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# Impact of Online Gaming on the Academic Performance of DEBESMSCAT-Cawayan Campus Students

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**Abstract.**
**Purpose**: This study investigated the effects of online gaming on the academic performance of students of DEBESMSCAT-Cawayan Campus.
**Methods:** A descriptive research design was employed, and a survey questionnaire was distributed to 75 student online gamers who were selected through a census approach. Statistical analysis techniques such as frequency and percentage were used to analyze the data.
**Result:** Mobile Legends was found to be the most popular game among the respondents. The majority of students spent 1-2 hours playing online games per day and incurred costs associated with gaming. However, most respondents believed that their gaming activities did not significantly hinder their ability to perform tasks in school or at home. The effects of online games on academic performance were perceived positively by the respondents. They believed that online gaming had a positive impact on test scores, overall grades, submission of school activities, time in studying, concentration in studies, participation in learning activities, interaction with people, interest in class discussions, willingness to go to school, and interest in school activities.
**Novelty:** This study provided a comprehensive overview of the perceptions of students regarding the effects of online games on their academic performance. The study suggested that online gaming could have both positive and negative effects on academic performance, depending on how it was managed by students. The study also contributed to the existing body of knowledge on the subject and may have informed future research and interventions aimed at supporting students in managing their gaming activities while maintaining their academic performance.

**Keywords**: Academic performance, Online games, Perceptions, Student online gamers.
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## INTRODUCTION

The rapid advancement of technology in recent years has brought about both advantages [1] and disadvantages [2], significantly impacting various aspects of people's lives [3]. One notable development resulting from this evolution is the emergence of online gaming through the internet, which has gained widespread popularity [4] and addiction among individuals, particularly teenagers. Online games refer to video games that can be accessed and played over the internet or other computer networks. This modern gaming platform encompasses computers, mobile devices, and smartphones, offering a virtual world for interactive gameplay [5], [6]. However, concerns have been raised regarding the prevalence of gaming addiction [7], particularly among today's youth.

Among the plethora of online games available, titles such as Counter-Strike, Call of Duty, Clash of Clans, League of Legends, Mine Craft, and Mobile Legends have gained immense popularity. Notably, Mobile Legends has become highly addictive, especially among students of DEBESMSCAT-Cawayan Campus. Many students have succumbed to the allure of this game since its rise to popularity, rapidly spreading throughout the country. Unfortunately, this addiction has led to adverse health effects, as students neglect proper eating and sleeping habits. Moreover, excessive engagement with online gaming activities often leads to distraction, as students become solely preoccupied with the game, giving rise to negative behaviors such as gambling, theft, threats, and even suicidal tendencies [8]. Consequently, the academic performance of students has been significantly impacted by these online games [9].

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Moreover, excessive time spent in playing online games can have a detrimental impact on students' overall lifestyle. Each gaming session demands considerable time and financial resources, complicating students' lives as they struggle to manage and control their gameplay activities effectively. Thus, it becomes imperative to explore the number of hours spent in playing online games and to examine the effects of these games on their academic performance of students of DEBESMSCAT-Cawayan Campus. Furthermore, this study aims to identify strategies to assist students in minimizing and regulating their gaming activities, enabling them to manage the consequences associated with online gaming. Implementing techniques such as setting time limits, engaging in other daily activities like exercise, keeping electronic devices away from the bedroom to avoid late-night gaming, and prioritizing academic responsibilities over online gaming can serve as effective measures.

Anecdotal evidence suggests that online gaming possesses addictive qualities [10], becoming a significant part of many young individuals' daily lives as a leisure activity [11]. Unfortunately, the continuous advancement of technology has had adverse consequences, particularly with the development and adoption of certain online game applications [12]. In this study, it was discovered that playing online games can influence an individual's behavior, with prolonged exposure to these games carrying a high risk of addiction [13], [14]. Such addiction is prevalent among students, impacting their academic performance [15], [16]. Online gaming has been found to affect both academic performance and social behavior among students [17], [18]. Excessive daily gaming among college students has been associated with poorer learning abilities [19].

Moreover, online gaming can lead to psychological stress, decreased school performance, compromised sleep quality, suicidal ideation, reduced sociability and self-efficacy, and decreased life satisfaction. The adverse impact of excessive gaming extends to an individual's mental, physical, and emotional well-being [19]. Embracing technology without adequate mitigation strategies poses risks and consequences [20]. Engaging in online gaming late at night disrupts sleep patterns, potentially contributing to a decline in academic performance and affecting students' behavior [21].

