STUDENTS AT THE UNIVERSITY LEVEL IN KATHMANDU

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ABSTRACT

This study examines the relationship between online gaming frequency and academic performance among university-level students in Kathmandu Valley. With the growing use of mobile phones and digital technology, students increasingly socialize through online platforms, including mobile games. Using a descriptive and causal research design, data were collected from 300 MBA, BBA, and BBS students through a purposive sampling technique and analyzed using statistical tools like correlation and regression. The findings reveal that while the impact of online gaming frequency on academic performance is minor, it varies by gender. The study recommends awareness programs for students, parents, and teachers to understand the positive and negative impacts of online gaming. Teachers are encouraged to incorporate educational games to enhance critical thinking and analytical skills. Future research should explore additional factors affecting academic performance with a larger, more diverse sample size for deeper insights

Keywords: *Mobile game, Younger generation, Socialization process, Online gaming frequency, and Students' academic performance*

Introduction

Approximately 73% of Nepali citizens own smartphones, and the country's mobile phone user base continues to expand annually. According to a report, smartphone ownership varies across provinces: 74.2% in Koshi Province, 66.9% in Madhesh Province, 80% in Bagmati Province, 77.8% in Gandaki Province, 75.5% in Lumbini Province, 58.4% in Karnali Province, and 62.67% in Sudurpaschim Province (MyRepublica, 2024).

Digital technology has had a significant effect on the lives of young people, especially on the lives of students. They socialize through mobile and online interaction. Spending time on technological gadgets is an essential component of

their daily lives. This attraction to the digital environment inhibits their academic concentration (Arockiyasamy et al., 2016). Online video games have become increasingly popular among college students due to their intricate design and immersive features, including detailed gameplay, lifelike graphics, and captivating sound effects (Eskasasnanda, 2017). However, excessive time spent playing online games often correlates with poor academic performance, reduced focus, and limited social interactions (Lin et al., 2013).

The rapid advancement of technology has transformed how individuals consume entertainment. While various innovations such as high-definition television, social media platforms like Facebook and YouTube, and 3D technologies have gained prominence, video gaming has emerged as one of the most significant technological phenomena among youth (Wright, 2011).

Digital game-based learning has introduced a novel approach by integrating instructional content with video games, catering to diverse learning styles and behaviors (Turner et al., 2018). Such games, purposefully designed for educational objectives, have evolved alongside interactive electronic media, becoming a dominant form of entertainment for college students in the past few decades (Craton, 2011).

Furthermore, video gaming and internet usage are now integral to the daily lives of adolescents, with gaming serving as a primary leisure activity in many developed nations. According to Ip and Jacobs (2008), gaming frequency is not solely defined by controlled or educational settings but also encompasses habitual gaming as a recreational activity.

In Nepal, mobile game addiction has emerged as a pressing concern, particularly among young children. Parents often provide mobile devices to entertain their children, engaging them in activities such as watching videos or playing games during meal times (Kabali et al., 2015). In some cases, parents resort to this practice due to their demanding schedules. Over time, this initial exposure transforms into habitual use, evolving from simple video watching to prolonged mobile gaming. Unfortunately, such habits can escalate into full-blown addiction, leaving parents struggling to disrupt the cycle. Despite their efforts, children often remain engrossed, and the detrimental effects become evident in their academic performance, with poor grades and failures becoming common outcomes (Finn & Rock, 1997). Teachers, too, observe these students as distracted and disinterested in studies, further exacerbating the issue within the classroom environment.

Nepali students are commonly drawn to a wide range of mobile games. Popular titles include battle royale games like *PUBG* and *Free Fire*, MOBA games like *DOTA*, casual games such as *Candy Crush Saga* and *Subway Surfers*, and board games like

Ludo King. Sports enthusiasts prefer games like *FIFA Mobile* and *Real Cricket*, while strategy and simulation games such as *Clash of Clans* enjoy widespread appeal (Dyer-Witheford & De Peuter, 2009). These gaming preferences reflect the diverse interests of students, highlighting the significant role mobile gaming plays in their daily lives.

