

THE EFFECTS OF SOCIAL MEDIA USE ON PSYCHOLOGICAL WELL-BEING AMONG SCHOOL ADOLESCENTS

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Abstract. Particularly among adolescents, social media use has skyrocketed in recent years, with sites such as YouTube, Instagram, TikTok, and Snapchat becoming indispensable for communication, information gathering, and identity building. But there are concerns about the detrimental impacts on mental health, including anxiety, hopelessness, and emotional distress. The effects of social media use on the psychological health of school-aged adolescents are investigated in this review. Using a literature review methodology, papers from databases including ScienceDirect, PubMed, and Google Scholar were examined, with an emphasis on studies published between 2019 and 2024. According to the review, psychological problems, including anxiety, sadness, and emotional distress, are strongly associated with excessive social media use. These effects are exacerbated, especially in females, by factors such as sleep disturbances, idealized self-presentation, and body image difficulties. The "Fear of Missing Out" (FOMO) phenomenon further intensifies these issues. In conclusion, while social media offers connection opportunities, its excessive use poses significant risks to adolescents' mental health.

Keywords: Social Media, Psychological Well-Being, School Adolescents

INTRODUCTION

Social media usage has significantly increased in recent years (Kemp, 2020; Leong et al., 2019). Social media refers to online platforms where users can easily participate, share content, and build social networks. Among the various forms of social media, social networking sites are the most widely used by people worldwide. With advancements in internet technology and mobile devices, social media has experienced rapid growth and evolution (Fadilah et al., 2023). People utilize social media for a variety of purposes, such as communication, entertainment, and information gathering. Interestingly, teens and young adults spend more time on social media, e-games, online networking sites, and texting. According to several writers, social media has changed how people engage in groups and how people behave both individually and collectively worldwide (Ostic et al., 2021).

Children and teenagers' use of social media has grown dramatically in recent years. According to a report by We Are Social and Hootsuite (Andi Dwi Riyanto, 2023), approximately 90% of children and adolescents aged 13–18 worldwide have access to social media. Platforms such as Instagram, TikTok, Snapchat, and YouTube have become integral to their daily lives. Children and adolescents use social media for various purposes, including communicating with friends, seeking information, sharing experiences, and developing their self-identity (Risna Rogamelia, 2022). The importance of online social support in enhancing psychological well-being, suggests that similar dynamics may apply to children and adolescents who utilize social media for connection and support (Napitupulu & Kurniawan, 2023). As a result, there are now more worries about the potential harm that social media addiction may do, especially to psychological health (Ostic et al., 2021). Mackson et al, (2019) found that while Instagram use can lead to negative outcomes such as anxiety and loneliness, it also fulfills the fundamental need for belonging, which is essential for psychological health. This duality underscores the complex nature of social media's impact on youth.

The transition from adolescence to emerging adulthood is particularly critical. Stockdale & Coyne (2020) discovered that greater levels of anxiety and negative behaviors are linked to increased social media use during this time. Growing reliance on social media for social connection is a hallmark of this transitional phase, and if left unchecked, it can exacerbate feelings of worry and social isolation. While social media can improve social ties and self-esteem, it also raises awareness of the dangers of excessive usage, including addiction and detrimental psychological effects (Widjaya & Andrew, 2023). The phenomenon of social comparison on social media platforms has also been linked to adverse psychological effects. Social comparison orientation can lead to decreased self-esteem and well-being, particularly when individuals engage in upward comparisons on social networking sites (Lee, 2022). This is echoed by the findings of (Liu et al., 2022) found that excessive engagement in selfie culture can trigger social anxiety and negative body image among youth, further complicating their psychological landscape. This review's objective is to investigate how social media use affects school-age teenagers' psychological health.

RESEARCH METHOD

This study used a literature review methodology to examine how social media use affects school-age adolescents' psychological health. Three main databases ScienceDirect, PubMed, and Google Scholar were methodically searched for scientific papers that served as data sources. The search was conducted using the primary keywords "Social Media, Psychological Well-Being, School Adolescents" to ensure relevance to the studied topic. Inclusion criteria for literature selection included articles published within the past five years, from 2019 to 2024. The identified articles were then reviewed and presented systematically.

