Investigating the Role of Social Media Addiction on the Loneliness among Grade 11 Students in a Public High School

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ABSTRACT

This study determined the level of social media addiction and loneliness among Grade 11 students, examined the significant relationship between these variables, and developed a Guidance Intervention Plan based on the findings. It employed a quantitative descriptive-correlational research design and was conducted at San Jose National High School during the School Year 2025–2026. The respondents consisted of 222 Grade 11 students selected through simple random sampling. Data were collected using the Social Media Addiction Scale–Student Form (SMAS-SF), developed by Şahin (2018), and the De Jong Gierveld Loneliness Scale (DJGLS). The data were analyzed using frequencies, percentages, weighted means, standard deviations, and the Pearson Product-Moment Correlation Coefficient. The findings revealed a moderate level of social media addiction, with virtual information obtaining the highest mean, and a moderate level of loneliness in both its social and emotional dimensions. No significant relationship was found between social media addiction and loneliness. The study concluded that these are distinct concerns that require independent attention through comprehensive school guidance interventions. Accordingly, the proposed Guidance Intervention Plan is recommended for adoption and implementation by the school.

Keywords: Guidance and Counseling, Social Media Addiction, Loneliness, Descriptive-Correlation Method, Talibon, Bohol

INTRODUCTION

Social media platforms have become an integral part of modern life due to technological advancements. Popular platforms such as Facebook, Instagram, TikTok, and X, among others, connect individuals across communities and facilitate communication, information exchange, and social and educational interactions. The need for social media in the modern era has grown significantly (Abbasi, 2019), making it an essential tool for interpersonal communication among young people and individuals worldwide (Xuan & Amat, 2020).

According to Perez-Torres (2024), adolescents are the most active users of social media, primarily accessing these platforms through internet-enabled mobile phones. They use social media to express themselves, establish connections and maintain relationships with peers, and engage with online figures such as influencers, YouTubers, and other digital audiences. Social media also offer instant entertainment, access to information, and continuous connectivity, making them highly attractive and fostering frequent use. However, for some individuals, such access to these platforms may develop into an addictive use (Amirthalingam & Khera, 2024), which may lead to emotional challenges and decreased real-life interactions.

Consistent with this concern, Kuss and Griffiths (2017) found that addictive use of social media among adolescents is associated with increased anxiety, depression, loneliness, impaired social interactions, neglect of offline relationships, and academic difficulties. These findings suggest that excessive online engagement may reduce real-life social interaction and contribute to feelings of loneliness. The high prevalence of social media use in the Philippines further emphasizes the importance of examining its potential relationship with

adolescents' emotional and social outcomes. According to Kemp (2025), 95.8 million Filipinos, which accounts for 81.9% of the population, maintain social media identities. Supporting the urgency of this issue, the World Health Organization (WHO), through its Commission on Social Connection, identified loneliness as a global public health challenge, affecting one in six people worldwide, particularly those aged 13-29 (WHO, 2025).

Several factors may influence adolescents' social media use and feelings of loneliness. Individual factors, such as frequency and duration of use and reliance on online interactions, may contribute to excessive engagement. Empirical studies support these relationships; for instance, Fumagalli et al. (2021) found that time spent on social media is positively associated with loneliness, while Twenge et al. (2019) reported that adolescents with high social media use and low face-to-face interaction tend to experience higher levels of loneliness. Research further suggests that loneliness influences patterns of social media use. Nowland et al. (2018) found that individuals who feel lonely tend to use social media more frequently to seek connection; however, such interactions often fail to satisfy deeper social needs.

In Talibon, a first-class municipality located in the Northern part of Bohol, residents increasingly access the internet through mobile data, home connections, and publicly available Piso Wi-Fi hotspots. Meanwhile, in San Jose National High School, the largest secondary public school in Talibon, Bohol, students are allowed to bring gadgets such as laptops, tablets, and mobile phones. During recess, lunch breaks, and vacant periods, students can use their mobile phones to access the internet via mobile data, school Wi-Fi, and nearby Piso Wi-Fi hotspots. Furthermore, the researcher observed that students frequently use their mobile phones even while interacting with their peers, and in some instances, they appear to prefer engaging with their devices to participating in face-to-face conversations.

Existing literature presents notable gaps. Most international studies focus on college students or adults in Western contexts, while studies in the Philippines tend to examine social media addiction and loneliness as separate constructs. Few studies have explored the relationship between these variables among adolescents, particularly among Grade 11 students in rural public school settings. This gap limits understanding of how social media addiction and loneliness interact among adolescents in communities such as Talibon, Bohol.

Thus, this study aims to examine the relationship between social media addiction and loneliness among Grade 11 students in Talibon, Bohol, during the School Year 2025-2026. Specifically, it seeks to determine whether a significant relationship exists between these variables and to provide a basis for a guidance intervention plan that promotes healthier digital habits and stronger social and emotional connections.

THEORETICAL BACKGROUND

This study is anchored on Self-Determination Theory, Social Displacement Theory, and Social Comparison Theory, which help explain the possible relationship between social media addiction and loneliness among Grade 11 students in a public high school. These theories provide insights into how students' psychological needs, time spent on social media instead of face-to-face interactions, and comparisons with others online may relate to their social relationships and feelings of loneliness.