As mobile games grow increasingly accessible and engaging, their ability to distract students during educational activities has become a growing concern. Studies investigating the relationship between screen time and attention span (Espiritu, 2016) emphasize the disruptive impact of mobile gaming on education. Increased time spent gaming daily correlates with a higher likelihood of developing gaming addiction, whereas a higher level of education tends to reduce this risk (Esposito et al., 2020; Kesici, 2020). Furthermore, the COVID-19 pandemic witnessed a marked rise in adolescents' video game usage and the prevalence of online gaming disorders (Teng et al., 2021). Extensive research on smartphone overuse and academic performance highlights the negative consequences of excessive screen time, with adverse effects ranging from diminished attention spans to reduced academic achievement (Durak, 2018; Mendoza et al., 2018; Rozgonjuk et al., 2018).

Inappropriate use of mobile devices has also contributed to significant distractions, diverting individuals from focusing on essential tasks or goals (Bakos & Treacy, 1986; Stephens & Davis, 2009). While students often claim they can multitask effectively during lectures, research disproves this notion, as multitasking correlates with lower academic performance and poor achievement scores (Dance, 2013; Peters & Peters, 2001). Teachers frequently express disapproval of device usage in classrooms, further reinforcing the detrimental impact of mobile gaming on academic success.

The impact of video game habits, both positive and harmful, on diverse behaviors is still hotly debated (Kaur & Lavleen, 2017). Students learn unexpectedly, yet excessive internet gaming use causes issues, such as distraction in class. Furthermore, where the child's attention is divided, their health and social lives are unwittingly damaged (Dumrique & Castillo, 2017). Every generation is distinct from the previous one, and some generational gaps have been tiny. However, rapid technological advancements are exacerbating generational divides. For example, communication today is significantly different from only a few years ago, and our culture's language is altering to reflect this developing revolution (Starkey, 2013). Today's developments in science and technology significantly impact our way of life. They have enforced numerous modifications in all sectors of life. In education, a new generation of tech tools has been created to replace old ways of teaching and help students learn better. Most modern classrooms contain computers, allowing instructors and academics to use ICT to improve teaching and learning

(Mahmoudi, Koushafar, Saribagloo, & Pashavi, 2014). The study showed that engagement in social media has a negative relationship with students' academic performance. However, most students feel its use should not be stopped (Hamal, 2021). A research problem is a clear statement about an area of concern, a situation that needs to be fixed, a problem that needs to be solved, or a troubling question in scholarly literature, theory, or practice. The study examines the relationship and effect of gaming frequency on students' academic performance.

Review of Literature

Theory

The **Online Game Interactivity Theory**, proposed by Michael Friedl in 2002, is highly relevant to your study as it provides a theoretical foundation to understand the relationship between **mobile game use** (independent variable) and **students' academic performance** (dependent variable). Friedl's theory emphasizes the importance of interactivity in online games, identifying three types of interactions—**player-to-computer interaction**, **player-to-player interaction**, and **player-to-game interaction**—which directly influence the behavior and engagement of players (Friedl, 2002). These interactions explain how mobile games capture attention, foster engagement, and shape habits, ultimately affecting academic outcomes.

The concept of **player-to-game interaction** sheds light on how mobile games like *PUBG*, *Free Fire*, and *Clash of Clans* immerse students in virtual worlds that demand cognitive engagement and strategic decision-making. This high level of involvement often detracts from the time and energy students can devote to academic tasks such as studying or completing assignments (Friedl, 2002; Dumrique & Castillo, 2017). For example, the need to solve in-game challenges or advance levels requires sustained attention, which may compromise students' ability to focus on their academic responsibilities. This aspect of Friedl's theory aligns with findings that frequent gaming correlates with lower classroom engagement and reduced academic performance (Hamal, 2021).

Similarly, **player-to-player interaction**, a key component of multiplayer games, fosters collaboration and social connections among players. While this interaction can enhance teamwork and communication skills, it can also lead to social distractions, particularly when students prioritize gaming interactions over their studies (Friedl, 2002). Games like *Clash of Clans* and *DOTA* exemplify this, as they require players to collaborate with teammates or compete against opponents, consuming significant amounts of time and mental effort (Lin, Hsu, & Wu, 2013). These distractions can result in procrastination and negatively impact students' academic performance.

The role of **player-to-computer interaction** is equally important in understanding how gaming habits influence academic outcomes. Many mobile games use reward systems and interactive feedback mechanisms to sustain engagement and motivate players. While these systems enhance the gaming experience, they also create addictive patterns that lead to excessive gaming at the expense of educational activities (Friedl, 2002). For instance, students may spend hours gaming to achieve in-game rewards, leading to sleep deprivation and insufficient time for academic preparation. This phenomenon highlights the negative impact of mobile games on students' ability to perform well academically (Kaur & Lavleen, 2017).

