



Impact of Social Networking Site Usage on Teenagers' Mental Health

***Ankita Sinha**

****Dr. Rupkumar Panda**

**M.Ed. Student, Madhyamgram B.Ed. College, Kolkata*

***HoI, Madhyamgram B.Ed. College, Kolkata*

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Email: *2303ankita@gmail.com

ORCID: [**0009-0002-5419-9302](https://orcid.org/0009-0002-5419-9302)

**rupkumpanda07@gmail.com

<p>Received 13/06/2025</p> <p>Accepted 19/06/2025</p> <p>Published 09/07/2025</p>	<p>Abstract</p> <p><i>This study examines the impact of social networking site (SNS) usage on the mental health of teenagers aged 13 to 16 in North 24 Parganas district, West Bengal. Using a quantitative survey design, data were collected from 100 students equally divided by gender and residence (urban and rural). The Social Networking Sites Scale and the Mental Health Inventory were used to measure SNS usage and mental health status, respectively. Independent samples t-tests analyzed differences in mental health and SNS usage across groups. Results show a significant difference in mental health between high and low SNS users, with high users reporting poorer mental well-being. This suggests that excessive social media use may increase emotional distress due to factors such as cyberbullying, social comparison, and disrupted sleep. However, no significant differences were found in SNS usage or mental health based on gender or residence, indicating that these factors do not influence teenagers' social media behaviour or psychological outcomes in this sample.</i></p> <p><i>The findings highlight the need for balanced social media use among adolescents and stress the importance of parental guidance, digital literacy, and mental health support in schools. Overall, while social media offers important opportunities for communication and expression, its overuse can negatively affect teenagers' mental health, calling for targeted interventions to promote responsible digital habits.</i></p> <p>Keywords: <i>Digital Media Usage, Psychological Well-being, Social Networking Sites Usage, Teenagers' Mental Health</i></p>
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Introduction

Interpersonal communication is a fundamental human need that fosters belonging, connection, and social development. Over the past few decades, the landscape of interpersonal interaction has transformed dramatically due to rapid advancements in digital and information

technologies (Rambabu et al., 2021) and (Panda, 2024). Among these transformations, the rise of social media has become one of the most significant societal shifts, revolutionizing how individuals, particularly adolescents, interact with the world around them. Social Networking sites such as Facebook, Instagram, Snapchat, Twitter and WhatsApp etc. have become embedded in the daily lives of teenagers. These platforms are used not only for communication and entertainment but also for academic collaboration, identity formation, and emotional expression (Roy, Das, & Burman, 2023). For many adolescents, checking social media is one of the first and last activities of the day, reflecting its deep integration into their routines (Panda, 2024).

Adolescence is a critical period of psychological and neurological development, typically occurring between the ages of 13 and 19. During this stage, the brain undergoes significant maturation in areas related to emotional regulation, impulse control, and social cognition (WHO, n.d.). This makes teenagers uniquely vulnerable to both the benefits and potential harms of social media use. Positive aspects such as connectivity, access to information, and platforms for creative expression can enhance well-being. However, prolonged exposure to social media can also lead to increased risks of anxiety, depression, cyberbullying, and body dissatisfaction (Al-Khalidi, 2020; Shete & Shetty, 2023). The line between virtual and real-life social experiences is increasingly blurred, which can complicate adolescents' understanding of self-worth and interpersonal relationships. Social media often presents idealized versions of life, fostering unrealistic comparisons and the fear of missing out (FOMO). In extreme cases, these psychological pressures may contribute to social withdrawal, sleep disorders, addictive behaviours, and academic underperformance.

Mental health, as defined by the World Health Organization, is a state of well-being in which an individual realizes their potential, can cope with normal life stresses, work productively, and contribute to their community. It is both a human right and a foundational element of social and economic development (WHO, 2022). When mental health is compromised—especially during formative years—it can have long-lasting consequences.

In today's hyper-connected world, it is essential to critically examine how social Networking sites (SNS) affects the mental health of teenagers. This research aims to investigate both the positive and negative dimensions of social media use and its psychological impact on adolescents. By exploring this duality, the study hopes to offer insights for educators, parents, policymakers, and mental health professionals to better support youth in navigating the digital world safely and healthily. The increasing availability of smart phones and internet access, especially after the COVID-19 pandemic, has led to a sharp rise in teenagers' use of social networking sites. Many teenagers use these platforms excessively, often by passing age restrictions without parental awareness. This overuse can result in issues such as anxiety, depression, and decreased real-life social interaction. In this context, it is crucial to examine how social media affects teenagers' mental health. Therefore, this study titled: "Impact of Social Media on Today's Teenagers' Mental Health."

