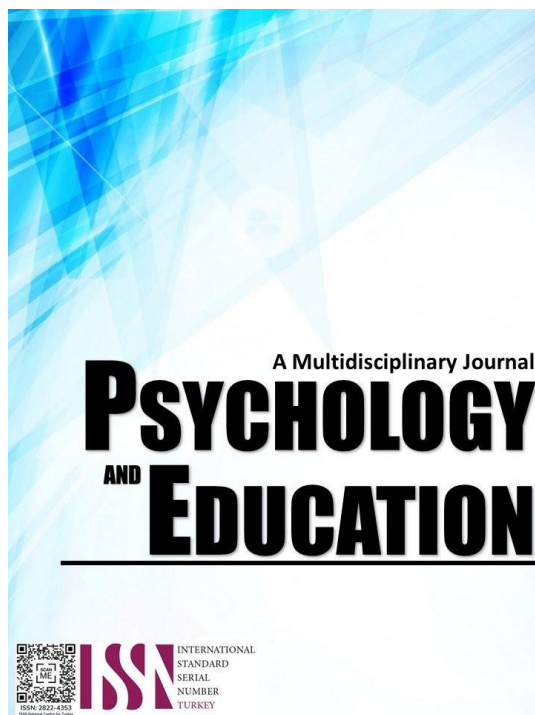


# COMPULSIVE INTERNET USE AND ACADEMIC PERFORMANCE AMONG SENIOR HIGH SCHOOL STUDENTS IN LIPA CITY



## PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 20

Issue 7

Pages: 838-850

Document ID: 2024PEMJ1898

DOI: 10.5281/zenodo.11546438

Manuscript Accepted: 05-13-2024

## Compulsive Internet Use and Academic Performance among Senior High School Students in Lipa City

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### Abstract

In today's digital age, the internet has become integral in the lives of individuals. However, while it offers numerous benefits, it is undeniable that compulsive internet utilization may have potential challenges, especially for students and their academic performance. This research identified and measured the levels of compulsive internet use and academic performance among senior high school students of Lipa City. The researchers used a quantitative descriptive correlational design to describe research variables and their relationship. A purposive sample method was used to select the 55 students from one institution in Lipa City. The Compulsive Internet Use Scale was used to measure the compulsive internet use of students while the academic performance was based on the grade point average obtained from the senior high school department. The present study found that the respondents have moderate compulsive internet use and satisfactory academic performance. A negative relationship was also found between the variables ( $r = -.295$ ), indicating that higher levels of compulsive internet use among respondents corresponded to lower academic performance. Likewise, statistical analysis indicated that the relationship between the two variables was significant ( $p = .029$ ). Therefore, the present study recommends that the parents, teachers, and the institution's administration should collaborate to formulate and spearhead an intervention program to reduce compulsive internet use.

**Keywords:** *academic performance, compulsive internet use, senior high school student*

### Introduction

In today's digital age, the internet has become an integral part of an individual's daily life. Given the continuous advancement and modernization, people benefit from this for communication, access to information, connection with the world, and engaging in entertainment involving social media, online games, videos, news, and music. While it offers numerous benefits, it is undeniable that compulsive utilization of the internet for entertainment activities may come with potential challenges, especially for students and their academic performance.

Students often rely on the internet for different purposes due to its widespread accessibility, resulting in a tendency for them to become compulsive users. Quiñones-García and Korak-Kakabadse (2014) stated that compulsive use of the internet is the maladaptive internet usage, including an unhealthy connection with the internet, lacking control over its usage, utilizing it to regulate emotions, and experiencing withdrawal symptoms. Being aware of this, there is evidence that some people may become compulsive in their internet use, which can have negative long and short-term effects on fundamental elements of their lives, such as maintaining daily habits, academic success, and family relationships (Yebowaah, 2018) and negative effects on mental health, including sleep loss, poor social skills, depression, and other psychiatric issues (Dutta & Chye, 2017).

In line with this, the current generation of adolescents, including senior high school students, are digital natives as they are exposed to technological tools during their upbringing. Based on international studies, 80% of adolescents own a digital gadget (Fox & Duggan, 2013) and found that in Asia, over 80% of young people have access to the internet (Cerniglia et al., 2016). At the same time, Filipino adolescents were found to utilize the internet regularly for entertainment purposes (Huele & Espinosa, 2022), including social media, online games, videos, news, music, and other forms of amusement (Algan et al., 2018), while only 1% of them used internet for academic purposes (Kolhar et al., 2021). From the aforementioned data, Ngoumandjoka (2012, as cited in Amponsah et al., 2022) stated that the internet is typically used for entertainment pursuits rather than educational ones, where it creates a place people can engage in leisure activities and disconnect from reality if it provides them with benefits (Liou et al., 2022).

