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GAMING ADDICTION AND ACADEMIC PERFORMANCE: A BATTLE FOR STUDENT SUCCESS

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Abstract: *This study investigates the relationship between gaming addiction and academic performance among students at Universiti Teknologi MARA (UiTM). With the rapid advancement of technology and the increasing accessibility of online gaming platforms, concerns regarding the impact of gaming on students' academic success have emerged. An online questionnaire was administered to gather data from 100 students, of which 68 responses were deemed suitable for analysis. The findings reveal a significant prevalence of gaming addiction among the respondents, with a notable correlation between excessive gaming and diminished academic performance. The study highlights the demographic characteristics of the participants, including gender, age, and educational level, which may influence the outcomes. The results underscore the need for awareness and intervention strategies to mitigate the adverse effects of gaming addiction on students' academic achievements.*

Keywords: *gaming, gaming addiction, academic performance*

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Introduction

The rapid growth of technology and global advancements are undeniable. Numerous social platforms and online gaming platforms, both free and paid, are readily accessible on our smartphones. Today, people use the Internet for various purposes, including business activities, personal interactions, leisure, and gaming (Gupta et al., 2024). However, the advancement of technology has also introduced new issues that didn't exist before. Smartphones, PlayStation Portables (PSPs), personal computers (PCs), and other gaming devices have become so popular that online games have easily integrated into the daily lives of university students. People typically play online games for enjoyment, thrills, adventure-seeking, emotional resilience, and as an escape from reality into virtual worlds to satisfy unmet desires or motives (Sun, Sun, & Ye, 2023).

While some studies (Cole & Griffiths, 2007; Blumberg et al., 2013) have demonstrated beneficial effects of gaming on mental and physical health, most research has focused on the negative consequences for gamers. Wan et al. (2014) linked excessive video gaming to several detrimental outcomes, including lack of sleep, reduced free time, insomnia, attention problems, poor academic performance, anxiety, depressive symptoms, deteriorating interpersonal relationships, family disputes, juvenile violence or criminality, lowered self-esteem, and decreased satisfaction with day-to-day living.

In recent years, addiction to online gaming has become a serious issue impacting the academic and personal lives of students. In 2018, the World Health Organization (WHO) added gaming addiction and gaming disorder to the list of mental disorders in the 11th revision of the International Classification of Diseases (ICD-11). This condition is characterized by a loss of control over other interests and regular activities, with continued or escalating gaming despite negative consequences. When people are unable to control their urge to play digital games, and gaming begins to affect their emotions, decision-making, or social life, it can lead to problematic or addictive gaming behavior (Griffiths & Davies, 2005; Young, 2009).

Mohammad, Jan, and Alsaedi (2023) stated in their research that excessive gaming can be classified as a behavioral addiction, which is similar to chemical addictions in nature but different in severity. Individuals with a chronic and recurring pattern of gaming behavior are known as gamers. According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), a gaming addict needs to meet at least five of the following nine criteria: (1) obsession with gaming to the point where it dominates daily activities; (2) experiencing anxiety, irritability, or sadness when not gaming; (3) persistently wanting to extend gaming sessions; (4) inability to limit or regulate gaming time; (5) neglecting other activities, such as daily routines, hobbies, or interests; (6) excessive involvement in gaming, leading to psychological and social issues; (7) lying to family members or others about gaming time; (8) using games as a diversion from bad moods; and (9) risking relationships, jobs, and educational or career opportunities due to gaming. Video game addiction is becoming an increasingly important global issue among young gamers (Ferguson, Coulson & Barnett, 2011).

The rising rate of gaming addiction among UiTM students affects their academic performance and future prospects in an increasingly competitive world. This highlights the importance of conducting research to examine the relationship between UiTM students' performance and gaming addiction. While many people, especially college students, find gaming to be a pleasurable and relaxing hobby, some may develop an addiction. Gaming addiction, characterized by an insatiable desire to play video games despite the potential negative impacts

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on one's life, can seriously affect a student's academic performance by making it harder to complete assignments, focus in class, and retain information. In extreme cases, gaming addiction can lead to students dropping out of college or failing their courses.

