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ADDICTION TO GAME PLAYING, LEARNING ATTITUDE AND HEALTH DIMENSIONS OF SENIOR HIGH SCHOOL STUDENT IN GINGOOG GITY DIVISION

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Abstract : Online gaming can captivate students for extended periods, potentially affecting their sense of time as they become absorbed in immersive virtual environments and captivating games. This study investigates the levels of addiction to game playing, learning attitudes, and health dimensions of students. At Gingoog City Comprehensive National High School, a significant number of students use mobile phones for gaming, posing a dilemma for teachers. Specifically, this study seeks to profile the respondents, determine their levels of addiction to game-playing and learning attitudes, and evaluate the effect of gaming addiction on the health dimensions of the respondents.

This study was conducted among students at Senior High School from selected schools categorized as mega, large, and medium in the Gingoog City Division during the School Year 2023-2024. A patterned and modified survey questionnaire was utilized using descriptive correlational research design, and Slovins Formula was used to determine the sample size. The data were analyzed using statistical tools such as the Pearson (r) Correlation, mean scores, frequency and percentage, and standard deviation.

The findings revealed that respondents aged 17-18 years old, male, in grade 12, enrolled in the HUMMS strand, and receiving a daily allowance of 50-99 pesos obtained the highest frequency. It was also found that the level of respondents' addiction to game playing was low, and their level of learning attitude was high. Additionally, it was revealed that the effects of addiction to game playing on the health dimensions of the respondents were low. This concludes that the respondents' sex, age, and academic strand showed a significant relationship with their levels of addiction to game playing, learning attitude, and health dimensions. Consequently, students with lower levels of addiction to game playing exhibited higher learning attitudes and experienced fewer negative effects on their health dimensions. This suggests that respondents' profiles, such as sex, age, and academic strand, play a significant role in the study's outcomes, emphasizing the need for specific interventions and support services to promote holistic well-being.

It is recommended to encourage collaboration among teachers and school administrators to design specific prevention programs, offer diverse learning experiences such as project-based learning, and implement comprehensive health education initiatives.

Keywords: addiction to game playing, learning attitude, and health dimensions

I. INTRODUCTION

Online gaming can have a powerful pull that draws kids in for extended sessions that take up a lot of their time. Their sense of time may be warped as they get absorbed in the immersive virtual environments and captivating games, causing them to underestimate how long their gaming sessions last. The reason for this underestimation is that youngsters tend to underestimate how much time they have spent playing because online games are so absorbing and can momentarily divert their attention.

It has been observed in Gingoog City Comprehensive National High School a prevalent trend among students wherein, during their free time in various areas of the school premises or even during class hours, a significant number of students engage in the use of mobile phones, predominantly for gaming purposes. This phenomenon poses a dilemma for many teachers as it is evident that students allocate more time and interest to mobile phone gaming than to their academic activities. The pervasive use of mobile phones for recreational purposes appears to be impacting the overall engagement of students in their educational responsibilities.

Online gaming is a widely popular form of entertainment enjoyed across age groups, acknowledged by experts in technology, entertainment, and gaming. Students are particularly attracted to the immersive virtual worlds and competitive games it offers.

However, this surge in online gaming raises concerns about its impact on students' learning attitudes and academic performance. Understanding the relationship between online game addiction and learning attitude is crucial for educators, parents, and leaders invested in students' comprehensive development. As posited by Kondo et al. (2023), there is a significant correlation between students' game addiction and their learning attitude.This clearly showed that the more addicted the students are to playing games, the lower their attitude toward learning.

Further, excessive online gaming can lead to addiction among children, resulting in emotional distress and an inability to moderate usage. Unrestricted gameplay can lead to disruptions, including losing track of time, experiencing withdrawal symptoms, and unsuccessful attempts to curb participation. This addiction may also lead to a loss of interest in prior hobbies and strained relationships with others, impacting personal, professional, and educational opportunities. Over time, habitual gaming can make it challenging for children to break free from this cycle, affecting their learning attitudes (Milani et al., 2018).

Learning attitude encompasses an individual's perspective, mindset, and approach to acquiring knowledge and skills. It includes their core beliefs, values, and behaviors in the educational process, ultimately shaping academic performance. A positive learning attitude, characterized by traits like curiosity, self-motivation, and a growth mindset, fosters effective learning and skill development. Conversely, a negative attitude may manifest as disinterest, procrastination, or reluctance to engage with academic material. Furthermore, to control students' online gaming habits and make sure that it does not get in the way of their academic obligations, it is important to set clear boundaries and time limitations. It is essential to have open lines of communication between parents, teachers, and students to create a welcoming atmosphere that encourages responsible technology use and good study habits.

In particular, Gingoog City Comprehensive National High School stands as the largest institution in the Gingoog City division, boasting an impressive population of approximately 6,000 students. Among these, roughly 2,000 are Senior High School students. GCCNHS serves a diverse student body, each student facing unique challenges that may impede their access to quality education. Among these challenges, one that has come into focus is the issue of addiction to online gaming. It has been observed that some students engage in digital gaming activities during class or break times, often discreetly using their smartphones.

The widespread use of computers and the internet in the modern digital age has presented students with a new obstacle: the risk of developing an addiction to online gaming. Online games' fascinating and engrossing qualities, which have the potential to readily absorb large quantities of students' time and attention, are the root of this developing worry. The academic performance, social interactions, and general well-being of students may suffer from excessive engagement in online gaming.

However, learners who play an online game continuously may not be aware of how much time they are spending playing, which causes them to waste a lot of time that could be spent on more productive activities. People who play online games frequently are unaware of how much time they spend playing. So many people spend a lot of time playing online games without even recognizing it (Kharisma et al., 2020). A positive attitude toward learning enhances students' academic achievements, whereas a negative attitude can hinder the learning process. Because online gaming is so popular and might affect how we feel about learning, it is important to study how they are connected.

Hence, the goal of this research at Gingoog City Comprehensive National High School is to find out how addiction to game-playing affects students' academic performance. This study is a worthwhile attempt because it illuminates the complex connections between technology, gaming, and education. It gives insights that can inform methods for more effective use of technology in education, ultimately leading to improved learning experiences by looking at how addiction to game playing affects students' attitudes about learning.

1.1 Theoretical Framework

This study made use of the Social Learning Theory (SLT) of Albert Bandura (1977). His theory made use of compulsive game-playing theory, learning engagement theory, and the Health belief model. He emphasized that people learn by watching others and this is called observational learning. Bandura also says that people are not just passive learners who are controlled by rewards and punishments. Rather, people are active learners who can learn from their observations of others. SLT can explain how video game addiction develops. Students may learn to play video games excessively by watching their friends or by watching game streamers. They may also be reinforced by the positive feelings they get from playing video games. Excessive video game playing can have negative consequences for students. It can lead to lower academic performance, social isolation, and sleep deprivation. These negative consequences can further worsen students' motivation and learning attitude.

Jin (2022), social learning methods are distinctive in their incorporation of cognitive processes into the learning framework. Unlike traditional learning theories that may focus primarily on direct reinforcement and observable behaviors, social learning theory, as proposed by Albert Bandura, integrates the role of mental processes in understanding how individuals acquire new behaviors and knowledge. Social learning theory posits that learning occurs through the observation of others and the outcomes of those behaviors, a process that involves attention, retention, reproduction, and motivation. This approach acknowledges that individuals actively engage in cognitive processes to interpret and internalize the behaviors they observe.

Social Learning Theory by Arishaba (2024) has played a crucial role in understanding how people pick up new information and shape their behavior by watching other people in social circumstances. According to this theory, learning happens not just through firsthand experience or reinforcement but also through observation and imitation of the behaviors of others. People can pick up new abilities, attitudes, and behaviors by watching role models and the results they exhibit. These lessons can then impact how they develop and adjust to social standards. This realization emphasizes how crucial social context and role models are in influencing a person's behavior and learning.

Moreover, the Learning Engagement Theory Kearsley and Schneiderman, (1998) is a theory of human learning that places a strong emphasis on the role that behavior, motivation, and attention play in learning. This hypothesis states that when students are motivated to learn, focused on the work at hand, and actively involved in the educational process, they are more likely to be engaged in the learning process. According to learning engagement theory, students who are addicted to video games may find it difficult to focus on other tasks, like studying and finishing their assignments. This is due to the fact that games can be highly gratifying and entertaining, which can make it challenging for pupils to concentrate on other assignments.

Also, to Mark Griffiths' (2000) compulsive game-playing theory, an addiction to video games can be classified as a form of compulsive behavior. The hallmark of compulsive activities is a lack of control over the conduct, especially in the face of unfavorable

outcomes. The compulsive game-playing theory states that individuals with gaming addictions have lost control over their activity and find it impossible to give up, even when they are aware of the negative effects it is having on their lives. It is believed that excessive gaming causes changes in the brain that are responsible for this lack of control.

The Health Belief Model by social psychologists at the U.S. Public Health Service provides the fundamental framework for comprehending how people view the possible health hazards connected to excessive gaming. According to this paradigm, perceptions about one's vulnerability to health problems, the seriousness of the consequences, the advantages of acting, and cues to act all have an impact on health-related behaviors. The Health Belief Model can be employed in this thesis to investigate how students view gaming's effects on their mental and physical well-being and, consequently, how this influences their learning attitudes.

Generally, the harmful association between students' video game addiction and learning attitude is clarified by the Social Learning Theory, the Health Belief Model, the Compulsive Game-Playing Theory, and learning engagement theory. Overindulgence in gaming can distract students from their schoolwork, impair their focus, induce social isolation, and cause them to lose sleep. It may also have a detrimental effect on pupils' cognitive abilities, which will make learning more difficult for them. Together, these elements may cause children to have a poor attitude toward learning. Not every student who plays video games will develop an addiction. It is important to remember (Taylor, 2021). Nonetheless, it is critical that caregivers and educators understand the possible dangers of video game addiction and take appropriate action to support

1.2 Conceptual Framework

This study provides a systematic approach to explore the intricate interplay between addiction to game playing, learning attitude, and health dimensions of Senior High School students. Within the scope of this research, we also consider the moderating effect of demographic factors within the respondents' profiles, including addiction to game playing, learning attitude, and health dimensions when grouped according to age, sex, grade level, academic strand, and daily allowance. These demographic variables are under scrutiny to ascertain their potential influence on the association between addiction to game playing, learning attitudes, and health dimensions among Senior High School learners.

According to Anggraeni and Wihardja (2020), online gaming problems are not the only factor that can affect the learning achievement of high school students in Jakarta. This suggests that while gaming issues may play a role in academic performance, other variables also contribute significantly to students' learning outcomes. These factors could include socio-economic status, parental involvement, teaching quality, school resources, and individual student characteristics such as motivation, study habits, and mental health.

As posited by Agustin and Karneli (2022), learning attainment declines for people who play online games for extended periods of time while still in school. The detrimental effects that excessive internet gaming might have on academic achievement are highlighted by this result. Students that spend a significant amount of time gaming typically have less time for studying, finishing homework, and engaging in class activities.

As cited by Yue (2024), addressing electronic game addiction as a genuine mental health concern is a pressing need. This highlights the growing recognition of the significant impact that excessive gaming can have on an individual's mental health. As gaming addiction becomes more prevalent, mental health professionals, educators, and policymakers need to develop comprehensive strategies to identify, prevent, and treat this condition.In particular, the addiction to game playing and learning attitude is expected to exert a substantial influence on the respondents' health dimensions. The implication is that increased engagement in game playing correlates with a higher likelihood of negative effects on learning attitude, subsequently impacting academic performance. It underscores the premise that the extent of addiction to game playing directly relates to the potential detriment in students' approach and commitment to learning, thereby influencing their overall scholastic achievements.

Moreover, the study suggests a significant impact of addiction to game playing on the respondents' health dimensions. It anticipates that individuals experiencing addiction to game playing may manifest physical complaints, anxiety symptoms, social dysfunction, and depression symptoms. This implies that the intensity of game addiction is linked to adverse effects on the physical and mental well-being of the students.

Figure 1 in this study visually illustrates the dynamic relationship between the independent variable, addiction to game playing and Learning attitude, and the dependent variable, health dimensions. These dimensions are assessed based on indicators such as physical complaints, anxiety symptoms, social dysfunction, and depression symptoms.The principal focus of this investigation centers on the independent variable of addiction to game playing and learning attitude. This variable was meticulously analyzed to discern their impact on the Health Dimensions exhibited by Senior High School students.

Conversely, the dependent variable pertains to the learners' health dimensions, encompassing indicators such as physical complaints, anxiety symptoms, social dysfunction, and depression symptoms. These indicators were systematically measured and analyzed to unveil how they are influenced by the independent variable of addiction to game playing among Senior High School students.

