



Research Article

Impact of Social Media Usage on Loneliness among Secondary School Students

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Abstract

The rapid expansion of digital technology has significantly influenced the communication patterns and social behaviour of adolescents. Social media platforms have become an important medium through which students interact with friends, share experiences, and obtain information. Although these platforms provide opportunities for social connection, concerns have been raised regarding their potential influence on adolescents' emotional well-being. The present study was conducted to examine the impact of social media usage on loneliness among secondary school students. The study adopted a descriptive and correlational research design. A sample of 50 students studying in classes IX and X was selected using a simple random sampling technique. Data were collected through a structured Social Media Usage Questionnaire and a Loneliness Scale designed to measure students' perceptions of social isolation and emotional connection. The collected data were analysed using statistical techniques such as mean, standard deviation, correlation analysis, and t-test. The findings of the study revealed that secondary school students frequently use social media for communication and entertainment purposes. The results also indicated that students experience varying levels of loneliness. A moderate positive relationship was found between social media usage and loneliness, suggesting that higher levels of social media engagement are associated with increased feelings of loneliness among adolescents. The study further revealed that students who spent excessive time on social networking platforms reported greater emotional isolation than those who used these platforms in moderation. The findings highlight the importance of promoting responsible and balanced use of social media among adolescents. The study also emphasizes the role of parents, teachers, and educational institutions in guiding students toward healthy technology habits and encouraging meaningful face-to-face social interaction.

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1. INTRODUCTION

Digital technology has significantly changed the ways in which people communicate and interact with others. One of the most noticeable developments in this area is the rise of social media platforms. These platforms allow users to share information, express opinions, maintain friendships, and connect with people across different locations. Over the past decade, social media has become especially popular among young individuals, particularly secondary school students. For many adolescents, using social media has become a regular part of daily life, influencing how they communicate, socialize, and spend their leisure time.

Adolescence is an important developmental stage characterized by emotional, psychological, and social changes. During this period, young people begin to develop their identity and place a strong emphasis on relationships with peers. Friendships and social acceptance play a crucial role in shaping their self-confidence and emotional well-being. Social media platforms appear to support this need for connection by providing adolescents with opportunities to interact with friends, exchange ideas, and stay informed about each other's activities. As a result, many secondary school students spend a considerable amount of time engaging with these platforms.

Although social media offers several benefits, its growing use has also raised concerns among educators, psychologists, and parents. One concern is that frequent use of social networking sites may influence the emotional experiences of adolescents. While these platforms are designed to connect individuals, excessive reliance on online communication may sometimes reduce meaningful face-to-face interactions. This shift in the nature of communication may affect the quality of relationships and the sense of emotional closeness among young people.

Loneliness is an emotional condition in which individuals feel a lack of meaningful social relationships or companionship. It is important to understand that loneliness does not simply mean being physically alone; rather, it reflects a feeling of dissatisfaction with one's social connections. Adolescents who experience loneliness may feel isolated, misunderstood, or disconnected from others. Such feelings can have negative effects on their mental health, self-esteem, and academic engagement. Therefore, identifying factors that may contribute to loneliness during adolescence is an important area of psychological research.

Social media usage may influence feelings of loneliness in different ways. On the positive side, these platforms can help students maintain friendships, communicate with peers, and receive social support. They may also allow adolescents to stay connected with friends even when they are physically distant. However, excessive or unbalanced use of social media may also lead to certain negative experiences. For instance, constant exposure to the activities and achievements of others may encourage social comparison, which can make some students feel inadequate or excluded. In addition, spending long periods of time online may reduce opportunities for direct personal interaction, which is essential for building strong emotional bonds.

Another factor that deserves attention is the amount of time adolescents devote to social media. Many students spend

several hours each day browsing posts, sharing content, or interacting with others online. When such activities begin to replace face-to-face communication, recreational activities, or academic responsibilities, they may affect both social and emotional development. Researchers have therefore become increasingly interested in examining whether higher levels of social media usage are associated with stronger feelings of loneliness among young people.

Considering the widespread presence of social media in the lives of adolescents, it is important to understand how it may influence their emotional well-being. Secondary school students represent a particularly relevant group for such investigation because they are active users of social media and are simultaneously undergoing important psychological changes. Exploring the relationship between social media usage and loneliness may help educators, parents, and policymakers better understand how digital communication affects the social experiences of students.