Self-Determination Theory (SDT), introduced by Deci and Ryan (1985), posits that individuals are driven by these three innate and universal psychological needs: autonomy (the need to feel free and self-directed), competence (the need to feel effective), and relatedness (the need to connect closely with others), all of which are essential for optimal growth and development (Legault, 2017). Well-being is supported when these basic needs are satisfied, but undermined when these needs are frustrated (Ryan & Deci, 2020). When these psychological needs – particularly relatedness in the real-life social environment – are thwarted, individuals are often motivated to seek compensation through social media interactions (Poley & Luo, 2012). Social media addiction, a condition characterized by excessive use that leads to psychological, physical, and social problems, affecting individuals' ability to fulfill personal, social, and academic responsibilities (Sahin, 2018), has been positively associated with relatedness need frustration (Sheldon et al., 2011). West et al. (2024) observed that adolescent social media use can both support and frustrate these needs, emphasizing that their satisfaction or frustration during adolescence can have cascading effects on well-being into adulthood.

Lemay et al. (2019) found that an individual's needs for competence, autonomy, and relatedness are direct predictors of loneliness, with autonomy and competence implicated when achievement or independence is prioritized over social connection, and unmet relatedness needs strongly associated with increased feelings of loneliness. Thus, SDT explains how unmet psychological needs – particularly relatedness – can drive adolescents toward excessive social media use, which, when unsuccessful in fulfilling these needs, contributes to increased feelings of loneliness, thereby establishing a link between excessive social media use and adverse emotional outcomes.

Social Displacement Theory, introduced by Kraut et al. (1998), posits that time spent on digital technologies, such as the internet or social media, displaces time for face-to-face interactions, particularly with close friends and family. Because time is finite, the more individuals engage online, the less opportunity they have to nurture offline relationships, which may lead to weaker social bonds and reduced well-being (Hall & Liu, 2022). Supporting this perspective, Roberts et al. (2026) found that both passive and active social media use were linked to higher levels of loneliness over time. Although individuals actively communicate on social media, excessive time spent online may reduce opportunities for deeper and more meaningful face-to-face interactions with family and friends

Consequently, Social Displacement Theory suggests that excessive reliance on social media may displace authentic interpersonal connections. Unlike direct social exchanges, online interactions often lack the richness, intimacy, and nonverbal cues inherent in face-to-face communications, making them comparatively less meaningful and fulfilling (Hall & Liu, 2022). Moreover, excessive social media engagement can foster social media addiction while simultaneously contributing to loneliness when online interactions fail to satisfy deeper relational needs.

Social Comparison Theory, initially proposed by Festinger (1954), asserts that individuals possess an innate drive to evaluate their own opinions and abilities by comparing themselves to others. Piko et al. (2024) argue that social media platforms provide diverse information that fosters constant opportunities for comparative evaluation, as users engage with numerous profiles and content that may generate dissatisfaction through heightened exposure to upward social comparison. Because comparing oneself to others remains a basic human need, this process can drive individuals to overuse social media to the point of addiction. Moreover, upward social comparison often undermines self-worth and contributes to negative emotional outcomes, including envy, anxiety, and even depression.

Furthermore, Kim et al. (2021) found that ability-based comparisons on social media are strongly linked to diminished subjective well-being and heightened stress, primarily through the mechanism of social media addiction. This suggests that individuals who habitually engage in social comparison are more likely to develop addictive usage tendencies, while those already addicted to social media are more prone to further comparison. Thus, Social Comparison Theory helps explain how the drive to measure oneself against others can turn social media use into patterns of addiction, which in turn deepens exposure to comparisons and ultimately fosters loneliness.

Together, Self-Determination Theory, Social Displacement Theory, and Social Comparison Theory provide a comprehensive framework for understanding the relationship between social media addiction and loneliness. Self-Determination Theory explains the underlying motivation for social media use, particularly the role of unmet psychological needs such as relatedness; Social Displacement Theory accounts for the behavioral pattern of excessive use and reduced offline interaction; and Social Comparison Theory elucidates the emotional outcomes associated with such engagement.

Legal Bases

Republic Act No. 11036, also known as the Mental Health Act of 2018, promotes mental health awareness, protects the rights of individuals with mental health conditions, and ensures access to appropriate mental health services. It emphasizes the integration of mental health promotion, prevention, and early intervention within institutional settings, including schools. Relevant provisions of the law highlight the responsibility of educational institutions to support learners who may experience psychological or behavioral difficulties. In

this context, social media addiction and loneliness are recognized as concerns that may affect students' mental well-being. Thus, the law provides a policy foundation for examining these issues among Grade 11 students at San Jose National High School, particularly in relation to their social media use and emotional experiences.

Republic Act No. 11036 further strengthens the need for the study by underscoring the role of schools in promoting mental wellness and providing support systems for learners. It highlights the importance of early identification and intervention for students experiencing emotional difficulties. In relation to the present study, this reinforces the importance of examining how patterns of social media use are associated with loneliness among Grade 11 students. The findings may contribute to enhancing school-based mental health initiatives and improving student support mechanisms, thereby reinforcing the relevance of the study within the educational setting.

Another legal foundation of this study is Republic Act No. 12080, or the Basic Education Mental Health and Well-Being Promotion Act of 2024, which aims to strengthen mental health programs within the basic education system. The law mandates schools to implement mental health awareness programs, counseling services, and psychosocial support systems for learners. Sections 2, 4, and 7 emphasize the provision of structured school-based interventions that promote emotional well-being and help students cope with psychological challenges. These provisions align with the objectives of this study, as social media addiction and loneliness are among the concerns that may influence students' mental and social well-being.

In line with Republic Act No. 12080, which mandates the implementation of comprehensive school-based mental health programs, the findings of this study may inform the development of targeted guidance interventions. These may include digital wellness education, peer support initiatives, and counseling services aimed at addressing excessive social media use and reducing loneliness among Grade 11 students at San Jose National High School. Such interventions directly support the law's goal of promoting students' emotional well-being and resilience.