As a consequence, since students frequently utilize the internet for purposes other than learning, the compulsive use of the internet for entertainment and the imbalanced time and attention to its usage can lead to academic distraction impacting the student's cognitive functioning including their ability to focus and concentrate (Bekalu et al., 2019). A study has revealed that 82.5% of adolescents felt more distracted when engaged in online entertainment activities (Siebers et al., 2022), which may affect their academic performance (Affum, 2022). Academic performance, on the other hand, is the outcome of learning prompted by the teaching activities of educators and produced by students, which are typically demonstrated through their grades in school (Lamas, 2015).

Based on the phenomena above, adolescents, including senior high school students, are perceived to be more vulnerable to compulsive internet use because they have not yet fully developed their cognitive abilities, self-control, and coping mechanisms compared to other age groups (Long et al., 2018). This vulnerability primarily pertains to individuals in the 10-19 age groups, as recognized by the World Health Organization. Moreover, compulsive adolescent internet use is steadily rising (Akar, 2015), and many studies have revealed that they are more likely to engage in compulsive online activities than adults (Long et al., 2018). Given these, the present study will target the senior high school students in one institution in Lipa City, who belong to the adolescent age group, as its respondents.

The cognitive-behavioral theory of pathological internet use (PIU) (Davis, 2001) supports the phenomenon under investigation,

proposing that compulsive internet use (CIU) is a manifestation of problematic cognitive behavior patterns that develop from regular internet use, leading to behaviors that either intensify or maintain the maladaptive responses (Diaz- Aguado et al., 2018). Additionally, individuals tend to utilize the internet as a way of social comfort where they perceive the online world as safer than the real world and to get away from the demands, obligations, and problems of the real world (King & Delfabbro, 2014) which could prompt the students to experience difficulty focusing on their academic studies, inability to complete homework on time and prepare for exams, deterioration of study habits, and missing classes (Ayaydin & Ayaydin, 2018).

Therefore, the present study seeks to determine the profile of respondents to find out what online entertainment platform the senior high school students of one institution in Lipa City are frequently utilizing, which could provide information on what platform needs further attention and may contribute to the existing local literature in assessing what online entertainment platform leads to a more compulsive internet use. Additionally, this study seeks to determine the level of academic performance and examine its relationship with compulsive internet use among the respondents, bearing in mind that the compulsive usage of the internet for entertainment may affect their academic performance. Since there are no studies regarding the relationship between the two psychological constructs conducted within the institution, it is imperative to test as it led a way to assess the relationship of compulsive internet use with the academic performance among senior high school students of the target institution in Lipa City. Lastly, it would address the gap in the literature in an interpersonal context since there has been no local study specifically incorporating these two variables.

### Research Questions

This study sought to assess and determine the level of compulsive internet use and its relationship with academic performance among senior high school students of Lipa City. It specifically aimed to answer the following:

1. What is the frequently utilized internet entertainment platform by the respondents?
2. What is the level of compulsive internet use of the respondents?
3. What is the level of academic performance of the respondents?
4. What is the relationship between compulsive internet use and the academic performance of the respondents?
5. How can the findings be utilized in proposing an intervention program?

### Literature Review

#### *Compulsive Internet Use*

The current generation of adolescents, including senior high school students, are digital natives as they are exposed to technological tools during their upbringing. Based on international studies, 80% of adolescents own a digital gadget (Fox & Duggan, 2013) and found that in Asia, over 80% of young people have access to the internet (Cerniglia et al., 2016). At the same time, Filipino adolescents were found to utilize the internet regularly for entertainment purposes, including social media, online games, videos, news, music, and other forms of amusement to foster connections and enable immediate engagement through leaving a mark online, like liking or commenting on different contents (Algan et al., 2018; Bozzola et al., 2022; Huele & Espinosa, 2022). Given these instances, Feito and Brown (2018) asserted that the internet's accessibility, functionality, and social characteristics make adolescent students frequently utilize and engage in these platforms compulsively.

Compulsive internet use refers to an unhealthy connection with the internet, characterized by a lacking control over usage, utilizing to regulate emotions, and experiencing withdrawal symptoms (Quiñones-García & Korak-Kakabadse (2014). It can have negative long and short-term effects on fundamental elements of lives, such as maintaining daily habits, academic success, and family relationships (Yebowaah, 2018) and negative effects on mental health, including sleep loss, poor social skills, depression, and other psychiatric issues (Dutta & Chye, 2017). Likewise, the heavy dependency of users, leisure activities engagement, and its design system providing pleasure and satisfaction also makes them susceptible to acquiring compulsive behavior towards internet use regardless of the platform (Giraldo-Luque, 2020; Guoho, 2015; Quiñones-García & Korak-Kakabadse, 2014; Ranganatha & Usha, 2017). Additionally, the interpersonal relationships and support received from other people also determine the level of compulsiveness, given that the level of social and family support is associated with the degree of compulsive internet usage (Quiñones-García & Korak-Kakabadse, 2014). It has also been linked to poor social connectedness corresponding to the cognitive behavioral theory in which dysfunctional thoughts or beliefs sustain compulsive behavior (Davis, 2001, as cited in McIntyre et al., 2015).

