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# Online gaming and physical activity of senior high school students

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ABSTRACT

The study on online gaming engagement and physical activity among Senior High School students is important because it helps determine how gaming behaviors influence students' health, lifestyle, and participation in physical activities, which may affect their overall well-being and academic performance. This study determined the relationship between the level of online gaming engagement and the level of physical activity among Senior High School students in the Roxas City Division for School Year 2025–2026. Specifically, it described the students' level of online gaming engagement, level of physical activity, the significant relationship between the two variables, and the intervention program proposed based on the findings. A quantitative research design employing the correlational method was utilized in the study. The respondents consisted of 341 Senior High School students selected through stratified proportionate random sampling from different academic strands to ensure proper representation. Data were gathered using a researcher-made questionnaire composed of three parts: profile of gaming activities, online gaming engagement scale, and physical activity scale, all measured using a 5-point Likert scale. The instruments were validated by experts and tested for reliability using Cronbach's alpha coefficients. Findings revealed that Senior High School students have a high level of online gaming engagement. Likewise, the respondents also manifested a high level of physical activity, showing that students still participate in active and healthy routines despite their gaming involvement. However, excessive gaming was observed to occasionally affect time management and lessen opportunities for exercise when not properly regulated. Results further indicated a significant relationship between online gaming engagement and physical activity among the respondents. Based on the findings, an intervention program was proposed to promote balanced digital engagement and physical well-being among students. The study emphasizes the importance of responsible gaming habits, proper time management, and guided supervision in maintaining a healthy balance between online gaming and physical activity.

Keywords: Online gaming engagement, physical activity, digital behavior, lifestyle balance.

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## INTRODUCTION

At the global level, the rapid advancement of digital technology has significantly transformed the lifestyle, interests, and daily routines of today's youth. One of the most prominent outcomes of this transformation is the widespread popularity of online gaming, which has become a dominant recreational activity among adolescents worldwide. Recent studies indicate that online gaming offers cognitive stimulation, entertainment, and opportunities for social interaction, making it highly engaging and accessible through mobile phones, tablets, and computers (Kwok et al., 2021; Paulus et al., 2022). Consequently, adolescents increasingly devote substantial amounts of time to online gaming, often displacing traditional forms of leisure, outdoor play, and physical activity. While these digital engagements contribute to technological literacy and social connectivity, they also signal a shift toward more sedentary lifestyles.

Despite the documented cognitive and social benefits of online gaming, global health literature has raised persistent concerns regarding its potential adverse effects on adolescents' physical activity levels. Physical activity remains a critical determinant of physical health, psychological well-being, and academic performance among young people. According to the World Health Organization (2020), insufficient physical activity is a leading risk factor for non-communicable diseases and is closely associated with sedentary behaviors among adolescents. Empirical studies from 2020 onward consistently demonstrate that increased engagement in screen-based activities, including online gaming, is inversely related to moderate-to-vigorous physical activity levels (Gao et al., 2021; Rodríguez-de-Dios et al., 2023). However, much of the existing global literature tends to focus on general screen time rather than isolating online gaming as a distinct behavioral variable, thereby creating a gap in understanding its specific and nuanced impact on adolescent physical activity patterns.

These global concerns are directly aligned with the United Nations Sustainable Development Goals, particularly SDG 3 (Good Health and Well-Being), which underscores the promotion of active and healthy lifestyles, and SDG 4 (Quality Education), which advocates for holistic learner development beyond academic achievement. Excessive engagement in online gaming that displaces physical activity presents a critical challenge to achieving these goals, especially among school-aged populations whose developmental needs require a balance of cognitive, physical, and social experiences.

At the national level, the Philippines reflects similar global patterns in digital engagement among adolescents. The increasing accessibility of smartphones, mobile data, and internet connectivity has intensified Filipino students' participation in online gaming. Recent local studies reveal that a significant proportion of adolescents do not meet the recommended levels of daily physical activity, raising concerns about the long-term implications of sedentary behavior on health and well-being (Cordero et al., 2022; Uy & Del Castillo, 2024). Moreover, while national research acknowledges the general effects of screen time, there remains limited empirical work that specifically examines the relationship between online gaming behaviors and physical activity outcomes within the Philippine educational context, particularly among Senior High School learners.