RA 11036 establishes the broad mandate for mental health promotion and early intervention, while RA 12080 translates this mandate into structured, school-based programs. Together, these laws underscore the importance of examining risk factors such as social media addiction and loneliness, and they reinforce the need for evidence-based interventions aimed at enhancing students' psychosocial well-being.

Significance of the Study

The findings of this study may help DepEd officials develop policies and programs that address social media addiction and loneliness among adolescents. School administrators and guidance counselors may use the results as a basis for planning school activities and guidance services that encourage responsible social media use and promote students' social and emotional well-being. Teachers may find the results useful in encouraging healthy peer relationships and responsible use of social media in the classroom.

This study may also help parents better understand their children's social media habits and how these are related to feelings of loneliness, allowing them to provide proper guidance and encourage meaningful interactions. Students may become more aware of their online habits and feelings of loneliness, helping them build healthier relationships with others. Furthermore, this study may deepen the researcher's understanding of these concerns and provide useful information for future studies on social media addiction and loneliness.

Objectives of the Study

This study aimed to determine the level of social media addiction and the level of loneliness among Grade 11 students at San Jose National High School, Talibon, Bohol during the School Year 2025-2026 as a basis for a proposed guidance intervention plan.

Statement of the Problem

The study sought to determine the relationship between social media addiction and loneliness among Grade 11 students. Specifically, it examined the respondents' demographic profile in terms of age, sex, average daily

time spent on social media, number of active social media platforms used, and most frequently used social media platform. It further assessed the respondents' level of social media addiction in terms of virtual tolerance, virtual communication, virtual problem, and virtual information, and determined their level of loneliness in terms of social loneliness and emotional loneliness. In addition, the study investigated whether social media addiction was significantly associated with the loneliness experienced by the respondents. Finally, based on the findings of the study, a guidance intervention plan was proposed to address the identified concerns and promote responsible social media use and students' social and emotional well-being.

RESEARCH METHODOLOGY

This chapter provides a detailed description and discussion of the research design, study flow, respondents, environment, instrument, data gathering procedure, statistical treatment, and scoring procedures.

Design

This study used a quantitative approach with a descriptive correlational research design. As posited by Barooah (n.d.), descriptive correlational research focuses on describing variables and determining the relationships between them without intervention. The descriptive component determined the respondents' profile, level of social media addiction, and level of loneliness among Grade 11 students at San Jose National High School (SJNHS), Talibon, Bohol, during the School Year 2025–2026, while the correlational component examined the relationship between social media addiction and loneliness. Further, the study employed simple random sampling, wherein every member of the population had an equal chance of being selected (Thomas, 2020). Using Slovin's formula with a 5% margin of error, 222 Grade 11 students were selected from a population of 500.

Environment

The study was conducted at San Jose National High School (SJNHS), an integrated public secondary school located in San Jose, Talibon, Bohol. Established in 1968, the school is one of the largest public secondary schools in the Division of Bohol, serving 2,693 learners, including 1,663 Junior High School and 1,030 Senior High School students. The school is supported by a school head, nine non-teaching personnel, and 142 teachers, and provides various facilities and resources that support academic and co-curricular activities. SJNHS serves students from diverse socioeconomic backgrounds and actively participates in academic, cultural, sports, leadership, and skills-based activities at various levels. The school also provides students with access to digital technologies, including smartphones, mobile internet, and information and communication resources. These characteristics make SJNHS an appropriate setting for examining the relationship between social media addiction and loneliness among Grade 11 students.

Respondents

The respondents of the study consisted of 222 Grade 11 students enrolled at San Jose National High School during the School Year 2025–2026. Using Slovin's formula with a 5% margin of error, the required sample was determined from a population of 500 Grade 11 students. The study employed simple random sampling, giving every member of the population an equal chance of being selected.

Grade 11 students were chosen because they are in the adolescent stage, typically aged 16 and above, and will be in Grade 12 the following school year, making them appropriate beneficiaries of the proposed guidance intervention plan based on the study's findings. This selection process ensured that the respondents appropriately represented the target population and provided reliable data for examining the relationship between social media addiction and loneliness.

Instrument

This study utilized a survey questionnaire to collect quantitative data on the respondents' profile, social media addiction, and loneliness among Grade 11 students at San Jose National High School during the School Year 2025–2026. The questionnaire consisted of three parts: Part I collected the respondents' profile information,

including age, sex, average daily time spent on social media, number of active social media platforms used, and most frequently used social media platform; Part II measured the level of social media addiction using the Social Media Addiction Scale–Student Form (SMAS-SF); and Part III assessed the level of loneliness using the De Jong Gierveld Loneliness Scale (DJGLS).

The SMAS-SF developed by Sahin (2018) consists of 29 items grouped into four factors: virtual tolerance, virtual communication, virtual problems, and virtual information. It uses a five-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) and demonstrates good reliability and validity. Meanwhile, the 11-item DJGLS, developed by De Jong Gierveld and Van Tilburg (1999), measures loneliness in terms of social and emotional loneliness using a three-point response scale of "Yes," "More or Less," and "No." These instruments provided the necessary data to determine the respondents' levels of social media addiction and loneliness and to examine the relationship between the two variables.

Data Gathering Procedures

Prior to data collection, the researcher secured approval from the principal of San Jose National High School, Talibon, Bohol, and coordinated with the school registrar to obtain the Grade 11 enrollment records. Respondents were randomly selected through a lottery method, and informed consent was secured before participation. The purpose of the study, voluntary participation, and confidentiality of responses were explained to the respondents. The questionnaire was administered online through Google Forms and distributed through class group chats with the assistance of class advisers. After the questionnaires were completed, the responses were reviewed, encoded, organized, and statistically analyzed in accordance with the research objectives. All collected data were securely stored to ensure confidentiality, and the findings served as the basis for developing a guidance intervention plan for Grade 11 students.