RESULT AND ANALYSIS

Table 1. Summary of literature review

Author & Year	Title	Desaign	Result
(Aryal & Rajbhandari, 2024)	Social media use and anxiety levels among school adolescents: a cross-sectional study in Kathmandu, Nepal	Cross sectional	According to the survey, 43.6% of participants used SM for 4–8 hours per day. Severe anxiety was more common in grade 9 pupils and females (45.2% and 34.3%, respectively).
(Suryani & Yazia, 2024)	Hubungan Tingkat Depresi dengan Social Media Addiction pada Remaja	Cross sectional	More than half (63.9%) of adolescent students experience moderate depression. Additionally, over half (56.6%) of adolescent students exhibit a moderate level of social media addiction. There is a significant relationship between depression levels and social media addiction among adolescent students ($p = 0.000$).
(Prajniti et al., 2022)	Hubungan Penggunaan Media Sosial Dengan Gejala Depresi Pada Remaja Di Sman 3 Denpasar	Cross sectional	Most adolescents experience a normal level of social media usage, with 94 adolescents (50%), and a normal level of depressive symptoms, with 96 adolescents (51.1%). The Spearman Rank test was used for bivariate analysis, and the results showed a modest but significant relationship between social media use and depressed symptoms ($p\text{-value} = 0.001$; $r = 0.235$).
(Mougharbel et al., 2023)	Heavy social media use and psychological distress among adolescents: the moderating	Cross sectional	According to our findings, 48% of teenagers utilized social media for three hours or more every day, and 43.7% of

	role of sex, age, and parental support		them had moderate to severe psychological discomfort; the incidence was greater for females (54%) than for boys (31%). Heavy social media usage (≥ 3 hours per day) was linked to higher risks of severe psychological distress after controlling for pertinent factors [odds ratio (OR): 2.01; 95% CI: 1.59-2.55]. Age ($p < 0.05$) altered the relationship between social media usage and psychological discomfort, but not sex or parental support. Younger teenagers showed a higher correlation.
(Thorisdottir et al., 2020)	Longitudinal association between social media use and psychological distress among adolescents.	cohort	Over time, there was a higher correlation between social media use and physical signs of anxiety and depression, although it is unclear whether this correlation is causative. Girls saw a larger correlation between social media usage and all psychological distress outcomes than those who were lazy, and over time, more social media use was positively correlated with sad mood symptoms.
(Boers et al., 2019)	Association of Screen Time and Depression in Adolescence.	RCT	According to significant between-person relationships, teenagers' depression symptoms rose by 0.64 units for every additional hour spent on social media (95% CI, 0.32-0.51).
(Heffer et al., 2019)	The Longitudinal Association Between Social-Media Use and Depressive Symptoms Among Adolescents and Young Adults: An Empirical Reply to Twenge et al. (2018)	Cross sectional	Neither male nor female depression symptoms were predicted over time by social media usage. However, only among teenage females did higher levels of depressive symptoms indicating more regular use of social media.

3.1. Impact of social media usage on school adolescen's mental health

Adolescents perceive social media as a danger to their mental health with three themes: social media use is thought to cause mood disorders and anxiety, social media is seen as a platform for cyberbullying, and social media use is often addictive (Septiana, 2021). Research conducted of Aryal & Rajbhandari (2024) According to the survey, 43.6% of participants used social media for 4–8 hours per day. Severe anxiety was more common in grade 9 pupils and females (45.2% and 34.3%, respectively). Of those who disclosed their accounts, 37.9% did so in spite of privacy concerns (93.3%). Severe anxiety was common (35.4%), and men were less likely than women to have severe anxiety (OR=0.37, p -value < 0.001), and higher usage frequency and length were linked to higher anxiety ($p < 0.001$ according to the Kruskal-Wallis test). Those who relied on social media were 1.15 times more likely to have severe anxiety, whereas those who did not take breaks experienced less anxiety (OR=0.89, $\beta = -0.10$). According to a Canadian research, 48% of teenagers used social media for three hours or more every day, and 43.7% of them reported having moderate to severe psychological discomfort; the prevalence was greater for females (54%) than for boys (31%)(Mougharbel et al., 2023).