Furthermore, students are inclined towards compulsive internet usage due to unstructured time, newfound freedom from parental oversight, absence of online expression monitoring, lack of peer pressure regarding identity disclosure, and the allure of gaining spontaneous popularity on social media platforms. They find gratification in their online activities, viewing it as a means to compensate for perceived shortcomings, leading to a dependency on the internet (Kumar & Mondal, 2018). A study cited by Dean (2019) further reinforces this notion by revealing that technology and social media use diminish emotional connections in real-life relationships, emphasizing the need to limit internet use. Additionally, individuals tend to utilize the internet as a way of social comfort where they perceive the online world as safer than the real world and to get away from the demands, obligations, and problems of the real world (King & Delfabbro, 2014) which could also prompt the students to experience difficulty focusing on their academic studies, inability to complete homework on time and prepare for exams, deterioration of study habits, and missing classes (Ayaydin & Ayaydin, 2018).

In this context, Espiritu et al. (2021) revealed that students in one institution in Lipa City have a moderate level of compulsive internet entertainment use, which was not a concern during the study in 2021. Still, given the incremental trend in use, it may soon rise. From the data above, Ngoumandjoka (2012, as cited in Amponsah et al., 2022) stated that the internet is typically used for entertainment pursuits rather than educational ones, where it creates a place where people can engage in leisure activities and disconnect from reality if it provides benefits (Liou et al., 2022). It also serves as primary outlet for coping with difficulties and satisfying immediate desires during negative social and psychological states, particularly when the internet is readily available (Li et al., 2015).

Among different age groups, adolescents, including senior high school, are thought to be more susceptible to compulsive internet use because they still lack fully formed cognitive abilities, self-control, and coping mechanisms than other age groups (Long et al., 2018). This vulnerability primarily pertains to individuals in the 10-19 age groups, as recognized by the World Health Organization. Consequently, there is a steady increase in compulsive internet use among adolescents (Akar, 2015), with several studies indicating that adolescents are more prone to engaging in compulsive online behaviors compared to adults (Long et al., 2018). Research suggests that adolescents struggle to control their participation in various online activities (Ogedebe, 2012, as cited in Affum, 2022), especially when interacting with entertainment platforms (Bragdon & Dowler, 2016). They spend uncontrollable time to these platforms as part of their daily routines, with only 1%, utilizing the internet for academic purposes (Kolhar et al., 2021). Since students frequently utilize the internet for purposes other than learning, this tends to distract them from their education, impacting cognitive abilities such as focus and concentration, and hindering their academic development (Bekalu et al., 2019). This is further supported by the study of Siebers et al. (2022) which found that 82.5% of adolescents reported feeling more distracted when involved in online entertainment activities, potentially affecting their academic performance (Affum, 2022).

### ***Academic Performance***

Academic performance was characterized as a measure of an individual's indicative and responsive abilities, reflecting the degree to which they had acquired knowledge through educational or training procedures. It is the outcome of learning prompted by the teaching activities of educators and produced by students, which are typically demonstrated through their grades in school (Lamas, 2015).

In line with this, as referred to DepEd Order No.8 s. 2015, in adherence to the Enhanced Basic Education Act of 2013 (Republic Act No. 10533), the Department of Education (DepEd) is incorporating the Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program. Within this framework, the K-12 program employs a grading system centered on standards and competencies and provides a grading scale with associated descriptors to convey students' learning advancements. Students who obtain grades between 90 and 100 are categorized as 'outstanding'. According to the studies of Sadler (2013) and Ginting et al. (2022), these students actively participate in classes, consistently produce high-quality work, and demonstrate strong work ethic and commitment to scholarly pursuits. Additionally, given that they deeply understand the course, they obtain high grades at the end of the semester or period. These could be attributed to their ability to motivate and regulate themselves to do the tasks easily without any distractions and at a fast pace (Herndon et al., 2017).

On the other hand, students who consistently submit competent assignments, excel in assessments and learning activities, and exceed the standard expectation for the course (Lee et al., 2013; Yogendra & Andrew, 2017) are described as 'very satisfactory' with grades between 85-89, while those students who still demonstrate competence, submit acceptable assignments and understand the lectures are described as 'satisfactory,' with grades ranging from 80-84. The ineffective time management has been identified as a factor in getting average grades where students may struggle to allocate sufficient time for studying, leading to rushed preparation for assignments and exams (Stroebe et al., 2016).

### ***Compulsive Internet Use and Academic Performance***

With internet usage experiencing substantial growth, particularly in developing nations, there is a claim that behaviors related to internet usage have been linked to academic performance (Chaudhari, 2015). However, there is still debate regarding the association between the two (Xu et al., 2019). Additionally, concerns regarding the impact of digital technology have been great, especially when it also leads to undesirable behavioral patterns like compulsive internet use (Hawi & Samaha, 2016).