Figure 1. A Schematic Presentation showing the interplay of the Variables between the Independent and Dependent Variables of the Study

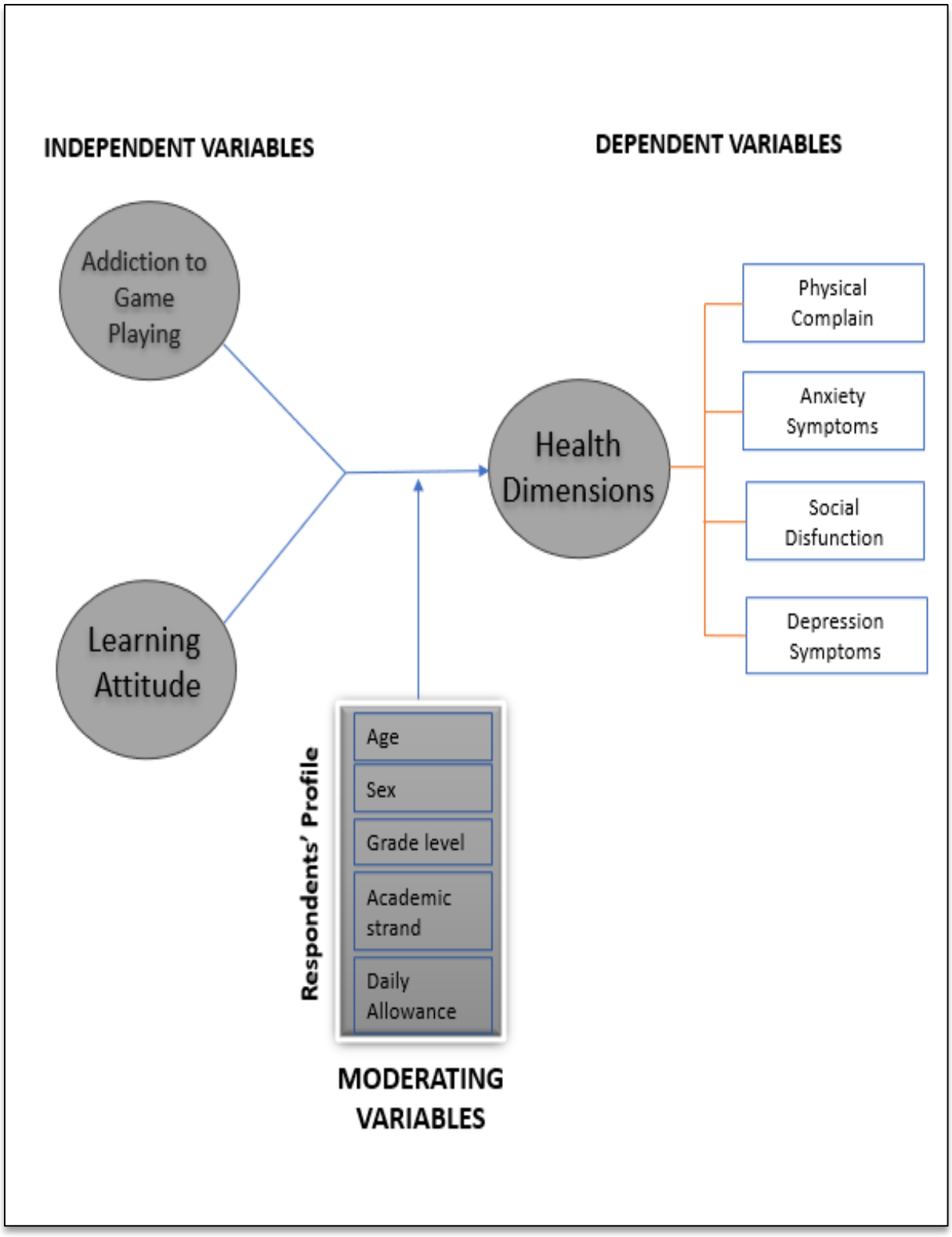

Figure 1. A Schematic Presentation showing the interplay of the Variables between the Independent and Dependent Variables of the Study

1.3 Statement of the Problem

This study aimed to investigate the level of addiction to game playing, learning attitude, and health dimensions of the select Senior High School learners in Gingoog City Division, during the School Year 2023-2024.
Specifically, this study sought to answer the following questions:
1. What is the respondents' profile in terms of age, sex, grade level, academic strand, and daily allowance?
2. What is the level of addiction to game playing and learning attitudes among the respondents?
3. What are the effects of addiction to game playing on the health dimensions of the respondents, specifically in terms of physical complaints, anxiety symptoms, social dysfunction, and depression symptoms?
4. Is there a significant relationship between addiction to game playing, learning attitude to health dimensions, and each of the respondents' profiles?

Hypothesis
Based on the specific problems stated except Problem 4, the null hypothesis was tested at a 0.05 level of significance.
Ho. There is no significant relationship between addiction to game playing, learning attitude, and health dimensions and each of the respondents' profiles.

2. METHODOLOGY

This study examines the relationship between addiction to game playing, learning attitude, and health dimensions of Senior High School students in the Gingoog City Division. It provides an in-depth discussion of the research design, study setting, research respondents, sampling technique, and research instruments. Furthermore, the study addresses the validation and reliability of the instruments, data gathering procedures, categorization of variables, system of scoring, statistical treatment of data, and ethical considerations.

2.1 Research Design

This study employed a cross-sectional survey design, a methodology suited for capturing a snapshot of data at a single point in time. Data was gathered from a representative sample of Senior High School students enrolled at Gingoog City Comprehensive National High School, San Luis National High School, Pundasan National High School, and Anakan National High School. Information of participants had completed a self-administered questionnaire, a widely used instrument for obtaining responses from study subjects.

This study adopts a descriptive research approach, aiming to comprehensively gather data on the current state of affairs. The primary objectives are twofold: first, to depict and understand the emergent nature of the phenomenon under examination during the study period, and second, to investigate the underlying causes of these specific situations.
This employed a descriptive correlational research design. The primary aim is to investigate the relationship between the independent variable, Respondents' levels of addiction to game playing and learning attitude, and the dependent variable, health dimensions, including Learners' physical complaints, anxiety symptoms, social dysfunction, and depression symptoms. This research design is chosen for its utility in achieving the study's objectives, specifically in determining the association between learners' characteristics and level of addiction to game playing among Senior High School Learners at Gingoog City Division.
A questionnaire has been administered to gather data, as it offers a quantitative method of data collection, yielding numerical evidence, facts, and information. Using a questionnaire provides the advantage of efficiently reaching a large number of individuals. The respondents for this study were drawn from the Senior High School students from the school categorized as mega, very large, and large in scale of Gingoog City Division of Gingoog City. This selection simplifies data collection for the researcher.

By utilizing these tools and methods, the study aims to gain a comprehensive understanding of the relationships between game-playing addiction, learning attitudes, and health dimensions among Senior High School students within the chosen educational institution. This research design allows for a systematic and structured exploration of these crucial aspects, potentially shedding light on the interplay between them.

2.2 Study Setting

This research was undertaken within the Gingoog City Division, focusing on selected schools classified as mega, very large, and large in scale. The chosen institutions include public high schools situated in Gingoog City, Misamis Oriental, Philippines. Specifically, the study encompasses Gingoog City Comprehensive National High School, which boasts a student population of around five thousand seven hundred sixty inclusive of two thousand seventy-four Senior High School students. Additionally, San Luis National High School, with a student body of seven hundred seventy-two, including two hundred fifty-four Senior High School students, PUNDASAN National High School, hosting seven hundred sixty-five students, including two hundred fourty-four Senior High School students, and Anakan National High School, accommodating six hundred eighty-three students, including one hundred seventy- Senior High School nine Senior High School students.

Gingoog City Division is situated in Barangay 22, along the National Highway in Gingoog City, Misamis Oriental. The researcher selected participants for the interviews based on their scores on the addiction to game playing, learning attitude, and health dimensions questionnaire. Participants were selected to represent a range of levels of addiction to game playing, learning attitude, and health dimensions. The study setting is appropriate for this research study because it provides access to a large sample. Additionally, the school has a diverse student body, which allowed the researcher to collect data from a representative sample of Senior High School students in the Philippines.

Gingoog City Division comprises ten (10) districts and ninety-six (96) elementary and secondary schools; the division has twenty-six (26) secondary schools offering Senior High School programs. Gingoog City Division has different school categories based on its student population. It has mega schools, very large, large, medium and small schools.

This study centers explicitly on the involvement of Senior High School students in schools classified as mega, large, and medium in scale. The selected institutions were Gingoog City Comprehensive National High School, Anakan National High School, Pundasan National High School, and San Luis National High School, collectively comprising a Senior High School student population of 2,751. These students are distributed across four different schools, regardless of their academic year level or strand. From this collective pool, the research aimed to identify and include two hundred (200) respondents.To identify these respondents, the research benefited from the guidance and recommendations of subject teachers and advisers. These educational professionals assist in the selection process, helping to identify students whose observed learning attitudes can be correlated with their gaming habits. This approach ensured that the chosen respondents were relevant to the study's objectives and research questions.

Table A provides a detailed distribution of respondents by section for each grade level.

Table A

Distribution of Respondents

Secondary School	Category	Grade Level	Population	Sample Size
Gingoog City Comprehensive National High School-Senior HS	Mega	Grade 11	1,466	76
		Grade 12	1028	74
Anakan National High School-Senior HS	Large	Grade 11	76	6
		Grade 12	103	7
Pundasan National High School-Senior HS	Large	Grade 11	114	9
		Grade 12	130	9
San Luis National High School-Senior HS	Large	Grade 11	129	10
		Grade 12	125	9
Total			**2, 751**	**200**

2.3 Sampling Technique

To establish this sample size, the researcher employed Slovin's Formula, a robust methodology for determining the ideal sample size while accounting for a predefined margin of error. With a total population of two thousand seven hundred fifty-one (2,751) students and a specified margin of error of 5% (equivalent to 0.05 in decimal form), inputting this value into the formula yields the desired sample size of two hundred (200) participants. This sample size is representative of the broader population of Senior High School students within the designated district and is considered sufficient for meaningful data collection and analysis.

To further enhance the precision of respondent selection from individual schools, a stratified random sampling approach has been implemented. This method ensured that the sample was both representative and proportional across various Senior High Schools. The allocation of respondents per school was determined by dividing the total number of Senior High School students within each school by the overall student population and then multiplying it by the desired sample size.

Further, a stratified random sampling technique was used to collect this sample, providing a fair and impartial chance for each Senior High School student to be chosen from the population. In this instance, the strata were defined by the Senior High School students of Gingoog City Comprehensive National High School, Anakan National High School, Pundasan National High School, and San Luis National High School in Gingoog City Division, and the precise number of students within each stratum was clearly outlined. This stratified sampling method is designed to yield valuable insights into the study's subject matter while upholding the principles of fairness, accuracy, and reliability throughout the research process.

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2.5 Research Instrument

The survey questionnaire is patterned and modified from the study of Kondo et al. (2023) and Celik et al. (2022) for the health dimensions. This is to gauge the levels of addiction to game playing, the learning attitudes, and health dimensions.
To create this tool, the researcher patterned and modified a survey questionnaire. The first part focuses on the independent variable, primarily centered on addiction to game playing, using frequency and percentage distribution. The second part of the questionnaire addresses students' learning attitudes and health dimensions, exploring facets such as physical complaints, anxiety symptoms, social dysfunction, and depression symptoms. This dual-part structure allows for a comprehensive assessment of both addiction to game playing, learning attitudes, and health dimensions among Senior High School students, aiming to provide a nuanced understanding of the correlation between these factors that range from 4 (At all Times), 3 (Most of the Time), 2 (Sometimes), 1 (Never).

2.6 Data Gathering Procedure

Effective data collection techniques are essential for preserving the integrity and authenticity of the gathered information. Once the research instruments are valid and reliable, the researcher formally requests permission from the Division Superintendent of the Division of Gingoog City. This request was supported by an endorsement from the Dean of the Graduate School of Cagayan de Oro College PHINMA-Education Network, facilitating the distribution of questionnaires to the Senior High School students at GCCNHS during the School Year 2023-2024.

Following the approval of the Schools Division Superintendent, the researcher proceeded to the schools mentioned above. An introductory visit was made to the office of the School Principal to obtain the relevant data regarding the respondents and teachers. Additionally, consultations were conducted with both the teachers and the students involved to ensure a smooth and organized data-collection process.

Parental consent forms were delivered on the first day of the visit in an effort to expedite the data-collecting procedure for student responses. Immediately following regular class hours, a 20-minute time window was set aside with parental consent. This method was intended to cause the most minor interruption to classes already in progress while allowing students to focus on effectively filling out the survey. The prescribed duration was instituted to uphold an organized and uniform methodology for gathering data.