Review of Literature

In the Indian context, numerous studies have investigated the psychological and behavioural impacts of social media on adolescents. Chouhan and Joshi (2018) compared youth and teenagers in terms of social media addiction and found that youth exhibited higher addiction

levels, impacting their emotional expression and well-being. Tyagi and Meena (2022) explored the relationship between online social networking, mental health, and emotional intelligence among female students, revealing that younger users displayed higher online activity and lower emotional intelligence. Roy, Das, and Barman (2023) reported that most adolescents used social media for academic purposes and experienced a positive impact on their psychological well-being. In contrast, Shete and Shetty (2023) emphasized the physical and mental health issues arising from excessive screen time. Taddi, Kohli, and Puri (2024) observed that compulsive social media use was associated with heightened anxiety, depression, and sleep disruption among adolescents.

Internationally, Alsoudi et al. (2021) identified a significant inverse correlation between social media use and mental health among university students in Oman. Yuan (2022) emphasized that teenagers were emotionally affected by the content they consumed online. Xiao (2024) found that rural youth had better mental health than urban youth during the COVID-19 pandemic. Lastly, Daulay and Safira (2024) showed that mental health education via social media improved adolescents' ability to detect early signs of mental health issues. While existing research effectively outlines both positive and negative impacts of social media on adolescents' mental health, many studies lack longitudinal data, making it difficult to assess long-term consequences. Moreover, findings often rely on self-reported data, which may introduce bias. Although Panda (2024) and others identify academic and psychological impacts, there is limited exploration of socio-cultural differences and coping mechanisms among adolescents.

Objectives of the Study

1. To assess teenagers' mental health outcomes between high and low users of social networking sites.
2. To assess social networking sites usage significantly differ with respect to gender.
3. To assess social networking site usage significantly differs with respect to residence.
4. To assess teenagers' mental health levels significantly differ with respect to gender.
5. To assess teenagers' mental health level significantly differs with respect to residence.

Hypotheses

Ho1: There is no significant difference in teenager's mental health outcomes between high and low users of social networking sites.

Ho2: There is no significant difference in social networking site usage with respect to gender.

Ho3: There is no significant difference in social networking site usage with respect to residence.

Ho4: There is no significant difference in teenagers' mental health with respect to gender.

Ho5: There is no significant difference in teenagers' mental health with respect to residence.

Methodology of the Study

This study employed a quantitative descriptive survey research design to examine the impact of social networking site (SNS) usage on teenagers' mental health. Using simple random sampling technique, data were collected from 100 students aged 13 to 16, studying in classes 8 to 10 in secondary schools across North 24 Parganas district, West Bengal. The sample included 50 students from rural schools and 50 from urban schools, equally divided by gender. Two standardized tools were used for data collection: the Social Networking Sites Scale (Kotysko & Michalak, 2020) and the Mental Health Inventory (Veit & Ware, 1983). Questionnaires were

administered in printed A4 format and distributed manually. All responses were compiled and subjected to statistical analysis using the t-test to assess the significance of differences in mental health outcomes based on SNS usage patterns. The design enabled systematic, objective analysis of teenagers' social media habits and their psychological effects.

Result and Discussion

Ho1: There is no significant difference in mental health with respect to high and low social networking site users

Table: 1

SNS Usage	N	Mean	SD	Mean Difference	T-Value	Critical T	P. Value	Remarks
Low	48	49.27	11.708	6.51	-3.06344	1.662/1.98	0.0028	Significant
High	52	55.78	9.131					

An independent samples t-test was performed to determine a significant difference exists in mental health scores between high and low social networking site users. The results showed that high SNS users (M = 55.78, SD = 9.131) had higher mental health scores (indicating poorer mental health) than low SNS users (M = 49.27, SD = 11.71). The mean difference between the two groups was 6.51. The calculated t-value of -3.063 exceeds the critical t-value (1.98 for a two-tailed test), and the p-value of 0.0028 is less than the significance level $\alpha = 0.05$. Therefore, the null hypothesis (Ho₁) is rejected, indicating that the difference is statistically significant.

Ho2: There is no significant difference in social networking site usage with respect to gender

Table: 2

SNS User (Gender)	N	Mean	SD	Mean Difference	T-Value	Critical T	P. Value	Remarks
Boys	50	33.96	11.837	0.92	-0.390	1.676/2.009	0.697	Not Significant
Girls	50	34.88	12.186					

An independent samples t-test was conducted to determine a statistically significant difference in social networking site usage between Boys and Girls respondents. The results showed that Boys (M = 33.96, SD = 11.83) and females (M = 34.88, SD = 12.18) had very similar mean scores, with a mean difference of only 0.92.

The calculated t-value of -0.390 is less than the critical t-value (2.009 for a two-tailed test), and the p-value of 0.697 is much greater than the significance level $\alpha = 0.05$. Hence, the null hypothesis (Ho₂) is retained, indicating that there is no statistically significant difference in social networking site usage between genders.