It's crucial to recognize that gaming addiction is a complex problem that can affect not only college students but also people in the workforce. Seeking treatment when necessary is essential. Because games can consume excessive attention and motivation, students may lose interest in their studies (Sahin, Gumus & Dincel, 2014). By being proactive in addressing gaming addiction and balancing their gaming with academic pursuits, students can reduce its negative effects on their academic performance and improve their quality of life.

Literature Review

Recent studies on the effects of gaming addiction on academic performance continue to highlight significant negative impacts, particularly in university settings. Sun, Sun & Ye (2023) in their study investigated the relationship between college students' addiction to online gaming and their decreased motivation for academic achievement. The study found that gaming addiction negatively influenced students' behavioural, emotional, and cognitive engagement in their studies, thereby reducing their academic motivation. This suggests that students who play video games frequently are less likely to focus on their schoolwork which can lead to lower academic performance.

Sahin, Gumus, and Dincel (2016) found that factors other than the addictive nature of games, such as poor time management, individuals' symptomatic responses to underlying problems, and postponing schoolwork to play games, often cause the link between online game addiction and lower academic performance. Furthermore, the widespread and continuous usage of mobile devices allows gaming to occur anywhere and at any time. These elements led to an examination of the possible connections between academic achievement, academic self-efficacy, and addiction to online gaming. In similar research, Toker and Baturay (2016) looked at grade point average (GPA) and game addiction and discovered a negative correlation between the two. Based on these findings, the current study suggests that academic self-efficacy and GPA are indicators of online gaming behaviours.

Research by Kuo et al. (2024) examines the connection between college students with disabilities' video gaming habits, signs of addiction, and academic achievement. The study investigates the relationship between academic performance and addiction symptoms, the frequency of playing video games, and their intended use (entertainment vs. non-entertainment). There were greater signs of video game addiction in students who played video games more often. However, the influence of gaming on academic engagement and addiction symptoms depended significantly on the goal of the game (entertainment vs. non-entertainment).

Hawi and Samaha (2024) conducted a study to investigate the relationship between problematic gaming and the amount of time spent playing online games. They found a connection between playing online games for more than 41 hours a week and internet gaming disorder (IGD). Times spend in gaming supposedly been spend in doing academic task and do revision. This IGD can give effect on academic performance since the student don’t know how to manage their time and keep on playing games. A different study done on teenagers revealed that a gaming addiction was linked to a narcissistic personality, expressing rage, and having a bad effect on

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social relationships (Salahuddin & Muazzam, 2019). The researchers stated that gamers with addiction issues formed social circles with other gamers and communicated through games.

Addicted issues also can bring lots of negative effect on gamers. According to a more recent study on university students in Pakistan, 50.8% of the participants had gaming addiction issues or were at risk of getting addicted (Zahra et al., 2019). Akbas and Isleyen (2024) conducted research on aggression and anger level in adolescents' effect from game addiction reported that gaming addiction can trigger aggression and anger in adolescents. They also suggest that interventions by nurses, educators, and mental health professionals are essential in preventing game addiction and managing anger and aggression. Addiction in gaming can totally change people behaviour because this addiction makes people feel bothering in doing other things when playing games. Because of that, gaming addiction was listed by WHO as one of disease under mental disorder in International Classification of Diseases. Its shows that, failure to manage gaming addiction can cause people to fall in mental disorders.

The effect of online mobile games on students' motivation for achievement, social support, and personal accomplishments was examined by Prasetyo et al. (2021). They discovered that gaming behaviours had a major impact on perceived stress, which in turn decreased motivation for achievement. Additionally, this study indicates that there are a variety of both beneficial and negative impacts associated with mobile gaming and academic achievement. The researchers suggest that mobile gaming influences students' perceived stress and motivation for achievement, with stress playing a crucial role in shaping the impact on academic achievements. This study sheds light on the nuanced relationship between gaming and academic achievement and highlights the value of stress management in the classroom.