Empirical data indicated that students who depend on the internet are more likely to experience academic failure than their peers (Nemati & Matlabi, 2017). In the review and longitudinal study of Liou et al. (2022) and Doleck et al. (2018), compulsive internet use predicted academic decrement. These recursive patterns suggest that students can overuse the internet to escape a rigorous course load and lower their view of their academic performance. Likewise, as students perceive lower academic performance, they look for success outside of the academic discipline, and the internet would be appealing to them since it is full of interesting and creative concepts as well as the opportunity for self-expression (Kiuru et al., 2009, as cited in Liou et al., 2022).

There is also evidence that students who use the internet heavily face academic difficulties and considerable levels of stress, which might make it difficult for them to interact with others effectively. From this, uncontrollable internet usage and reliance can disrupt students' academic and professional lives (Jafari et al., 2022). Engaging in different online entertainment activities also increases the likelihood of acquiring academic distraction and procrastination, which affects academic success (Brate, 2017; Feng et al., 2019). This was supported by the research of Perdomo et al. (2022), which revealed that compulsive internet use negatively affects a student's academic performance for several reasons, such as distraction from studies and sharing ideas and opinions on different internet

platforms. It was found to divert students' focus from educational tasks and lead to a significant waste of time, resulting in detrimental impacts on their academic performance. Furthermore, struggling with increasing internet entertainment engagement and dependency implies that uncontrollable internet use distracts students from studying, resulting in them losing the ability to focus and receiving declined academic achievement (Akhter, 2013).

Despite the negative consequences of maladaptive internet usage, entertainment positively affects cognitive function. In the study of Algan (2018), online entertainment, like video games, can help children develop their visual-spatial awareness, problem-solving abilities, and capacity for cooperation and teamwork. Additionally, Castillo and Dumrique (2017) stated that online games can relieve stress, challenge, and competition, help people relax, enjoy social interaction, and even help people mentally escape from the real world. Making players alert, active, and strategic is beneficial since they develop solutions and decisions in tight situations. Various entertainment programs, such as puzzle games, online movies, and online music, assist them in balancing their home-school life, reducing stress, and improving moods (Cardoso, 2015).

Furthermore, the research revealed that individuals who heavily use the internet are more likely to achieve higher academic success than those who use it sparingly or moderately. Heavy internet users who utilized the internet for information gathering and chatting exhibited enhanced academic performance and positively impacted their grades while improving their reading, writing, and information processing abilities. As per extensive research, computer resources like games had a positive impact on spatial skills, memory, and the development of visual and auditory capacities (Chen & Tzeng, 2010; Jehopio et al., 2017; Subrahmanyam et al., 2001; Suhail & Bargees, 2006, as cited in Jehopio et al., 2017).

In contrast, Hamza et al. (2021) found no correlation between the internet addiction test result and cumulative grade point average (CGPA). This is for the reason that the majority of students who had been classified as addicted by the screening appeared to have a problem with time management, whether their CGPA was high or low. This study is in line with the results of Usman et al. (2014), which indicated that there is no significant correlation between uncontrollable use of the internet and school performance where the finding is not at a critical level as measured through Pearson correlation. However, early intervention to avoid this should be considered, and students should intentionally be aware of the drawbacks that it might cause.

### **Intervention Program**

An intervention is designed to integrate physical activity with learning activities, drawing on evidence supporting the positive effects of moderate to vigorous physical activity (MVPA) on academic achievement (Mullender-Wijnsma et al., 2015). This intervention comprises a combination of program elements or strategies aimed at producing behavioral changes or enhancing health status among individuals. Interventions encompass educational programs, strengthened policies, environmental enhancements, or health promotion campaigns, incorporating multiple strategies typically proven to be the most effective for achieving desired and enduring change (Sterne, 2017).

Recreation, as an intervention program, is a leisure activity pursued for pleasure, enjoyment, or amusement to refresh the mind and body after periods of work. It encompasses various activities such as sports, hobbies, games, swimming, fishing, cycling, running, and traveling, all undertaken for enjoyment, relaxation, and personal satisfaction. Recreational activities can be experienced individually or in a group setting, be either passive or active, take place indoors or outdoors, and have the potential to be either harmful or healthy, as well as useful or detrimental (Ekhtor et al., 2018). Additionally, engaging in recreational activities contributes to maintaining good physical and mental health and supports overall well-being and personal fulfillment (Petersen et al., 2021)

According to the study of Delk et al. (2014), incorporating breaks for recreational activities during classes can enhance concentration and focus when students return to their academic tasks, and balancing academic and recreational pursuits also aids in developing effective time management skills. Furthermore, engaging in group activities as part of recreation fosters social interaction and teamwork, playing a role in developing interpersonal skills and establishing positive relationships, which are crucial factors for academic success (Erinjeri, 2023). Recreational activities also contribute to psychological well-being among students as they serve as valuable emotional outlets, providing students a means to express themselves and cope with challenges positively (Mardan et al., 2022). Therefore, including recreational activities in intervention programs for students offers a break from academic stress, promotes physical exercise, encourages social interaction, and facilitates skill development, collectively contributing to overall well-being (Pharez, 2016). Likewise, higher levels of physical activity, healthy eating habits, and enhanced psychological well-being are also correlated with improved academic performance (Peltzer & Pengpid, 2014)