Friedl's emphasis on **complexity management** in game design also resonates with your study. The immersive nature of mobile games, driven by complex interactions and decision-making processes, often results in poor time management among students. Balancing academic responsibilities with gaming becomes a challenge, particularly when students are deeply engrossed in multiplayer or strategy-based games (Friedl, 2002). This aligns with research showing that increased time spent gaming reduces students' academic focus and performance (Turner, Johnston, Kebritchi, Evans, & Heflich, 2018).

Finally, the theory's focus on technological advancements in game design helps explain the behavioral shifts observed in students who frequently use mobile games. The seamless integration of features like virtual communities, real-time multiplayer interactions, and visually stimulating interfaces appeals to students and fosters habitual gaming behaviors (Friedl, 2002; Teng, Pontes, Nie, Griffiths, & Guo, 2021). These behaviors often disrupt students' study routines, reducing their ability to achieve academic success. However, Friedl's insights also suggest that the interactive features of mobile games could be leveraged for educational purposes, such as improving problem-solving skills and strategic thinking, under controlled circumstances.

In conclusion, the **Online Game Interactivity Theory** provides a comprehensive framework to understand how mobile games influence students' academic performance. The theory's exploration of player-to-game, player-to-player, and player-to-computer interactions highlights the mechanisms through which mobile games captivate users and shape their habits. These principles directly relate to your study by explaining how mobile game use impacts students' ability to focus, manage time, and excel academically, either positively or negatively. By applying Friedl's theory, your study can explore these interactions in depth, providing valuable insights into the relationship between mobile gaming and academic outcomes.

Kuss and Griffiths (2012) explored the impact of mobile game addiction on academic performance by synthesizing findings from studies across various

countries and age groups. Their research highlighted a consistent pattern: excessive mobile game use is strongly linked to lower academic achievement. The study delved into the underlying mechanisms, revealing how addiction can negatively influence cognitive abilities and disrupt study habits. Similarly, Schmidt and Vandewater (2008) examined the relationship between mobile gaming and academic engagement. Their review assessed how students' involvement in mobile gaming affects their participation in academic activities and their attitudes toward learning. The study also analyzed the complex connections between gaming, classroom behavior, and overall academic outcomes.

Lissak (2018) provided a comprehensive review that went beyond gaming addiction to examine the broader effects of screen time, including mobile gaming, on students' academic performance. The research focused on how prolonged screen exposure affects study habits, attention spans, and academic success, offering a holistic perspective on the consequences of excessive mobile game use in the context of overall screen time. Kildare and Middlemiss (2017) studied parental perceptions and interventions regarding the impact of mobile gaming on children's academic progress. Their qualitative research highlighted parental concerns, the challenges they face in regulating gaming habits, and the role of parental involvement in mitigating gaming's negative effects on academic performance.

Elsherbiny and Al Maamari (2021) investigated the dual nature of mobile games and educational applications, comparing the potential benefits of app-based learning with the distractions posed by mobile games. Their study identified specific aspects of mobile games that hinder academic performance while emphasizing the educational potential of apps designed for learning. Similarly, Blinka and Mikuka (2014) explored the Internet as a medium for entertainment through online computer games, noting their immense popularity and the significant changes they brought to leisure activities. Zamani et al. (2009) highlighted the dual impact of computer games, acknowledging their potential benefits while cautioning against excessive play, which can lead to physical and mental health issues, including anxiety.

Sherry et al. (2001) examined why adolescents aged 15 to 20 in the western United States were drawn to video and computer games. They found that adolescents, particularly boys, regarded these games as their primary source of entertainment due to the thrills, challenges, and competitive nature of the games. Boys especially preferred games that involved physical conflict and competitive sports. Scott (2013) argued that while online games could provide entertainment, they also posed risks, including addiction, aggression, and physical injuries. The study highlighted the global prevalence of online gaming addiction and the need for interventions to address its adverse effects.

Ballarotto, Volpi, and Tambelli (2018) investigated how emotionally stimulating events, including playing online video games, affect brain development, particularly in adolescents. Their research focused on the prefrontal cortex and the limbic system, highlighting how online games influence brain function. Similarly, Eren and Orsal (2018) discussed the widespread use of the Internet for various activities, including gaming, and its potential to lead to excessive use and addiction, particularly among children and young adults.

