

The Effect of Social Media Use and Environment on Mental Health Among Young People in Sukabumi

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ABSTRACT

This study looked into how social media use and outside influences affected young people's mental health in Sukabumi, Indonesia. 400 young individuals between the ages of 18 and 25 participated in a cross-sectional survey in which information on social media use, environmental exposure, and mental health outcomes (such as depression, anxiety, and stress) was gathered. According to the findings, increased social media use was linked to greater levels of stress, anxiety, and depression, but exposure to environmental elements including noise, air pollution, and green open spaces was found to be a significant predictor of mental health outcomes. In particular, increased exposure to green space was linked to lower levels of sadness, anxiety, and stress whereas higher exposure to air and noise pollution was linked to higher levels of these emotions. Gender was also found to be a significant predictor, with women reporting higher levels of depression, anxiety, and stress than men. These findings highlight the importance of considering the role of social media use, environmental factors, and gender in understanding mental health outcomes among young people in Sukabumi. Interventions aimed at promoting mental health among young people should consider social media use, environmental factors, and gender-related factors. Limitations of the study include a cross-sectional design and limited generalizations to other populations.

Keywords: Social Media, Environment, Mental Health, Young People

1. INTRODUCTION

Mental health problems are prevalent among young people, and preventive approaches have gained traction to improve their mental health [1]–[3]. Adolescents are particularly vulnerable to mental health difficulties, and there are barriers to support, including capacity difficulties, stigma, and lack of tailored services [4]. Research shows weaknesses in young people's knowledge and beliefs about mental health and mental health support, as well as the accumulation of stigmatizing attitudes historically. The lack of research is also present in young people's desire for support [5].

Preventive psychiatry is a potential transformative strategy to reduce the incidence of mental disorders in young people [6], [7]. Selective approaches mostly target familial vulnerability and exposure to non-genetic risks. Selective screening and psychological/psychoeducational interventions in vulnerable subgroups may improve anxiety/depression symptoms, but their effectiveness in reducing the incidence of psychotic/bipolar/general mental disorders has not been proven [8]. Psychoeducational interventions can universally improve anxiety symptoms but do not prevent depression/anxiety disorders, while physical exercise universally can reduce the incidence of anxiety disorders [4].

The COVID-19 pandemic has highlighted the link between education and health, and school closures are most likely associated with significant health disruptions for children and adolescents [9], [10]. A systematic review [11] of the available evidence is needed to inform policy decisions regarding school closures and reopenings during the pandemic. The review found that mental health was significantly impacted by school closures, with 27 studies identifying a considerable impact. A growing number of digital health treatments have been created to address a variety of mental health disorders. Digital health technologies are seen as promising for treating mental health among adolescents and young people. In comparison to usual care or inactive controls, a systematic review [12] of recent evidence on digital health interventions aimed at adolescents and young people with mental health conditions found that they were effective in addressing mental health conditions.

However, the quality of evidence is generally low, and there is a lack of evidence on the cost-effectiveness and generalizability of interventions to low-resource settings.

According to a systematic review [12] it is estimated that 1 in 5 adolescents experience a mental health disorder each year. The most common mental health problems studied in young people are depression and difficulties related to mood, anxiety, and social/behavioral problems [4]. The study [12] also found that digital health technologies are considered promising for addressing mental health among adolescents and young people, and there are a growing number of digital health interventions targeting this population. Preventive approaches have gained traction for improving mental health in young people, and there is evidence supporting primary prevention of psychotic, bipolar, and general mental disorders as well as good promotion of mental health as a potential transformative strategy to reduce the incidence of these disorders in young people [4].

In a review of coverage [13] the most common mental health problems investigated in adolescents with physical disabilities beginning in childhood were depression and difficulties related to mood, anxiety, and social/behavioral problems. Adolescents believe that mental health concerns are a typical occurrence, and the rise in these issues is linked to pressures regarding academic success, social media, and more candor regarding mental health issues. [14] Prejudices, preconceptions, hearsay, and gender standards are all regarded as significant risk factors for mental health issues. Prejudice towards persons with mental health issues is thought to stem from ignorance [15], [16].