2.7 Categorization of Variables and System of Scoring

Part I. Respondents' Profile

Age
21 years and above
19 -20 years old
17-18 years old
16 years old and below

Sex
Male
Female

Grade-level
Grade 12
Grade 11

Academic Strand
ICT
Industrial Arts
Performing Arts
Home Economics
STEM
HUMMS
ABM
GAS

Daily Allowance
300.00 and above
100.00 – 299.00
50.00 – 99.00
49.00 and below

Part II and III. Addiction, Students' learning attitude, and Health dimensions

Scale	**Range**	**Description**	**Interpretation**
4	3.51-4.00	At All Times	Very High
3	2.51-3.50	Most of the Time	High
2	1.51-2.50	Sometimes	Low
1	1.00-1.50	Never	Very Low

2.8 Statistical Treatment of Data

The collected data had undergone a comprehensive process, including data collection, tabulation, and analysis, utilizing a variety of statistical treatments.

Problem 1 utilized the frequency and percentage to define the respondents' characteristics.
Problems 2 and 3 employed descriptive statistical techniques. This approach involves calculating the mean values and standard deviations of the data obtained from the respondents. Descriptive statistics was harnessed to provide a clear summary of the data, facilitating the assessment of the relationship between play addiction, learning attitudes, and health dimensions of Senior High School students at Gingoog City Division.

On the other hand, Problem 4 involved the use of Pearson's Correlation Coefficient (Pearson r). This statistical method was utilized to determine whether a significant relationship exists between the independent and dependent variables under scrutiny. Pearson's correlation coefficient is particularly useful for identifying the strength and direction of the relationship between two variables, contributing to a more nuanced understanding of the research findings.

3. RESULTS AND DISCUSSIONS

This chapter discusses the presentation, analysis, and interpretation of the data gathered from the survey questionnaires given to the respondents to investigate the level of addiction to game playing, learning attitude, and health dimensions of the select Senior High School students in Gingoog City Division, during the School Year 2023-2024.

3.1 Results

Problem 1. What is the profile of the respondents concerning age, sex, grade level, academic strand, and daily allowance?

Table 1
Distribution of Respondents' Age

Age	Frequency	Percentage
21 years old and above	9	4.50
19-20- years old	28	14.00
17-18 years old	133	66.50
16 years old and below	30	15.00
Total	**200**	**100%**

Table 1 shows the respondents' profile in terms of age. Results show that out of 200 respondents, 133 (66.5%) who were 17-18 years old obtained the Highest Frequency. This means that the majority of the respondents belong to the 17-18-year-old bracket. This further means that the study population predominantly comprises individuals at a critical juncture in their academic journey, typically representing the final years of secondary education. As Senior High School students, individuals within this age group are navigating various challenges and opportunities that shape their learning attitudes, as well as their health dimensions. As posited by Shirley (2018) This addiction can potentially lead to various negative effects, including changes in behavior and health problems. Understanding the experiences, perspectives, and behaviors of Senior High School students, particularly regarding game-playing addiction, learning attitudes, and health dimensions, is crucial for addressing their unique needs and challenges. The prevalence of respondents aged 17-18 years old underscores the importance of tailoring interventions, programs, and support services to cater to these specific needs within the educational context of Gingoog City Division.

On the other hand, 9 (4.5%) are 21 years old and above obtained the Lowest Frequency. This means that the majority of the respondents belong to 21 years 21-year-old and above bracket. This further means that individuals in this older age category are notably underrepresented in the surveyed population of Senior High School students in the Gingoog City Division.
Moreover, this finding suggests a deliberate focus of the study on younger individuals, who are typically associated with the Senior High School age range. By prioritizing this demographic segment, the research aims to delve into the experiences and challenges related to game-playing addiction, learning attitudes, and health dimensions among Senior High School students, where the bulk of the sample lies. This finding highlights the study's applicability to the Gingoog City Division's educational setting since it calls for a sophisticated comprehension of topics relevant to the age group it is aimed at. The study intends to meet the unique requirements and problems of Senior High School students by concentrating on younger people providing insights that are immediately applicable to their educational environment.

Furthermore, albeit in lesser numbers, the inclusion of respondents who are 21 years of age and older provides insightful information on possible outliers or those who may have postponed their education or are pursuing other career paths. However, it's noteworthy that individuals in this age bracket are more likely to fall outside the ideal age range for Senior High School students, which typically spans from 15 to 18 years old. Reynolds (2019) suggests that exceeding the ideal age range for Senior High School students may introduce unique challenges or considerations.

Table 2
Distribution of Respondents' Sex

Sex	Frequency	Percentage
Male	131	65.50
Female	69	34.50
Total	**200**	**100%**

Table 2 shows the respondents' demographic profile in terms of age. Results show that out of 200 respondents, 131 (65.5%) are Male which obtained the Highest Frequency. This means that the majority of the respondents are male. This further means that male students are within the surveyed population, suggesting a predominant representation of males in the study. The significant proportion of male respondents implies a higher prevalence of male students actively involved in game playing across all sections where the study was conducted. This finding underscores the gendered nature of gaming behavior among Senior High School students, with males exhibiting more active engagement in gaming activities compared to their female counterparts. This observation aligns with existing research, as posited by López-Fernández (2020), which indicates that boys tend to play games more frequently and display a higher propensity for disordered gaming behaviors compared to girls. Understanding these gender differences is crucial for developing targeted interventions to address gaming addiction and promote healthier gaming habits among male students, ultimately contributing to their overall well-being and academic success.

On the contrary, the data reveals that 69 (34.5%) are females ,obtained the Lowest Frequency. This means that female students in Gingoog City Division are less engaged in game playing compared to their male counterparts. This further means that the lower frequency of female respondents indicates a reduced likelihood of female students being actively involved in gaming activities within the surveyed population. Furthermore, these findings suggest that there might be fewer opportunities for gaming addiction among female Senior High School students in the division. As posited Dolch (2020), women play digital games significantly less than their male counterparts. The lower engagement in gaming among females could indicate differences in interests, priorities, or cultural norms surrounding gaming behavior compared to males. It's important to note that this observation does not imply that female students are immune to gaming addiction but rather that they may exhibit lower levels of involvement in gaming activities overall.

Table 3
Distribution of Respondents' Grade Level

Age	**Frequency**	**Percentage**
21 years old and above	9	4.50
19-20- years old	28	14.00
17-18 years old	133	66.50
16 years old and below	30	15.00
Total	**200**	**100%**

Table 3 shows the respondents' demographic profile in terms of grade level. Results show that out of 200 respondents, 106 (53%) are Grade 12 students who obtained the Highest Frequency. This means that Grade 12 students are the most represented group among the surveyed population. This further means that Grade 12 students constitute a significant portion of the sample, indicating a focus on this particular grade level within the study. One possible implication of this result is that Grade 12 students may have specific characteristics or experiences that make them particularly relevant to the research objectives. As posited by Estacio et al., (2018) Grade 12 students, particularly those identified may have unique educational experiences and capabilities. They may be nearing the end of their high school education, facing important academic decisions, or experiencing unique challenges related to their transition to higher education or the workforce. Understanding the characteristics and needs of Grade 12 students can provide valuable insights for developing targeted interventions or support programs tailored to their circumstances.

On the other hand, 94 (47%) of the respondents are Grade 11 students which obtained the Lowest Frequency. This means that Grade 11 students are a less represented group among the surveyed population. This means further that The lower frequency indicates several possibilities. It could imply a smaller cohort size within the schools surveyed, or it might reflect differences in the distribution of students across grade levels within the educational system of Gingoog City Division. Additionally, it may highlight potential differences in the experiences, needs, or characteristics of these students compared to their Grade 12 counterparts. Further analysis is necessary to explore the reasons behind this disparity and its implications for understanding the dynamics of the surveyed population**.**

Table 4
Distribution of Respondents' Academic Strand

Academic Strand	Frequency	Percentage
ICT	11	5.50
Industrial Arts	31	15.50
Performing Arts	6	3.00
Home Economics	27	13.50
STEM	19	9.50
HUMMS	80	40.00
ABM	13	6.50
GAS	13	6.50
Total	**200**	**100%**

Table 4 shows the respondents' demographic profile in terms of grade level. Results show that respondents, 80 (40%) are enrolled in HUMMS Strand which obtained the Highest Frequency. This means that the largest number of students enrolled in schools participating in this study belong to the HUMSS strand. This further means that the predominance of these students suggests a significant representation of this academic strand within the surveyed population. This could imply various factors, such as the popularity of the program among Senior High School students in the surveyed area or the specific focus of the study aligning with the curriculum or interests of these students.

Furthermore, the higher frequency of HUMSS students indicates their increased involvement and participation in the study. According to Bacaling et al. (2021), the predominance of students in the Humanities and Social Science strand suggests its popularity among Senior High School students in the surveyed area. This trend indicates a strong interest in disciplines that focus on human society, culture, and behavior, highlighting the importance of these subjects in shaping students' educational choices and career aspirations.

On the contrary, the data reveals that only 6 (3%) respondents are enrolled in the Performing Arts Strand which obtained the Lowest Frequency. This means Performing Arts strand students are a less represented group among the surveyed population. This further means the limited number of students belonging to this academic strand suggests that fewer individuals enrolled in the target schools are pursuing studies in the Performing Arts discipline. This finding also underscores a potential disparity in the availability or popularity of the Performing Arts strand among the surveyed schools. This limited availability of the Performing Arts program compared to other academic strands could be influenced by various factors such as school resources, curriculum emphasis, or student interests.

As posited by Elpus (2020), school size, type, and student demographics are key factors in the availability of arts education, with larger, traditional public schools being more likely to offer such courses. The disproportionate representation of students from the Performing Arts strand highlights the unique nature of this academic program within the context of the surveyed schools.

Table 5
Distribution of Respondents' Daily Allowance

Daily Allowance	Frequency	Percentage
300 and above	7	3.50
200.00 – 299.00	6	3.00
100.00 - 199.00	32	16.00
50.00 – 99.00	87	43.50
49.00 and below	68	34.00
Total	**200**	**100%**

Table 5 shows the respondents' demographic profile in terms of daily allowance. Results show that out of 200 respondents, 87 (43.5%) have a 50-99 pesos daily allowance which obtained the Highest Frequency. This means that the majority of the respondents from Gingoog City Division have a 50-99 pesos daily allowance. This means further that a significant proportion of the respondents come from families with limited financial resources. The prevalence of daily allowances in this range indicates that the majority of respondents belong to families with low household incomes. These households may encounter difficulties in meeting their daily expenses, encompassing basic needs such as food, transportation, and educational materials. Limited financial resources can have widespread implications, affecting various aspects of the respondents' lives, including their access to educational opportunities, healthcare services, and leisure activities.

As proposed by Nielsen et al. (2019), the challenges of managing low incomes considering expenditures are compounded by a lack of assets and insurance. Furthermore, the high frequency of respondents with low daily allowances underscores the socioeconomic disparities within the surveyed population. It highlights the importance of considering socioeconomic factors when examining issues such as addiction to game playing, learning attitudes, and health dimensions among Senior High School students.

On the other hand, only 6 (3%) have a 200-299 pesos daily allowance, which obtained the Lowest Frequency. This means that there are minorities in the community under study who have reasonably stable financial situations. This suggests, even more, the socioeconomic variety among Gingoog City Division Senior High School students, which is relevant to comprehending game addiction levels, learning styles, and health aspects. According to Gee's (2021) assertion, people from households who receive larger daily allowances typically have access to a wider range of resources. These resources encompass a range of factors, notably including access to gaming devices and internet connectivity. With greater financial means, these individuals are more likely to

afford the latest gaming consoles, computers, or smartphones, along with internet subscriptions that enable online gaming experiences. As a result, they may engage more extensively in gaming activities compared to their counterparts from families with lower daily allowances.

Furthermore, individuals from financially secure households typically enjoy better access to educational materials, such as textbooks, reference materials, and educational software. This access enhances their academic resources and fosters a more conducive learning environment. Additionally, they can participate in extracurricular activities like sports teams, clubs, or music lessons, broadening their skill sets and interests beyond academic pursuits. These opportunities not only contribute to a well-rounded education but also support personal growth and development in various areas.

Problem 2. What are the levels of addiction to game playing and learning attitudes among the respondents?