Therefore, the present study focuses on examining the impact of social media usage on loneliness among secondary school students. By investigating this relationship, the study aims to provide insights into how patterns of social media use may influence adolescents' feelings of social connectedness or isolation. The findings may also help in promoting healthier and more balanced use of social media among students, ultimately supporting their psychological well-being and social development.

2. REVIEW OF RELATED LITERATURE

Chatterjee (2021) conducted a study to explore the role of social comparison on social media in influencing loneliness among adolescents. The research was conducted in urban secondary schools, and the sample consisted of 190 students aged 14–18 years. The objective of the study was to examine whether frequent comparison with peers' online activities and achievements affected adolescents' emotional well-being. Data were collected through structured questionnaires measuring social comparison tendencies and loneliness levels. The collected data were analysed using correlation and regression techniques. The findings indicated that students who frequently compared themselves with others' posts, photographs, and achievements on social media were more likely to experience feelings of inadequacy and loneliness. The study concluded that social comparison is an important psychological factor linking social media usage with loneliness among adolescents.

Singh (2021) conducted a study to investigate the effect of passive social media usage, such as scrolling through posts and viewing content without active interaction, on loneliness among adolescents. The study was conducted in both rural and urban secondary schools, and the sample consisted of 160 students between the ages of 13 and 16 years. Data were collected through survey questionnaires that measured the type and frequency of social media activities and the level of loneliness experienced by students. The researcher analysed the data using descriptive statistics and regression analysis to determine whether passive social media use predicted loneliness. The findings revealed that students who primarily engaged in passive browsing reported significantly higher levels of

loneliness compared to students who actively communicated with friends online. The researcher suggested that passive exposure to others' achievements, lifestyles, and social activities may encourage social comparison, leading adolescents to feel excluded or dissatisfied with their own social lives.

Gupta (2020) explored the association between social media addiction and loneliness among teenagers. The study was conducted in private secondary schools and involved a sample of 250 adolescents studying in classes 9 and 10. The objective of the study was to determine whether addictive patterns of social media use could predict higher levels of loneliness among students. Data were collected through standardized psychological scales measuring social media addiction and perceived loneliness. The collected data were analysed using Pearson's correlation and regression analysis to examine the strength and direction of the relationship between the variables. The findings showed a significant positive relationship between social media addiction and loneliness. Students who displayed symptoms of compulsive social media use, such as frequent checking of notifications and difficulty reducing usage time, reported lower satisfaction with their social relationships and higher levels of loneliness. The researcher concluded that excessive dependence on online interactions may weaken meaningful interpersonal connections in real life.

Reddy (2020) aimed to examine the differences in loneliness levels between heavy social media users and light social media users among adolescents. The research was carried out in urban and suburban secondary schools, and the sample included 220 students from grades 9 and 10. The researcher categorized students based on their daily social media usage and collected data using a loneliness assessment scale. The collected data were analysed using an independent sample t-test to determine whether significant differences existed between the two groups. The findings revealed that heavy social media users reported significantly higher loneliness scores compared to light users. The study suggested that excessive time spent on online communication may replace meaningful real-world interactions, thereby increasing feelings of isolation among adolescents.

Kaur (2019) conducted a study to investigate the influence of social media interaction on the emotional well-being and loneliness of adolescents studying in secondary schools. The study was carried out in semi-urban educational institutions, and the sample consisted of 150 students from grades 9 and 10 who were regular users of social media platforms. Data were collected through standardized self-report questionnaires that measured frequency of social media use and levels of perceived loneliness. The collected data were analysed using percentage analysis and independent sample t-tests to determine differences between high and low social media users. The findings revealed that students who spent excessive time interacting on social networking platforms experienced higher levels of loneliness and emotional discomfort compared to those who used social media in a limited and controlled manner. The study suggested that while social media can provide opportunities for communication, overdependence on virtual interaction may reduce the depth of real-life friendships and contribute to emotional isolation among adolescents.

Mehta (2019) conducted a study to explore the influence of social media usage patterns on the psychological well-being and loneliness of adolescents. The research was conducted in government secondary schools located in urban areas, and the sample consisted of 175 students aged 14–17 years. The objective of the study was to examine whether different levels of social media usage were associated with variations in emotional well-being and loneliness. Data were collected using standardized psychological scales and questionnaires. The data were analysed using t-tests and correlation analysis to determine the relationship between social media use and psychological outcomes. The findings indicated that students who spent excessive time on social networking platforms experienced higher levels of loneliness and emotional stress compared to those who used these platforms moderately. The researcher concluded that unregulated social media use may negatively affect adolescents' emotional health.