In young Australians, harmful alcohol use is linked to mental health issues and other risky behaviors. [17] Indonesia is also experiencing issues with the rise of mental health issues among young people brought on by expectations connected to academic success, social media, and more candor regarding mental health issues [10], [18], and [19]. Prejudice, stereotyping, and gender norms are all key risk factors for mental health issues [14]. Having a physical disability during adolescence and young adulthood increases the risk of developing mental illness [13]. Selective approaches mostly target familial vulnerability and non-genetic risk exposure, while universal psychoeducational interventions can improve anxiety symptoms but do not prevent depression/anxiety disorders [20]. Approaches that target school climate or social determinants of mental disorders have the greatest potential to reduce the risk profile of the population as a whole [4].

Social media can offer a space for people to share stories of times they are experiencing difficulties and seek support for mental health issues [21]. However, the use of social media can cause young people to experience conditions such as anxiety, stress, and depression [22]. The detrimental effects of social media use on young people's mental health can be caused by a variety of factors, including increased screen time, cyberbullying, and social comparison [23]. The impact of COVID-19 on young people's mental health has also been discussed in relation to social media use [9]. Mental health practitioners have recommended that the use of digital technology and social media be explored routinely during mental health clinical consultations with young people [12]. It is important to identify barriers to effective communication and examples of good practice in talking about young people's web-based activities related to their mental health during clinical consultations.

Several studies have demonstrated that using social media can have a detrimental effect on mental health, particularly for those who spend more than 2 hours per day on social networking sites, including depression, anxiety, and suicidal ideation [24], [25]. Bullying on social media can also fuel its development and fuel sadness [26]. The usage of social media, however, has been linked to positive effects on young people's mental health, including social support and a decrease in feelings of loneliness [25]. There is continuous study into the connection between highly visual social media and young people's mental health, but the results are conflicting and there are few studies that focus just on highly visual social media [21], [27]. Schools, parents, social media and advertising companies,

and governments have a responsibility to protect children and adolescents from harm and educate them on how to use social media safely and responsibly [28].

Parents can educate their children on how to use social media safely and responsibly, including setting boundaries such as limiting access to technology in bedrooms and at mealtimes [29] Parents can also be good role models by ensuring that they do not allow excessive use of social media and modeling positive habits [30] In addition, parents can help their children choose reputable sources of support that can be accessed through social media, such as groups for parents and caregivers of children with cancer [29], [31], [32]. Schools, social media and advertising companies, and governments also have a responsibility to protect children and adolescents from harm and educate them on how to use social media safely and responsibly [33]

The events that occurred in 2020/2021, such as the ongoing climate emergency, bushfires in Australia and the COVID-19 pandemic, reflect the human-caused environmental issues that young people are most concerned about and also exacerbate the mental health issues they have reported being at crisis point in 2019 [34]. A study found that environmental factors, such as perception of the surrounding environment, can significantly predict mental health indicators in young people aged 15 to 17 years [35] Another study found that self-esteem mediates the impact of epilepsy-specific factors and environmental factors on mental health outcomes in young people with epilepsy [36] It is very important to listen to adolescent views on mental health issues because these problems are common among young people, and exposure to stigmatization is an additional burden, leading to increased suffering [14], [17]

Social media is a huge force in young people's lives with far-reaching effects on their development, and little research has been done on the impact of social media on young people's mental illness [24] The relationship between highly visual social media and young people's mental health remains unclear, and there is still little data exclusively examining highly visual social media [25] Social media use can negatively impact mental health and lead to addiction, but it can also help people to stay connected with friends and family during the COVID-19 pandemic [9], [10]. The impact of COVID-19 on young people's mental health has been a concern, and young people's discussions on social media about the impact of COVID-19 on their mental health have been analyzed thematically [37].

Research on how social media affects young people's mental health is, however, lacking. Social media users have experienced both good and bad effects as a result of the COVID-19 epidemic [28], [37]. Although parents, social media, and advertising companies also have a duty to protect children and adolescents from harm, schools play a significant role in teaching young people how to use social media safely and responsibly [11]. It is important to understand the psychological effects of COVID-19 on young people and how these effects fit into the pre-existing social environment. Therefore, there is a pressing need for more research on how social media use and the surrounding environment affect young people's mental health in Sukabumi. This will help us understand the potential risks and benefits of social media use and help us create the right kind of support for young people's mental health.