Table 6
Distribution of Respondents' Level of Addiction to Game Playing

Indicators *As a student, I…*	**Mean**	**SD**	**Description**
feel excited about playing online games.	2.51	0.92	Most of the Time
consistently fail to avoid restricting my online gaming	2.08	0.76	Sometimes
experience anxiety when attempting to cut back on or quit playing online games.	1.77	0.92	Sometimes
feel sad when trying to reduce or stop playing online games.	1.92	0.91	Sometimes
feel depressed when trying to reduce or stop playing online games.	1.76	0.88	Sometimes
feel easily offended when trying to reduce or stop playing online games.	1.78	0.82	Sometimes
truly feel the need to play online games to achieve my satisfaction.	2.19	0.90	Sometimes
stay online longer when I am playing online games.	2.18	0.97	Sometimes
prefer playing online games over gathering with family members.	1.82	0.93	Sometimes
prefer online games over playing with friends outside the house.	2.14	0.99	Sometimes
use online games as a way to escape from problems	2.63	1.10	Most of the Time
often think about or look forward to playing video games during non-gaming activities	2.05	0.90	Sometimes
feel irritable or anxious when unable to play video games	1.78	0.84	Sometimes
continue to play video games despite knowing it negatively affects my school or work performance	1.85	0.97	Sometimes
often lose track of time while playing video games, leading to longer gaming sessions	2.06	0.94	Sometimes
Overall	**2.03**	**0.92**	**Sometimes**

Legend: 3.26 – 4.00 Always/ Very High 1.76 – 2.50 Sometimes/Low
2.51 – 3.25 Most of the Time/ High 1.00– 1.75 Never/Very Low

Table 6 shows the respondents' level of addiction to game playing. Overall, results show that the respondents' level of addiction to game playing was low as indicated by the overall mean of 2.03 (SD=0.92), described as Sometimes and interpreted as Low. This means that the majority of the respondents can maintain a balanced approach to gaming without significantly impacting their daily lives. For most of the respondents, game playing remains a recreational activity rather than a compulsive behavior that interferes with other aspects of their lives. These results align with the findings of Novrialdy et al. (2019), indicating that the majority of adolescents view gaming as a balanced and enjoyable activity, with only a small percentage showing compulsive behavior. Understanding the prevalence of low game addiction levels among Senior High School students has several implications. Firstly, it suggests that gaming plays a relatively benign role in their lives, serving as a source of entertainment, relaxation, and socialization without significantly interfering with their academic or personal responsibilities.

Moreover, recognizing these low levels of game addiction underscores the need for nuanced approaches to addressing gaming-related concerns among Senior High School students. Rather than focusing solely on prevention or intervention strategies for addiction, efforts may also emphasize promoting responsible gaming habits, fostering digital literacy, and providing support for healthy leisure activities. Martinez (2019) suggests that Swedish leisure-time teachers play a crucial role in promoting critical digital literacy. This initiative focuses on equipping students with the skills needed to navigate, interpret, and critically evaluate digital content. By fostering these competencies, leisure-time teachers help students become more discerning consumers of digital information, enhancing their ability to participate effectively and responsibly in the digital age.

The standard deviation of 0.92 means that there is a moderate spread around the mean, indicating that while some students may experience health issues more frequently, others may seldom face such problems. This variability underscores the differing individual experiences among the students. This means further that the moderate variability suggests that while some students are more affected by the health impacts of gaming addiction, others are less impacted. Interventions should be personalized to address the specific needs of the more affected students. According to Labana et al. (2020), the level of addiction among adolescents predominantly manifests at a mild level. This finding indicates that while many adolescents engage in behaviors that may be considered addictive, the severity of these behaviors often does not reach moderate or severe levels. This suggests that most adolescents are still able to maintain control over their gaming habits, balancing them with other aspects of their lives such as academics, social interactions, and physical activities.

The indicator As a student, I use online games as a way to escape from problems obtained the highest mean rating of 2.63 (SD=1.10), described as Most of the Time and interpreted as High. This means that some students use gaming as a coping

strategy to get over stress, worry, or other obstacles they could encounter on a regular basis. Further, this emphasizes how crucial it is to take into account the psychological drivers of students' gaming habits. Some people may find that gaming meets emotional needs that go beyond simple pleasure, offering a momentary reprieve from the challenges of real life. It is important to take into consideration the potential benefits of gaming, including cognitive, motivational, emotional, and social aspects.

As suggested by Von Der Heiden et al. (2019), this aspect of gaming warrants attention, as an excessive reliance on gaming as an escape mechanism could potentially lead to negative consequences, such as ignoring responsibilities or exacerbating mental health issues. Moreover, the discovery of this indicator emphasizes the necessity of focused interventions and support plans that deal with the underlying causes of students' use of gaming as a coping method. The underlying anxieties or difficulties that lead kids to turn to gaming for consolation may also need to be addressed in addition to efforts to cut down on gaming time or combat addiction.

The indicator As a student, I feel depressed when trying to reduce or stop playing online games got the lowest mean rating of 1.76 (SD=0.88) , described as Sometimes and interpreted as Low. This means that respondents do not frequently encounter depressive feelings about their gaming behavior. The respondents may not experience significant emotional distress or depression when faced with the prospect of reducing or quitting their online gaming activities. Moreover, gaming for most students, does not have a detrimental impact on their mental well-being in terms of depressive symptoms. However, the presence of some respondents experiencing occasional depressive symptoms when trying to cut back on gaming is noteworthy. This finding emphasizes how crucial it is to take into account the possible psychological effects of excessive gaming as well as the difficulties people may encounter when trying to change their gaming habits. Furthermore, although playing video games frequently is linked to improved executive skills, this claim is at odds with research by Huang et al. (2017) that indicates video games may benefit young children. Moreover, knowing what influences depressive thoughts regarding gaming quit attempts might help with the creation of customized therapies.

Table 7
Distribution of Respondents' Level of Learning Attitude

Indicators *As a student, I…*	**Mean**	**SD**	**Description**
diligently review the study materials at home	2.68	0.76	Most of the Time
am ready if asked to work on a problem in front of the class	2.35	0.76	Sometimes
take notes after listening to the teacher's explanation	2.70	0.86	Most of the Time
ask if I don't understand the material	2.67	0.85	Most of the Time
diligently take notes on the given material	2.81	0.92	Most of the Time
come on time for lessons inside the classroom	3.10	0.83	Most of the Time
enjoy participating in class discussions and activities	2.94	0.84	Most of the Time
put in extra effort to learn the material, even if it is not required	2.58	0.81	Most of the Time
ask questions in class when I am unsure about something	2.59	0.86	Most of the Time
actively work on the problems given by the teacher	2.75	0.86	Most of the Time
listen to the teacher's explanation in class during the learning process	3.14	0.89	Most of the Time
eager to apply learning in real-life situations.	2.81	0.89	Most of the Time
actively seek out additional resources to enhance my understanding of the subject matter.	2.80	0.83	Most of the Time
believe that learning is important.	3.43	0.85	Always
am interested in learning with classmates.	2.99	0.94	Most of the Time
Overall	**2.82**	**0.85**	**Most of the Time**

Legend: 3.26 – 4.00 Always/ Very High 1.76 – 2.50 Sometimes/Low
2.51 – 3.25 Most of the Time/ High 1.00– 1.75 Never/Very Low

Table 7 shows the respondents' level of learning attitude. Overall, results show that the respondents' level of learning attitude was highly positive as indicated by the overall mean of 2.82 (SD=0.85), described as Most of the Time and interpreted as High. This means that most students consistently show a positive attitude about their learning activities. This high mean score for learning attitude is noteworthy since it shows that the student has a positive outlook on learning. The fact that most students are driven, involved, and excited about studying can have a significant effect on both their academic achievement and the results of their education as a whole. The observed positive learning attitude among the respondents is encouraging for educators and school administrators. It suggests that Senior High School students in Gingoog City Division are receptive to learning experiences and are likely to actively participate in educational activities. This positive disposition towards learning creates a conducive environment for effective teaching and learning processes.

As highlighted by Palomar et al. (2020), these findings underscore the importance of fostering positive teacher-student relationships and creating a conducive learning environment to further enhance students' learning experiences and outcomes. Moreover, a positive learning attitude fosters a growth mindset, wherein students are more inclined to embrace challenges, seek out growth opportunities, and persist in the face of setbacks. This mindset is essential for promoting lifelong learning and preparing students for success in various academic and professional endeavors.

Subsequently, the standard deviation of 0.85 means that there is some degree of variation. This suggests that while a majority have a strong positive attitude, there are also students who might display slightly less enthusiasm or engagement towards learning, though not drastically different. This further means that the high mean combined with moderate variability implies that educational programs and teaching strategies are generally effective in fostering positive attitudes toward learning among most students.

According to Visser et al. (2018), the factors influencing their learning are regularly present among students with high levels of academic procrastination. This suggests that procrastination significantly impacts the learning process, potentially leading to poorer academic outcomes. Students who frequently delay their academic tasks may experience increased stress, reduced learning efficiency, and lower overall performance. Understanding these factors is crucial for developing effective strategies to mitigate procrastination and enhance learning outcomes.

In particular,the indicator As a student, I believe that learning is important obtained the highest mean rating of 3.43 (SD=0.85), described as Always and interpreted as Very High. This means that most of the respondents recognize the intrinsic value of education and perceive it as a fundamental aspect of personal and intellectual growth. The acknowledgment of learning's importance aligns with broader educational goals aimed at fostering lifelong learning and skill development. When students perceive learning as important, they are more likely to approach educational activities with enthusiasm, motivation, and a sense of purpose. This positive attitude towards learning can enhance student engagement, academic performance, and overall educational outcomes. Moreover, a strong belief in the importance of learning reflects a deeper understanding of its benefits beyond the immediate academic context. Students who value learning are more likely to actively seek out opportunities for intellectual exploration, personal development, and career advancement. As posited by (Kumar, 2018), there is a strong emphasis on the importance of ongoing education since it fosters career progression, personal growth, and flexibility in a world that is changing quickly. This kind of thinking encourages a culture of lifelong learning and flexibility, two qualities that are vital in the quickly evolving world of today. The value of learning is acknowledged, and this has consequences for educational policy and practice. It emphasizes how crucial it is to design welcoming learning environments that give top priority to student-centered strategies, individualized instruction, and chances for meaningful interaction. Teachers can effectively promote good learning outcomes and enable students to realize their full potential by matching their instructional techniques to the attitudes and values of their students on learning.

On the other hand, the indicator As a student, I am ready if asked to work on a problem in front of the class got the lowest mean rating of 2.35 (SD=0.76), described as Sometimes and interpreted as Low. This means that when it comes to taking part in problem-solving exercises in front of their peers, students have differing degrees of hesitancy, reluctance, or anxiety. Fear of failing, self-consciousness, or a lack of confidence in one's ability to perform successfully in front of others are some possible causes of this hesitation. When it comes to helping kids who are encountering difficulties improve their self-confidence, parents and teachers are essential. Together, they can establish a nurturing atmosphere that inspires these students to discover their abilities, get beyond challenges, and develop resilience. Recognizing students' preparedness to work on assignments in front of the class is essential to comprehending the dynamics of student engagement and classroom involvement. It emphasizes how crucial it is to provide safe, accepting classroom spaces where students feel free to take chances, make errors, and freely express their opinions. Metzger and Langley (2020) have emphasized the significance of active engagement in the classroom, with different types of engagement characterizing the pedagogical approach of each course. Furthermore, addressing students' concerns about working on problems in front of the class requires targeted interventions aimed at building confidence, fostering a growth mindset, and providing opportunities for practice and feedback. Educators can implement strategies such as collaborative problem-solving activities, peer-to-peer support, and gradual exposure to public speaking situations to help students overcome their apprehensions and develop the necessary skills and confidence.

Chen et al. (2020) explored the connection between game addiction and academic performance, particularly examining the role of learning motivation. Their research highlighted the need to address this issue in higher education through customized interventions to aid students. The study showed that game addiction not only affects students directly but also significantly influences their motivation to learn and their academic achievements.

Table 8
Summary of Respondents' Level of Addiction to Game Playing

Variables	Mean	SD	Interpretation
Addiction to Game Playing	2.03	0.92	Low
Learning Attitude	2.82	0.85	High

Legend: 3.26 – 4.00 Always/ Very High; 2.51 – 3.25 Most of the Time/ High; 1.76 – 2.50 Sometimes/Low; 1.00– 1.75 Never/Very Low

Table 8 summarizes the respondents' levels of addiction to game playing and learning attitude. The results indicate that the respondents' level of addiction to game playing was low, with an overall mean of 2.03 (SD=0.919), interpreted as Low. This means that most respondents appear to manage their gaming habits effectively, ensuring they do not disrupt their daily routines. For the majority, gaming serves as a leisure activity rather than an obsessive fixation, indicating a balanced approach to this form of entertainment. This insight is particularly encouraging as it demonstrates the students' ability to maintain a healthy equilibrium between gaming and other life responsibilities. It suggests that gaming, while prevalent, has not reached problematic levels that would necessitate significant concern or intervention. This balance reflects positively on the students' time management and self-regulation skills, implying that their engagement with gaming is primarily recreational and controlled. Kondo et al. (2023) looked into the relationship between students' learning attitudes at an Indonesian public Senior High School and their game addiction. The study discovered a strong inverse relationship between students' attitudes toward learning and their addiction to video games. This indicates that a negative attitude toward learning is more common among pupils who are addicted to video games.