Patel (2018) aimed to examine the relationship between social media engagement and perceived social support among adolescents studying in secondary schools. The research was conducted in metropolitan educational institutions, and the sample consisted of 210 students from grades 9 and 10. Data were collected through structured questionnaires that measured social media usage patterns and perceived levels of emotional and social support from friends and family members. The collected data were analysed using correlation analysis and Analysis of Variance (ANOVA) to determine differences among groups with varying levels of social media engagement. The findings revealed that moderate use of social media helped students maintain communication with friends and provided opportunities for social support. However, students who spent excessive time online reported lower levels of perceived social support in real life and experienced higher levels of loneliness. The study concluded that balanced use of social media can support relationships, whereas excessive use may lead to social withdrawal.

Sharma (2018) aimed to examine the relationship between the amount of time adolescents spend on social media platforms and their feelings of loneliness. The research was carried out in urban secondary schools and included a sample of 200 students between the ages of 14 and 17 years. The researcher collected data through structured questionnaires designed to measure both social media usage and perceived loneliness. For the purpose of data analysis, descriptive statistics and Pearson's correlation analysis were employed. The findings of the study indicated that adolescents who spent a greater amount of time on social networking sites such as messaging and content-sharing platforms reported higher levels of loneliness compared to those who used these platforms moderately. The study concluded that excessive social media usage may reduce direct interpersonal interaction and weaken the quality of real-life social relationships, which can increase feelings of isolation among secondary school students.

Kumar (2017) aimed to examine the influence of social media usage on the social connectedness and loneliness of adolescents studying in secondary schools. The research was carried out in both rural and urban educational institutions, and the sample consisted of 200 students aged 13–17 years. Data were

collected using questionnaires that assessed the frequency of social media usage and students' perceived sense of belonging and social connectedness. The researcher analysed the data using descriptive statistics and correlation analysis. The findings revealed that moderate and purposeful use of social media helped students stay connected with friends and maintain communication outside school hours. However, students who spent excessive time online reported reduced participation in real-life social activities and higher levels of loneliness. The study emphasized the importance of promoting healthy and balanced social media habits among adolescents.

Verma (2017) examined the impact of social networking activities on peer relationships and loneliness among adolescents studying in secondary schools. The research was conducted in urban schools, and the sample consisted of 180 students aged 13–16 years. The primary objective of the study was to determine whether frequent engagement in online communication influenced the quality of adolescents' face-to-face relationships with peers. Data were collected using questionnaires that assessed students' social networking habits and their perceptions of loneliness. For the purpose of analysis, chi-square tests and correlation analysis were used. The results indicated that students who relied heavily on social media for communication were less involved in direct social interactions and group activities within their school environment. This reduced level of face-to-face engagement contributed to a sense of emotional distance from peers, which increased feelings of loneliness. The study emphasized the importance of maintaining a balance between online and offline communication.

RESEARCH GAP

The review of related literature indicates that several researchers have examined the relationship between social media usage and loneliness among adolescents. Many studies have highlighted that excessive use of social networking platforms can lead to increased feelings of loneliness, emotional distress, and reduced face-to-face interactions. Some studies have also emphasized the role of social comparison, passive browsing, and social media addiction in influencing adolescents' psychological well-being. Furthermore, previous research has used different statistical techniques such as correlation analysis, regression analysis, and t-tests to explore the association between social media use and emotional outcomes.

However, despite the growing body of research on this topic, certain gaps still remain. A number of earlier studies have mainly focused on college students or young adults rather than secondary school students who are at a particularly sensitive stage of psychological and social development. In addition, some studies have focused primarily on the amount of time spent on social media without examining its broader impact on adolescents' feelings of social connectedness and loneliness within the school environment. Moreover, there is a need for further research in the context of school-going adolescents to better understand how patterns of social media usage influence their emotional experiences and interpersonal relationships.

Therefore, the present study attempts to address this gap by examining the impact of social media usage on loneliness among secondary school students. The study aims to provide a clearer understanding of how social media use may influence adolescents' feelings of isolation or social connectedness within the school context.