From these studies its indicate that gaming addiction can lead to various issues. First issues raise in academic motivation where the studies found that college students who involve in gaming addiction will reduce their academic motivation because this addiction negatively affects their behaviour, emotion and engagement in their studies. Sahin, Gumus, and Dincel (2016) study indicates that the link between online game addiction and lower academic performance is influenced by factors such as poor time management and procrastination rather than just the addictive nature of games. Toker & Baturay (2016) found a negative correlation between GPA and game addiction, suggesting that academic self-efficacy and GPA are indicators of gaming behaviour. Kuo et al. (2024) explored the gaming habits of college students with disabilities, finding that addiction symptoms varied based on gaming purpose (entertainment vs. non-entertainment). Hawi and Samaha (2024) identified a connection between excessive gaming (over 41 hours a week) and internet gaming disorder (IGD), which negatively impacts academic performance due to poor time management. Salahuddin and Muazzam (2019) linked gaming addiction to narcissism and social relationship issues, while Zahra et al. (2019) reported that over half of university students in Pakistan faced gaming addiction. Akbas and Isleyen (2024) highlighted that gaming addiction can lead to increased aggression in adolescents, emphasizing the need for interventions. Lastly, Prasetyo et al. (2021) found that mobile gaming affects students' perceived stress and achievement motivation, revealing both positive and negative impacts on academic performance and underscoring the importance of stress management in education. Thus, the objective of this research is to investigate the relationship between gaming addiction and academic performance among Public University students by addressing research gaps and following research trends.

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Method & Material

Data for the study were gathered via an online questionnaire survey. Following the research of previous researchers (Senthilkumar & Easwaramoorthy, 2017) the aim of this study is to investigate the relationship between gaming addiction and academic performance among UiTM students. An online questionnaire survey was determined to be the most effective method of data collection to meet this goal. Software called SPSS version 28 was used to analyse and present the data in a useful manner. Convenience purposive sampling was selected for the sample because it allows researchers to access public universities. The chosen course is information management, with the aim of filling in the gaps in the literature by investigating the relationship between gaming addiction and academic performance among UiTM students. Out of the 100 online surveys that were gathered, only 68 were considered suitable for data analysis because of missing and incomplete information. Since no relationships are being sought to be established by the research, the analysis merely uses descriptive techniques.

Findings

Demographic Information

First part of demographic information is gender of the student. For gender, we can see in Table 1 that males are more dominant, at 70.6% (48 out of 68) of respondents, than females, at 29.4% (20 out of 68) of respondents. For age, 14.7% (10 out of 68) of respondents are between 18 and 20 years old, 83.8% (57 out of 68) are between 21 and 25 years old, and 1.5% (1 out of 68) are 26 years old and older. In terms of education, 67.6% (46 out of 68) of the respondents hold a degree, while 27.9% (19 out of 68) hold a diploma, and only 4.4% (3 out of 68) are pursuing post-graduate studies at the master's level. Table 2 and 3 show the demographic statistics for age and education information. This demographic information would have an impact on the findings of academic performance based on academic level.

Table 1: Gender

Male (%)	Female (%)
70.6	29.4

Table 2: Age

Age (years)	Percentage (%)
18 – 20	14.7
21 – 25	83.8
26 and above	1.5

Table 3: Education Level

Education Level	Percentage (%)
Diploma	27.9
Degree	67.6
Master	4.4

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Gaming addiction among UiTM students

From the data studied, it was found that 29.4% (20 out of 68) of respondents are often addicted to gaming. Additionally, 23.5% (16 out of 68) of respondents reported feeling addicted to gaming either rarely or sometimes. Furthermore, 16.2% (11 out of 68) of respondents admitted that they never feel addicted to gaming, while 7.4% (5 out of 68) stated that they feel very often addicted. Moreover, participants were questioned about their ability to stop playing once they start and whether gaming causes sleep deprivation. The findings revealed that 26.4% (18 out of 68) of respondents sometimes cannot stop playing once they begin, and 29.41% (20 out of 68) reported experiencing sleep deprivation due to gaming. Figures 1, 2 and 3 illustrate the findings of gaming addiction among UiTM students. From this finding it can be said that gaming addiction sometimes can cause student unable to stop once start playing and can cause sleep deprivation. Sleep deprivation will make student tired and cannot focus on class thus can affect their academic involvement and performance.