On the other hand , the respondents' level of learning attitude was highly positive as indicated by the overall mean of 2.82 (SD=0.849), interpreted as High. This means that most students consistently display a positive and receptive attitude toward various learning endeavors. The notable high mean score for learning attitude holds substantial importance, symbolizing a proactive mindset and inclination towards education. Students exhibit a prevalent sense of motivation, involvement, and eagerness in their learning pursuits, which holds significant implications for their academic achievements and holistic educational progress. The

evident positive learning disposition among the respondents stands as an encouraging sign for educators and school officials alike. It signifies that Senior High School students in the Gingoog City Division are keen on embracing learning opportunities and are inclined towards active engagement in educational endeavors. As posited by Bacaling et al. (2021), school engagement partially mediates the relationship between attitude toward learning and academic achievement. This implies that students' active participation and involvement in school activities play a crucial role in translating their positive learning attitudes into higher academic performance. By fostering a more engaging and supportive school environment, educators can enhance students' academic outcomes by leveraging their attitudes towards learning.

Problem 3. What are the effects of Addiction to Game Playing on the health dimensions of the respondents, specifically in terms of physical complaints, anxiety symptoms, social dysfunction, and depression symptoms?

Table 9
Distribution of Respondents' Effects of Addiction to Game Playing on Health Dimensions in terms of Physical Complaints

Indicators *As a student, I…*	**Mean**	**SD**	**Description**
experience persistent headaches in the past month	2.34	0.93	Sometimes
often feel fatigued or lack energy	2.29	0.90	Sometimes
currently experiencing muscle or joint pain	2.23	0.86	Sometimes
notice changes in my appetite recently	2.20	0.86	Sometimes
am experiencing digestive issues, such as stomach pain or discomfort	1.99	0.85	Sometimes
had issues with dizziness or lightheadedness in the past month	2.10	1.00	Sometimes
often experience physical tension or stiffness in muscles	2.04	0.93	Sometimes
currently managing a chronic health condition	1.92	0.89	Sometimes
notice changes in my weight recently	2.17	0.94	Sometimes
currently experiencing physical symptoms related to allergies	1.87	0.93	Sometimes
Overall	**2.11**	**0.91**	**Sometimes**

Legend: 3.26 – 4.00 Always/ Very High 1.76 – 2.50 Sometimes/Low
2.51 – 3.25 Most of the Time/ High 1.00– 1.75 Never/Very Low

Table 9 shows the effects of addiction to game playing on the health dimensions of the respondents, specifically in terms of physical complaints as perceived by the respondents with an overall mean of 2.11 (SD=0.91) with a description of Sometimes and interpreted as Low. This means that while some respondents experience physical complaints occasionally because of addiction to game playing, it is not a pervasive or severe issue among the majority of respondents. Addiction to game playing may have a limited impact on physical health complaints among the surveyed population. Recognizing a low level of physical complaints associated with gaming addiction is significant, as it sheds light on the nuanced relationship between gaming behavior and physical well-being. While excessive gaming can potentially lead to sedentary behavior, eye strain, or musculoskeletal discomfort, the findings suggest that these effects are not universally experienced or may be mitigated by other factors such as lifestyle habits or individual resilience. This is consistent with the study by Benchebra et al. (2019), that discovered digestive, sleep, and cardiovascular problems are common in those with gaming or gambling habits. In addition, the results highlight the significance of encouraging gamers to adopt healthy lifestyle choices and gaming practices in order to reduce any potential harm to their physical well-being. This could entail promoting frequent pauses, upholding good posture, exercising, and taking good care of your eyes to minimize or lessen any physical discomfort brought on by gaming.

The standard deviation of 0.91 means that while most students reported occasional physical complaints, there is significant variation. Some students may experience these issues more frequently, while others might seldom face them. This means further that the moderate variability suggests that individual experiences with physical complaints vary widely. This highlights the importance of understanding personal gaming habits and their specific impacts on health. Männikkö et al. (2019) state that the moderate variability indicates a wide range of individual experiences with physical symptoms. This suggests that whereas some people might have physical problems on a regular basis, others would not. In order to customize therapies and support systems that cater to the unique needs of each person, enhance general wellbeing, and lessen the influence of these complaints on day-to-day living, it is imperative to comprehend this diversity.

The indicator As a student, I experienced persistent headaches in the past month and obtained the highest mean rating of 2.34 (SD=0.93), described as Sometimes and interpreted as High. This means that although they are not a regular occurrence, headaches are prominent enough among the people who were polled. One common side effect of prolonged gaming sessions and excessive screen time is persistent headaches. Headaches can be brought on by things like eye strain, bad posture, dehydration, and tension from gaming. The prevalence of headaches noted in this study emphasizes the need for preventative care and education regarding possible health risks related to extended gaming sessions.

According to Lee et al. (2019), excessive and continuous computer gaming impairs visual functions and causes ocular and physical fatigue. Persistent headaches can negatively impact students' well-being and academic performance. Headaches may lead to difficulty concentrating, irritability, and reduced productivity, affecting learning outcomes and overall quality of life. Recognizing the prevalence of headaches among students as a consequence of gaming addiction is essential for developing targeted interventions and support mechanisms to address this issue effectively.

On the contrary, the indicator As a student, I currently experiencing physical symptoms related to allergies got the lowest mean rating of 1.87 (SD=0.93) , described as Sometimes and interpreted as Low. This means that some individuals may be affected by allergies, but it is not a prevalent or consistent issue among the surveyed population. This implies that allergies are not predominantly linked to addiction to game playing among the surveyed population. Instead, it suggests that while some individuals may be affected by allergies, it is not a widespread or consistent problem among the respondents. This insight highlights the

importance of considering other factors beyond gaming behavior when evaluating physical symptoms like allergies. It indicates that while allergies may affect some individuals, they are not necessarily correlated with game addiction for the majority. This understanding underscores the need for comprehensive assessments to identify the various factors contributing to physical symptoms among students, ensuring appropriate interventions tailored to individual needs.

According to Akhouri and House (2023), there is a wide range of physical symptoms associated with allergies, such as watery eyes, sneezing, nasal congestion, and itching. These symptoms, which are brought on by a variety of allergens like pollen, dust, pet dander, or specific foods, can have a substantial negative influence on the quality of life and productivity of the patients. These symptoms are random, which suggests that although allergies might exist, they are not highly connected to a game addiction among responders.

Table 10
Distribution of Respondents' Effects of Addiction to Game Playing on Health Dimensions in terms of Anxiety Symptoms

Indicators *As a student, I…*	**Mean**	**SD**	**Description**
experience persistent feelings of worry or uneasiness in the past month	2.20	0.92	Sometimes
often feel restless or on edge	2.22	0.89	Sometimes
notice changes in my sleep patterns, such as difficulty falling asleep or staying asleep	2.50	0.93	Sometimes
frequently irritable or easily agitated	2.34	0.94	Sometimes
experience muscle tension or physical discomfort due to anxiety	2.08	0.93	Sometimes
had difficulty concentrating or finding that my mind went blank.	2.28	0.91	Sometimes
am experiencing sudden and intense feelings of fear or panic	2.10	0.93	Sometimes
notice changes in my appetite, such as eating more or less than usual	2.27	0.95	Sometimes
experience physical symptoms such as trembling, sweating, or a racing heart during anxious episodes	2.11	0.95	Sometimes
frequently feel like something bad is about to happen, even when there's no clear reason for it.	2.28	0.90	Sometimes
Overall	**2.24**	**0.93**	**Sometimes**

Legend: 3.26 – 4.00 Always/ Very High 1.76 – 2.50 Sometimes/Low
2.51 – 3.25 Most of the Time/ High 1.00– 1.75 Never/Very Low

Table 10 shows the effects of addiction to game playing on the health dimensions on anxiety symptoms with an overall mean of 2.24 (SD=0.93) described as Sometimes and interpreted as Low. This means that although addiction to game playing may occasionally exacerbate anxiety, for the majority of responders, anxiety symptoms are not significantly or consistently caused by gaming addiction. Anxiety symptoms can take many different forms, such as uneasiness, tension, anxiety, or trepidation. Stressors connected to social interactions, personal situations, or academic pressure might cause these symptoms. While excessive gaming may exacerbate feelings of anxiety in some individuals, the low mean rating suggests that it is not a predominant factor contributing to anxiety symptoms among the surveyed population (Kim et al., 2022). However, it is important to note that excessive gaming has been found to exacerbate feelings of anxiety in some individuals, particularly among those with social anxiety and depression.

The standard deviation of 0.93 means that while most students report occasional anxiety symptoms, there is significant variation. Some students may experience these symptoms more frequently, while others might seldom face them. This means further that the moderate variability suggests that individual experiences with anxiety symptoms vary widely. This highlights the importance of understanding personal gaming habits and their specific impacts on mental health. According to Vengurlekar and Thudi (2023), video gaming has minimal influence on stress and anxiety levels among college students. This finding suggests that, contrary to common concerns, gaming may not significantly exacerbate these mental health issues in this demographic.

The indicator As a student, I notice changes in my sleep patterns, such as difficulty falling asleep or staying asleep obtained the highest mean rating of 2.50 (SD=0.93) described as Sometimes and interpreted as Low. This means that sleep disturbances are commonly associated with anxiety disorders, and changes in sleep patterns can serve as indicators of underlying anxiety symptoms. Gaming addiction may have a notable impact on the sleep quality of individuals, potentially contributing to sleep-related anxiety symptoms. Excessive gaming can disrupt the circadian rhythm, increase arousal levels, and heighten cognitive stimulation, all of which can interfere with the ability to initiate or maintain sleep. As posited by Akçay and Akçay (2020), addictive gaming and problematic internet use were associated with poorer sleep quality. The presence of sleep disturbances among respondents highlights the interconnected nature of mental health and sleep patterns. Furthermore, poor sleep quality can exacerbate feelings of anxiety and stress, leading to a detrimental cycle of worsening mental health outcomes.

On the other hand, the indicator As a student, I experience muscle tension or physical discomfort due to anxiety got the lowest mean rating of 2.08 (SD=0.93), described as Sometimes and interpreted as Low. This means that some individuals may experience physical manifestations of anxiety, but it is not a prevalent or consistent issue among the majority of respondents. Muscle tension and physical discomfort are common symptoms of anxiety and stress, reflecting the physiological response to psychological distress. However, the low mean rating for this indicator suggests that these physical symptoms may not be strongly associated with addiction to game playing among the surveyed population. This understanding of the limited influence of gaming addiction on the physical manifestations of anxiety underscores the necessity for thorough evaluations and precise interventions targeting the mental health aspects associated with gaming.

This contradicts the statement of Kowal et al. (2020) propose that commercial video games offer promising mental health benefits, potentially alleviating symptoms of depression and anxiety. Although physical symptoms may not be prominent, it remains imperative to delve into other dimensions of anxiety, including emotional well-being, cognitive function, and coping mechanisms.

Table 11
Distribution of Respondents' Effects of Addiction to Game Playing on Health Dimensions in terms of Social Dysfunction

Indicators *As a student, I…*	**Mean**	**SD**	**Description**
often find it challenging to initiate conversations with my classmates or peers.	2.24	0.85	Sometimes
noticed a decrease in my interest or participation in extracurricular social activities on campus in the past month.	2.10	0.86	Sometimes
feel anxious or uncomfortable in group settings, such as classroom discussions or team projects.	2.07	0.92	Sometimes
experienced difficulty maintaining eye contact or engaging in face-to-face conversations with others.	2.25	0.92	Sometimes
often feel isolated or left out in social situations on campus.	2.17	0.92	Sometimes
find it challenging to express thoughts and opinions during class discussions or group activities.	2.35	0.87	Sometimes
experienced changes in the ability to trust my peers in social relationships on campus.	2.21	0.89	Sometimes
often feel judged or criticized in social situations on campus.	2.21	0.87	Sometimes
find it difficult to seek opportunities to engage in social activities and build new connections with peers.	2.21	0.87	Sometimes
don't feel comfortable meeting with new people within the school community.	2.23	0.96	Sometimes
Overall	**2.20**	**0.89**	**Sometimes**

Legend:
3.26 – 4.00 Always/ Very High
2.51 – 3.25 Most of the Time/ High
1.76 – 2.50 Sometimes/Low
1.00– 1.75 Never/Very Low

Table 11 shows the effects of addiction to game playing on the health dimensions of the respondents, specifically in terms of social dysfunction as perceived by the respondents with an overall mean of 2.20 (SD=0.89) , described as Sometimes and interpreted as Low. This means that the low mean rating for social dysfunction implies that while addiction to game playing may have some impact on social interactions and relationships, it is not a predominant factor contributing to significant social dysfunction among the surveyed population. This Social dysfunction can arise from various factors, including excessive screen time, reduced face-to-face interactions, and prioritizing gaming over social activities. However, the findings suggest that these issues are not universally experienced or may be mitigated by other factors such as social support networks or individual coping strategies.