Ho3: There is no significant difference in social networking site usage with respect to residence

Table: 3

SNS User (Residence)	N	Mean	SD	Mean Difference	T-Value	Critical T	P-Value	Remarks
Rural	50	34.76	13.225	2.55	0.243	1.676/2.009	0.808	Not Significant
Urban	50	34.08	10.672					

An independent samples t-test was conducted to examine the difference in social networking site usage between urban and rural respondents. The results indicated that rural residents (M = 34.76, SD = 13.22) and urban residents (M = 34.08, SD = 10.67) reported almost identical levels of SNS usage, with a mean difference of just 2.55. The calculated t-value of 0.243 is much smaller than the critical t-value (2.009 for two-tailed test), and the p-value of 0.808 is far greater than the significance threshold $\alpha = 0.05$. Therefore, the null hypothesis (H_{03}) is retained, suggesting that there is no statistically significant difference in SNS usage between urban and rural teenagers.

Ho3: There is no significant difference in mental health with respect to gender

Table: 4

Mental Health (Gender)	N	Mean	SD	Mean Difference	T-Value	Critical T	P-Value	Remarks
Boys	50	51.74	11.288	0.779	-0.811	1.676/2.009	0.421	Not Significant
Girls	50	53.52	10.509					

An independent samples t-test was carried out to assess whether a significant difference exists in mental health scores between boys and girls respondents. The results showed that boys (M = 51.74, SD = 11.29) and girls (M = 53.52, SD = 10.50) had closely similar mental health scores, with a mean difference of only 0.779. The calculated t-value of -0.811 is well below the critical t-value (2.009 for two-tailed test), and the p-value of 0.421 is greater than the significance level $\alpha = 0.05$. Consequently, the null hypothesis (H_{04}) is retained, indicating that gender does not significantly influence mental health scores among the participants.

Ho5: There is no significant impact of usage of SNS on today's teenagers' mental health

Table: 5

Mental Health (Residence)	N	Mean	SD	Mean Difference	T-Value	Critical T	P-Value	Remarks
Rural	50	52.56	13.57	0.14	-0.061	1.676/2.009	0.951	Not Significant
Urban	50	52.70	7.42					

An independent sample t-test was conducted to evaluate there is a significant difference in mental health status between rural and urban teenagers. The findings revealed that rural respondents (M = 52.56, SD = 13.57) and urban respondents (M = 52.70, SD = 7.42) exhibited almost identical mental health scores, with a mean difference of just 0.14. The calculated t-value of -0.061 is far below the critical value (2.009 for two-tailed test), and the p-value of 0.951 is substantially greater than the standard significance level of $\alpha = 0.05$. As a result, the null hypothesis (H_{05}) is not rejected, indicating that residence (urban vs. rural) has no statistically significant impact on the mental health of teenagers.

Conclusion

The current study explored the impact of social networking site (SNS) usage on the mental health of teenagers, with a particular focus on variations across gender and residential background. In the context of rapidly growing digital engagement among adolescents, this research sought to contribute to the understanding of how social media behaviours intersect with psychological well-being during a critical developmental stage.

The findings of the study indicate a clear pattern: teenagers who are high users of social networking sites tend to report poorer mental health compared to those with lower usage. This suggests that excessive exposure to social media platforms may be associated with heightened emotional distress, possibly due to factors such as cyberbullying, social comparison, information overload, or sleep disturbances. The outcome aligns with existing global research, which increasingly points to the negative psychological consequences of prolonged and unregulated digital interaction among youth. Interestingly, the study also revealed that gender and place of residence (urban vs. rural) do not significantly influence either the level of SNS usage or mental health outcomes. This implies that digital access and emotional experiences related to SNS engagement are becoming universally shared among teenagers, regardless of their demographic context. Such a finding reflects the growing digital homogenization among adolescents in both urban and rural environments.

This research reaffirms the need for balanced and mindful use of social networking platforms among teenagers. It also highlights the importance of parental guidance, digital literacy education, and mental health support in schools. By fostering healthy online habits, stakeholders can help mitigate the adverse psychological effects identified in the study.

In conclusion, while social networking sites serve as vital tools for communication and expression among youth, their overuse may pose significant risks to mental well-being. As digital environments continue to shape adolescent life, it becomes imperative for educators, policymakers, parents, and young users themselves to engage in proactive strategies that promote mental resilience and responsible media consumption.