A negative correlation has been observed between the general point average (GPA) and the amount of time spent playing online games, indicating a potential impact on students' grades [22]. This study aims to delve deeper into the relationship between online gaming and academic performance, shedding light on the detrimental effects that prolonged engagement with online games can have on students' educational outcomes. Online gaming has emerged as a popular form of entertainment among individuals, particularly teenagers. However, its addictive nature and the adverse consequences associated with excessive gameplay have raised concerns, particularly regarding the academic performance of students. This study aims to investigate the influence of online games on students' academic achievements, exploring the number of hours spent playing these games and implementing strategies to assist students in managing their gaming activities effectively. By understanding the effects of online gaming and addressing the challenges it presents, educators and stakeholders can develop interventions to support students in maintaining a healthy balance between academic pursuits and leisure activities. The study may also contribute to the existing body of knowledge on the subject and may provide data for future research and interventions aimed at supporting students in managing their gaming activities while maintaining their academic performance.

## METHODS

### Research Design

The researchers employed the descriptive method to examine the effects of online games on academic performance among randomly selected students of DEBESMSCAT-Cawayan Campus. By utilizing this research design, the study aimed to provide a detailed account of the phenomenon and contribute to the existing body of knowledge on the subject. The findings of this study can serve as a foundation for future investigations and the development of strategies to support students in effectively managing their online gaming activities while maintaining their academic performance.

### Sampling

The respondents of this study consisted of 75 student online gamers. The respondents were selected through a pre-survey identifying student online gamers within the target population. In this study, the entire population of 75 students served as the respondents. A census approach was used where every member of the population was included in the sample. The use of the entire population as respondents provided a

unique opportunity to gather data from all relevant individuals, ensuring a comprehensive representation of the student online gaming community in DEBESMSCAT-Cawayan Campus. By including the entire population, the findings of the study were considered highly representative and reflective of the experiences and perspectives of student online gamer. Using the entire population as respondents also eliminated the need for statistical inference and allowed for a more detailed analysis of the data. This approach enabled researchers to explore individual cases, identify patterns, and provide rich descriptions of the effects of online games on academic performance of all the respondents. However, it is important to acknowledge that employing a census approach had limitations, such as increased time and resource requirements for data collection and analysis. Additionally, the findings may be specific to the particular context of the DEBESMSCAT-Cawayan Campus and may not be generalizable to other populations or settings. By including all 75 student online gamers as respondents, this study aimed to capture a comprehensive understanding of the effects of online games on academic performance within the specific population under investigation. The findings of this study contributed to the existing body of knowledge on the topic and may inform future research and interventions aimed at supporting student online gamers in managing their gaming activities while maintaining their academic performance.

**Data Collection**

Data collection methods in this study included an online survey. To gather the necessary information and data, the researchers utilized a survey questionnaire as the main instrument, which was distributed via Google Forms. Significant time, effort, and cooperation were dedicated in developing the survey questionnaire to ensure its suitability for the intended respondents. The researchers adapted the questions posed in the survey questionnaire from the study conducted by [23], aligning the current study with existing literature. By utilizing validated and relevant questions from previous research, the researchers aimed to maintain consistency and comparability in the data collected. To distribute the survey questionnaire, the researchers shared the generated link to the students of DEBESMSCAT-Cawayan Campus through messenger applications or other suitable communication channels. This allowed for convenient access to the questionnaire and ensured a wide reach among potential participants. Sufficient time was allotted for the participants to respond to the survey questionnaire based on their availability. The researchers recognized the importance of accommodating the participants' schedules to encourage meaningful and thoughtful responses. Upon completion of the data collection period, the researchers tallied and computed the responses for interpretation. The researchers examined the items checked by the respondents, analyzing the data to identify patterns, trends, and relationships relevant to the effects of online games on academic performance. By employing the online survey method and diligently managing the data collection process, the researchers aimed to gather comprehensive and reliable information regarding the participants' experiences and perceptions. This approach allowed for efficient data collection, ensuring a diverse range of responses that could contribute to a comprehensive understanding of the effects of online games on academic performance among DEBESMSCAT-Cawayan Campus students.