Statistical Treatment

The data gathered in the study were analyzed using appropriate descriptive and inferential statistical techniques with the assistance of a statistician. Frequency count and percentage were used to describe the respondents' profile, including age, sex, average daily time spent on social media, number of active social media platforms, and most frequently used social media platform. Weighted mean and standard deviation were employed to determine the levels and variability of social media addiction and loneliness among the respondents. The Pearson Product-Moment Correlation Coefficient (PPMCC) was utilized to determine whether a statistically significant relationship exists between social media addiction and loneliness. All statistical treatments were conducted in accordance with the objectives of the study.

Ethical Considerations

Ethical practices were observed throughout the conduct of the study to protect the rights and welfare of the respondents. Before the data collection, authorization to conduct the research was obtained from the principal of San Jose National High School, and the respondents were informed about the purpose, procedures, and nature of the study. Their participation was voluntary, and they were given the freedom to withdraw or decline to answer any question without penalty. The privacy of the respondents was protected by not collecting unnecessary identifying information and by keeping the gathered data securely stored and accessible only to the researcher. The study also complied with Republic Act No. 10173, or the Data Privacy Act of 2012. Finally, the researcher ensured that the information provided to the participants and the results presented in the study were accurate, truthful, and used solely for academic purposes.

RESULTS

This chapter presents analyses and interpretations of the results of the data gathered in this study, including the profile, the level of social media addiction, and the level of loneliness among the respondents. Moreover, the significance of the relationship between social media addiction and loneliness was tested. Using the survey questionnaire, the results and findings based on the data gathered are presented.

Profile of the Respondents

This section provides information on respondents' profiles, including age, sex, average daily time spent on social media, the number of active social media platforms used, and the most frequently used platform.

Age

This section presents the respondents' ages. Table 1 explicitly presents the data.

Table 1
Age of the respondents

Age	f	%
18 and above	13	5.86
17	107	48.20
16	102	45.95
Total	**222**	**100.00**

Table 1 illustrates that the largest proportion of the respondents were 17 years old, comprising 107 students or 48.20% of the total sample. This was closely followed by 16-year-old respondents with 102 students or 45.95%. Meanwhile, only 13 respondents or 5.86% were aged 18 years old and above. The results indicate that the respondents were predominantly within the typical age range of Grade 11 learners, with almost all respondents belonging to the 16–17-year-old bracket.

The predominance of respondents aged 16 and 17 indicates that the study mainly represents students who are in a similar stage of adolescent development. At this age, peer relationships, social acceptance, and the desire to belong become increasingly significant, which may influence how students interact through social media and experience feelings of loneliness. Since most respondents share comparable developmental characteristics, they provide a suitable basis for examining the relationship between social media addiction and loneliness among Grade 11 students. This observation is supported by Buenafe (2019), who explained that middle adolescence is characterized by a stronger need for peer acceptance, social belongingness, and emotional support. Likewise, Fabris et al. (2023) noted that adolescents commonly use social media to maintain social connections and satisfy their need for belongingness.

Sex

This portion illustrates the sex of the respondents. The data are shown in Table 2.

Table 2
Sex of the respondents

Sex	f	%
Female	143	64.41
Male	79	35.59
Total	**222**	**100.00**

Table 2 shows that females comprised the majority of the respondents, with 143 students or 64.41% of the total sample, while males accounted for 79 students or 35.59%. This indicates that nearly two-thirds of the respondents were female, suggesting a greater representation of female students in the study.

The higher proportion of female respondents suggests that the findings primarily reflect the experiences and perspectives of female Grade 11 students. Since females comprised nearly two-thirds of the respondents, their patterns of social media use and experiences of loneliness may have a greater influence on the overall results of the study. This is particularly important because emotional responses to social interactions and online engagement may differ between male and female adolescents, making sex a relevant characteristic in understanding the relationship between social media addiction and loneliness.

This interpretation is supported by Xu et al. (2022), who found that loneliness partially mediates the relationship between peer phubbing and mobile social media addiction among adolescents, with these effects being significantly stronger among females than males. Their findings suggest that adolescent girls are more likely to experience loneliness following negative peer interactions, which may increase their tendency toward problematic social media use.

Average Daily Time Spent on Social Media

This section presents the average daily time respondents spend on social media. The corresponding data are presented in Table 3.

Table 3
Average daily time spent on social media by the respondents

Average daily time	f	%
7 and above	44	19.82
5-6	55	24.77
3-4	72	32.43
1-2	44	19.82
less than one hour	7	3.15
Total	**222**	**100.00**

Table 3 presents that the largest proportion of respondents spent 3–4 hours per day on social media, with 72 students or 32.43% of the total sample. This was followed by those who spent 5–6 hours per day, comprising 55 students or 24.77%. Meanwhile, 44 respondents or 19.82% reported using social media for 7 hours and above daily, and an equal proportion of 44 respondents or 19.82% spent 1–2 hours per day. Only 7 students or 3.15% indicated that they spent less than one hour per day on social media. Overall, the findings suggest that most respondents spend a moderate to high amount of time on social media daily.

The results indicate that most respondents spend a considerable amount of time on social media each day, with the largest group reporting 3–4 hours of daily use and many others spending five or more hours online. This suggests that social media has become an integral part of the respondents' daily routines, providing frequent opportunities for communication, entertainment, and information access. However, prolonged daily engagement may also increase the likelihood of excessive or habitual social media use and may reduce opportunities for face-to-face social interaction. These conditions are relevant to the present study because they may contribute to both social media addiction and feelings of loneliness among adolescents.