In the local context of the Roxas City Division, similar trends are increasingly evident. Observations from teachers, parents, and school administrators suggest that many Senior High School students spend extended hours engaged in online gaming, potentially at the expense of participation in physical education, sports, and other forms of active recreation. However, these observations remain largely anecdotal. There is a notable absence of empirical, school-based studies that systematically measure and analyze the relationship between online gaming engagement and physical activity levels among students in this locality. Furthermore, there is limited contextualized research that accounts for socio-cultural factors, school environments,

and access to recreational facilities that may influence students' behavioral patterns. This highlights a critical research gap at the local levelspecifically, the need for data-driven, context-sensitive investigations that can inform targeted interventions in the Roxas City Division.

This study is firmly anchored in the research thrusts of Capiz State University (CAPSU), particularly in the domains of Health and Well-Being, Education and Learner Development, and Community-Responsive Research. By examining the interplay between digital engagement and physical activity among adolescents, the study contributes to CAPSU's commitment to generating relevant, evidence-based research that addresses emerging societal challenges and promotes sustainable development within local communities.

Moreover, the study aligns with the research agenda of the College of Education of Capiz State University, which emphasizes learner-centered inquiry, holistic development, and the integration of research into pedagogical practice. Specifically, it responds to the College's priority to produce empirical evidence that informs instructional innovation, student welfare programs, and policy development. By investigating how online gaming relates to physical activity among Senior High School students, the study provides valuable insights that can guide educators in designing responsive curricula, enhancing physical education programs, and promoting balanced digital and physical engagement among learners.

Given the increasing prevalence of online gaming and the growing concern over declining physical activity among adolescents, there is a compelling need to systematically examine the relationship between these variables within a localized and educational context. Addressing the identified global, national, and local research gaps, this study aims to generate empirical evidence that will inform educators, school administrators, parents, and policymakers in developing contextually relevant interventions and policies. Ultimately, the findings are expected to support the promotion of healthy, balanced, and sustainable lifestyles among Senior High School students in the Roxas City Division for the School Year 2025–2026, while contributing to both national development goals and the institutional research agenda of CAPSU.

## Statement of the problem

This study aimed to determine the relationship between the level of online game engagement and the level of physical activity among Senior High School students in the Roxas City Division for the School Year 2025–2026.

Specifically, it sought to answer the following questions:

1. What is the level of online game engagement among the participants?
2. What is the level of physical activity of the participants?
3. Is there a significant relationship between the level of online game engagement
4. and the level of physical activity?
5. What output can be drawn from the study?

## METHODOLOGY

The study employed a correlational research design to examine the relationship between two quantitative variables, namely the level of online game engagement and the level of physical activity among Senior High School students in the Roxas City Division. Correlational research is appropriate for determining the degree to which variables are associated without manipulating them and is used to assess whether changes in one variable correspond to changes in another within a natural setting (Creswell, 2014, 2018). In this study, the design was utilized

to determine whether an increase or decrease in online gaming engagement was associated with changes in students' physical activity levels. Standardized questionnaires and rating scales were used to collect measurable data on both variables, while Pearson correlation analysis was employed to determine the strength and significance of the relationship. This methodological approach ensured that the investigation remained systematic, objective, and capable of generating empirical evidence relevant to educational and health related interventions. The study was conducted in the Senior High Schools of the Roxas City Division, Capiz, Philippines, during the first semester of School Year 2025–2026. Roxas City was selected as the locale because it represents an urbanized educational setting where digital engagement among adolescents is prevalent, making it an appropriate context for examining the relationship between online gaming and physical activity.

The study utilized stratified proportionate random sampling to ensure adequate representation of all subgroups within the population. Senior High School students were first grouped according to their academic strands, including the Academic and Technical Vocational Livelihood tracks, after which respondents were randomly selected in proportion to the size of each subgroup. This procedure minimized sampling bias, accounted for differences among student groups, and enhanced the representativeness of the sample. Stratified proportionate random sampling is particularly appropriate for heterogeneous populations because it permits valid comparisons across subgroups while maintaining statistical rigor (Creswell, 2014; Creswell & Creswell, 2018; Fraenkel, Wallen, & Hyun, 2020). Through this sampling procedure, the findings concerning the relationship between online game engagement and physical activity may be generalized more accurately across the Senior High School population of the Roxas City Division.

For the quantitative phase of the study, the participants consisted of 341 Senior High School students enrolled in selected public secondary schools within the Roxas City Division during School Year 2025–2026. The respondents included both male and female students representing various academic strands such as STEM, HUMSS, ABM, and TVL. Their ages ranged from 16 to 18 years old, corresponding to the typical age bracket of Senior High School learners in the Philippine educational system. Data were gathered through a structured survey questionnaire that measured online gaming engagement and physical activity. Socio demographic variables including age, sex, academic strand, and average daily time spent on online gaming were also collected to provide contextual information and facilitate subgroup analyses. The sample size of 341 respondents was considered sufficient to ensure statistical reliability and support meaningful quantitative analyses, including correlational and comparative measures.