Moreover, Khan and Lee (2020) emphasized that incorporating engaging and fulfilling recreational activities can divert problematic internet use among students, offering alternative sources of enjoyment and relaxation. Physical activities such as sports, hiking, or dancing contribute to health and physical efficiency and divert attention from sedentary internet use, promoting a healthier lifestyle (Ahmed et al., 2016). Moreover, participation in sports, fitness activities, or outdoor adventures shifts the focus from screens to active pursuits, imparting important life skills and teaching lifelong leisure activities (Schwab, 2014). Engaging in recreational activities, particularly those involving group participation, promotes face-to-face interactions, reduces reliance on online social platforms, and contributes to improved mental health. Additionally, involvement in artistic endeavors like painting, writing, or music can stimulate students' interests and provide a creative outlet away from digital screens (Root, 2015; Vacchiano & Bolano, 2020).



## Methodology

### Research Design

The present study utilized a descriptive correlational research design. Quantitative research involves the gathering and examination of numerical information. Its purpose is to investigate the nature of the relationship and draw conclusions from numerical data collected from statistical analysis. Also, quantitative methods are employed to gather and quantify numerical data impartially through questionnaires and surveys or to manipulate existing statistical data with computational techniques (Bhandari, 2023). The required data for this study was acquired through survey questionnaires. On the other hand, descriptive correlational design was used to describe research variables and explore their natural connections or relationships. This research method facilitates the researchers in ascertaining whether a significant correlation exists between compulsive internet usage and academic performance (Lemboye, 2019).

### Participants

The participants of the study were the senior high school students in one institution in Lipa City. They were selected from the population of senior high school students using specific criteria. The respondents were bonafide students in the target senior high school institution in Lipa City, enrolled in any strand and within the age range of 16-19 years old.

The researchers also utilized G\*Power to test the statistical strength of the study further and to know the minimum sample size. According to this tool, the minimum sample size was eighty-four (84) with a 0.3 effect size, 0.80 power, and probability error of 0.5 using Correlation: Bivariate normal model. In line with this, the survey was distributed to 100 respondents in senior high school and did not include invalid or incomplete responses in the number of respondents. In addition, respondents who obtained a score above 28 points were included in the study. However, after having conducted the study, only fifty five (55) students qualified.

Subsequently, the purposive quota sampling was used, which became its main method for selecting people for sampling. Purposive quota sampling was a non-probability sampling strategy where researchers choose a sample based on pre-set quotas for particular demographic traits or subgroups. Quota sampling's objective was to manage who or what was included in the sample (Nikolopoulou, 2023).

### Instruments

The study's respondents completed a demographic profile form to obtain information on their frequently utilized internet platform. Similarly, a standardized Compulsive Internet Use Scale (CIUS) by Meerkerk et al. (2009) was used to measure compulsive Internet use. It was based on the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) criteria for Dependence and Pathological Gambling. Also, it included general features of behavioral addictions, which were added based on Griffiths's (1999) recommendations.

CIUS consisted of 14 items with a five-point Likert scale with the options of (1) Never, (2) Seldom, (3) Sometimes, (4) Often, and (5) Very often. The verbal interpretation of this 5-point Likert scale was Very Low in 1 (Never) with a mean value of 1.00 – 1.79; Low in 2 (Seldom) with a mean value of 1.80 – 2.59; Moderate in 3 (Sometimes) with a mean value of 2.60 – 3.39; High in 4 (Often) with a mean value of 3.40 – 4.19; and Very High in 5 (Very Often) with a mean value of 4.20 – 5.00. A higher score indicated a higher severity of pathological or compulsive internet use. However, no empirically derived cut-off has yet been published in English to differentiate between compulsive and non-compulsive internet users. Meerkerk et al. suggested that problems described by the items should play an important role in the internet users' lives to constitute compulsive internet use. This will be the case if specified internet use behaviors occur on average at least 'sometimes', corresponding to a cut-off of 28 points most often used internationally. Subsequently, Rumpf et al. (2013) utilized this scale and found groups demarcating potential addiction and high-risk use from high engagement corresponding to approximately CIUS summary scores of 28. It was also found that the scale has shown good validity and reliability, ranging from 0.88 to 0.90. Thus, this signifies strong reliability.

Lastly, the respondents' academic performance was obtained through their grades, which were requested from the office of the vice principal of the target senior high school institution. The grades were then classified through the grading scale with corresponding descriptors, as in DepEd Order No.8. S. 2015. These were Outstanding (90-100), Very Satisfactory (85-89), Satisfactory (80-84), Fairly Satisfactory (75-79) and Did Not Meet Expectations (below 75).