Moreover, the low level of social dysfunction associated with gaming addiction underscores the need for comprehensive approaches to assessing and addressing the social dimensions of gaming behavior. As posited by Heng et al. (2021), online social capital serves as a mediator in the relationship between in-game social interaction and gaming disorder. This indicates that the social connections and networks formed within online games can influence the development of gaming disorder. Enhanced social interaction within games can lead to increased online social capital, which in turn may exacerbate problematic gaming behaviors.

The standard deviation of 0.89 means that there is a moderate spread around the mean, suggesting that while many students occasionally experience social dysfunction, the degree of these experiences varies. Some students may face significant social challenges, while others might rarely have such issues. This means further that The moderate variability highlights the diverse experiences among students regarding social dysfunction. This suggests that interventions should be tailored to address the specific needs of those who are more affected. As cited by Almalki and Aldajani (2021), female medical students at Taif University in Saudi Arabia experienced social behavioral and academic problems as a result of their continuous use of video games, which led to addiction. This suggests that playing video games too often can have a detrimental impact on important facets of students' lives, emphasizing the need for methods to lessen these impacts and encourage a healthy balance between gaming and other obligations. The indicator As a student, I find it challenging to express thoughts and opinions during class discussions or group activities obtained the highest mean rating of 2.35 (SD=0.87) , described as Sometimes and interpreted as Low. This means that while some individuals may experience difficulties in social interactions, it is not a pervasive or constant issue among the majority of respondents. Difficulties in doing so can indicate social anxiety, self-consciousness, or a lack of confidence in social settings.

As posited by Dechant et al., (2020) expressing ideas and opinions is a vital component of engaging in social interactions and participating in academic pursuits. These issues may be exacerbated by game addiction, which may result in social disengagement or decreased involvement in group activities. The significance of taking into account the effects of addition to game playing on social functioning and academic engagement is highlighted by the high mean rating for this category. Moreover, addressing challenges related to social dysfunction requires targeted interventions aimed at promoting social skills, confidence-building, and effective communication strategies.

On the contrary, the indicator As a student, I feel anxious or uncomfortable in group settings, such as classroom discussions or team projects got the lowest mean rating of 2.07 (SD=0.92) described as Sometimes and interpreted as Low. This means that some individuals may face challenges in social situations, but severe or unbearable anxiety in group settings is not typical. Feeling anxious or uncomfortable in group settings can hinder social interactions, academic performance, and overall well-being. The low mean rating suggests that gaming addiction may not be a significant factor contributing to social dysfunction in

group settings among the surveyed population. According to Marino et al. (2020), social anxiety is directly associated with four motives such as escape, coping, fantasy, and recreation as well as with Internet Gaming Disorder (IGD). This suggests that individuals with social anxiety may turn to gaming as a means to fulfill these specific motives, which can subsequently contribute to the development of IGD. Understanding these associations can help in creating targeted interventions to address both social anxiety and problematic gaming behaviors.

The study by Koban et al. (2021) delves into the compensatory model of media use, which posits that individuals may turn to gaming as a coping mechanism, particularly in response to stress, social interaction anxiety, and feelings of loneliness. This model suggests that gaming serves as a form of escape or distraction from negative emotions or situations, providing individuals with a sense of relief or temporary respite from their stressors. The study explores how factors such as stress, social interaction anxiety, and loneliness can moderate the effects of gaming on individuals.

Table 12
Distribution of Respondents' Effects of Addiction to Game Playing on the Health Dimensions in terms of Depression Symptoms

Indicators *As a student, I…*	**Mean**	**SD**	**Description**
experience persistent feelings of sadness or hopelessness in the past month.	2.25	1.02	Sometimes
find it difficult to derive pleasure or interest from activities that I used to enjoy	2.24	0.89	Sometimes
often experience changes in my appetite, such as overeating or undereating.	2.22	0.96	Sometimes
notice changes in sleep patterns, such as difficulty falling asleep or sleeping too much.	2.35	0.97	Sometimes
often fatigued or lacking in energy, even when I get enough sleep.	2.33	0.95	Sometimes
have difficulty concentrating on studies or tasks	2.37	0.88	Sometimes
experience feelings of worthlessness or excessive guilt in the past month.	2.17	0.99	Sometimes
find it challenging to make decisions, even about simple matters.	2.30	0.91	Sometimes
often have thoughts of death or suicide.	1.75	0.87	Never
often feel a sense of despair or hopelessness about the future.	2.23	0.98	Sometimes
Overall	**2.22**	**0.92**	**SOMETIMES**

Legend: 3.26 – 4.00 Always/ Very High; 2.51 – 3.25 Most of the Time/ High; 1.76 – 2.50 Sometimes/Low; 1.00– 1.75 Never/Very Low

Table 12 shows the effects of addiction to game playing on the health dimensions of the respondents in terms of depression symptoms with an overall mean of 2.22 (SD=0.94) , described as Sometimes and interpreted as Low. This means that the low mean rating for depression symptoms implies that while addiction to game playing may contribute to feelings of depression in some cases, it is not a predominant factor contributing to significant depression symptoms among the surveyed population. Depression symptoms can arise from various factors, including biological, psychological, and environmental influences. While excessive gaming may worsen feelings of depression in some individuals, the findings suggest that these effects are not universally experienced or may be mitigated by other factors such as social support networks or coping mechanisms (Nurmagandi & Hamid, 2020). Furthermore, the low level of depression symptoms associated with addiction to game playing underscores the need for comprehensive approaches to assessing and addressing the mental health dimensions of gaming behavior. While depression symptoms are important to consider, it is also essential to explore other aspects of mental well-being such as anxiety, stress, and overall life satisfaction.

The standard deviation of 0.94 means that there is a moderate to high spread around the mean, suggesting that while many students occasionally experience depression symptoms, the intensity of these experiences varies widely. Some students may face significant depressive challenges, while others might experience them infrequently. This means further that the moderate to high variability highlights the diverse experiences among students regarding depression symptoms. This suggests that interventions should be tailored to address the specific needs of those who are more affected. As posited by Andersson and Håkansson (2021), the risk factors associated with traditional substance use problems in young adults are more well-known compared to those for behavioral addictions like gambling and gaming in early adulthood. This indicates a need for more research and awareness regarding the factors that contribute to behavioral addictions, to develop effective prevention and intervention strategies for these issues among young adults.

The indicator As a student, I have difficulty concentrating on studies or tasks obtained the highest mean rating of 2.37 (SD=0.88), described as Sometimes and interpreted as Low. This means that the high mean rating for this indicator implies that gaming addiction might contribute to concentration difficulties, potentially impacting students' ability to focus on academic tasks or responsibilities. This corresponds with existing literature associating excessive screen time and gaming behavior with attentional problems and cognitive impairments (Bondoc, 2020). Although difficulty concentrating is a hallmark of depression, it can also stem from other factors like stress, fatigue, or attention-deficit/hyperactivity disorder. Therefore, while gaming addiction may worsen concentration issues for some, it might not be the sole or primary cause—furthermore, a need for comprehensive assessments and interventions to address the mental health aspects of gaming behavior. Strategies to aid individuals with concentration difficulties may include cognitive-behavioral techniques, time management skills, and lifestyle adjustments to enhance focus and attention.

On the contrary, indicator As a student, I often have thoughts of death or suicide got the lowest mean rating of 1.75 (SD=0.87) ,described as Sometimes and interpreted as Low. This means that suicidal or death-related thoughts are a sign of severe psychological distress and are frequently associated with major depressive disorder and other mental health issues. The low mean rating implies that among the questioned population, addiction to game playing may not be a major factor in these thoughts. These kinds of thoughts are important markers of extreme psychological suffering, and they are frequently connected to major depressive disorder and other mental health issues. Therefore, even occasional occurrences warrant serious attention and intervention. It's essential to recognize that while gaming addiction may contribute to such thoughts for some individuals, addressing mental health concerns requires comprehensive approaches that consider various factors beyond gaming behavior. This insight emphasizes the critical need for mental health support and resources for individuals experiencing distressing thoughts related to gaming addiction. While gaming can negatively affect mental health, such as causing feelings of sadness or hopelessness, the findings suggest that suicidal thoughts may not be a major consequence of gaming addiction for most people. Moreover, factors beyond gaming behavior, like underlying mental health issues and life stressors, can influence thoughts of death or suicide. gaming addiction might worsen distress for some individuals, but it's not necessarily the main cause of suicidal thoughts.

This aligns with Bondoc's (2020) findings, emphasizing the need for a deeper understanding of the many factors that contribute to suicidal thoughts rather than attributing them solely to video game play. Recognizing the low mean rating for these thoughts underscores the importance of comprehensive assessments and interventions to address mental health concerns related to gaming behavior. Strategies to help individuals with suicidal thoughts may include crisis intervention, counseling services, and suicide prevention programs.

Table 13
Summary of Respondents' Effects of Addiction to Game Playing on Health Dimensions

Variables	Mean	SD	Interpretation
Physical Complaints	2.11	0.91	Low
Anxiety Symptoms	2.24	0.93	Low
Social Dysfunction	2.20	0.89	Low
Depression Symptoms	2.22	0.94	Low
Overall	**2.19**	**0.92**	**Low**

Legend: 3.26 – 4.00 Always/ Very High; 2.51 – 3.25 Most of the Time/ High; 1.76 – 2.50 Sometimes/Low; 1.00– 1.75 Never/Very Low

Table 13 shows the summary of the effects of addiction to game playing on the health dimensions with an overall mean of 2.19 (SD=0.92) interpreted as Low. This means that while addiction to game playing may have some impact on health dimensions, it is not a pervasive or severe issue among the majority of respondents. The low mean score highlights that respondents do not consistently experience significant negative effects on their health dimensions due to addiction to game playing. While gaming behavior can have adverse effects on mental and physical well-being, the findings suggest that these effects are generally mild or occasional. This concurs with the study of Carras et al., (2019) that the adverse effects of gaming on mental and physical well-being are generally mild or occasional. It is important to note that individual experiences may vary, and some respondents may be more susceptible to the negative effects of addiction to game playing than others. While the overall impact may be low, targeted interventions and support may still be necessary for those individuals who experience more severe consequences.

In particular ,the variable on Anxiety Symptoms obtained the highest mean rating of 2.24 (SD=0.93) with an interpretation of Low. This means that there are not many individuals who report having anxiety symptoms as a result of their addiction to video games. Although a small percentage of the surveyed population reported having anxiety symptoms generally, some people may have these symptoms as a result of playing video games excessively. Even though the mean rating is low, it is important to understand that treating the anxiety symptoms linked to gaming addiction is still vital for the wellbeing of those who are affected. Students' anxiety symptoms can be reduced and their general mental wellness can be enhanced by putting stress management, relaxation, and good coping mechanisms into practice.

This is consistent with the findings of Von Der Heiden et al. (2019), who found that video game addiction can have a mildly negative effect on mental health, especially when it comes to encounters involving anxiety. This research emphasizes how crucial it is to take into account the psychological effects of gaming habits on people's mental health.

On the other hand, the variable of Physical Complaints got the lowest mean rating of 2.11 (SD=0.91) with an interpretation as Low. This means that respondents experiencing physical complaints due to game addiction are relatively few. This finding implies that while some individuals may indeed encounter physical discomfort or issues related to excessive gaming, it's not a prevalent problem among the surveyed population. However, it is important to acknowledge that even though the overall rating is low, addressing physical complaints associated with gaming addiction remains significant for those affected. Implementing strategies to promote healthy gaming habits and physical well-being among students, such as regular breaks, ergonomic setups, and physical activity, can help mitigate potential adverse effects and promote overall wellness. Research on the impact of game addiction on physical health yields mixed results.

The study of Aziz et al. (2021) found that Malaysian adolescents addicted to computer games experienced obesity, back and neck pain, orthopedic/joint muscle issues, eyesight and hearing problems, and physical inactivity. Moreover, it is important to recognize that physical complaints may arise from various factors beyond gaming behavior, including poor ergonomics, inadequate rest, or pre-existing medical conditions. While playing game addiction may contribute to physical discomfort for some individuals, it may not be the primary or sole cause of these complaints.

Problem 4. Is there a significant relationship between addiction to game playing, learning attitude, health dimensions, and each of the respondents' profiles?