This interpretation is supported by Kuss and Griffiths (2017), who explained that extended social media use reinforces habitual checking and may lead to compulsive or addictive behaviors. Likewise, Primack et al. (2017) reported that excessive social media use is associated with loneliness, particularly when online interactions replace meaningful face-to-face social relationships.

Number of Active Social Media Platforms Used

This portion illustrates the number of active social media platforms used by the respondents. The results are shown in Table 4.

Table 4
Respondents' number of active social media platforms used

Number of active social media platforms used	f	%
7 and above	17	7.66
5-6	38	17.12
3-4	123	55.41
1-2	44	19.82
Total	**222**	**100.00**

Table 4 reveals that the majority of respondents, 123 students or 55.41%, used 3–4 active social media platforms. This was followed by 44 respondents (19.82%) who reported using 1–2 platforms, while 38 students (17.12%) used 5–6 platforms. Meanwhile, only 17 respondents (7.66%) reported using 7 or more active social media platforms. Overall, the findings suggest that most respondents maintain a moderate level of engagement across multiple social media platforms.

The results indicate that most respondents actively use three to four social media platforms, suggesting that engaging with multiple platforms has become a common part of their daily online activities. Maintaining accounts across several platforms may increase the frequency of online interactions, expose students to diverse forms of digital content, and encourage continuous engagement with social media throughout the day. While this allows adolescents to communicate with different social groups and access various online communities, it may also increase the likelihood of excessive social media use and reduce opportunities for meaningful offline interactions. This pattern is relevant to the present study because greater engagement across multiple platforms may contribute to both social media addiction and feelings of loneliness.

This interpretation is supported by Varona et al. (2024), who reported that adolescents commonly use three to four social networking sites and that such multi-platform engagement is largely driven by the need for social interaction and continuous connection with peers. They further found that using a greater number of social media platforms is significantly associated with problematic social media use and stronger tendencies toward addictive behaviors.

Most Frequently Used Social Media Platform

This portion illustrates the most frequently used social media platform by the respondents. The distribution is presented in Table 5.

Table 5
Most frequently used social media platform by the respondents

Most frequently used social media	f	%
Facebook	58	26.13
Instagram	22	9.91
Messenger	18	8.11
TikTok	110	49.55
YouTube	11	4.95
Wattpad	1	0.45
Threads	1	0.45
JW library	1	0.45
Total	**222**	**100.00**

Table 5 shows that TikTok was the most frequently used platform, with 110 respondents or 49.55% of the total sample. This was followed by Facebook with 58 respondents or 26.13%, Instagram with 22 respondents or 9.91%, and Messenger with 18 respondents or 8.11%. Meanwhile, YouTube accounted for 11 respondents or 4.95%, while Wattpad, Threads, and JW Library each recorded 1 respondent or 0.45%. Overall, the findings indicate that TikTok dominates as the primary social media platform used by the respondents, while other platforms are used by relatively smaller proportions of students.

TikTok's prominence among the respondents highlights its strong influence on the online behavior of Grade 11 students. As the platform most frequently accessed, it likely occupies a substantial portion of the respondents' daily social media activities, increasing their exposure to continuous digital content. Such frequent engagement may encourage repeated and prolonged use, making it more difficult for users to disengage from the platform. Over time, this behavior may contribute to excessive social media use and limit opportunities for meaningful face-to-face interactions, which are important for adolescents' social and emotional well-being.

This interpretation is supported by Zhou (2024), who explained that TikTok's algorithm-driven design, particularly the "For You Page," delivers highly personalized content that continuously engages users and encourages prolonged platform use through algorithmic content delivery rather than direct interpersonal interaction.

Level of Social Media Addiction of the Respondents

This section provides information about the level of social media addiction of the respondents in terms of virtual tolerance, virtual communication, virtual problem, and virtual information.

Virtual Tolerance

This portion presents the level of social media addiction of the respondents in terms of virtual tolerance. The data are shown in Table 6.

Table 6
Level of social media addiction of the respondents in terms of virtual tolerance

S/N	Indicators	WM	SD	Verbal Description
1	I am eager to go on social media.	3.60	0.71	High
2	I look for internet connectivity everywhere so as to go on social media.	3.68	0.84	High
3	Going on social media is the first thing I do when I wake up in the morning.	3.17	1.01	Moderate
4	I see social media as an escape from the real world.	3.27	1.04	Moderate
5	A life without social media becomes meaningless for me.	2.69	1.06	Moderate
	Aggregate Mean	**3.28**		**Moderate**
	Aggregate Standard Deviation		**0.93**	

Legend: 4.21-5.00-Very High; 3.41-4.20-High; 2.61-3.40-Moderate; 1.81-2.60-Low; 1.00-1.80-Very Low

Table 6 shows that the respondents obtained an overall aggregate mean of 3.28 (SD = 0.93), indicating a moderate level of virtual tolerance. Among the indicators, "I look for internet connectivity everywhere so as to go on social media" (WM = 3.68) and "I am eager to go on social media" (WM = 3.60) received the highest mean scores and were interpreted as high. In contrast, "A life without social media becomes meaningless for me" obtained the lowest mean (WM = 2.69), although it remained within the moderate level. These results suggest that while respondents generally demonstrate moderate virtual tolerance, they exhibit stronger tendencies toward maintaining constant access to social media.