Granie et al. (2014) noted that in the United States, 91% of children aged 2 to 17 play video games, with 99% of boys and 94% of girls engaging in gaming. While research on the positive effects of video games is limited, the study acknowledged the potential benefits of gaming, such as fostering problem-solving skills and social interaction. However, Ip et al. (2008) found that higher gaming time negatively correlated with examination scores, suggesting that excessive gaming can detract from academic success. Canarias (2019) echoed this sentiment, reporting that while mobile gaming can enhance cognitive skills and problem-solving abilities, it ultimately has a detrimental effect on students' overall academic performance.

Conceptual Framework

According to the literature review, various factors affect students' academic performance. The study's dependent variable was how well students did in school, and its independent variable was how often they used the Internet. The relationship between these variables can be summed up as follows:

Source: (Manandhar & Timalsena,2023)

Hypothesis

H1 : There is a significant relationship between mobile game use and students' academic performance.

H2 : There is an effect of mobile game use on students' academic performance

Research Methodology

This study is both descriptive and analytical in design. BBA and BBS students were the focus of the study, and 300 respondents from three management colleges in the Kathmandu Valley were selected at random to give accurate data for the study. The information and data for the study were gathered via a questionnaire survey based on primary data. The questionnaire was created using a Likert scale with 5 points, ranging

from strongly disagree to strongly agree. The participants in this study were college-level students ofMBA, MBS, BBA and BBS in the Kathmandu Valley. As part of this survey, 370 questionnaires were distributed, but 320 questionnaires were returned, and 300 were valid, translating to a response rate of 86%. The questionnaires have been entered into an SPSS 26 spreadsheet. The data were analyzed and interpreted using the measures mean, median, standard deviation, variance, independent sample t-test, regression, and correlation to examine the result.

Table 1

Reliability results of study variables

S.N.	Variables	Cronbach's Alpha
1	Mobile game use frequency	0.795
2	Students' academic performance	0.767

Source: Field Survey, 2024

The Cronbach's alpha for students' academic performance is 0.767, while the value for mobile game use is 0.795. Cronbach's alpha for each table's variables is greater than 0.750. That demonstrates that all of the study's components are consistent. This analysis employed the subsequent regression model.

$$SAP = \beta 0 + \beta 1 Mgu + er,$$

Where,

SAP : Students' academic performance

β0 : Constant

MGUF : **Mobile game use frequency**

Data Analysis and Results

Table 2

Gender of respondents

Gender	Frequency	Per cent	Cumulative Per cent
Male	97	32.33%	32.33%
Female	203	67.66%	100%
Total	**300**	**100.00%**	

Source: Field Survey, 2024

Out of the total 300 respondents, 97 (32.33%) were male, while 203 (67.66%) were female. This gender distribution highlights a predominance of female participants in the sample. Such a composition may reflect the broader representation of females in the target population or their higher likelihood of participation in the study. It is also relevant to note that this gender imbalance could influence certain findings, particularly those related to gaming habits and academic performance, as gender differences in gaming behaviors are well-documented.

Table 3

Education level of respondents

Education Level	Frequency	Per cent	Cumulative Per cent
Bachelor	190	63.33%	63.33%
Master	110	36.66%	100%
Total	**300**	**100%**	

Source: Field Survey, 2024

The majority of the respondents (63.33%) were pursuing or had completed a bachelor's degree, while 36.66% were at the master's level. This suggests that the sample primarily consisted of undergraduate students, who are typically in the age group most associated with high engagement in mobile gaming. The focus on younger individuals with diverse educational levels ensures that the study captures relevant insights about gaming habits and their academic implications across a significant stage of educational development.

Table 4

The age group of respondents

Age Group	Frequency	Per cent	Cumulative %
Below 20	100	33.33%	33.33%
20-25	110	36.66%	70%
25-30	90	30%	100%
Total	**300**	**100%**	

Source: Field Survey, 2024

The age distribution shows that 33.33% of the respondents were below 20 years old, 36.66% were aged between 20–25 years, and 30% were aged between 25–30 years. This breakdown reflects a predominantly young sample, with 70% of the respondents under the age of 25. Younger age groups are more likely to engage in mobile gaming due to their familiarity with technology and greater free time, making this sample well-suited to investigate the impact of gaming on academic performance.