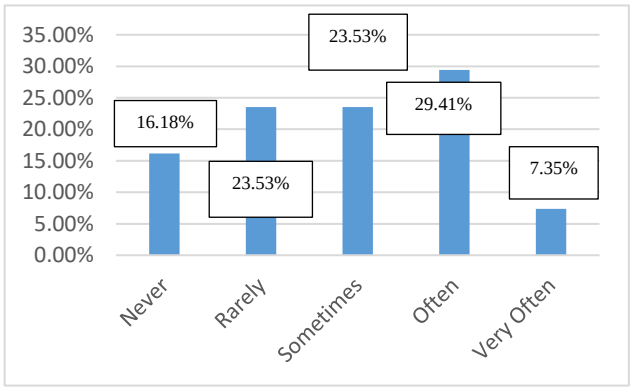

Figure 1: Felt addicted to game

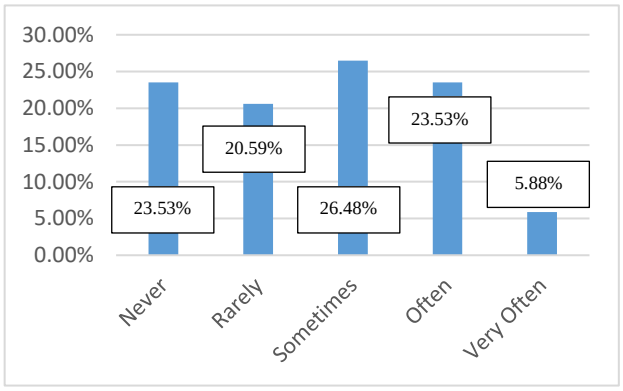

Figure 2: Unable to stop once start playing

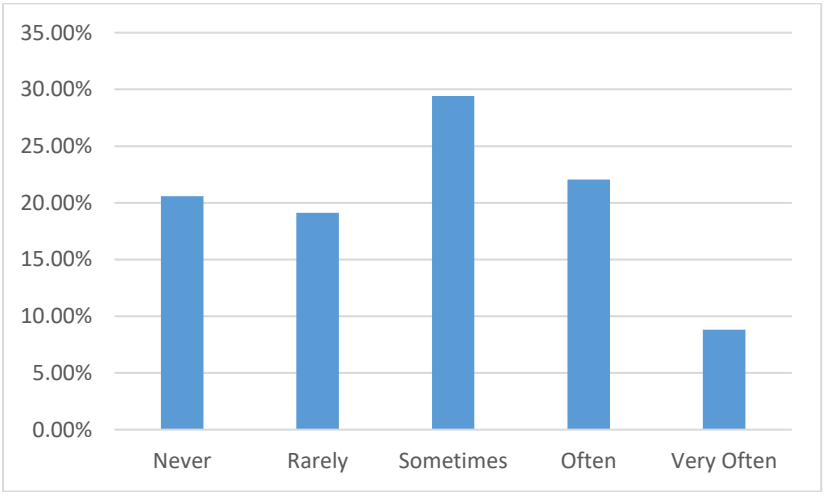

Figure 3: Gaming caused sleep deprivation

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Gaming addiction and students' performance among UiTM students

When asked directly whether gaming addiction has affected their academic performance, 55.9% (38 out of 68) of respondents admitted that gaming has negatively impacted their performance. In contrast, 25% (17 out of 68) stated that gaming has not affected their academic performance, while 19.1% (13 out of 68) believed that gaming may have had an impact. Respondents also asked whether gaming could impact them to perform well and do they ever struggled to balance academic study with gaming. The study found that 44.1% (30 out of 68) of respondents' state that gaming can affect them to perform well in class, 16.2% (11 out of 68) not sure and 39.7% (27 out of 68) state that gaming does not affect them to perform well in class.