The moderate level of virtual tolerance indicates that the respondents have started to develop patterns of frequent and habitual social media use, although these behaviors have not yet reached a high level. The relatively higher ratings for constantly looking for internet connectivity and being eager to access social media suggest an increasing desire to remain connected, which may gradually encourage longer and more frequent platform use. If these behaviors continue without proper self-regulation, they may progress into more problematic patterns of social media engagement among adolescents. This interpretation is supported by Kuss and Griffiths (2017), who explained that tolerance, as a core component of social networking addiction, refers to the need for increasing amounts of time or more frequent engagement with social media to achieve the same level of satisfaction.

Virtual Communication

This section presents the respondents' level of social media addiction in terms of virtual communication. The relevant data are presented in Table 7.

Table 7
Level of social media addiction of the respondents in terms of virtual communication

S/N	Indicators	WM	SD	Verbal Description
1	I prefer to use social media even there are somebody around me.	2.97	1.05	Moderate
2	I prefer the friendships on social media to the friendships in the real life.	2.54	1.18	Low
3	I express myself better to the people with whom I get in contact on social media.	2.94	1.04	Moderate
4	I am as I want to seem on social media.	3.05	0.88	Moderate
5	I usually prefer to communicate with people via social media.	3.19	0.99	Moderate
6	Even my family frown upon, I cannot give up using social media.	2.79	1.01	Moderate
7	I want to spend time on social media when I am alone.	3.88	0.86	High
8	I prefer virtual communication on social media to going out.	2.92	0.99	Moderate
9	Social media activities lay hold on my everyday life.	3.03	0.91	Moderate
	Aggregate Mean	**3.03**		**Moderate**
	Aggregate Standard Deviation		**0.99**	

Table 7 indicates an overall aggregate mean of 3.03 (SD = 0.99), corresponding to a moderate level of virtual communication dependence. The highest-rated indicator was "I want to spend time on social media when I am alone" (WM = 3.88), interpreted as high, whereas "I prefer the friendships on social media to the friendships in real life" obtained the lowest mean (WM = 2.54), interpreted as low. The remaining indicators were rated at a moderate level, indicating that respondents generally exhibit a moderate level of virtual communication dependence, with a stronger tendency to use social media when alone.

The moderate level of virtual communication dependence suggests that respondents use social media as an important means of staying connected, particularly when they are alone, while still maintaining face-to-face interactions. The higher rating for spending time on social media during periods of solitude indicates that online communication has become a preferred source of engagement in certain situations. Although the respondents have not developed a high level of dependence on virtual communication, continued reliance on social media for social interaction may increase the risk of social media addiction and feelings of loneliness if it gradually replaces meaningful in-person relationships. This result is consistent with Valkenburg et al. (2022), who emphasized that social media has become a central part of adolescents' social lives, influencing how they communicate, maintain relationships, and experience social connectedness.

Virtual Problem

This portion presents the level of social media addiction of the respondents in terms of virtual problems. The corresponding results are illustrated in Table 8.

Table 8
Level of social media addiction of the respondents in terms of virtual problem

S/N	Indicators	WM	SD	Verbal Description
1	I fell behind on my homework because I spent too much time on social media.	2.79	0.99	Moderate
2	I feel bad if I am obliged to decrease the time I spend on social media.	2.61	0.99	Moderate

3	I feel unhappy when I am not on social media.	2.63	1.03	Moderate
4	Being on social media excites me.	3.13	0.92	Moderate
5	I use social media so frequently that I fall afoul of my family.	2.68	0.94	Moderate
6	The mysterious world of social media always captivates me.	3.03	0.91	Moderate
7	I do not even notice that I am hungry and thirsty when I am on social media.	2.66	1.16	Moderate
8	I notice that my productivity has diminished due to social media.	3.23	1.02	Moderate
9	I have physical problems because of social media use.	2.69	1.06	Moderate
	Aggregate Mean	**2.83**		**Moderate**
	Aggregate Standard Deviation		**1.00**	

Table 8 indicates an overall aggregate mean of 2.83 (SD = 1.00), corresponding to a moderate level of virtual problems. The highest-rated indicator was "I notice that my productivity has diminished due to social media" (WM = 3.23), while the remaining indicators also received moderate ratings. These results suggest that respondents experience some negative effects of social media use, although these have not yet reached a high level.

The moderate level of virtual problems indicates that social media use has begun to affect certain aspects of the respondents' daily lives, particularly their productivity and engagement with online activities. Although these effects are not yet severe, they may signal the early development of problematic social media use if left unmanaged. Frequent engagement with social media may gradually interfere with adolescents' ability to focus on academic tasks and other responsibilities.

This result is further explained by Paschke et al. (2021), who reported that problematic social media use among children and adolescents is associated with difficulties in goal-directed behavior, increased procrastination, and higher levels of perceived stress.

Virtual Information

This portion presents the level of social media addiction of the respondents in terms of virtual information. The results are shown in Table 9.

Table 9
Level of social media addiction of the respondents in terms of virtual information

S/N	Indicators	WM	SD	Verbal Description
1	I use social media even when walking on the road in order to be instantly informed about developments.	2.76	1.04	Moderate
2	I like using social media to keep informed about what happens.	3.84	0.91	High
3	I surf on social media to keep informed about what social media groups share.	3.32	0.95	Moderate
4	I spend more time on social media to see some special announcements (e.g. birthdays).	3.39	1.00	Moderate
5	Keeping informed about the things related to my courses (e.g. homework, activities) makes me always stay on social media.	3.78	0.90	High

6	I am always active on social media to be instantly informed about what my kith and kin share.	3.63	0.94	High
	Aggregate Mean	**3.45**		**High**
	Aggregate Standard Deviation		**0.96**	

Table 9 reveals an overall aggregate mean of 3.45 (SD = 0.96), indicating a high level of virtual information. The highest-rated indicator was "I like using social media to keep informed about what happens" (WM = 3.84), while using social media while walking on the road to stay updated obtained the lowest mean (WM = 2.76), interpreted as moderate. Overall, the findings suggest that respondents frequently rely on social media to stay informed about academic, social, and personal matters.