Table 5

Preferences regarding playing games among respondents

	Responses		
Statements	**N**	**Percent**	**%**
DOTA	20	6.66%	6.66%
PUBG	90	30.00%	36.66%
Freefire	60	20.00%	56.66%
Ludo	70	23.33%	79.99%
Chess	10	3.33%	83.44%
Candy Crush	50	16.66%	100%

Source: Field Survey, 2024

The most popular game among respondents was **PUBG (30%)**, followed by **Ludo (23.33%)** and **Free Fire (20%)**. Other games, such as **Candy Crush (16.66%)**, **DOTA (6.66%)**, and **Chess (3.33%)**, were less commonly played. The variety of games indicates diverse gaming preferences among respondents, ranging from casual games like *Candy Crush* to competitive and team-based games like *PUBG* and *DOTA*. The popularity of PUBG and Free Fire highlights a preference for battle royale games among the respondents, likely due to their immersive and interactive gameplay. The cumulative percentage exceeding 100% indicates that many respondents play multiple games, suggesting that gaming habits are not confined to a single genre.

Table 6

Intentions to play online games

Features	Rank 1		Rank 2		Rank 3		Rank 4		Md	Rank
	No	%	No	%	No	%	No	%		
I like graphics/realism	60	20.00%	20	6.70%	32	10.70%	58	19.30%	4.0	4
I can play any time when I'm bored	20	6.70%	16	5.30%	156	52.00%	82	27.30%	3.0	3
It changes my mind	98	32.70%	136	45.30%	32	10.70%	28	9.30%	2.0	1
It is such a great achievement to finish the game	70	23.30%	100	33.30%	62	20.70%	6	2.00%	2.0	2
Total	**300**	**100%**	**300**	**100%**	**300**	**100%**	**300**	**100%**		

Source: Field Survey, 2024

Respondents identified several reasons for playing online games. The most highly ranked reason was **"It changes my mind" (32.70%)**, reflecting the emotional and psychological relief that gaming provides. The second-highest motivation was **"It is such a great achievement to finish the game" (23.30%)**, highlighting the sense of accomplishment derived from gaming. Lower-ranked reasons included **graphics/realism (20.00%)** and **boredom relief (6.70%)**, indicating that while visual appeal and convenience matter, the primary drivers of gaming are emotional engagement and the sense of progress or achievement. This data provides insight into why individuals play games and how these motivations can influence gaming habits.

Table 7

Independent sample T-test

Variable	Gender	Number	Mean	SD	P-Value
mobile game use frequency	Male	97	3.56	0.724	0.003
	Female	203	3.11	0.898	
Students' academic performance	Male	97	3.03	0.693	0.024
	Female	203	3.31	0.621	

The independent sample t-test revealed significant gender differences in both mobile game use and academic performance:

- **Mobile game use frequency** Male respondents (mean = 3.56) reported significantly higher engagement in mobile gaming compared to females (mean = 3.11), with a p-value of 0.003. This finding aligns with existing research suggesting that males are more likely to engage in gaming activities.
- **Academic Performance:** Female respondents (mean = 3.31) performed significantly better academically than males (mean = 3.03), with a p-value of 0.024. This indicates that female students exhibit better academic outcomes, potentially due to less engagement in gaming or better time management skills.

Correlation Analysis

The correlation between the dependent and independent variables is now measured by the person's method.

Table 8

Correlation coefficients

Variables	GF	SAP
MGUF	1	
SAP	0.472 P = 0.003	1

Source: Field Survey, 2024

The correlation analysis using Pearson's method shows a moderate positive correlation (r = 0.472, p = 0.003) between mobile game use frequency (MGUF) and students' academic performance (SAP). While the relationship is statistically significant, the moderate correlation coefficient suggests that gaming frequency alone is not a strong predictor of academic performance. This result underscores the need to consider additional factors that may mediate or moderate the relationship between gaming and academic outcomes.

Regression result

Table 9

Regression Table with Model Summary

	B	Std. Error	Beta	t	P-Value
(Constant)	2.600	0.195		13.042	0.001
MGUF	0.072	0.045	0.120	0.120	1.600

Source: Field Survey, 2024

Table 9 provides detailed insights into the regression analysis conducted to evaluate the impact of **mobile game use frequency (MGUF)** on **students' academic performance (SAP)**.