**Statistical Analysis**

In this study, the researchers employed various statistical tools to analyze and interpret the collected data, including frequency, percentage, and correlation. The frequency distribution was utilized to determine the occurrence of specific variables and their corresponding frequencies within the dataset. By tabulating the frequencies, the researchers were able to identify the prevalence of certain factors related to online gaming and academic performance among the respondents. Percentage calculations were employed to quantify the relative representation of different variables within the sample. The formula used to calculate the percentage is:

$$\text{Percentage (\%)} = \frac{\Sigma fx}{N} \text{ x } 100 \quad (1)$$

Where:

% = represents the total percentage
Σfx = represents the sum of the frequencies,
N = represents the total number of respondents.

This calculation allowed the researchers to express the distribution of variables in terms of relative proportions, providing a clearer understanding of their significance within the study population.

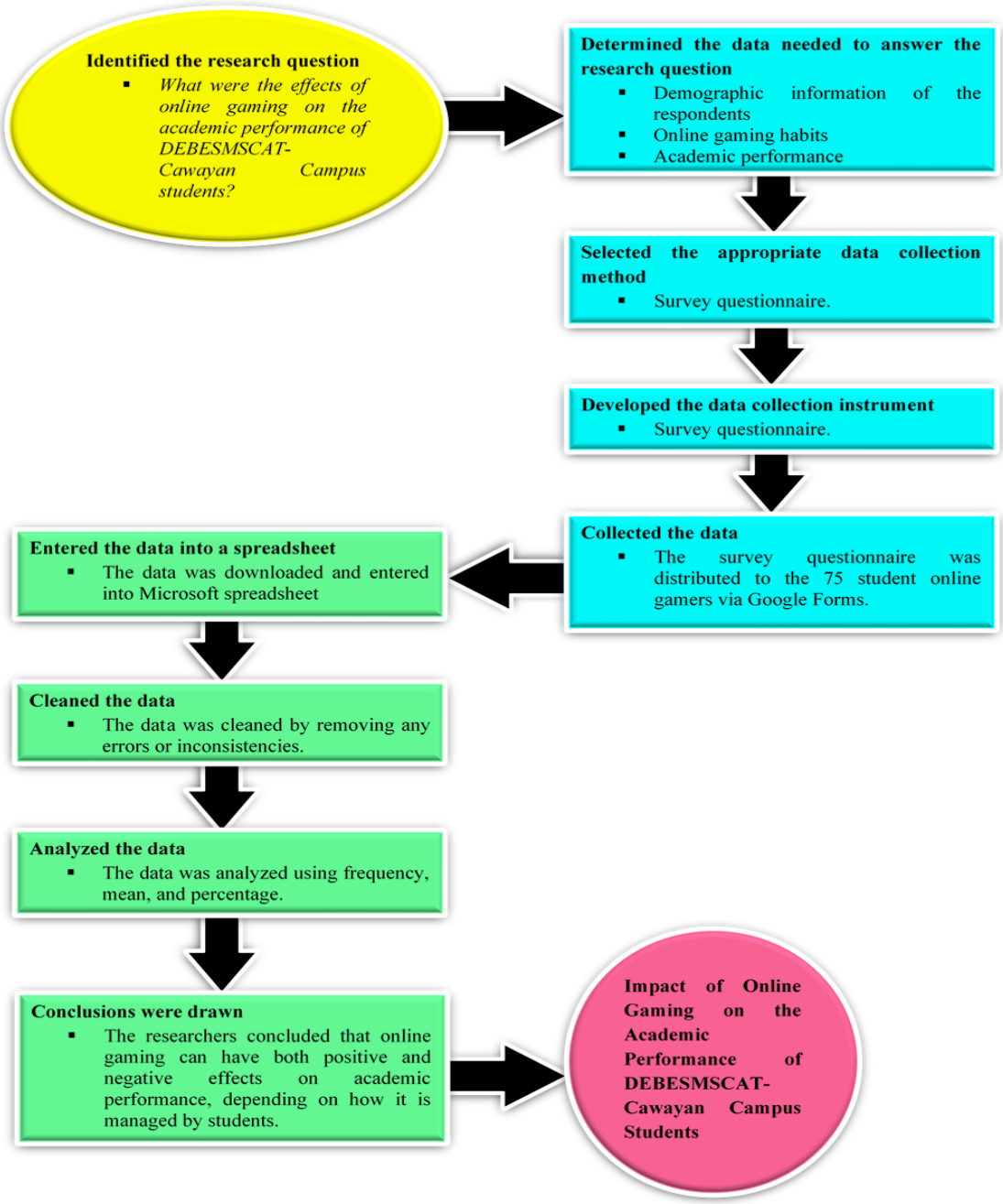


Figure 1. Research flowchart

Figure 1 shows the process of the study on how the data were collected and analyzed. The research process began with the articulation of the research question. The question was carefully formulated to be precise, clear, specific, and compatible with the available data. After the research question was established, the data needed to answer it were identified. These data included the respondents' demographic information, their online gaming habits, and their academic attainment. The researchers then selected an appropriate data collection method. In this case, a survey questionnaire was used. The questionnaire was carefully designed to be clear, concise, and easy to understand. The survey questionnaire was then distributed to the 75 identified online gamers. The data collected from the survey were entered into a spreadsheet. The data were then cleaned to remove any errors or inconsistencies to ensure that the data were accurate and ready for analysis. The data were then analyzed using statistical methods. The researchers used frequency, mean, and percentage calculations to glean insights and discern patterns in the data. The final step in the research process was to draw conclusions. The researchers interpreted the findings of the data analysis and concluded

that online gaming can have both positive and negative effects on academic performance, depending on how it is managed by students.

## RESULTS AND DISCUSSIONS

### Demographic Profile of the Student Online Gamers

Table 1 presents the sociodemographic profile of the respondents. Data show that the majority of respondents are within 18-19 age group (50.67%) [24]. This finding aligns with previous studies that have reported a higher prevalence of online gaming among teenagers and young adults [25], [26]. The gender distribution that 56% (42) of the respondents are female, while 44% (33) are male. This gender distribution is consistent with the findings of similar studies conducted in educational settings [27], [28].