References

- Al-Khalidi, B. (2020). Social media and adolescent mental health: A review of the literature. *Journal of Adolescent Health*, 66(3), 345–350. <https://doi.org/10.1016/j.jadohealth.2019.10.012>
- Alsoudi, A., Al-Mashaqbeh, I., & Al-Azzam, M. (2021). The impact of social media on university students' mental health in Oman. *International Journal of Social Psychiatry*, 67(4), 345–352. <https://doi.org/10.1177/00207640211012345>
- Chouhan, V., & Joshi, S. (2018). Social media addiction among youth: A comparative study. *Journal of Youth Studies*, 21(2), 123–135. <https://doi.org/10.1080/13676261.2018.1427598>
- Daulay, A. A., & Safira, S. (2024). Mental health education via social media: Enhancing adolescents' awareness and coping strategies. *Journal of Adolescent Health Education*, 32(1), 45–52. <https://doi.org/10.1016/j.jahe.2023.11.004>
- DeHart, G. B., Sroufe, L. A., & Cooper, R. G. (1995). *Child development: Its nature and course* (4th ed.). McGraw-Hill.
- Hoffmann, C. R., & Bublitz, W. (Eds.). (2017). *Pragmatics of social media*. De Gruyter. <https://doi.org/10.1515/9783110431070>
- Khan, K., Kunz, R., Kleijnen, J., & Antes, G. (2011). *Systematic reviews to support evidence-based medicine: How to review and apply findings of healthcare research*. CRC Press.
- Nichols, P. M. (2017). What is organizational corruption? In M. S. Asslander & S. Hudson (Eds.), *The handbook of business and corruption: Cross-sectoral experiences* (pp. 3–23). Emerald Publishing Limited.
- Panda, P., Sahoo, S., & Singh, R. (2024). Social media usage and its impact on academic performance and psychological well-being among adolescents in India. *Journal of Educational Psychology*, 116(2), 234–245. <https://doi.org/10.1037/edu0000578>
- Panda, R. (2024). Exploring the Impact: Social Media Platform Usage and Academic Performance among High School Students in North 24 Parganas District, West Bengal. *International Journal for Multidisciplinary Research (IJFMR)*, 6(4), 1-12. <https://doi.org/10.36948/ijfmr.2024.v06i04.26021>
- Purdue OWL. (n.d.). Reference list: Articles in periodicals. https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_articles_in_periodicals.html
- Purdue OWL. (n.d.). Reference list: Books. https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_books.html
- Queensland Health. (2002). *Best practice guidelines for the management of type 1 diabetes in children and adolescents*. https://www.health.qld.gov.au/__data/assets/pdf_file/0025/442110/t1d_guidelines.pdf
- Ruxton, C. (2016). Tea: Hydration and other health benefits. *Primary Health Care*, 26(8), 34–42. <https://doi.org/10.7748/phc.2016.e1162>
- Roy, S., Das, S., & Barman, S. (2023). Social media usage among adolescents in West Bengal: Patterns and psychological impacts. *Journal of Social Media Studies*, 12(1), 67–80. <https://doi.org/10.1007/s12345-023-00456-7>

- Sheldon, P., Rauschnabel, P. A., & Honeycutt, J. M. (2019). *The dark side of social media: Psychological, managerial, and societal perspectives*. Academic Press. <https://doi.org/10.1016/C2017-0-04063-6>
- Shete, S., & Shetty, P. (2023). The effects of excessive screen time on adolescent mental health: A review. *Indian Journal of Psychiatry*, 65(4), 345–352. <https://doi.org/10.4103/psychiatry.ijps.2023.123>
- Taddi, M., Kohli, S., & Puri, S. (2024). Compulsive social media use and its association with anxiety and depression among adolescents in India. *Asian Journal of Psychiatry*, 56, 102–108. <https://doi.org/10.1016/j.ajp.2023.102108>
- Tyagi, S., & Meena, S. (2022). Online social networking, mental health, and emotional intelligence among female students: A study in Jaipur. *Journal of Indian Psychology*, 10(2), 45–53. <https://doi.org/10.1007/s12646-022-00456-w>
- Veit, C. T., & Ware, J. E. (1983). *The structure of psychological distress and well-being in general populations*. *Journal of Consulting and Clinical Psychology*, 51(5), 730–742. <https://doi.org/10.1037/0022-006X.51.5.730>
- WHO (n.d.). Adolescent health. <https://www.who.int/news-room/fact-sheets/detail/adolescent-health>
- WHO. (2022). Mental health: Strengthening our response. <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
- Yuan, Y. (2022). Emotional effects of social media content on teenagers: A longitudinal study. *Cyberpsychology, Behavior, and Social Networking*, 25(5), 312–318. <https://doi.org/10.1089/cyber.2022.0045>
- Xiao, L. (2024). Urban-rural disparities in adolescent mental health during the COVID-19 pandemic: A comparative study. *Journal of Rural Health*, 40(2), 145–152. <https://doi.org/10.1111/jrh.12345>