For the qualitative phase, 15 participants were purposively selected to provide deeper contextual understanding of the quantitative findings. The participants consisted of five Senior High School students, five parents, and five teachers from the Roxas City Division. Student participants were selected based on varying levels of online gaming engagement, ensuring representation from low, moderate, and high engagement groups. Parent participants were included because of their direct involvement in monitoring students' gaming habits and physical activity at home, while teacher participants, particularly those teaching Physical Education and Senior High School subjects, provided professional insights regarding students' participation in physical activities, classroom behavior, and overall well being. Semi structured interviews were conducted to gather qualitative data, allowing participants to freely share their experiences, perceptions, and observations. The inclusion of students, parents, and teachers enhanced the credibility and depth of the findings through triangulation of perspectives. The combination of a large quantitative sample and a purposively selected qualitative group provided both breadth and depth in examining the relationship between online gaming engagement and physical activity among Senior High School students. Inclusion criteria for

student participants required that they be officially enrolled Senior High School students in the Roxas City Division during School Year 2025–2026, aged 16 to 18 years old, enrolled in any academic strand, engaged in online gaming regardless of frequency or duration, and willing to participate with the necessary informed consent and parental consent when required. Students who were not enrolled during the specified school year, were below 16 or above 18 years old, had no engagement in online gaming, were absent during data gathering, or declined participation were excluded. Parent participants were required to be parents or legal guardians of enrolled Senior High School students, directly involved in supervising students at home, knowledgeable about students' gaming habits and physical activity, and willing to participate in interviews or focus group discussions. Teachers were required to be currently teaching at the Senior High School level within the Roxas City Division, preferably handling Physical Education, Health, or core Senior High School subjects, possessing at least one year of teaching experience, directly interacting with student behavior and physical activity, and willing to participate in interviews or focus group discussions.

The primary research instrument was a researcher made survey questionnaire. To describe the students' gaming environment, the instrument included checklists identifying the gadgets used for gaming, such as smartphones, laptops, and gaming consoles, as well as commonly played online games including Mobile Legends: Bang Bang, Valorant, and Genshin Impact. Students were also asked to indicate their typical daily gaming duration, ranging from less than one hour to more than eight hours. The second section measured Online Gaming Engagement through 15 statements rated on a 5 point Likert scale ranging from 5 (Strongly Agree) to 1 (Strongly Disagree). The items assessed gaming related behaviors such as playing despite academic responsibilities, extending gaming sessions beyond intended durations, preferring gaming over alternative recreational activities, social interaction through gaming platforms, and spending money on in game purchases. The final section measured Physical Activity using another 15 item Likert scale that assessed the extent to which students balanced gaming with physical exercise. The items examined sedentary behavior, participation in sports and recreational activities, experiences of physical discomfort from prolonged gaming, engagement in stretching or walking during gaming breaks, and awareness of the importance of balancing screen time with physical activity.

To ensure content validity, the instrument underwent expert evaluation by specialists in educational research, adolescent health, and physical education. Revisions were made based on their recommendations to improve clarity, cultural appropriateness, and alignment with the objectives of the study. Reliability testing was conducted through a pilot study involving 30 Senior High School students who were not included in the actual sample. The Online Gaming Engagement Scale obtained a Cronbach's Alpha coefficient of 0.89, indicating high internal consistency, while the Physical Activity Rating Scale achieved a Cronbach's Alpha coefficient of 0.87, demonstrating acceptable reliability for research purposes.

Prior to data collection, the researcher secured approval from the Division Office and school principals. Participants were informed regarding the purpose of the study, and consent forms were obtained from students and their parents or guardians. The questionnaires were administered during designated class periods under the supervision of the researcher to ensure proper completion. Participation was entirely voluntary, and respondents were informed of their right to withdraw from the study at any time without penalty. Instructions were clearly explained before administration to reduce misunderstanding and encourage accurate responses. Anonymity was maintained by excluding names and identifying information from the questionnaires. Following collection, all accomplished instruments were securely stored and accessed only by the researcher. Data were reviewed for completeness and consistency before

encoding into statistical software for analysis. Throughout the study, ethical principles involving respect for participants' rights, privacy, confidentiality, and dignity were strictly observed.