### Procedure

The researchers sought the permission of the research advisers and instructors to begin the data-gathering process. Then, they prepared the necessary documents, which included informed consent and formal letters. A letter of request was addressed to the principal and assistant principal of the Senior High School Department to obtain and assess the respondents' academic performance. After these documents were approved, the researchers conducted and disseminated the printed survey questionnaires to identify which online entertainment platforms were frequently used by the respondents. Also, the survey incorporated the Compulsive Internet Use Scale items to evaluate further the extent of compulsive Internet usage of the respondents and gain insights into their online behavior. The official respondents were selected purposely based on the scores they obtained on the Compulsive Internet Use Scale, specifically targeting individuals who scored 28 and above.

## Data Analysis

For the statistical analysis of the present study, the Statistical Package for Social Sciences (SPSS) was used. To ensure the reliability of the analyses and their interpretations, the researchers utilized a (1) frequency distribution table, which showed the actual distribution of the profile of respondents in a frequency format; (2) percentage, which determined the relative position of the respondents; (3) ranking, which was the ordinal number of a value that was arranged in a specific order; (4) weighted mean, which was the average that was calculated by assigning various weights to certain of the individual variables; and (5) Pearson  $r$ , which was used to determine the association between the variables. These statistical techniques described the frequently utilized internet platform, the level of compulsive internet use, and academic performance.

## Ethical Considerations

In engaging with the respondents, ethical considerations were prioritized and covered by the Republic Act No. 10173, much better known as the Data Privacy Act. This republic protects peoples' private information in public and private information and communication systems. The APA Ethical Principles of Psychologists and Code of Conduct stated that the researchers explained the respondents' rights in a letter and obtained informed consent. Regarding their inquiries, the respondents can contact the researchers using the provided contact details, clarifications, or any worries regarding the study and their participation.

Participation in this survey was voluntary, and respondents were free to withdraw at any time. No one was forced, and they can respond to the survey whenever it is most convenient. The researchers also maintained the confidentiality of the research data, and they asked the students' permission before using their true identities. Likewise, no one was harmed during the conduct of the study. Finally, respondents were made aware that only the researchers had access to the data collected from them and that it was solely used in the study. Data was properly removed after the research study to protect the privacy of the subjects' information.

## Results and Discussion

Table 1. *The platform of internet entertainment frequently utilized by the respondents*

Platform	Frequency	Percentage	Rank
Social media	47	85.5	1
Videos on Demand	5	9.1	2
Online Games	3	5.5	3
Total	55	100%	

Table 1 displays the platform of internet entertainment frequently utilized by the respondents, where the majority were using social media as attested by a frequency count of 47 out of 55 respondents with a corresponding percentage of 85.5%. These include Facebook, Instagram, WhatsApp, Twitter, etc. On the other hand, 5 out of 55 respondents were using the videos on demand. These include YouTube, Netflix, Iflix, Disney+, HBO, and others, while another three respondents used online games as an entertainment platform. These include Mobile Legends, Axie Infinity, DOTA, etc.

Table 2. *Level of compulsive Internet use of the respondents*

Indicators	WM	VI	R
1. I find it difficult to stop using the internet when I am online.	3.64	Often	3.5
2. I continue using the internet for entertainment despite my intention to stop.	3.53	Often	6
3. Others (e.g., partners, children, parents, friends) frequently suggest that I should use the internet less.	3.64	Often	3.5
4. I often prefer to use the internet for entertainment instead of spending time with others (e.g., partners, children, parents, friends).	3.25	Sometimes	9
5. I am frequently short of sleep because of the internet.	3.55	Often	5
6. I often think about what entertains me on the internet, even when I am not online.	3.24	Sometimes	10
7. I often look forward to my next internet session.	3.33	Sometimes	8
8. I think I should use the internet less often.	2.31	Seldom	14
9. I have made unsuccessful attempts to spend less time on the internet on numerous occasions.	3.38	Sometimes	7
10. I frequently rush through my (home) work to go online.	2.89	Sometimes	12
11. I often neglect my daily obligations (work, school, or family life) because I prefer online.	2.40	Seldom	13
12. I entertain myself on the internet when I am feeling down.	4.38	Very Often	1
13. I frequently use the internet to escape from sorrows or get relief from negative feelings.	4.18	Often	2
14. I feel restless, frustrated, or irritated when I cannot use the internet.	3.10	Sometimes	11
Grand Mean	3.34	Sometimes/Moderate	

Legend: WM = Weighted Mean VI = Verbal Interpretation 1.00-1.79 = Never/Very Low 3.40-4.19 = Often/High 1.80-2.59 = Seldom/Low 4.20-5.00 = Very Often/Very High 2.60-3.39 = Sometimes/Moderate