Teens with high (as opposed to low) usage were also twice as likely to have been diagnosed with anxiety or depression or to have required therapy for behavioral or mental health issues. Additionally, moderate screen users were far more likely than low users to have poor wellbeing and, among those aged 14 to 17, to have been diagnosed with anxiety or depression or require mental health services (Twenge & Campbell, 2018). One of the primary mechanisms through which social media contributes to anxiety and depression is disrupted sleep patterns. Woods and Scott discovered that teenagers who used social media at night had lower-quality sleep, which is linked to higher levels of anxiety and depression symptoms (Woods & Scott, 2016). This finding is supported by

Riehm et al (2019) that idealized self-presentations often encountered on social media can negatively influence body image and encourage harmful social comparisons, further exacerbating feelings of anxiety and depression. The interplay of these factors suggests that late-night engagement with social media not only affects sleep but also contributes to a cycle of negative self-perception and emotional distress.

Extensive social media use among female adolescents is associated with cognitive internalization of unrealistic body standards, leading to increased social appearance anxiety and diminished body esteem (Yang et al., 2020). This sentiment is echoed by Rohit Tiwari, (2023) that social media platforms often serve as breeding grounds for cyberbullying and unrealistic standards, further heightening stress levels among adolescents. The phenomenon of "Fear of Missing Out" (FOMO) has also been implicated in this context, as it can lead to increased anxiety and depressive symptoms due to the constant comparison with peers (Oberst et al., 2017).

3.2. Social media effect in social development and emotional regulation on school adolescent's mental health

Study of Primack et al (2017) regarding social media use and perceived social isolation among young adults in the United States, participants in the highest quartile for social media use time had twice the odds of feeling more socially isolated than those in the lowest quartile (AOR=2.0, 95% CI= 1.4, 2.8), according to fully adjusted multivariable models that included survey weights. Similarly, those in the highest quartile of social media usage frequency were more than three times as likely to have higher PSI than people in the lowest quartile (AOR=3.4, 95% CI=2.3, 5.1). The results were robust to all sensitivity analyses, and the associations were linear ($p < 0.001$ for all). One of the primary mechanisms through which social media contributes to feelings of isolation is the nature of online interactions. Adolescents who reported higher levels of loneliness also tended to have a greater number of social media accounts (Barry et al., 2017). This suggests that despite the potential for connection, the quality of interactions may be lacking, leading to superficial relationships that do not fulfill emotional needs. Furthermore, adolescents may engage in social media as a means of coping with feelings of loneliness, which can create a cycle of dependency on online interactions that ultimately fails to alleviate their isolation.

Compared to low users, children and adolescents who used screens more frequently had worse psychological health. Inability to complete activities, declining interest, trouble establishing friends, and poor emotion management (not keeping cool, fighting too much, being difficult to get along with) were all much more common among heavy screen users. High users were also characterized by caregivers as having less self-control and being harder to care for. In general, there was no discernible difference in the wellbeing of non-users and screen-light users (Twenge & Campbell, 2018). Furthermore, the social comparison phenomenon that is common on social networking sites can make people feel even more alone and inadequate. According to youth narratives, there is a tendency for upward social comparisons, especially with peers and social media influencers, which can result in negative emotions including poor self-esteem and feelings of inadequacy (Samari et al., 2022).

CONCLUSION

Social media use has a complex effect on school-age teenagers' mental health, showing both beneficial and detrimental effects. Overuse of social media is closely linked to mental health issues such as emotional discomfort, sadness, and anxiety. Factors like disrupted sleep, idealized self-presentations, body image concerns, and social comparison exacerbate these issues, particularly among female adolescents. The phenomenon of "Fear of Missing Out" (FOMO) further amplifies these adverse effects, fostering a cycle of negative self-perception and emotional instability. In terms of social development and emotional regulation, high social media usage correlates with increased perceived social isolation, reduced emotional regulation, and superficial social interactions that fail to fulfill emotional needs. Adolescents often rely on social media to cope with loneliness, which can lead to dependency and exacerbate feelings of inadequacy.

While social media offers opportunities for connection, the risks of addiction, cyberbullying, and unrealistic standards highlight the need for balanced usage. Interventions aimed at promoting healthy habits, addressing cyberbullying, and enhancing awareness about its impact on mental health can help mitigate the adverse effects and foster better emotional well-being and social development among adolescents.