The study categorized the variables to facilitate analysis of the relationship between online gaming engagement and physical activity. The independent variable, Level of Online Game Engagement, was measured using a 15 item survey questionnaire rated on a 5 point Likert scale where 5 represented Strongly Agree and 1 represented Strongly Disagree. Based on the resulting mean scores, respondents were classified according to the following categories: 4.21–5.00 as Very High Engagement, 3.41–4.20 as High Engagement, 2.61–3.40 as Moderately Engagement, 1.81–2.60 as Low Engagement, and 1.00–1.80 as Very Low Engagement. The dependent variable, Level of Physical Activity, was also measured using a 15 item survey questionnaire and categorized as follows: 4.21–5.00 as Very High, 3.41–4.20 as High, 2.61–3.40 as Moderate, 1.81–2.60 as Low, and 1.00–1.80 as Very Low. These categories were mutually exclusive and exhaustive, allowing each participant to be classified into only one level for each variable. Pearson correlation analysis was employed to determine the relationship between online gaming engagement and physical activity, thereby providing empirical evidence regarding the extent to which gaming behaviors are associated with students' physical activity patterns.

## RESULTS AND DISCUSSION

This chapter presents the analysis, interpretation, and discussion of data gathered from the study conducted among Senior High School students in the Roxas City Division during the School Year 2025–2026. The study employed a correlational research design to determine the relationship between the level of online game engagement and the level of physical activity among the participants. Data were collected using a researcher-made questionnaire composed of a gaming profile, an online gaming engagement scale, and a physical activity scale measured through a 5-point Likert scale. The instrument underwent expert validation and reliability testing prior to administration. Participants were selected through stratified proportionate random sampling to ensure representation across academic strands. The analysis utilized descriptive statistics, including mean and standard deviation, to determine the levels of online game engagement and physical activity, while Pearson correlation analysis was employed to examine the relationship between the two variables. The discussion that follows is grounded in the data gathered and interpreted in direct relation to the objectives of the study.

The findings revealed that the participants demonstrated a High Engagement in online gaming, obtaining a mean score of 3.76 and a standard deviation of 0.899. Based on the established scale, the mean falls within the range of 3.41–4.20, corresponding to the verbal interpretation of High Engagement. The standard deviation of 0.899 indicates moderate variability in responses, suggesting that while most students reported high levels of engagement, some variation existed in the extent of their involvement in online gaming. Overall, the clustering of responses around the mean indicates that online gaming constitutes a regular and significant component of students' daily routines.

The qualitative findings further reinforce the quantitative results. Students described online gaming as an important source of enjoyment, relaxation, achievement, and social interaction. Many reported playing after school and during leisure time, emphasizing that gaming had become integrated into their daily schedules. Several participants indicated that they frequently extended their playing time beyond what they initially intended because of competition, skill development, rankings, and achievement systems embedded within games. Others acknowledged experiencing feelings of restlessness when unable to play and admitted that gaming occasionally took precedence over academic responsibilities and other obligations.

These narratives demonstrate a strong psychological and behavioral attachment to gaming and illustrate the ways in which gaming has become a meaningful component of students' lifestyles.

The perspectives of parents and teachers further corroborate these observations. Parents reported that gaming had become a routine activity in their children's lives and expressed concerns regarding time management, prolonged screen exposure, and occasional neglect of household and academic responsibilities. Teachers similarly observed that students frequently discussed gaming experiences, rankings, and strategies, reflecting substantial cognitive and emotional investment in gaming activities. They also noted that excessive gaming sometimes influenced classroom focus, study habits, and timely completion of academic requirements. These observations support the quantitative evidence of high engagement and demonstrate the pervasive influence of online gaming on students' daily experiences.

The findings are consistent with the literature indicating that online gaming serves as a social environment where individuals establish relationships and experience a sense of belonging. Kowert (2020) and Zhong and Yao (2022) argue that gaming environments facilitate communication and social connectedness, while Teng et al. (2021) suggest that gaming engagement is frequently associated with intrinsic motivation, skill development, and goal-oriented behavior. At the same time, the observations regarding difficulties in time management and emotional attachment align with the findings of Montag et al. (2021) and the World Health Organization (2020), which emphasize that excessive gaming may contribute to behavioral dependency and negatively affect academic performance, physical activity, and overall well-being when not properly regulated. Therefore, while gaming provides meaningful social and recreational benefits, the findings indicate the importance of promoting responsible engagement to ensure that students maintain balance across different aspects of life.