Table 2 presents the results of the respondents' assessments on their level of compulsive internet use, which showed that respondents moderately have compulsive internet use as attested by a grand mean of 3.34. Specifically, they have a very high compulsive internet use when they entertain themselves because of feeling down, with the highest weighted mean (WM) of 4.38. In addition, they used the internet to escape from sorrow or get relief from negative feelings, which garnered the second-highest weighted mean of 4.18. Similarly,

other people such as partners, children, parents, or friends highly suggest that they should use the internet less (WM=3.64, rank 3.5); find it difficult to stop using the internet when they are online (WM=3.64, rank 3.5); frequently short of sleep because of the internet (WM=3.55, rank 5); and continue using the internet for entertainment purposes despite their intentions to stop (WM=3.53, rank 6). On the other hand, they have made a moderate level of unsuccessful attempts to spend less time on the internet on numerous occasions (WM=3.38, rank 7), look forward to their next internet session (WM=3.33, rank 8), prefer to use the internet for entertainment instead of spending time with others (WM=3.25, rank 9); think about what entertains them on the internet, even when they are not online (WM=3.24, rank 10); feel restless, frustrated, or irritated when they cannot use the internet (WM=3.10, rank 11); and rush through home or work to go on the internet (WM=2.89, rank 12). However, they have a low level of neglecting their daily obligations (work, school, or family life) because they prefer to go on the internet (WM=2.40, rank 13) and think they should use the internet less often with the lowest weighted mean (WM) of 2.31.

Table 3. *Academic performance of the respondents*

Grade	Frequency	Percentage	Rank	Mean	Mode	St. Dev.	Skewness
77-79	3	5	7	87.64	88	5.02	-.264
80-82	7	13	4.5				
83-85	9	16	3				
86-88	13	24	1				
89-91	7	13	4.5				
92-94	12	22	2				
95-97	4	7	6				
Total	55	100%					

Table 3 reflects the respondents' academic performance, where the lowest academic performance among the respondents was 77 and the highest was 97. Most of the respondents' academic performance fell between 90 - 100, with a frequency count of 21. Eighteen respondents got an academic performance between 85 - 89 (rank 2), 13 students got grades between 80 - 84 (rank 3), and three students got grades between 75 - 79 (rank 4). The overall performance of the respondents showed a mean of 87.64. Further analysis showed that the standard deviation of the distribution was 5.02. Such a high value showed that the distribution was dispersed. On the other hand, a skewness of -.264 showed that more grades reflected respondents' academic performance on the right of the mean than on the left side. This showed that out of 55 respondents, most of them earned grades higher than 87.64 (mean) compared to the frequency of students who earned grades below the mean, which implies that the majority of these students were performing above the mean, showcasing a dedication to their academic pursuits,

Table 4. *Relationship between the level of compulsive internet use of the respondents and their academic performance*

Academic Performance	Level of Compulsive Internet Use		
	r-coeff	r-square	p-value
	-.295	.087	.029
			p-value<.05, Reject the Null Hyp.

Legend: P-value<0.05=significant, p<0.001=highly significant; r: .70-1.00=very strong, .50-.69=high, .30-.49=moderate, .10-.29=low, 0.01-0.09=negligible

Table 4 reveals the relationship between the respondents' level of compulsive internet use and academic performance. Data analysis showed a low to moderate negative relationship between the student's academic performance and their level of compulsive internet use, as shown by a correlation coefficient of -.295. This only means that there was a low to moderate degree that the higher the respondents' difficulty in lessening their engagement with compulsive internet uses, the lower their expected academic performance. In addition, the proportion of academic performance that can be accounted for by the compulsive internet use, and vice versa can be indicated by the coefficient of determination of 0.087. Thus, the p-value of .029, which was lower than 0.05, indicated that the relationship between the two variables, level of compulsive internet use and academic performance, was, therefore, significant.

Among the three entertainment platforms, social media was the most frequently utilized because students used it to interact socially. This context can be explained by the utilization of the internet which serves a crucial role in the lives of many for entertainment purposes, fostering connections and enabling immediate engagement through leaving a mark online, like liking or commenting on different contents (Bozzola et al., 2022). Aside from social media functions, it has also been employed to address various challenges, such as seeking emotional support, providing an avenue to express stress, and combating feelings of isolation and depression (Chen et al., 2022). Given these, Feito and Brown (2018) state that senior high school students most frequently use social media as an internet entertainment platform due to its accessibility, functionality, and inherent social characteristics.

In relation to this, the respondents exhibit a moderate degree of compulsive engagement in internet entertainment activities, which was in line with the research of Espiritu et al. (2021). Even though it was only focused on social media, the study revealed that the level of compulsiveness is no different compared to the result of the present study despite focusing on different online entertainment platforms. Likewise, the present finding indicated that students could maintain a level of control over their usage, highlighting that students with self-control can mitigate online behavioral issues and reduce the increased level of compulsive behaviour. Furthermore, the students'



level of compulsive internet usage appears to be influenced by various factors, including academic stress, social expectations, negative social skills, the desire for distraction, and external pressures such as sadness, boredom, and stress (Puspita & Rohedi, 2018).