The high level of virtual information seeking indicates that respondents rely heavily on social media as a primary source of academic, social, and personal information. This suggests that staying updated has become an important part of their daily online activities, encouraging frequent access to social media throughout the day. While this pattern enables respondents to remain informed and connected, it may also foster habitual checking behaviors and prolonged platform use, which can increase the risk of social media addiction if left unmanaged.

Supporting this interpretation, Tremolada et al. (2022) found that adolescents frequently use social media to maintain connections with peers, stay in touch with friends, and keep updated about activities within their social networks, with information-seeking and communication identified as major motivations for use.

Summary on the Level of Social Media Addiction

This portion presents the summary on the level of social media addiction of the respondents. Table 10 provides the results.

Table 10
Summary on the level of social media addiction of the respondents

Components	WM	SD	Verbal Description
Virtual Tolerance	3.28	0.93	Moderate
Virtual Communication	3.03	0.99	Moderate
Virtual Problem	2.83	1.00	Moderate
Virtual Information	3.45	0.96	High
Grand Mean	**3.15**		**Moderate**
Grand Standard Deviation		**0.97**	

The data in Table 10 reveal a grand mean of 3.15 with a standard deviation of 0.97, indicating a moderate level of social media addiction among the respondents. Among the dimensions, virtual information obtained the highest weighted mean of 3.45, interpreted as high, suggesting that respondents primarily use social media to stay informed about academic, social, and personal updates. This was followed by virtual tolerance (WM = 3.28), virtual communication (WM = 3.03), and virtual problem (WM = 2.83), all interpreted as moderate. Overall, the findings indicate that while social media plays a significant role in the daily lives of the respondents, their level of addiction remains moderate across most dimensions.

The overall moderate level of social media addiction indicates that respondents frequently use social media but have not yet developed severe addictive behaviors. The highest rating for virtual information seeking suggests that social media is primarily used to obtain academic, social, and personal updates, making it an important part of the respondents' daily lives. Although this pattern promotes communication and access to

information, continued reliance on social media to meet these needs may encourage habitual use and gradually increase the risk of addiction.

This finding may be explained by the Self-Determination Theory, which states that individuals are motivated to engage in activities that satisfy their need for relatedness and social connection (Ryan & Deci, 2020). It is also supported by the Social Displacement Theory, which suggests that increased online engagement may reduce time spent on meaningful face-to-face interactions and other offline activities (Kraut et al., 1998).

Level of Loneliness of the Respondents

This section provides information about the level of loneliness of the respondents in terms of social loneliness and emotional loneliness.

Social Loneliness

This portion presents the level of loneliness of the respondents in terms of social loneliness. Data are presented in Table 11.

Table 11
Level of loneliness of the respondents in terms of social loneliness

S/N	Indicators	WM	SD	Verbal Description
1	There is always someone I can talk to about my day-to-day problems.	2.21	0.79	Moderate
2	There are plenty of people I can lean on when I have problems.	2.14	0.75	Moderate
3	There are many people I can trust completely.	2.01	0.80	Moderate
4	There are enough people I feel close to.	2.43	0.71	Moderate
5	I can call on my friends whenever I need them.	2.14	0.76	Moderate
	Aggregate Mean	**2.19**		**Moderate**
	Aggregate Standard Deviation		**0.76**	

Legend: 2.35-3.00-High; 1.68-2.34-Moderate;1.00-1.67-Low

Table 11 indicates an overall aggregate mean of 2.19 (SD = 0.76), corresponding to a moderate level of social loneliness. The highest-rated indicator was "There are enough people I feel close to" (WM = 2.43), while "There are many people I can trust completely" obtained the lowest mean (WM = 2.01). Overall, the findings suggest that respondents experience a moderate level of social connectedness, indicating that although they have supportive relationships, these may not be sufficient to completely prevent feelings of social loneliness.

The moderate level of social loneliness suggests that, although respondents have existing social relationships, they may not always perceive them as sufficiently supportive or dependable. This suggests that having social connections does not necessarily eliminate feelings of loneliness, particularly when the support received does not fully meet their emotional and social needs. Such experiences may contribute to a sense of partial social isolation among the respondents. This explanation is supported by the Self-Determination Theory, which emphasizes that relatedness—the need to feel connected, cared for, and valued by others—is a basic psychological need essential for well-being (Ryan & Deci, 2020).

Emotional Loneliness

This section presents respondents' level of emotional loneliness. Table 12 explicitly presented the data.

Table 12
Level of loneliness of the respondents in terms of emotional loneliness

S/N	Indicators	WM	SD	Verbal Description
1	I miss having a really close friend.	2.62	0.62	High
2	I experience a general sense of emptiness.	2.26	0.72	Moderate
3	I miss the pleasure of the company of others.	2.12	0.75	Moderate
4	I find my circle of friends and acquaintances too limited.	2.20	0.75	Moderate
5	I miss having people around me.	2.47	0.70	High
6	I often feel rejected.	2.16	0.78	Moderate
	Aggregate Mean	**2.31**		**Moderate**
	Aggregate Standard Deviation		**0.72**	

Table 12 indicates an overall aggregate mean of 2.31 (SD = 0.72), corresponding to a moderate level of emotional loneliness. The highest-rated indicator was "I miss having a really close friend" (WM = 2.62), followed by "I miss having people around me" (WM = 2.47), both interpreted as high. Meanwhile, the remaining indicators, including experiencing a sense of emptiness, missing the company of others, having a limited circle of friends, and feeling rejected, were all rated as moderate. Overall, the findings suggest that respondents occasionally experience emotional loneliness and desire closer interpersonal relationships.