Table 14
Relationship between Addiction to Game Playing When Grouped According to their Profiles

Category	r-value	p-value	Decision	Overall
Age	0.108 (WPR)	0.128	Accept H_o	Not Significant
Sex	**0.232 (WPR)**	**0.001***	**Reject H_o**	**Significant**
Grade Level	0.070 (NLR)	0.321	Accept H_o	Not Significant
Academic Strand	**0.187 (WPR)**	**0.008***	**Reject H_o**	**Significant**
Daily Allowance	0.098 (NLR)	0.169	Accept H_o	Not Significant

Legend: *significant at p<0.05 alpha level S – significant NS – not significant

Table 14 shows the relationship between addiction to game playing when grouped according to age, sex, grade level, academic strand, and daily allowance. Overall, the respondents' sex as well as their academic strand showed a significant relationship between their addiction to game playing as indicated by the correlation r-value and probability value less than 0.05 alpha level which led to the rejection of the null hypothesis. This implies that sex and academic strands are contributory factors in determining individuals' susceptibility to addiction to game playing. Specifically, the correlation analysis indicates that certain demographic factors, such as being male and belonging to a particular academic strand, are associated with higher levels of addiction to game playing among the respondents. This further implies that the significant relationship between sex and addiction to game playing implies that there may be gender-specific differences in gaming behavior and susceptibility to addiction among Senior High School students. Similarly, the association between academic strands and play-game addiction suggests that the nature of students' academic pursuits may influence their engagement with gaming activities and their tendency for addiction.

As posited by Topal et al. (2023), being a male and being a player, according to the Computer Game Addiction Scale GUTHS, were significant predictors of digital game addiction. These findings underscore the importance of considering demographic factors such as sex and academic strand when designing interventions and support systems aimed at addressing addiction to game playing among Senior High School students. Tailored approaches that take into account gender differences and academic interests may be more effective in addressing gaming-related concerns and promoting healthy gaming habits among students.

On the other hand, the respondents' Sex obtained the highest correlation coefficient (r-value) of 0.070, and a p-value of 0.001 indicated as Significant. This means that there is a statistically significant relationship between sex and addiction to game playing among the respondents. In other words, gender differences play a notable role in influencing the levels of addiction to game playing observed in the study. This further means that This finding underscores the importance of considering gender-specific dynamics when examining gaming behaviors and addiction tendencies among Senior High School students. This is further supported by the finding of Neily et al., (2022) that there was a substantial correlation between the participants' male gender and the Gaming Addiction Scale score lends additional evidence to this. Additionally, gender norms and cultural expectations can influence a person's gaming habits. For example, men could perceive pressure to uphold stereotypical ideas of what it means to be a man, which could lead to competitive and intensive gaming experiences that are associated with addiction. But females could encounter different social influences and interests, which could affect their gaming habits and susceptibility to addiction. Comprehending the ways in which gender shapes gaming behaviors can assist educators, legislators, and medical experts in creating focused interventions and support plans that effectively address gaming-related issues and are adapted to the unique requirements and experiences of various genders.

Meanwhile, the respondents' Grade Level obtained the Lowest correlation coefficient (r-value) of 0.070 and a p-value of 0.321 indicated as Not Significant. This means that academic standing, whether they are in Grade 11 or Grade 12, does not significantly influence their susceptibility to gaming addiction. This means further that factors other than academic progression, such as age, sex, or individual differences in personality and coping mechanisms, may have a more pronounced impact on students' likelihood of developing gaming addiction. One possible explanation for this result could be that the academic workload and responsibilities associated with Grade 11 and Grade 12 do not significantly differ in a way that affects students' engagement with gaming activities. This concurs with the study findings of Dikmen et al. (2022) that The academic standing of students does not significantly influence their susceptibility to gaming addiction. Understanding the lack of association between grade level and gaming addiction can inform interventions and support strategies aimed at addressing gaming-related concerns among Senior High School students.

Table 15
Relationship between Learning Attitude When Grouped According to their Profile

Category	r-value	p-value	Decision	Overall
Age	**0.163 (WPR)**	**0.021***	**Reject H_o**	**Significant**
Sex	**0.187 (WPR)**	**0.008***	**Reject H_o**	**Significant**
Grade Level	0.040 (NLR)	0.571	Accept H_o	Not Significant
Academic Strand	**0.206 (WPR)**	**0.003***	**Reject H_o**	**Significant**

Daily Allowance	0.080 (NLR)	0.258	Accept H_o	Not Significant

Legend: *significant at p<0.05 alpha level S – significant NS – not significant

Table 15 shows the relationship between learning attitudes when grouped according to age, sex, grade level, academic strand, and daily allowance. Overall, the respondents age, sex as well, and academic strand showed a Significant relationship with their learning attitude as indicated by the correlation r-value and probability value less than 0.05 alpha level which led to the rejection of the null hypothesis. This means that the respondent's age, sex, and academic strand are contributory factors towards the learning attitudes of the respondents of Gingoog City Division. This implies further that older students, females, and those enrolled in specific academic strands may exhibit distinct learning attitudes compared to their counterparts. One possible explanation for the significant relationship with age could be the developmental changes and experiences that occur as students progress through Senior High School. Older students may have different perspectives, priorities, and motivations toward learning compared to younger students, influencing their overall attitude toward academics. Similarly, the significant relationship with sex suggests that gender differences may influence learning attitudes. Cultural, societal, and personal factors may contribute to variations in how males and females perceive and approach learning tasks, leading to differences in their attitudes toward education.

The respondents' Academic Strand obtained the highest correlation coefficient (r-value) of 0.206 and a p-value of 0.003 indicated as Significant. This means that the choice of academic program influences students' attitudes toward learning. This means further that students enrolled in different academic strands may exhibit distinct learning attitudes shaped by the specific curriculum, objectives, and requirements of their chosen strands. As posited by (Aşgın & Coşkun (2019) The choice of academic program influences students' attitudes toward learning. One possible explanation for this significant relationship is that academic strands offer unique learning experiences tailored to students' interests, abilities, and career aspirations. Students in STEM-focused strands, for instance, might have a greater appreciation for science, technology, engineering, and math courses, which would result in a more positive attitude toward learning in these fields. In a similar vein, students enrolled in humanities or arts-focused tracks might show a stronger passion for critical analysis, artistic expression, and cultural discovery. Furthermore, the significant relationship with the academic strand highlights the importance of curriculum alignment and educational resources tailored to the needs and interests of students in different strands.

Moreover, the respondents' Sex obtained a correlation coefficient (r-value) of 0.187 and a p-value of 0.008, indicated as Significant. This means that there are measurable differences in learning attitudes between male and female students in the Senior High School group studied. This significant correlation implies that sex is an influential factor in shaping students' learning attitudes. For instance, male and female students might have different motivations, study habits, or responses to academic challenges, which could be reflected in their overall attitudes toward learning. This is in contrast to the study (Clavel & Flannery, 2022) that there is no significant difference in performance for girls or boys who attend single-sex schools compared to their mixed-school peers in science, mathematics, or reading. This suggests that the type of school environment, whether single-sex or coeducational, does not inherently impact students' academic achievements in these core subjects. These findings indicate that other factors, such as quality of teaching, curriculum design, and individual student motivation, might play a more crucial role in academic success.

The respondents' Age obtained a correlation coefficient (r-value) of 0.163 and a p-value of 0.021, indicated as Significant. This means that there are measurable differences in learning attitudes among students of different ages within the Senior High School group studied. This significant correlation implies that age is an influential factor in shaping students' learning attitudes. As students progress in age, their attitudes towards learning may evolve due to various factors such as increased maturity, changing academic expectations, and greater clarity regarding their future career plans. Older students might exhibit more positive learning attitudes due to their proximity to graduation and the transition to higher education or the workforce.

Also, the respondents' Grade Level obtained the lowest correlation coefficient (r-value) of 0.040 and a p-value of 0.571 indicated as Not Significant. This implies that students' attitudes towards learning may not significantly vary based on their current grade level in Senior High School. This further implies that regardless of whether students are in Grade 11 or Grade 12, their overall attitudes towards learning remain relatively consistent. One possible explanation for this result could be the overarching educational environment and culture within the Senior High School setting, which may influence students' learning attitudes irrespective of their specific grade level. Factors such as teaching methodologies, school policies, peer interactions, and extracurricular activities may play a more significant role in shaping students' attitudes toward learning than their grade level alone. As posited by Yolak et al. (2020), positive attitudes such as patience and compassion support students' self-confidence. Additionally, it is important to consider that the transition from Grade 11 to Grade 12 may not inherently impact students' learning attitudes, as both grade levels are part of the Senior High School experience and share similar academic expectations and goals. This suggests that fostering a supportive and empathetic educational environment could have a significant positive effect on students' attitudes and confidence, regardless of their grade level. This insight emphasizes the value of emotional and psychological support in enhancing students' academic experiences and outcomes.

According to Bacaling et al. (2021), school engagement partially mediates the relationship between attitude toward learning and academic achievement. This implies that students' active participation and involvement in school activities play a crucial role in translating their positive learning attitudes into higher academic performance. By fostering a more engaging and supportive school environment, educators can enhance students' academic outcomes by leveraging their attitudes towards learning. Additionally, this mediation effect highlights the importance of school engagement programs, such as extracurricular activities, student organizations, and classroom participation, in strengthening the connection between students' intrinsic motivation and their academic success.

Table 16
Relationship between Health Dimensions When Grouped According to their Profile

Category	Health Dimensions **Physical Complaints** *r-value* *p-value*	**Anxiety Symptoms** *r-value* *p-value*	**Social Dysfunction** *r-value* *p-value*	**Depression Symptoms** *r-value* *p-value*	**OVERALL** *r-value* *p-value*
Age	**0.195** **(WPR)** **0.006*** **S**	0.120 (WPR) 0.092 NS	0.119 (WPR) 0.094 NS	0.087 (NLR) 0.219 NS	**0.150** **(WPR)** **0.034*** **S**
Sex	0.062 (NLR) 0.387 NS	0.117 (WPR) 0.100 NS	0.069 (NLR) 0.330 NS	0.117 (WPR) 0.099 NS	0.108 (WPR) 0.129 NS
Grade Level	0.069 (NLR) 0.334 NS	0.069 (NLR) 0.333 NS	0.020 (NLR) 0.779 NS	0.054 (NLR) 0.448 NS	0.013 (NLR) 0.850 NS
Academic Strand	**0.144** **(WPR)** **0.042*** **S**	**0.105** **(WPR)** **0.040*** **S**	0.069 (NLR) 0.334 NS	0.079 (NLR) 0.263 NS	**0.115** **(WPR)** **0.015*** **S**
Daily Allowance	0.032 (NLR) 0.650 NS	0.029 (NLR) 0.681 NS	0.064 (NLR) 0.370 NS	0.005 (NLR) 0.945 NS	0.016 (NLR) 0.820 NS

Table 16 shows the relationship between health dimensions when grouped according to age, sex, grade level, academic strand, and daily allowance. Overall, the respondents' Age and Academic Strand showed a Significant relationship between their health dimensions as indicated by the correlation r-value and probability value less than 0.05 alpha level which led to the rejection of the null hypothesis. This implies that the respondents' age and academic strand are contributory factors to their health dimensions. The implications of these findings are multifaceted. Firstly, the significant relationship between age and health dimensions underscores the impact of developmental stages on health. As students progress through different phases of adolescence, they encounter various physical, emotional, and social changes. Hormonal fluctuations, achievement of developmental milestones, and increased exposure to stressors such as academic pressures and social dynamics can all contribute to variations in health outcomes. For instance, younger adolescents might experience more pronounced physical changes that affect their self-esteem and body image, while older adolescents might face greater academic and social pressures that impact their mental health.

Furthermore, the academic strand is another critical factor influencing health dimensions. Different academic tracks may present unique challenges and stressors. For example, students in a rigorous science or mathematics strand might experience higher levels of academic stress compared to those in arts or vocational tracks. The curriculum demands, competitive environments, and future career expectations associated with different strands can significantly affect students' health, particularly their mental and emotional well-being. Additionally, while age and academic strands show a significant relationship with health dimensions, it is important to consider the potential influences of sex, grade level, and daily allowance. Although these factors did not show a statistically significant relationship in this study, they may still contribute to health outcomes in complex and interacting ways. Hua et al. (2019) further demonstrated the effectiveness of peer education in enhancing adolescents' quality of life, particularly in the psychological and social dimensions. Similarly, the significant relationship between academic strands and health dimensions highlights the influence of academic specialization on students' health outcomes. Different academic strands may entail distinct academic requirements, extracurricular activities, and career aspirations, which can impact students' physical and psychological well-being.

Overall, these findings underscore the multifaceted nature of health among Senior High School students, influenced by factors such as age and academic strand. By acknowledging the intricate interplay between demographic characteristics and health dimensions, educators, policymakers, and healthcare professionals can develop targeted interventions that promote holistic well-being and support the diverse needs of students across different age groups and academic pathways.

The respondents' profile Academic strand obtained the highest correlation coefficient (r-value) of 0.115 and a p-value of 0.015 indicated as Significant. This implies that the choice of academic strand can influence various aspects of students' Health Dimension. This implies further that Academic strands often differ not only in terms of curriculum content but also in the associated learning environments, academic demands, and extracurricular opportunities.