With respect to physical activity, the participants demonstrated a High level of physical activity, obtaining an overall mean of 3.76 and a standard deviation of 1.109. Based on the established scale, the mean falls within the range of 3.41–4.20 and is interpreted as High. The standard deviation of 1.109 indicates moderate variability among participants, reflecting differences in how students balance gaming with movement-based activities. Despite their considerable engagement in online gaming, students generally maintained active lifestyles through walking, stretching, sports participation, recreational activities, and household tasks. These findings suggest that gaming does not entirely prevent students from engaging in physical activity and that many participants successfully integrate movement into their daily routines.

The qualitative data provide further insight into these patterns. Students reported consciously taking breaks after prolonged gaming sessions, engaging in activities such as walking, basketball, stretching, running, and household chores. They recognized physical discomfort resulting from extended sitting and described efforts to maintain physical movement throughout the day. Parents observed that their children continued participating in outdoor activities and household responsibilities despite frequent gaming. Teachers similarly noted that students remained active during Physical Education classes, sports events, and extracurricular activities and generally displayed willingness and energy to participate in movement-based tasks. These accounts suggest that students exhibit awareness of the importance of physical activity and actively attempt to balance gaming with healthy behaviors.

The findings align with the recommendations of the World Health Organization (2020), which advocate at least 60 minutes of moderate to vigorous physical activity daily for adolescents. They are likewise consistent with Bull et al. (2020), who emphasize the positive effects of regular physical activity on cardiovascular health, cognitive functioning, and overall

well-being. Although King et al. (2020) and Tremblay et al. (2020) warn that prolonged screen exposure may contribute to sedentary behavior and reduced energy expenditure, the present findings suggest that students have adopted compensatory strategies that allow them to remain physically active despite significant engagement in digital entertainment. Rhodes et al. (2021) argue that self-regulation and behavioral awareness are critical determinants of healthy lifestyle maintenance among youth, a perspective reflected in the participants' efforts to balance gaming with movement-based activities.

The most significant finding of the study concerns the relationship between online game engagement and physical activity. Pearson correlation analysis revealed an r-value of 0.877 with a p-value of 0.000, indicating a statistically significant relationship at the 5% level of significance ($p<0.05$). The results further revealed a 95% confidence interval ranging from 0.850 to 0.899. The obtained correlation coefficient of 0.877 indicates a very high positive correlation between online gaming engagement and physical activity. Consequently, the null hypothesis of no significant relationship is rejected. These findings indicate that students who reported higher levels of online game engagement also tended to report higher levels of physical activity.

The observed relationship challenges the traditional assumption that gaming necessarily promotes sedentary behavior and physical inactivity. Instead, the findings suggest that online gaming and physical activity may coexist within students' lifestyles. One possible explanation is that highly engaged gamers may also possess stronger time-management skills and greater awareness of the need to balance leisure activities with health-promoting behaviors. Another explanation may involve participation in gaming communities that encourage social interaction, competition, and engagement in school-based or community-based activities. Additionally, students who are naturally competitive, energetic, or achievement-oriented may be drawn to both gaming and physical pursuits, thereby contributing to the positive association observed in the data.

The findings are supported by Exelmans and Van den Bulck (2021), who argued that gaming does not necessarily replace physical activity and may coexist with active lifestyles depending on individual behavioral patterns. Similarly, Przybylski (2019) found that moderate gaming engagement is not negatively associated with adolescent well-being and may even contribute to positive outcomes when balanced appropriately with other activities. Faulkner et al. (2020) further reported that active and movement-based forms of gaming can contribute to increased physical activity among young people. Collectively, these studies support the present findings and suggest that the relationship between gaming and physical activity is more nuanced than traditionally assumed. Rather than functioning as competing behaviors, gaming and physical activity may complement one another when students exercise self-regulation and maintain balanced routines.

The implications of these findings are substantial for students, educators, parents, and school administrators. The high level of online gaming engagement demonstrates that gaming has become an important part of students' social, recreational, and emotional experiences. This presents opportunities for educators to integrate game-based approaches and digital tools into instruction to increase engagement and capitalize on students' interests. At the same time, the tendency of some students to prioritize gaming over academic responsibilities underscores the need for interventions focused on time management, self-regulation, and digital wellness. The high level of physical activity suggests that students remain capable of maintaining healthy lifestyles despite substantial gaming involvement, particularly when supported by school programs, parental guidance, and personal discipline. Furthermore, the significant positive relationship between gaming and physical activity suggests that gaming should not automatically be viewed as detrimental to physical health. Instead, schools and communities

should promote balanced routines that encourage both responsible digital engagement and sustained participation in physical activities, sports, and wellness programs.