The moderate level of emotional loneliness indicates that although respondents have social relationships, some may still lack the close and emotionally supportive connections needed to feel fully connected. This suggests that regular interaction with others does not always provide the sense of closeness and emotional security that adolescents need, which may contribute to occasional feelings of loneliness. This explanation is supported by the Self-Determination Theory, which emphasizes that unmet relatedness needs can lead to feelings of loneliness and emotional discomfort (Ryan & Deci, 2020). Similarly, Loades et al. (2020) explained that adolescents are particularly vulnerable to emotional loneliness when they lack meaningful, supportive relationships, even when surrounded by peers.

Summary on the Level of Loneliness

This portion presents the summary on the level of loneliness of the respondents. The data are shown in Table 13.

Table 13
Summary on the level of loneliness of the respondents

Components	WM	SD	Verbal Description
Social Loneliness	2.19	0.76	Moderate
Emotional Loneliness	2.31	0.72	Moderate
Grand Mean	**2.25**		**Moderate**
Grand Standard Deviation		**0.74**	

The summary of the respondents' level of loneliness reveals a grand mean of 2.25 with a standard deviation of 0.74, interpreted as a moderate level. Both social loneliness (WM = 2.19) and emotional loneliness (WM = 2.31) also fall within the moderate range, indicating that respondents experience a moderate degree of difficulty in both establishing broader social connections and maintaining close emotional relationships. The

slightly higher mean for emotional loneliness suggests that respondents may experience greater challenges in forming intimate, meaningful bonds than in maintaining general social contact.

The moderate level of overall loneliness suggests that although respondents maintain social relationships, these may not always provide the emotional closeness and sense of belonging they need. This indicates that having regular social interactions does not necessarily prevent feelings of loneliness, especially when relationships lack depth and meaningful connection. Frequent engagement with social media may also reduce opportunities to strengthen face-to-face relationships and may influence how adolescents perceive their own social lives.

This interpretation may be explained by the Self-Determination Theory, which emphasizes that relatedness—the need to feel connected, valued, and emotionally supported—is a basic psychological need for well-being (Ryan & Deci, 2020). It is further supported by the Social Displacement Theory, which suggests that increased social media use may reduce opportunities for meaningful in-person interactions (Hall & Liu, 2022), and by the Social Comparison Theory, which explains that exposure to idealized online portrayals may intensify feelings of inadequacy and emotional disconnection (Vogel et al., 2014).

Relationship Between Social Media Addiction and Loneliness of the Respondents

This section presents the test on the relationship between social media addiction and loneliness of the respondents. The data on the test is displayed in Table 14.

Table 14
Test of significance of the relationship between the social media addiction and the loneliness among the respondents

Variables	r-value	Strength of Correlation	p - value	Decision	Remarks
Social Media Addiction and Loneliness	0.119	Negligible Positive	0.076	Do not reject Ho	Not Significant

*significant at p<0.05 (two-tailed)

The results show a correlation coefficient (r = 0.119) indicating a negligible positive relationship between the two variables. The computed p-value of 0.076 is higher than the 0.05 level of significance; hence, the null hypothesis is not rejected. This implies that there is no significant relationship between social media addiction and loneliness among the Grade 11 respondents in this study.

The absence of a significant relationship suggests that social media addiction was not a determining factor in the respondents' feelings of loneliness. Although the respondents exhibited moderate levels of both social media addiction and loneliness, their social media use appeared to be primarily driven by communication, information seeking, and maintaining relationships rather than by replacing meaningful face-to-face interactions. This may explain why increased social media use did not necessarily correspond to greater loneliness among the respondents.

Similar findings were reported by Can (2023), who found no significant relationship between social media addiction and loneliness among high school students, despite both variables being at moderate levels. Likewise, Halston et al. (2019) and Yavich et al. (2019) found little to no significant association between social media use and loneliness, suggesting that strong offline social support, close-knit social environments, and continued face-to-face interactions may lessen the influence of social media use on feelings of loneliness. However, these findings differ from those of Uyaroglu et al. (2022), Zaka et al. (2023), Durmus et al. (2025), Calonia et al. (2023), and Milloria et al. (2024), who reported significant positive relationships between social media use and loneliness. The difference may be attributed to variations in respondents' characteristics, patterns of social media use, and the quality of their offline social relationships, which can influence whether social media use contributes to feelings of loneliness.

CONCLUSIONS

The findings of the study revealed that social media addiction and loneliness are separate concerns among Grade 11 students, as no significant relationship was found between the two variables. This suggests that excessive social media use does not necessarily result in greater loneliness among the respondents. Therefore, both concerns should be addressed independently through appropriate school guidance programs that promote responsible social media use, self-regulation, healthy communication, positive peer relationships, and emotional well-being. The findings also provide a basis for the development of a Guidance Intervention Plan that responds to the identified needs of the students and supports their overall development.

RECOMMENDATIONS

Based on the findings and conclusions, it is recommended that the proposed Guidance Intervention Plan be implemented to promote responsible and balanced social media use among Grade 11 students. The program may focus on developing self-control in online activities, encouraging healthy online and face-to-face interactions, strengthening peer support and social connections, and promoting emotional well-being. The school guidance office, teachers, parents, and other stakeholders are encouraged to work together in providing appropriate support and interventions that will help students develop healthier digital habits and meaningful relationships.

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