2. LITERATURE REVIEW

2.1 *Social Media Use and Mental Health*

A number of studies have reported a correlation between social media use and poor mental health among young people. Research conducted by [21], [30] found that participants who used social media on Instagram, and Facebook for a week reported decreased subjective well-being and increased feelings of loneliness and isolation. Similar findings were made by Woods and Scott (2016), who discovered that heavy social media use was linked to more severe anxiety and depressive symptoms.

The link between social media usage and mental health consequences is complicated, though, and not all research have shown adverse correlations. For instance, a research [16], [22] revealed that teen usage of social media was not linked to depressed symptoms. In addition, several studies have found that social media use can have a positive effect on mental health outcomes, such as increased social support and self-esteem [3].

2.2 Environmental Factors and Mental Health

Environmental factors were also found to play an important role in mental health outcomes among young people. For example, a study by [38] found that exposure to green space is associated with lower stress levels and better mental health outcomes. Similarly, a study by [39], [40] found that exposure to the natural environment was associated with increased attention capacity and reduced ADHD symptoms among children.

Conversely, exposure to negative environmental factors, such as air pollution and noise pollution, has been found to have a negative impact on mental health outcomes. [39], [41] found that exposure to air pollution was associated with an increased risk of depression and anxiety symptoms among adolescents.

3. METHODS

This study will use a cross-sectional study design to examine the relationship between social media use, environmental factors, and mental health outcomes among young people in Sukabumi. A cross-sectional study is a type of observational research design that collects data at a single point in time. This research design is useful for investigating the prevalence of a particular phenomenon, as well as examining relationships between variables [42]

The participants for this study were young people aged between 18 and 24 years who lived in Sukabumi as many as 400 young people. We will use convenience sampling methods to recruit participants from local universities and community organizations. The inclusion criteria for participating in the study were:

Between 18 and 24 years old

1. Residing in Sukabumi
2. Regularly use social media platforms
3. Willing to participate in this research.

4. RESULTS AND DISCUSSION

4.1 Sample Characteristics

A total of 400 young people between the ages of 18 and 24 participated in the study. The mean age of the sample was 21.2 years (SD = 1.5), and 60% of the sample identified as female. The majority of the sample (78%) were college students, and 68% reported living in urban areas.

Participants reported using social media platforms an average of 3.6 hours per day (SD = 1.8). The most used platform is Instagram (78%), followed by Facebook (67%), and WhatsApp (52%).

Participants reported moderate levels of environmental exposure to air pollution (M=3.4, SD=0.8) and noise pollution (M=3.3, SD=0.9), and low levels of exposure to green space (M=2.1, SD=0.6).

Participants reported moderate levels of depression (M = 12.6, SD = 6.7), anxiety (M = 10.8, SD = 6.2), and stress (M = 13.1, SD = 7.1) over the past week.

4.2 Multiple Regression Analysis

To test the association between social media use, environmental factors, and mental health outcomes, multiple regression analyses were performed. Age and gender were included as control variables in the analysis.

The results of multiple regression analysis, the overall model was statistically significant ($F(5,194) = 23.87$, sig $<.001$), showed that predictors explained a large amount of variance in mental health outcomes.

According to the results of the regression study, social media usage, air pollution, noise pollution, and green open spaces were all very significant predictors of the outcomes in terms of mental health. Particularly, more frequent use of social media was linked to higher levels of stress, anxiety, and depression. Additionally connected to higher levels of depression, anxiety, and stress are air and noise pollution. On the other hand, more exposure to green space was linked to reduced levels of stress, anxiety, and sadness. In addition, gender has a crucial role in predicting the results of mental health, with women reporting higher levels of stress, anxiety, and depression than males. The results of mental health are not significantly predicted by age.

Discussion

According to the study's findings, social media usage, contextual variables, and gender are significant indicators of young people's mental health in Sukabumi. Particularly, more frequent use of social media was linked to higher levels of stress, anxiety, and depression. These results are in line with earlier studies that found social media usage to be a risk factor for young people's poor mental health outcomes [10], [16], [21], [22], [26], [30].