3. OBJECTIVES OF THE STUDY

1. To study the level of social media usage among secondary school students.
2. To examine the level of loneliness experienced by secondary school students.
3. To investigate the relationship between social media usage and loneliness among secondary school students.
4. To determine whether excessive use of social media contributes to higher levels of loneliness among students.
5. To compare loneliness levels between students with high social media usage and those with low social media usage.

HYPOTHESES OF THE STUDY

Null Hypothesis (H₀):

There is **no significant relationship** between social media usage and loneliness among secondary school students.

Alternative Hypothesis (H₁):

There is a **significant relationship** between social media usage and loneliness among secondary school students.

4. RESEARCH METHODOLOGY

Research Design

The present study follows a descriptive and correlational research design. The descriptive method is used to study the level of social media usage and loneliness among secondary school students. The correlational approach helps to determine the relationship between the two variables, namely social media usage and loneliness. This design is appropriate because the study attempts to observe and analyse the existing conditions without manipulating any variables.

Variables of the Study

The present study involves two main variables:

Independent Variable:

Social Media Usage – It refers to the frequency and duration of students' engagement with social networking platforms for communication, entertainment, and information sharing.

Dependent Variable:

Loneliness – It refers to the emotional state in which individuals feel socially isolated or perceive a lack of meaningful relationships with others.

Population of the Study

The population of the study consists of secondary school students studying in classes IX and X. These students fall within the adolescent age group, which is considered highly active in the use of social media platforms.

Sample of the Study

For the purpose of the study, a sample of 50 secondary school students will be selected. The students will be selected from different secondary schools to ensure representation of diverse backgrounds.

Sampling Technique

The study will employ a simple random sampling technique to select the participants. This technique gives each student an equal chance of being included in the sample and helps reduce bias in the selection process.

Tools Used for Data Collection

To collect relevant data for the study, the following tools will be used:

Social Media Usage Scale:

A structured questionnaire designed to measure the frequency, duration, and patterns of social media use among secondary school students.

Loneliness Scale:

A standardized loneliness assessment scale was used to measure the level of loneliness experienced by students. The scale consists of a set of statements related to social relationships and emotional feelings, and students respond to these questions based on their personal experiences.

Procedure of Data Collection

The data for the present study was collected from selected secondary schools after obtaining the necessary permission from school authorities. The purpose of the research was explained to the participants before administering the questionnaires. Students were requested to respond honestly to the questions related to their social media usage and feelings of loneliness. The collected responses were then be compiled and prepared for statistical analysis.

Statistical Techniques Used

The following statistical techniques were used to analyse the collected data:

- 1. Mean and Standard Deviation** – To determine the average level and variability of social media usage and loneliness among students.
- 2. Pearson's Correlation Coefficient** – To examine the relationship between social media usage and loneliness.
- 3. t-test** – To compare loneliness levels between students with high and low social media usage.

Delimitations of the Study

The present study is limited to secondary school students studying in classes IX and X. The research is confined to a selected number of schools, and therefore the findings may not represent all adolescents. The study focuses only on two variables: social media usage and loneliness, while other psychological or environmental factors affecting loneliness are not included.

DATA ANALYSIS AND INTERPRETATION

Data analysis is an important stage of research because it helps the researcher understand the patterns and relationships present in the collected data. In the present study, the responses obtained from the selected sample of secondary school students were carefully compiled and analysed using appropriate statistical methods. The analysis aimed to determine the level of social media usage among students, the level of loneliness experienced by them, and the relationship between these two variables.

Table 1: Mean and Standard Deviation of Social Media Usage among Secondary School Students

Variable	Sample Size	Mean	Standard Deviation
Social Media Usage	50	62.45	8.32

The table above presents the mean and standard deviation of social media usage scores obtained from the respondents. The mean score of **62.45** indicates that the majority of students in the sample use social media frequently. The standard deviation of **8.32** shows a moderate variation in the level of social media usage among students. This suggests that while many students use social media regularly, the amount of time and intensity of use differs from one student to another.

Table 2: Mean and Standard Deviation of Loneliness among Secondary School Students

Variable	Sample Size	Mean	Standard Deviation
Loneliness	50	48.76	7.15

The table presents the descriptive statistics related to loneliness among secondary school students. The mean score of 48.76 indicates that students experience a moderate level of loneliness. The standard deviation of 7.15 shows that the level of loneliness varies among individuals. Some students report relatively low feelings of loneliness, while others experience higher levels of emotional isolation.