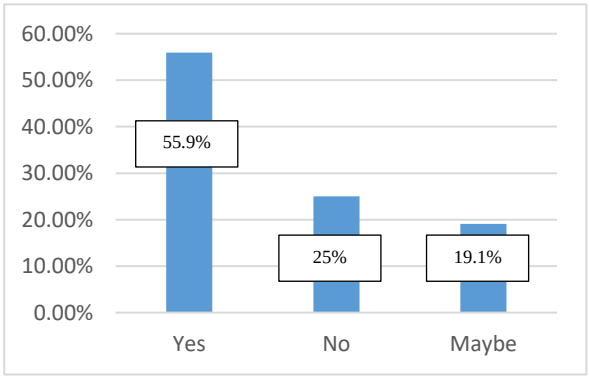

Figure 4: Gaming effect academic performance

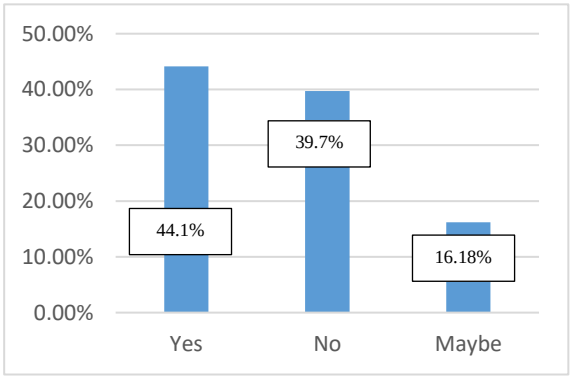

Figure 5: Gaming give impact to perform well in class

Discussion

The results indicate that the relationship between gaming addiction and student performance is complex and multifaceted. Interestingly, while some findings suggest that gaming can positively impact students' performance, this is not the whole story. This aligns with the research conducted by Naaj and Nachouk (2021), which also explores the nuanced effects of gaming on academic outcomes. According to the statistics from this study, it is surprising to note that many students acknowledge that gaming has affected their studies. Despite this response, they also assert that they are not struggling academically and believe that gaming does not significantly detract from their study time. However, this perception may overlook some critical underlying issues. For instance, the study reveals that 60.29% of students report that gaming addiction has significantly impacted their sleep patterns, as shown in Figure 3. The substantial amount of time spent gaming often leads to sleep deprivation, which can hinder students' ability to complete their assignments both at home and in school, ultimately lowering their academic output. Moreover, improper engagement with online games can lead to addiction and distraction. A lack of emotional and cognitive control is a key indicator of internet gaming addiction. Worryingly, 55.88% of students often find themselves unable to stop playing once they start, a behaviour that raises concerns about their overall well-being. The implications of these findings are significant. Excessive gaming can adversely affect both the mental and physical health of students. Therefore, it is crucial for students to develop effective time management strategies regarding their gaming habits. This issue warrants serious attention from various stakeholders, including universities and parents, who should work together to support students in finding a healthy balance between gaming and their academic responsibilities.

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Conclusion

In conclusion, this research sheds light on the critical issue of gaming addiction among UiTM students and its detrimental effects on academic performance. While gaming can be a healthy and enjoyable activity for many, it is crucial for individuals to monitor their gaming habits and be aware of any negative impacts on their lives. If gaming begins to interfere with daily functioning, seeking help from a healthcare professional is advisable. The findings indicate that while gaming can serve as a source of entertainment and stress relief, excessive engagement can lead to negative academic outcomes. It is essential for educational institutions to recognize the signs of gaming addiction and implement support systems to help students manage their gaming habits effectively. Future research should explore intervention strategies and the long-term implications of gaming addiction on students' overall well-being and academic trajectories. By fostering a balanced approach to gaming, students can enjoy the benefits of technology while maintaining their academic responsibilities.

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