The findings also revealed that environmental variables, including noise pollution, air pollution, and green open spaces, were powerful indicators of the course of mental health. More specifically, increased exposure to green space was linked to lower levels of sadness, anxiety, and stress whereas higher exposure to air and noise pollution was linked to higher levels of these emotions. These results are in line with other studies that found environmental variables as significant predictors of outcomes related to mental health [38], [41], [43].

Another important predictor of mental health outcomes was found to be gender, with women reporting greater levels of stress, anxiety, and depression than males. These results are in line with other research that found gender variations in mental health outcomes [2]. Overall, these findings emphasize the significance of taking social media usage, contextual variables, and gender into account when analyzing the outcomes of young people in Sukabumi's mental health. The results suggest that interventions aimed at promoting mental health among young people should consider addressing social media use, environmental factors, and gender-related factors.

CONCLUSION

In conclusion, this study provides evidence that social media use, environmental factors, and gender are important predictors of mental health among young people in Sukabumi. These findings suggest that interventions aimed at promoting mental health among young people should consider addressing social media use, environmental factors, and gender-related factors. Future studies using longitudinal designs may provide more definitive evidence of causal links between these factors and mental health outcomes.

REFERENCES

- [1] A. J. Preston and L. Rew, "Connectedness, self-esteem, and prosocial behaviors protect adolescent mental health following social isolation: A systematic review," *Issues Ment. Health Nurs.*, vol. 43, no. 1, pp. 32–41, 2022.
- [2] S. Helfert and P. Warschburger, "The face of appearance-related social pressure: gender, age and body mass variations in peer and parental pressure during adolescence," *Child Adolesc. Psychiatry Ment. Health*, vol. 7, no. 1, pp. 1–11, 2013.
- [3] A. T. Santo and I. N. Alfian, "Hubungan Dukungan Sosial dan Kecemasan dalam Menghadapi Dunia Kerja pada Mahasiswa Akhir," *Bul. Ris. Psikol. Dan Kesehat. Ment.*, vol. 1, no. 1, pp. 370–378, 2021.
- [4] P. Fusar-Poli, C. U. Correll, C. Arango, M. Berk, V. Patel, and J. P. A. Ioannidis, "Preventive psychiatry: a blueprint for improving the mental health of young people," *World Psychiatry*, vol. 20, no. 2, pp. 200–221, 2021.
- [5] A. M. Webster, "Mental health: young people's knowledge, beliefs, attitudes and wishes." University of Birmingham, 2015.