References

- Andi Dwi Riyanto. (2023). *Hootsuite (We are Social): Data Digital Indonesia 2024*. <https://andi.link/hootsuite-we-are-social-indonesian-digital-report-2023/>
- Aryal, N., & Rajbhandari, A. (2024). Social media use and anxiety levels among school adolescents: a cross-sectional study in Kathmandu, Nepal. *BMJ Public Health*, 2(1), e000615. <https://doi.org/10.1136/bmjph-2023-000615>
- Barry, C. T., Sidoti, C. L., Briggs, S. M., Reiter, S. R., & Lindsey, R. A. (2017). Adolescent social media use and mental health from adolescent and parent perspectives. *Journal of Adolescence*, 61, 1–11. <https://doi.org/10.1016/j.adolescence.2017.08.005>
- Boers, E., Afzali, M. H., Newton, N., & Conrod, P. (2019). Association of Screen Time and Depression in Adolescence. *JAMA Pediatrics*, 173(9), 853–859. <https://doi.org/10.1001/jamapediatrics.2019.1759>
- Fadilah, U. N., Septiarini, D., Dyashafa, L., Putri, N., & Fansurna, A. (2023). Dampak Penggunaan Media Sosial Terhadap Perkembangan Anak Remaja Di Tinjau dari Aspek Hukum dan Kesehatan. *Jikes: Jurnal Ilmu Kesehatan*, 1(2), 131–138.
- Heffer, T., Good, M., Daly, O., MacDonell, E., & Willoughby, T. (2019). The Longitudinal Association Between Social-Media Use and Depressive Symptoms Among Adolescents and Young Adults: An Empirical Reply to Twenge et al. (2018). *Clinical Psychological Science*, 7(3), 462–470. <https://doi.org/10.1177/2167702618812727>
- Kemp, S. (2020). *Digital 2020: 3.8 billion people use social media*. *We Are Social*. <https://wearesocial.com/blog/2020/01/digital-2020-3-8-billion-people-use-social-media>
- Lee, J. K. (2022). The effects of social comparison orientation on psychological well-being in social networking sites: Serial mediation of perceived social support and self-esteem. *Current Psychology*, 41(9), 6247–6259. <https://doi.org/10.1007/s12144-020-01114-3>
- Leong, L. Y., Hew, T. S., Ooi, K. B., Lee, V. H., & Hew, J. J. (2019). A hybrid SEM-neural network analysis of social media addiction. *Expert Systems with Applications*, 133, 296–316. <https://doi.org/10.1016/j.eswa.2019.05.024>
- Liu, Y., Zhu, J., & He, J. (2022). Can selfies trigger social anxiety? A study on the relationship between social media selfie behavior and social anxiety in Chinese youth group. *Frontiers in Psychology*, 13(November), 1–16. <https://doi.org/10.3389/fpsyg.2022.1016538>
- Mackson, S. B., Brochu, P. M., & Schneider, B. A. (2019). Instagram: Friend or foe? The application's association with psychological well-being. *New Media and Society*, 21(10), 2160–2182. <https://doi.org/10.1177/1461444819840021>
- Mougharbel, F., Chaput, J. P., Sampasa-Kanyinga, H., Hamilton, H. A., Colman, I., Leatherdale, S. T., & Goldfield, G. S. (2023). Heavy social media use and psychological distress among adolescents: the moderating role of sex, age, and parental support. *Frontiers in Public Health*, 11(June), 1–11. <https://doi.org/10.3389/fpubh.2023.1190390>
- Napitupulu, L., & Kurniawan, Y. (2023). Online Social Support and Psychological Well-Being of Caregivers of Children with Autism Spectrum Disorder. *European Journal of Educational Research*, 12(2), 927–946. <https://doi.org/10.12973/eu-jer.12.2.927>
- Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of*

Adolescence, 55, 51–60. <https://doi.org/10.1016/j.adolescence.2016.12.008>

Ostic, D., Qalati, S. A., Barbosa, B., Shah, S. M. M., Galvan Vela, E., Herzallah, A. M., & Liu, F. (2021). Effects of Social Media Use on Psychological Well-Being: A Mediated Model. *Frontiers in Psychology*, 12(June). <https://doi.org/10.3389/fpsyg.2021.678766>