- **Constant (B = 2.600):** The constant represents the baseline level of academic performance when mobile game use is not considered. This means that students' academic performance would be at a baseline value of 2.600 if there were no influence from gaming frequency.
- **Mobile Game Use Frequency (B = 0.072):** The regression coefficient for MGUF is 0.072, indicating a weak positive relationship between mobile game use and academic performance. This suggests that for every unit increase in mobile game use, there is a minimal increase (0.072 units) in academic performance.
- **Significance (P = 0.120):** The p-value for mobile game use is 0.120, which is greater than the significance threshold of 0.05. This indicates that the relationship between gaming frequency and academic performance is statistically **insignificant**. Thus, the data does not provide sufficient evidence to conclude that mobile game use has a meaningful impact on academic outcomes.
- **Interpretation of T-value (t = 1.600):** The t-value indicates the strength of the relationship. The relatively low t-value suggests that the relationship between gaming and academic performance is weak.

Overall, while the regression analysis shows a weak positive relationship, the results are statistically insignificant, meaning that gaming frequency does not substantially or reliably predict academic performance.

Table: 10: Regression Table with Model Summary

Coefficient	Sig	R^2	F value	P-value
(Constant)	1.050	0.001		
MGUF	0.260	0.12	0.015	20.50

Table 10 expands on the regression results by summarizing the model's overall explanatory power and statistical outcomes.

- **Coefficient for MGUF (B = 0.260):** The coefficient here aligns with the findings in Table 9, suggesting a weak positive impact of mobile game use on academic performance. However, this relationship remains insignificant (p = 0.12).
- **R^2 Value (0.15):** The R^2 value indicates that only **15% of the variance** in students' academic performance can be explained by mobile game use. This low value demonstrates that mobile game use is not a strong determinant of academic performance and that other factors are likely more influential in explaining academic outcomes.

- **F-Value (20.50):** The F-statistic evaluates the overall significance of the regression model. Despite an acceptable F-value, the p-value (0.12) associated with mobile game use makes the model statistically insignificant, confirming that mobile gaming frequency does not significantly impact academic performance.

Summary of Hypothesis Testing

Hypothesis 1 (H1): There is a significant relationship between of **mobile game use frequency** and academic performance (Accepted).

The correlation analysis revealed a statistically significant positive relationship ($r = 0.472$, $p = 0.003$) between gaming frequency and academic performance. This indicates that students who game more frequently tend to exhibit some measurable impact on their academic outcomes. Although the relationship is weak, the statistical significance supports the hypothesis, showing that gaming frequency and academic performance are not independent of each other.

Hypothesis 2 (H2): There is a significant impact of of **mobile game use frequency** on students' academic performance (Rejected).

The regression analysis showed that the impact of gaming frequency ($B = 0.260$, $p = 0.12$) on academic performance is statistically insignificant. The p-value exceeds the conventional threshold of 0.05, indicating that gaming frequency does not significantly explain variations in academic performance. Additionally, the R^2 value (0.15) highlights that gaming frequency accounts for only 15% of the variance in academic performance, suggesting that other factors play a more substantial role in influencing students' academic outcomes.

Discussion and Conclusion

Discussion

The study identified a negative correlation between of **mobile game use frequency** and academic achievement. This aligns with the findings of Ip et al. (2008), who reported that higher gaming frequency is inversely associated with test scores, meaning frequent gamers tend to perform worse academically compared to less frequent gamers. Similarly, Zamani et al. (2009) highlighted that while short-term gaming can offer benefits, prolonged gaming may lead to physical and mental health issues, including symptoms of anxiety.

Interestingly, the study also found that gaming frequency does not directly impact students' academic performance in all contexts. Canarias (2019) emphasized that mobile gaming can impair academic performance but simultaneously enhance cognitive abilities, enabling students to solve both simple and complex problems.

However, the overall effect of mobile gaming on academic achievement remains detrimental (Canarias, 2019).

Additionally, research by Manandhar and Timilsena (2023) produced comparable results, suggesting that there is no relationship between of **mobile game use frequency** and academic performance.

Conclusion

The data highlights significant gender and age differences in gaming habits and academic performance, with males gaming more frequently but females performing better academically. The study reveals a moderate correlation between mobile game use frequency and academic performance but no significant direct impact, suggesting that other factors influence academic success. Respondents' gaming motivations primarily stem from emotional and psychological needs, such as stress relief and a sense of accomplishment. The findings provide valuable insights into the dynamics of gaming and academic outcomes, emphasizing the complexity of their relationship.

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