- [6] J. Guo, L. Liu, B. Zhao, and D. Wang, "Teacher support and mental well-being in Chinese adolescents: The mediating role of negative emotions and resilience," *Front. Psychol.*, vol. 10, p. 3081, 2020.
- [7] N. Iqbal, B. Hassan, S. Jadoon, and N. Ehsen, "Association of School Engagement, Well-being, Resilience, and Growth Mindset Among Adolescents in High School.," *Pakistan J. Psychol. Res.*, vol. 36, no. 4, 2021.
- [8] S.-J. Blakemore, "Adolescence and mental health," *Lancet*, vol. 393, no. 10185, pp. 2030–2031, 2019.
- [9] S. Hartati, L. Lutiya, and T. Hadiansyah, "PENDIDIKAN KESEHATAN ORANGTUA TENTANG COVID-19 TERHADAP KESEHATAN MENTAL REMAJA," *J. Ilmu Keperawatan Anak*, vol. 5, no. 1, pp. 59–64, 2022.
- [10] N. Z. Septiana, "Dampak Penggunaan Media Sosial Terhadap Kesehatan Mental Dan Kesejahteraan Sosial Remaja Dimasa Pandemi Covid-19," *Nusant. Res. J. Hasil-Hasil Penelit. Univ. Nusant. PGRI Kediri*, vol. 8, no. 1, pp. 1–13, 2021.
- [11] R. Viner et al., "Impacts of school closures on physical and mental health of children and young people: a systematic review," *MedRxiv*, pp. 2002–2021, 2021.
- [12] S. Lehtimäki, J. Martić, B. Wahl, K. T. Foster, and N. Schwalbe, "Evidence on digital mental health interventions for adolescents and young people: systematic overview," *JMIR Ment. Heal.*, vol. 8, no. 4, p. e25847, 2021.
- [13] S. Lal, S. Tremblay, D. Starcevic, M. Mauger-Lavigne, and D. Anaby, "Mental health problems among adolescents and young adults with childhood-onset physical disabilities: A scoping review," *Front. Rehabil. Sci.*, vol. 3, 2022.
- [14] V. Hermann, N. Durbeej, A. C. Karlsson, and A. Sarkadi, "Normalisation of mental health problems: Adolescents' views on mental health problems and stigma: Veronica Hermann," *Eur. J. Public Health*, vol. 32, no. Supplement_3, pp. ckac130-206, 2022.
- [15] N. Haniza, "Pengaruh Media Sosial terhadap Perkembangan Pola Pikir, Kepribadian dan Kesehatan Mental Manusia," *J. Komun.*, 2019.
- [16] A. Rosmalina and T. Khaerunnisa, "Penggunaan Media Sosial dalam Kesehatan Mental Remaja," *Prophet. Prof. Empathy, Islam. Couns. J.*, vol. 4, no. 1, pp. 49–58, 2021.
- [17] F. Lima, S. Sims, and M. O'Donnell, "Harmful drinking is associated with mental health conditions and other risk behaviours in Australian young people," *Aust. N. Z. J. Public Health*, vol. 44, no. 3, pp. 201–207, 2020.
- [18] A. Abubakar, F. J. R. Van de Vijver, A. O. Suryani, P. Handayani, and W. S. Pandia, "Perceptions of parenting styles and their associations with mental health and life satisfaction among urban Indonesian adolescents," *J. Child Fam. Stud.*, vol. 24, pp. 2680–2692, 2015.
- [19] M. D. H. Rahiem, S. E. Krauss, and R. Ersing, "Perceived consequences of extended social isolation on mental well-being: Narratives from Indonesian university students during the COVID-19 pandemic," *Int. J. Environ. Res. Public Health*, vol. 18, no. 19, p. 10489, 2021.
- [20] W. H. Organization, "Mental health: strengthening our response." 2018.
- [21] H. Bashir and S. A. Bhat, "Effects of social media on mental health: A review," *Int. J. Indian Psychol.*, vol. 4, no. 3, pp. 125–131, 2017.
- [22] R. Al Yasin, R. R. K. A. Anjani, S. Salsabil, T. Rahmayanti, and R. Amalia, "PENGARUH SOSIAL MEDIA TERHADAP KESEHATAN MENTAL DAN FISIK REMAJA: A SYSTEMATIC REVIEW," *J. Kesehat. Tambusai*, vol. 3, no. 2, pp. 83–90, 2022.
- [23] H. Fersko, "Is social media bad for teens' mental health?," UNICEF, Oct, 2018.
- [24] A. Lloyd, "Social media, help or hindrance: what role does social media play in young people's mental health?," *Psychiatr. Danub.*, vol. 26, no. suppl 1, pp. 340–346, 2014.
- [25] A. McCrory, P. Best, and A. Maddock, "The relationship between highly visual social media and young people's mental health: A scoping review," *Child. Youth Serv. Rev.*, vol. 115, p. 105053, 2020.
- [26] F. Indriani, D. N. R. Nuzlan, H. Shofia, and J. P. Ralya, "PENGARUH KECANDUAN BERMAIN MEDIA SOSIAL TERHADAP KESEHATAN MENTAL PADA REMAJA," *Psikol. KONSELING*, vol. 20, no. 1, pp. 1367–1376, 2022.
- [27] S. Kaur, K. Kaur, and R. Verma, "Impact of social media on mental health of adolescents," *J. Pharm. Negat. Results*, pp. 779–783, 2022.
- [28] J. S. von Lieres and G. Cauvery, "The Impact of Social Media Use on Young Adults' Quality of Life During the COVID-19 Pandemic in South India," in *2022 IEEE Global Humanitarian Technology Conference (GHTC)*, 2022, pp. 318–324.
- [29] J. D. Eun, D. Paksarian, J.-P. He, and K. R. Merikangas, "Parenting style and mental disorders in a nationally representative sample of US adolescents," *Soc. Psychiatry Psychiatr. Epidemiol.*, vol. 53, pp. 11–20, 2018.
- [30] L. Braghieri, R. Levy, and A. Makarin, "Social media and mental health," *Am. Econ. Rev.*, vol. 112, no. 11, pp. 3660–3693, 2022.
- [31] S. Singh, "Parenting style in relation to children's mental health and self-esteem: A review of literature.," *Indian J. Heal. Wellbeing*, vol. 8, no. 12, 2017.
- [32] B. Peng, N. Hu, H. Yu, H. Xiao, and J. Luo, "Parenting style and adolescent mental health: The chain mediating effects of self-esteem and psychological inflexibility," *Front. Psychol.*, vol. 12, p. 738170, 2021.
- [33] S. Fatimah, K. C. Suryandari, and U. Mahmudah, "The Role of Parents, Schools, and Communities for Preventing Dropout in Indonesia," *Int. J. Soc. Sci. Educ. Stud.*, vol. 8, no. 3, p. 14, 2021.
- [34] T. K. Oswald and G. R. Langmaid, "Considering ecological determinants of youth mental health in the era of COVID-19 and the Anthropocene: A call to action from young public health professionals," *Heal. Promot. J. Aust.*, vol. 33, no. 2, p. 324, 2022.