Table 1. Demographic Profile of the student online gamers

| Background | Frequency | Percentage |
|---|---|---|
| Age | | |
| 18-19 | 38 | 50.67 |
| 20-21 | 22 | 29.33 |
| 22-23 | 10 | 13.33 |
| 24-25 | 6 | 8 |
| 26-27 | 2 | 2.67 |
| 28-29 | 1 | 1.33 |
| Sex | | |
| Female | 42 | 56 |
| Male | 33 | 44 |
| Course and Section | | |
| BSED | 17 | 22.67 |
| BSIT-ELT | 15 | 20 |
| BEED | 14 | 18.67 |
| BSIT-ET | 11 | 14.67 |
| BSA | 10 | 13.33 |
| BSA- AG.ED. | 3 | 4 |
| BSA- AN SCI. | 3 | 4 |
| BSA- CROP SCI. | 2 | 2.67 |
| Civil status | | |
| Single | 73 | 97.33 |
| Married | 2 | 2.67 |

The breakdown of respondents by course and section revealed that the BSED program had the highest representation (22.67%). This finding may be attributed to the specific focus of the study on a particular educational institution or geographic location, as different programs and specializations may attract varying levels of interest in online gaming [29]. In terms of civil status, the majority of respondents (97.33%) are single, while a small percentage (2.67%) are married. This result is consistent with the typical marital status distribution observed among college students or individuals in the specified age range [30].

### Online Gaming Habits among Respondents

Table 2 presents the data on various variables related to online gaming habits and their impact on the respondents. The variables examined include the specific online games played, the number of hours spent playing online games per day, the cost associated with playing online games, and the ability to perform tasks in school or at home. "Mobile Legends," was found to be the topmost online game played by students which recorded 60% followed by "Minecraft" (20%), "Clash of Clans" (13.33%), and "Call of Duty" (6.67%). These findings suggest that "Mobile Legends" is the most popular online game among the respondents in this study.

In terms of the number of hours spent playing online games per day as shown in table 2, the largest percentage of respondents (62.67%) reported spending 1-2 hours playing, followed by 3-4 hours (14.67%), 5-6 hours (12%), and 7-8 hours (6.67%). A smaller percentage of respondents (4%) reported spending 5-10 minutes playing online games per day. These results highlight that a significant proportion of the respondents dedicate a considerable amount of time in playing online games [31]. The data also provide information on the cost associated with playing online games. The majority of respondents (52%) reported that playing online games costs them between 10-20 units (e.g., load, currency, etc.), followed by 50 units (26.67%), 100 units (17.33%), and 30-40 units (4%). This suggests that a significant number of respondents incur expenses while engaging in online gaming activities.