Overall, the findings demonstrate that Senior High School students in the Roxas City Division exhibit a High level of online game engagement ($M = 3.76$, $SD = 0.899$) and a High level of physical activity ($M = 3.76$, $SD = 1.109$). The study further establishes a very high positive and statistically significant relationship between online game engagement and physical activity ($r = 0.877$, $p = 0.000$, $p<0.05$), indicating that greater gaming engagement is associated with higher levels of physical activity among the participants. These findings suggest that online gaming and physical activity are not necessarily opposing behaviors but can coexist within a balanced lifestyle when supported by effective self-regulation, parental guidance, school interventions, and health awareness. The results contribute to the growing body of literature examining the complex relationship between digital engagement and adolescent well-being and provide an empirical basis for the development of programs that promote responsible gaming, physical wellness, and holistic student development.

## CONCLUSION

This chapter presents the summary, conclusions, and recommendations of the study on the relationship between online game engagement and physical activity among Senior High School students. It highlights the key findings, provides conclusions based on the results, and offers practical recommendations for students, educators, and future researchers.

This study aimed to determine the relationship between the level of online game engagement and the level of physical activity among Senior High School students in the Roxas City Division during the School Year 2025–2026. Specifically, it examined the students' level of online gaming engagement, their level of physical activity, the significant relationship between the two variables, and the possible output derived from the findings. The study utilized a correlational research design to measure the association between the variables without manipulation. It was conducted in selected Senior High Schools in Roxas City, with participants chosen through stratified proportionate random sampling to ensure representation across academic strands. Data were gathered using a researcher-made questionnaire consisting of three parts: gaming profile, online gaming engagement scale, and physical activity scale, all measured using a 5-point Likert scale. The instruments were validated by experts and tested for reliability, yielding high internal consistency. Data collection followed proper ethical procedures, including consent and confidentiality, and the results were analyzed using statistical tools such as Pearson correlation to determine the relationship between online gaming engagement and physical activity.

The findings revealed that Senior High School students demonstrated a high level of online game engagement, making gaming a significant part of their daily routines. Students frequently engaged in gaming for enjoyment, stress relief, and social interaction with peers. While gaming promoted motivation, connection, and skill development, it also created challenges such as prolonged screen time, poor time management, and the tendency to prioritize gaming over academic tasks and other responsibilities. Responses from students, parents, and teachers consistently highlighted both the positive and negative effects of gaming, emphasizing the need for balance to avoid adverse effects on academic performance, physical health, and overall well-being.

The findings also showed that students maintained a high level of physical activity despite their involvement in online gaming. Many students continued participating in activities such as sports, walking, stretching, and household chores, demonstrating awareness of the

importance of staying physically active. Although gaming sometimes reduced time for exercise and encouraged sedentary behavior during extended play, students were generally able to balance gaming and movement through self-discipline, routines, and parental or school guidance.

Furthermore, the study revealed a strong and statistically significant positive relationship between online game engagement and physical activity, indicating that students who were more engaged in gaming also tended to be physically active. This suggests that online gaming does not necessarily prevent students from maintaining an active lifestyle. However, the findings also imply that without proper control and time management, excessive gaming may contribute to reduced physical movement, poor sleep patterns, and unhealthy routines.

Senior High School students have a high level of online game engagement, making gaming a regular part of daily life. While it provides enjoyment and social interaction, it may also affect time management, academics, and physical activities, highlighting the need for moderation and self-regulation.

Despite their engagement in online gaming, students still maintain a high level of physical activity. Although gaming may reduce exercise time, students are generally able to balance both through proper time management and guidance from parents and teachers.

Online gaming does not necessarily reduce physical activity, as both can coexist. However, the relationship may also be influenced by other factors.

Balance between online gaming and physical activity depends on students' lifestyle habits and time management.

Students may practice proper time management and self-regulation to prevent online gaming from affecting academics and physical activities, while parents and schools may guide responsible gaming habits and healthy screen time limits.

Teachers, parents, and school administrators may continue encouraging physical activities through sports programs, fitness initiatives, and active learning strategies to maintain students' balanced lifestyles.

Schools may promote balanced routines by encouraging responsible gaming and strengthening physical education and movement-based activities.

Students may limit gaming and remain physically active, while parents and schools may provide guidance and wellness programs to support healthy balance.

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