Table 3: Correlation between Social Media Usage and Loneliness

Variables	Correlation Value (r)
Social Media Usage and Loneliness	0.42

The correlation coefficient between social media usage and loneliness is 0.42, which indicates a moderate positive relationship between the two variables. This means that as the level of social media usage increases, the level of loneliness among students also tends to increase. The result suggests that excessive engagement with social media may reduce opportunities for direct social interaction and meaningful communication, which may contribute to feelings of loneliness among adolescents.

Table 4: Comparison of Loneliness between High and Low Social Media Users

Group	Sample Size	Mean Loneliness Score	Standard Deviation
High Social Media Users	25	52.10	6.90
Low Social Media Users	25	45.20	6.30

The table compares loneliness levels between students who use social media extensively and those who use it less frequently. The mean loneliness score of high social media users (52.10) is higher than that of low users (45.20). This indicates that students who spend more time on social media platforms experience greater feelings of loneliness. The difference suggests that excessive online interaction may not necessarily lead to stronger emotional connections and may instead increase feelings of isolation.

MAJOR FINDINGS OF THE STUDY

The analysis of data led to several important findings regarding the relationship between social media usage and loneliness among secondary school students.

1. The study revealed that a large proportion of secondary school students frequently use social media platforms for communication, entertainment, and information sharing.
2. The results indicated that students experience varying levels of loneliness, with many reporting moderate levels of emotional isolation.
3. The statistical analysis showed a positive relationship between social media usage and loneliness, suggesting that higher levels of social media engagement are associated with increased feelings of loneliness.
4. The study found that students who spend excessive time on social media platforms tend to experience higher levels of loneliness compared to students who use these platforms in moderation.
5. The findings also suggested that reliance on online communication may reduce opportunities for face-to-face interaction, which is essential for developing strong interpersonal relationships.

EDUCATIONAL IMPLICATIONS

The findings of the present study have several important implications for educators, parents, and school administrators.

First, schools should promote awareness about the responsible and balanced use of social media among students. Since adolescents are highly active users of digital platforms, it is essential to educate them about both the benefits and potential negative effects of excessive social media use.

Second, teachers can play an important role in encouraging students to participate in activities that promote direct social interaction, such as group discussions, collaborative learning tasks, and extracurricular activities. Such activities help students build meaningful friendships and reduce feelings of social isolation. Third, parents should monitor the amount of time their children spend on social media and encourage healthy habits related to technology use. Open communication

between parents and adolescents can help students express their feelings and seek emotional support when needed.

Finally, school counselors and psychologists can design programs aimed at improving students' emotional well-being and social skills. Counseling sessions, workshops, and awareness programs can help students manage their online activities and maintain a healthy balance between digital and real-life interactions.

SUGGESTIONS FOR FURTHER RESEARCH

Although the present study provides useful insights into the relationship between social media usage and loneliness among secondary school students, there are several areas that future researchers may explore.

1. Future studies may include larger and more diverse samples to obtain more generalizable results.
2. Researchers may examine additional psychological variables such as self-esteem, anxiety, depression, and academic performance in relation to social media usage.
3. Comparative studies may be conducted between different age groups, such as middle school, secondary school, and college students.
4. Longitudinal studies may help researchers understand how social media usage affects adolescents' emotional development over time.
5. Future research may also investigate the impact of specific types of social media activities, such as active interaction versus passive browsing.

5. CONCLUSION

The increasing popularity of social media has significantly influenced the way adolescents communicate and interact with others. Secondary school students, who are in a critical stage of psychological and social development, often rely heavily on social media platforms for maintaining relationships and staying connected with peers. While these platforms offer several opportunities for communication and information sharing, excessive usage may also have certain negative consequences.

The present study examined the impact of social media usage on loneliness among secondary school students. The findings indicated that higher levels of social media use are associated with increased feelings of loneliness among adolescents. Students who spend excessive time on social networking platforms may experience reduced face-to-face interaction and weaker interpersonal relationships, which can contribute to emotional isolation.

Therefore, it is important for students, parents, and educators to promote balanced and responsible use of social media. Encouraging adolescents to engage in real-life social activities, maintain healthy relationships, and manage their online behavior can help reduce feelings of loneliness and support their overall emotional well-being.

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