Table 2. Online gaming habits among student online-gamers

| Variables | Frequency | Percentage |
|---|---|---|
| What online games did you play? | | |
| Mobile legends | 45 | 60 |
| Minecraft | 15 | 20 |
| Clash of clan | 10 | 13.33 |
| Call of duty | 5 | 6.67 |
| Number of hours you spent playing online games per day | | |
| 5-10 (minutes) | 3 | 4 |
| 1-2(hours) | 47 | 62.67 |
| 3-4(hours) | 11 | 14.67 |
| 5-6(hours) | 9 | 12 |
| 7-8(hours) | 5 | 6.67 |
| How much does it cost in playing online games? | | |
| 10-20 | 39 | 52 |
| 30-40 | 3 | 4 |
| 50 | 20 | 26.67 |
| 100 | 13 | 17.33 |
| Can you still able to perform your task in school or at your house? | | |
| Yes | 63 | 84 |
| No | 1 | 1.3 |
| Maybe | 11 | 14.67 |

On the other hand, result on respondents' ability to perform tasks in school or at home indicated that majority of respondents (84%) indicated that they were still able to perform their tasks, while a small percentage answered "No" (1.3%) or "Maybe" (14.67%). These findings imply that most respondents believe that their online gaming activities do not significantly hinder their performance in school or at home.

**Effects Of Online Games on Academic Performance**

Based on the mean scores shown in table 3, the adjectival rating for each variable on academic performance was determined. The adjectival rating serves as a qualitative descriptor of the mean score, categorizing the level of perception or experience associated with the variable. In this study, all variables obtained an adjectival rating "Good". The test score variable had a mean of 3.11, indicating a "Good" perception of performance on tests. This suggests that the respondents perceived online games to have a positive effect on their test scores. Similarly, the effects on grade variable had a mean of 3.92, implying a "Good" perception of how online games influenced overall grades. The respondents believed that online gaming had a positive impact on their grades.

Table 3. Effects of online games on academic performance of student online gamers.

| Variables | Mean | Adjectival Rating |
|---|---|---|
| Test Score | 3.1 | Good |
| Effects on Grade | 3.9 | Good |
| Submission of School Activities | 3.4 | Good |
| Time in Studying | 3.3 | Good |
| Concentration in Studies | 3.2 | Good |
| Participation in Learning Activity | 3.3 | Good |
| Interaction with People | 3.3 | Good |
| Interest in Class Discussions | 3.2 | Good |
| Willingness to go to School | 3.3 | Good |
| Interest in School Activities | 3.2 | Good |

The submission of the school activities variable obtained a mean of 3.43, reflecting a "Good" rating. This suggests that the respondents felt that online games positively influenced their ability to submit school activities on time. The variables of time in studying, concentration in studies, participation in learning activities, interaction with people, interest in class discussions, willingness to go to school, and interest in school activities respectively have mean scores ranging from 3.17 to 3.32, interpreted as "Good". This suggests that the respondents perceived online gaming to have a positive influence on the abovementioned academic performance variables [32].

It is important to note that these interpretations are based on the respondents' perceptions and may not reflect actual objective performance. However, these results provide valuable insights into how the respondents perceived the effects of online games on various dimensions of their academic performance. These findings are consistent with previous research that has highlighted the positive effects of online

games on certain aspects of academic performance [23], [33]. The perceived positive impact on test scores, overall grades, submission of school activities, and other academic indicators aligns with the notion that online games can enhance certain cognitive and social skills that are beneficial for academic success.

In conclusion, the data analysis revealed that the respondents perceived online gaming to have a positive influence on various aspects of their academic performance, as indicated by the "Good" adjectival rating assigned to each variable. These findings contribute to the understanding of how online games are perceived by students about their academic performance. However, further research is needed to validate these perceptions and explore the actual impact of online gaming on academic outcomes.

**Effects of online games on behavior of student online gamers.**

Table 4 shows the effects of online games on students' behavior. It can be noted that the mean scores for aggressive behavior, lower psychosocial well-being, short-tempered behavior, solitude, violent behavior, and lack of attention among student online gamers recorded an adjectival rating of "Good". These findings suggest that engaging in online games had a positive impact on these aspects of behavior among the participants. The mean score for aggressive behavior indicates that participating in online games contributed to increased assertiveness or competitiveness among student online gamers [34]. Similarly, the mean score for lower psychosocial well-being suggests that online gaming had a positive influence on the overall psychological and social well-being of the participants [35]. The positive effect of online gaming on short-tempered behavior indicates that it helped students manage their emotions and handle stressful situations more effectively [36], [37]. The mean score for solitude implies that online gaming provided a sense of solitude or privacy for relaxation and self-reflection [38]. The positive impact of online gaming on violent behavior suggests that it facilitated the expression of aggressive tendencies among student online gamers [39]. Additionally, the mean score for lack of attention indicates that online gaming had a positive effect on the participants' ability to concentrate and maintain focus [15]. However, it is important to note that the mean score for low self-esteem was in the "Marginal" range, suggesting that participating in online games had a limited impact on the self-esteem of student online gamers [40]. This finding implies that other factors or variables may play a more significant role in determining their self-esteem levels [41].