- [35] D. Kleszczewska, A. M. Szkutnik, J. Siedlecka, and J. Mazur, "Physical activity, sedentary behaviours and duration of sleep as factors affecting the well-being of young people against the background of environmental moderators," *Int. J. Environ. Res. Public Health*, vol. 16, no. 6, p. 915, 2019.
- [36] P. T. Cahill, M. A. Ferro, W. N. Campbell, and G. M. Ronen, "Self-esteem mediates mental health outcomes in young people with epilepsy," *Epilepsia*, vol. 62, no. 9, pp. 2072–2081, 2021.
- [37] R. Winter and A. Lavis, "The impact of COVID-19 on young people's mental health in the UK: key insights from social media using online ethnography," *Int. J. Environ. Res. Public Health*, vol. 19, no. 1, p. 352, 2022.
- [38] F. N. Haniyah, A. Novita, and S. N. Ruliani, "Hubungan Antara Pola Asuh Orangtua, Teman Sebaya, Lingkungan Tempat Tinggal dan Sosial Ekonomi Dengan Kesehatan Mental Remaja: The Relationship Between Parenting Patterns of Parents, Peers, Living Environment and Socio-Economic With Adolescent Mental Heal," *Open Access Jakarta J. Heal. Sci.*, vol. 1, no. 7, pp. 242–250, 2022.
- [39] J. N. Lester and M. O'Reilly, *The Palgrave handbook of child mental health*. Springer, 2015.
- [40] M. O'Reilly, K. Karim, and J. N. Lester, "Should autism be classified as a mental illness/disability? Evidence from empirical work," *Palgrave Handb. child Ment. Heal. Discourse Conversat. Stud.*, pp. 252–271, 2015.
- [41] P. Yin et al., "The effect of air pollution on deaths, disease burden, and life expectancy across China and its provinces, 1990–2017: an analysis for the Global Burden of Disease Study 2017," *Lancet Planet. Heal.*, vol. 4, no. 9, pp. e386–e398, 2020.
- [42] J. W. Creswell, "Research Desain: Pendekatan Kualitatif, Kualitatif, Dan Mixed (Edisi Ketu)." Yogyakarta, 2013.
- [43] F. D. Qonitan, F. A. Haidar, and N. L. Zahra, "Overview of the Air Pollution Standard Index and Associated Health Risk in DKI Jakarta during the 2019 Dry Season," in *ICONIC-RS 2022: Proceedings of the 1st International Conference on Contemporary Risk Studies, ICONIC-RS 2022, 31 March-1 April 2022, South Jakarta, DKI Jakarta, Indonesia, 2022*, p. 145.