Prajaniti, G. A. S., Swedarma, K. E., & Manangkot, M. V. (2022). Hubungan Penggunaan Media Sosial Dengan Gejala Depresi Pada Remaja Di Sman 3 Denpasar. *Coping: Community of Publishing in Nursing*, 10(1), 52. <https://doi.org/10.24843/coping.2022.v10.i01.p08>

Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L. yi, Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social Media Use and Perceived Social Isolation Among Young Adults in the U.S. *American Journal of Preventive Medicine*, 53(1), 1–8. <https://doi.org/10.1016/j.amepre.2017.01.010>

Riehm, K. E., Feder, K. A., Tormohlen, K. N., Crum, R. M., Young, A. S., Green, K. M., Pacek, L. R., La Flair, L. N., & Mojtabai, R. (2019). Associations between Time Spent Using Social Media and Internalizing and Externalizing Problems among US Youth. *JAMA Psychiatry*, 76(12), 1266–1273. <https://doi.org/10.1001/jamapsychiatry.2019.2325>

Risna Rogamelia, A. N. I. (2022). Peran Media Sosial dalam Perkembangan Psikologis Anak dan Remaja Risna. 2(3), 1030–1037. <https://irje.org/index.php/irje/article/view/547/451>

Rohit Tiwari, V. P. S. (2023). Mental Health Effects of Social Media on Adolescents Rohit. *International Journal for Research in Applied Science & Engineering Technology (IJRASET)*, 10(1), 2321–9653. <https://doi.org/https://doi.org/10.22214/ijraset.2023.57651>

Samari, E., Chang, S., Seow, E., Chua, Y. C., Subramaniam, M., van Dam, R. M., Luo, N., Verma, S., & Vaingankar, J. A. (2022). A qualitative study on negative experiences of social media use and harm reduction strategies among youths in a multi-ethnic Asian society. *PLoS ONE*, 17(11 November), 1–14. <https://doi.org/10.1371/journal.pone.0277928>

Septiana, N. Z. (2021). Dampak Peggunaan Media Sosial Terhadap Kesehatan Mental Dan Kesejahteraan Sosial Remaja Dimasa Pandemi Covid-19. *Nusantara of Research : Jurnal Hasil-Hasil Penelitian Universitas Nusantara PGRI Kediri*, 8(1), 1–13. <https://doi.org/10.29407/nor.v8i1.15632>

Stockdale, L. A., & Coyne, S. M. (2020). Bored and online: Reasons for using social media, problematic social networking site use, and behavioral outcomes across the transition from adolescence to emerging adulthood. *Journal of Adolescence*, 79(January), 173–183. <https://doi.org/10.1016/j.adolescence.2020.01.010>

Suryani, U., & Yazia, V. (2024). Hubungan Tingkat Depresi Dengan Social Media Addiction Pada Remaja. *Jurnal Keperawatan*, 16(2), 783–790.

Thorisdottir, I. E., Sigurvinsdottir, R., Kristjansson, A. L., Allegrante, J. P., Lilly, C. L., & Sigfusdottir, I. D. (2020). Longitudinal association between social media use and psychological distress among adolescents. *Preventive Medicine*, 141(April), 106270. <https://doi.org/10.1016/j.ypmed.2020.106270>

Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventive Medicine Reports*, 12(October), 271–283. <https://doi.org/10.1016/j.pmedr.2018.10.003>

Widjaya, S. N., & Andrew, D. A. K. (2023). Information behavior and psychological well-being: A review of the literature on social media use. *Record and Library Journal*, 9(2), 319–333. <https://doi.org/10.20473/rlj.V9-I2.2023.319-333>

Woods, H. C., & Scott, H. (2016). #Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem. *Journal of Adolescence*, 51, 41–49. <https://doi.org/10.1016/j.adolescence.2016.05.008>

Yang, H., Wang, J. J., Tng, G. Y. Q., & Yang, S. (2020). Effects of social media and smartphone use on body esteem in female adolescents: Testing a cognitive and affective model. *Children*, 7(9). <https://doi.org/10.3390/children7090148>