Table 4. Effects of online games on behavior of student online gamers.

| Variables | Mean | Adjectival Rating |
|---|---|---|
| Aggressive behavior | 3.2 | Good |
| Lower psychosocial well-being | 3.5 | Good |
| Short-tempered | 3.1 | Good |
| Solitude | 3.2 | Good |
| Violent | 3.5 | Good |
| Lack of attention | 3.2 | Good |
| Low self-esteem | 2.0 | Marginal |

The "Good" levels of aggressive behavior, lower psychosocial well-being, short-tempered behavior, solitude, violent behavior, and lack of attention exhibited by the student online gamers may have both positive and negative effects on their learning. On the other hand, higher levels of aggressive behavior may drive student online gamers to actively participate in class discussions and assert their opinions, potentially leading to enhanced engagement and critical thinking skills [34]. The ability to manage short-tempered behavior may contribute to better conflict resolution and interpersonal skills, fostering a positive classroom environment [36]. The sense of solitude experienced by student online gamers may provide opportunities for self-reflection and independent learning, enabling them to explore concepts at their own pace and develop self-directed learning skills [38]. However, it is crucial to acknowledge that excessive engagement in online games and the associated behaviors can have detrimental effects on students' learning. The "Good" levels of violent behavior may indicate a predisposition towards aggressive responses, which can interfere with positive social interactions and collaborative learning experiences [39]. The lack of attention may lead to reduced concentration during classroom activities, impairing information processing and retention [15]. Furthermore, the marginal level of self-esteem suggests that online gaming may have a limited impact on students' self-perception and confidence, which are known to influence motivation and academic achievement [40], [42].

These findings highlight the complex nature of the effects of online gaming on student behavior and learning. While certain behaviors may have positive implications for student engagement and skills development, it is important to monitor and address potential negative consequences associated with excessive engagement in online games [37]. By promoting a balanced approach and fostering a supportive learning environment, educators can help students harness the positive aspects of online gaming while mitigating its potential drawbacks.

**Health Effects of Online Games on Student Online Gamers**

In this study, the effects of online games on various health variables were analyzed. The data collected on these variables are presented in Table 5 along with their corresponding mean values and adjectival ratings. The analysis focused on investigating the impact of online gaming on sleeping disorders, anxiety, depression, obesity, stress, headache, dizziness, and blindness. The mean values for each health variable were calculated to determine the average severity of the effects observed among the respondents. According to the results, all health variables had mean values ranging from 1.2 to 1.3, indicating a negative impact. These mean values suggest that the respondents experienced varying degrees of negative effects in terms of sleeping disorders, anxiety, depression, obesity, stress, headache, dizziness, and blindness due to their engagement in online gaming activities [43].

Table 5. Health Effects of online games on student online gamers

| Variables | Mean | Adjectival Rating |
|---|---|---|
| Sleeping disorder | 1.2 | Bad |
| Anxiety | 1.2 | Bad |
| Depression | 1.3 | Bad |
| Obesity | 1.2 | Bad |
| Stress | 1.2 | Bad |
| Headache | 1.2 | Bad |
| Dizziness | 1.2 | Bad |
| Blindness | 1.2 | Bad |

The adjectival ratings assigned to each health variable further reinforce the detrimental effects of online games on the respondents' health. Mean scores on all variables received an adjectival rating of "Bad," indicating a significant negative impact. This implies that the respondents experienced adverse health consequences such as disrupted sleep patterns, heightened anxiety, increased depressive symptoms, obesity-related issues, elevated stress levels, frequent headaches, dizziness, and even potential vision impairments as a result of their involvement in online gaming. These findings conforms with previous research that has highlighted the negative effects of excessive online gaming on various aspects of health. For instance, studies have reported associations between prolonged gaming sessions and sleep disturbances [44], increased anxiety [45] and depression symptoms [46], higher obesity rates [24], elevated stress levels and physical discomforts such as headaches and dizziness [47]. The present study's results further support these earlier findings, illustrating the detrimental impact of online gaming on the respondents' health.