Online entertainment activities also serve as the primary outlet for coping with difficulties and satisfying immediate desires during negative social and psychological periods, particularly when the internet is readily available (Li et al., 2015; Puspita & Rohedi, 2018). In addition, the interpersonal relationships and support received from other people also determine the level of compulsiveness given that the level of social and family support is associated with the degree of compulsive internet usage (Quiñones-García & Korak-Kakabadse, 2014), however it was emphasized that this support should come from outside the online community (Mazzoni et al. (2016). Given that internet entertainment activities play an important role in regulating social connectedness and well-being, particularly being the preferred mode of communication with family and friends, a source of entertainment, and a coping mechanism for difficulties (Bischof-Kastner et al., 2014; Valkenburg and Peter, 2009 as cited in Benhadj, 2023; Schols, 2015), it made them use these online activities that stimulate them compulsively (Tsitsika et al., 2013) and seldom thinks of using it less.

Despite the challenges faced by these respondents, it was noteworthy that the overall level of their academic performance was characterized as very satisfactory, as referred to DepEd Order No. 8, s. 2015, indicating that, as a group, they were performing competently and meeting the academic tasks assigned to them as supported by the research findings that students typically submit competent assignments, excel in assessments, and exceed the standard expectation for the course highlighting the resilience and capability of students in managing stressors and maintaining a commendable level of academic performance (Lee et al., 2013; Yogendra & Andrew, 2017).

Further analysis showed that a skewness of  $-0.264$  showed that more grades reflected respondents' academic performance on the right of the mean than on the left side. This showed that out of 55 respondents, most of them earned grades higher than 87.64 (mean) compared to the frequency of students who earned grades below the mean, which implies that the majority of these students were performing above the mean, showcasing a dedication to their academic pursuits, which aligned with the findings of Ab et al. (2020), who observed that students invest commendable effort to attain higher grades in school. In addition, the level of academic performance can be attributed to the kind of lifestyle these students have, consistent with the research of Peltzer and Pengpid (2014), which suggests that higher levels of physical activity, healthy eating habits, and enhanced psychological well-being are correlated with improved academic performance. This implied that not only are these students academically dedicated, but their overall lifestyle choices and well-being may also contribute to their success in academic endeavors.

Moreover, through utilizing the correlation bivariate model, it was revealed that compulsive internet use and academic performance correlate with each other negatively as both provide detrimental impacts on an individual's quality of life. This was supported by the research of Perdomo et al. (2022), which revealed that compulsive internet use negatively affects a student's academic performance for several reasons, such as distraction from studies and sharing ideas and opinions on different internet platforms. It was found to divert students' focus from educational tasks and lead to a significant waste of time, resulting in detrimental impacts on their academic performance. Furthermore, this may also stem from the fact that students spend an unequal distribution of time between engaging in online entertainment activities and studying, which aligns with the results of the present study. Struggling with increasing internet entertainment engagement and dependency implies that uncontrollable internet use distracts students from studying, resulting in them losing the ability to focus and receiving declined academic achievement (Akhter, 2013).

From the results of the study, the researchers proposed an intervention program to decrease compulsive internet use and improve the respondents' academic performance. This program was designed to help students regulate their mood when feeling down and divert attention from compulsively using the internet as a coping mechanism. It would encompass school recreational clubs, creative expression activities, and a tech-free fun day, as well as a seminar workshop about "Mindfulness and Tech Balance." As respondents become more educated about the smart use of the internet and have built stronger interpersonal relationships with their peers when feeling negative psychological emotions, they would not rely on the internet to regulate their moods. At the same time, the proposed intervention program through recreational activities would enhance concentration and focus when they return to their academic tasks, thereby improving their academic performance.

## Conclusion

Students often rely on the internet for different purposes due to its widespread accessibility, resulting in a tendency for them to become compulsive users. Since students frequently utilize the internet for purposes other than learning, the compulsive use of the internet for entertainment and the imbalanced time and attention to its usage can impact their academic performance. Notably, social media turned out as the most frequently utilized internet entertainment platform among senior high school students, who also exhibited a concerning trend of using the internet to cope with negative emotions. Despite this, they demonstrated good competency, solid commitment to academic endeavors, and a quality performance in school. Furthermore, statistical analysis has shown that the increase in compulsive internet use of the students corresponded to a decline in their academic performance. To address the problem, an intervention program is proposed to help students regulate their emotions and reduce compulsive internet usage as a coping mechanism, with the aim of improving academic performance.

Moreover, students, parents, and school administrators are recommended to establish collective, proactive, and significant measures to

diminish negative outcomes. At the same time, organizing intervention programs for students can also be a beneficial strategy to shift students' focus away from compulsive internet utilization as it may serve as a valuable emotional outlet, providing students with a means to express themselves and cope with challenges positively. Both of which, in turn, could positively impact academic performance. On the other hand, the present study still has limitation. The results of the study are limited to a single senior high school institution; therefore, it would benefit future researchers to consider using a larger sample size and different age groups. This approach aims to assess whether there are significant differences in variables under study across a broader spectrum of participants. By expanding the sample size and incorporating different age groups, researchers can enhance the generalizability of the findings and gain a more comprehensive understanding of the relationships between variables.

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