As posited by Bergmann et al. (2019), the demands associated with medical studies may interfere with demands in other domains of life. As a result, students enrolled in different academic strands may experience distinct health outcomes based on the unique challenges and stressors associated with their chosen pathway. For example, students in STEM-focused academic strands may encounter high levels of academic pressure, rigorous coursework, and intense competition, potentially leading to increased stress levels and mental health concerns such as anxiety and burnout. On the other hand, students in humanities or arts-focused strands may face different stressors related to creativity, performance expectations, or interpersonal dynamics within their academic programs. These differences in academic experiences can impact students' physical, emotional, and social well-being, contributing to variations in health dimensions across different academic strands.

As posited by Sun et al. (2023), gaming addiction diminishes behavioral, emotional, and cognitive engagement in learning, subsequently decreasing students' academic motivation and performance. This indicates that excessive gaming can divert the focus and energy students need for their studies, resulting in poorer educational outcomes. Recognizing this connection underscores the importance of fostering balanced gaming habits and implementing interventions that encourage healthier interactions with both digital entertainment and academic responsibilities.

The respondents' Grade Level obtained the lowest correlation coefficient (r-value) of 0.013 and a p-value of 0.850 indicated as Not Significant. This means that there is no significant relationship in health outcomes between students in different grades within the Senior High School level. In other words, regardless of whether students are in Grade 11 or Grade 12, their health dimensions appear to be relatively similar. This implies further that factors other than grade level, such as age, academic strand, or daily allowance, may have a stronger influence on students' health outcomes. It's important to note that while grade level may not directly impact health dimensions, other variables such as academic stress, social relationships, and lifestyle factors could still play a significant role in shaping students' health experiences. Additionally, the lack of significance in the relationship between grade level and health dimensions highlights the need to consider a broader range of factors when addressing students' health needs and implementing targeted interventions (Kim et al., 2021). Further exploration into the specific factors influencing health dimensions among Senior High School students, independent of grade level, can provide valuable insights for educators, policymakers, and healthcare professionals.

According to Andersson and Håkansson (2021), proximal and distal protective and risk factors for healthy aging are enumerated. This comprehensive overview helps identify the various influences on healthy aging, providing valuable insights for developing targeted interventions and support systems to promote well-being in older adults. Comprehending these variables is pivotal in devising efficacious tactics to augment the standard of living as people age. Given their frequency, it appears that specialized approaches are necessary to lessen the negative effects of these problems on teenagers and young adults. Together, parents, mental health specialists, and schools can develop all-encompassing programs that deal with the underlying causes as well as the symptoms of the issue. These initiatives could involve educational seminars, therapy, and extracurricular activities aimed at encouraging healthy lifestyle choices and coping skills.

Table 17
Summary of Respondents' Relationship between Addiction to Game-Playing, Learning Attitude, and Health Dimensions When Grouped According to their Profile

Category	Addiction to Game Playing	Learning Attitude	Health Dimensions
	r-value *p-value*	*r-value* *p-value*	*r-value* *p-value*
Age	0.108 (WPR)	**0.163** **(WPR)**	**0.150** **(WPR)**
Sex	0.128 NS **0.232** **(WPR)**	**0.021** **S** **0.187** **(WPR)**	**0.034*** **S** 0.108 (WPR)
Grade Level	**0.001** **S** 0.070 (WPR)	**0.008** **S** 0.040 (WPR)	0.129 NS 0.013 (NLR)
Academic Strand	0.321 NS **0.187** **(WPR)**	0.571 NS **0.206** **(WPR)**	0.850 NS **0.115** **(WPR)**
Daily Allowance	**0.008** **S** 0.098 (WPR)	**0.003** **S** 0.080 (WPR)	**0.015*** **S** 0.016 (NLR)
	0.169 NS	0.258 NS	0.820 NS

Legend: *significant at p<0.05 alpha level S – significant NS – not significant

Table 17 shows a summary distribution of the relationship between addiction to game playing, learning attitude, and health dimensions when grouped according to their profile. The respondents' Sex as well as their Academic Strand showed a Significant relationship between their addiction to game playing as indicated by the correlation r-value and probability value less than 0.05 alpha level which led to the rejection of the null hypothesis. This means that sex and academic strands are key factors in determining individuals' susceptibility to addiction to game playing. The correlation analysis indicates that certain demographic factors, such as being male and belonging to specific academic strands, are linked to higher levels of addiction to game playing among the respondents. This implies that there may be gender-specific differences in gaming behavior and susceptibility to addiction among Senior High School students. Additionally, the association between academic strands and addiction to game playing suggests that the nature of students' academic pursuits may influence their engagement with gaming activities and their propensity for addiction.

Meanwhile, the respondents' Grade Level obtained the Lowest correlation coefficient (r-value) of 0.070 and a p-value of 0.321 indicated as Not Significant. This means that academic standing, whether they are in Grade 11 or Grade 12, does not significantly influence their susceptibility to gaming addiction. This means further that factors other than academic progression, such as age, sex, or individual differences in personality and coping mechanisms, may have a more pronounced impact on students' likelihood of developing gaming addiction. One possible explanation for this result could be that the academic workload and responsibilities associated with Grade 11 and Grade 12 do not significantly differ in a way that affects students' engagement with gaming activities.

The relationship between learning attitudes when grouped according to their profile. the respondent's Age, Sex as well, and Academic Strand showed a Significant relationship with their learning attitude as indicated by the correlation r-value and probability value less than 0.05 alpha level which led to the rejection of the null hypothesis. This implies that the respondent's age, sex, and academic strand are contributory factors to their learning attitudes. Specifically, older students, males, and those enrolled in specific academic strands may exhibit distinct learning attitudes compared to their counterparts. One possible explanation for the significant relationship with age could be the developmental changes and experiences that occur as students progress through Senior High School. Older students may have different perspectives, priorities, and motivations toward learning compared to younger students, influencing their overall attitude toward academics. Similarly, the significant relationship with sex suggests that gender differences may also play a role in shaping learning attitudes.

The respondents' Academic Strand obtained the highest correlation coefficient (r-value) of 0.206 and a p-value of 0.003 indicated as Significant. This means that the choice of academic program influences students' attitudes toward learning. This means further that students enrolled in different academic strands may exhibit distinct learning attitudes shaped by the specific curriculum, objectives, and requirements of their chosen strands.

On the other hand, The respondents' Grade Level showed the lowest correlation coefficient (r-value of 0.040) and a p-value of 0.571, indicating Not Significant relationship with learning attitudes. This implies that students' attitudes towards learning do not significantly vary based on their current grade level in Senior High School. Whether students are in Grade 11 or Grade 12,

their overall attitudes towards learning remain relatively consistent. This may be due to the overarching educational environment and culture within the Senior High School setting, which influences students' learning attitudes regardless of their specific grade level.

Oreover, the relationship between health dimensions when grouped according to their profile. The respondents' Age and Academic Strand showed a Significant relationship between their health dimensions as indicated by the correlation r-value and probability value less than 0.05 alpha level which led to the rejection of the null hypothesis. This means that the respondents' age and academic strand are contributory factors to their health dimensions. The significant relationship between age and health dimensions underscores the impact of developmental stages on health. As students progress through different phases of adolescence, they encounter various physical, emotional, and social changes. Additionally, the academic strand is another critical factor influencing health dimensions. Different academic strands may present unique challenges and stressors. For example, students in rigorous science or mathematics strands might experience higher levels of academic stress compared to those in arts or vocational tracks. The curriculum demands, competitive environments, and future career expectations associated with different strands can significantly affect students' health, particularly their mental and emotional well-being.

The respondents' profile Academic strand obtained the highest correlation coefficient (r-value) of 0.115 and a p-value of 0.015 indicated as Significant. This means that the choice of academic strand can influence various aspects of students' Health Dimension. This implies further that Academic strands often differ not only in terms of curriculum content but also in the associated learning environments, academic demands, and extracurricular opportunities.

On the other hand, The respondents' Grade Level showed the lowest correlation coefficient (r-value of 0.013) and a p-value of 0.850, indicating Not Significant relationship with health outcomes. This means there is no significant difference in health dimensions between students in Grade 11 and Grade 12; their health outcomes appear to be relatively similar. Other factors, such as age, academic strand, or daily allowance, may have a stronger influence on students' health outcomes. While grade level may not directly impact health dimensions, variables such as academic stress, social relationships, and lifestyle factors could still play a significant role in shaping students' health experiences.

3.2 Discussions

According to the study, the age group of 17-18 years old, typically Grade 12 students, is a critical period marked by the transition from secondary to higher education and increasing responsibilities. This stage involves significant academic pressure and the formation of future career plans, explaining the high learning attitude observed. Enrollment in the HUMMS strand, focusing on humanities and social sciences, indicates a strong interest in critical thinking, communication, and social awareness. Additionally, a daily allowance of 50.00 to 99.00 Pesos suggests financial stability, allowing students to meet basic needs and engage in leisure activities like gaming without significant economic stress.

Moreover, the study revealed a high level of Respondents' Learning Attitudes among Senior High School students in the Gingoog City Division. This suggests that most respondents, primarily male and aged 17-18 years old, these students exhibit a very high level of learning attitude, consistently displaying a positive and proactive approach to their educational endeavors. This high mean score for learning attitude underscores their commitment and highlights their effective time management and self-discipline, contributing to a balanced lifestyle.

The study revealed that, across four health indicators, the Anxiety Symptoms obtained the highest overall mean and were interpreted as Low. This means that while addiction to game playing may contribute to feelings of anxiety in some cases, it is not a significant or consistent source of anxiety symptoms for most respondents. These symptoms can be triggered by stressors related to academic pressure, social relationships, or personal circumstances.

Furthermore, The results also demonstrated a substantial correlation between the respondents' sex and their academic strand and their addiction to game playing, underscoring the necessity of recognizing and addressing Senior High School students' gaming behaviors. The importance of educational paths on students' attitudes toward learning is highlighted by the considerable association found between age, sex, and academic strands toward learning attitudes. This research emphasizes how crucial it is to acknowledge and take into account the various demands and preferences of students enrolled in various academic programs. The significant relationship between the age, academic strand, and health dimensions highlights the importance of considering the impact of educational pathways on students' overall well-being. The crucial findings revealed a significant correlation between age, sex, and academic strand and Addiction to Game Playing, Learning Attitude, and Health Dimensions. These results underscore the pivotal role that age, sex, and academic strand play as contributory factors in this study. This insight highlights the intricate interplay between respondents' profiles and behavioral tendencies, shedding light on the multifaceted nature of the phenomena under study.

3.3 Conclusions

The study concludes that sex and academic strand significantly influence their addiction to game playing, underscoring the need to address gaming activities among students. Additionally, the significant relationships between age, sex, academic strand, and learning attitudes emphasize the impact of educational pathways on students' attitudes toward learning. This finding highlights the importance of recognizing and accommodating the diverse needs and preferences of students across different academic programs. Moreover, the significant relationship between age, academic strand, and health dimensions underscores the necessity of considering the impact of educational pathways on students' overall well-being.

Moreover, the crucial findings demonstrate a significant correlation between age, sex, academic strands and addiction to game playing, learning attitude, and health dimensions. These results underscore the pivotal role that age, sex, and academic strand play as contributory factors in this study, shedding light on the intricate interplay between respondents' profiles and behavioral tendencies and illuminating the multifaceted nature of the phenomena under study.

3.4 Recommendations

Based on the findings and conclusions obtained from the study, the following recommendations are given below:

1. Considering the focus of the study on students' levels of addiction to game playing, learning attitudes, and health dimensions, it is imperative to emphasize the importance of prioritizing academic pursuits over excessive gaming habits. Regardless of factors such as age, sex, grade level, academic strand, and daily allowance, students should be encouraged to strike a balance between their academic responsibilities and recreational activities. This entails promoting healthy gaming habits, such as setting limits on gaming time, engaging in alternative leisure activities, and cultivating a positive attitude toward learning.
2. Educational institutions and mental health professionals need to provide support services tailored to addiction to game playing. On the other hand, based on the data indicating readiness among students to work on a problem in front of the class, it is recommended that educators incorporate more interactive and participatory learning activities into their teaching methods. Encouraging students to engage in problem-solving tasks publicly can foster confidence, communication skills, and critical thinking abilities.
3. Educators and parents need to remain vigilant and continue promoting healthy habits to prevent any potential physical discomfort or health issues related to prolong gaming.
4. While grade level may not significantly influence students' addiction to game playing, learning attitudes, and health dimensions in this study, it is important to recognize the multifaceted nature of student development. Academic progression is just one aspect of a student's experience, with various other factors contributing to their well-being and behavior. Therefore, despite the lack of a direct correlation between grade level and the variables under study, a holistic approach to student support and intervention is crucial. Educators and parents should remain attentive to individual student needs, regardless of grade level.

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