In conclusion, the analysis of the data presented in Table 4 reveals that the respondents experienced a range of negative health effects, including sleeping disorders, anxiety, depression, obesity, stress, headache, dizziness, and even potential vision impairments. The mean values and adjectival ratings indicate the severity of these effects, with all variables classified as "Bad." These findings underscore the need for further research and interventions aimed at promoting healthy online gaming habits and mitigating the negative health consequences associated with excessive engagement in online games.

**Effects of Online on the general weighted average of student online gamers**

In the study, data were collected to examine the effects of online games on academic performance, specifically in terms of the respondents' General Weighted Average (GWA) for the previous year and the last two semesters. The collected data was analyzed using statistical tools, such as frequency and percentage calculations. The data in Table 6 showed that none of the respondents had a GWA of 1.0 from the previous year. The highest frequency recorded 24% (18) respondents have grades ranging from 1.9-2.0. This was followed by of 2.3-2.4 with 17.33 (13) respondents and 2.1-2.2 with 12% (9) respectively. The remaining ranges had varying frequencies, ranging from 0 to 9 respondents. For the respondents' General Weighted Average (GWA) for the last two semesters, again, none of the respondents had a GWA of 1.0. The highest frequency was observed in the range of 1.9-2.0, with 19 respondents (25.33%) falling within this range.

This was followed by the ranges of 2.3-2.4 (11 respondents, 14.67%) and 2.1-2.2 (9 respondents, 12%). The remaining ranges had varying frequencies, ranging from 2 to 12 respondents.

Table 6. Effects of online on the general weighted average of the student online gamers.

| VARIABLES | FREQUENCY | PERCENTAGE |
|---|---|---|
| What is your general weighted average last year? | | |
| 1.0 | 0 | 0 |
| 1.1-1.2 | 1 | 1.30 |
| 1.3-1.4 | 4 | 5.33 |
| 1.5-1.6 | 5 | 6.67 |
| 1.7-1.8 | 5 | 6.67 |
| 1.9-2.0 | 18 | 24 |
| 2.1-2.2 | 9 | 12 |
| 2.3-2.4 | 13 | 17.33 |
| 2.5-2.6 | 5 | 6.67 |
| 2.7-2.8 | 6 | 8 |
| 2.9-3.0 | 9 | 12 |
| What is your general weighted average for the last two semesters of the current year? | | |
| 1.0 | 0 | 0 |
| 1.1-1.2 | 2 | 2.67 |
| 1.3-1.4 | 5 | 6.67 |
| 1.5-1.6 | 6 | 8 |
| 1.7-1.8 | 3 | 4 |
| 1.9-2.0 | 19 | 25.33 |
| 2.1-2.2 | 9 | 12 |
| 2.3-2.4 | 11 | 14.67 |
| 2.5-2.6 | 2 | 2.67 |
| 2.7-2.8 | 6 | 8 |
| 2.9-3.0 | 12 | 16 |

These findings indicate the distribution of respondents' GWAs across different ranges and provide insights into the academic performance of students regarding their engagement with online games. However, it is important to note that these frequency distributions alone do not establish a causal relationship between online gaming and academic performance. In past studies, research has suggested a potential negative impact of excessive online gaming on academic performance. For example, [10] found that gaming addiction can lead to decreased academic performance. Similarly, [22] demonstrated a negative correlation between the amount of time spent playing video games and students' general academic achievement. While the data presented here only provides an overview of the respondents' GWAs, further analysis, and correlation tests would be needed to establish any significant associations between online gaming and academic performance. Additionally, qualitative research methods could be employed to gain deeper insights into the experiences and perceptions of students regarding the effects of online gaming on their academic performance.

## CONCLUSION

Based on the study's findings, it can be concluded that student online gamers exhibit diverse demographic profiles, with a majority falling within the 18-19 age group and a slight gender imbalance favoring females. The popularity of "Mobile Legends" among respondents and their average daily gaming duration of 1-2 hours indicate the significance of this particular game in their lives. While the majority of participants did not perceive online gaming as hindering their academic performance, there were indications of both positive and negative effects on behavior. Furthermore, negative health effects were observed, highlighting the need for interventions that promote healthy gaming habits.

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