

The Relationship Between Social Media Use and Mental Health Among Gen Z Students

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Abstract

Background: High intensity of social media use among Gen Z university students may impact emotional stability, anxiety, depression, and stress levels. Objective: This study aims to investigate the relationship between social media use and mental health among Gen Z students at Universitas Nurul Jadid, Paiton, Probolinggo. Methods: A quantitative cross-sectional design was applied. Participants were selected using simple random sampling between January and March 2026. Data were collected via online questionnaires measuring social media use intensity and mental health outcomes using DASS-21. Data analysis was performed with univariate analysis and the Spearman correlation test. Results: The Spearman correlation coefficient was 0.482, indicating a moderate positive relationship between social media use and mental health issues. Higher social media use intensity is associated with increased symptoms of stress, anxiety, and depression. Conclusion: Excessive social media use among Gen Z students affects mental health, highlighting the need for preventive strategies, digital literacy programs, and targeted psychological interventions.

Key words: Social media, Mental health, Gen Z students.

Introduction

The rapid development of digital technology has fundamentally transformed how adolescents and young adults communicate and socialize (Alatoum & Sobuh, 2026). Among Gen Z students, social media platforms such as Instagram, TikTok, and WhatsApp have become integral to daily life, providing opportunities for interaction, entertainment, and information exchange. While these platforms can strengthen social connectivity and emotional support, emerging evidence suggests that excessive use may adversely affect mental health, including symptoms of anxiety, depression, and stress (Rajaei & Abraham, 2025).

Previous studies indicate that high social media engagement can lead to cognitive and emotional overload, disrupted sleep patterns, and reduced academic performance. Adolescents who frequently engage in online interactions are more susceptible to emotional dependency and social comparison, which may exacerbate psychological distress (Marano et al., 2025). The intensity, frequency, and type of social media use are therefore critical factors that may influence mental health outcomes (Ulvi et al., 2022).

Despite extensive research globally, there is limited context-specific evidence regarding the relationship between social media use and mental health among Indonesian

university students, particularly in smaller campuses such as Universitas Nurul Jadid, Paiton, Probolinggo. Considering cultural, academic, and social differences, localized studies are essential to provide actionable insights for mental health interventions tailored to the needs of Gen Z students in Indonesia.

Understanding this relationship is crucial because mental health problems during university years can affect multiple aspects of students' lives, including academic achievement, social interactions, and personal development. By identifying patterns of social media use that are associated with adverse mental health outcomes, stakeholders such as educators, counselors, and policymakers can implement preventive strategies and guidance to promote balanced digital engagement (La-rosa-longobardi & Gallegos-espinoza, 2024).

Therefore, this study aims to investigate the relationship between social media use intensity and mental health outcomes among Gen Z university students at Universitas Nurul Jadid, Paiton, Probolinggo. Specifically, it examines how the frequency and duration of social media engagement correlate with symptoms of stress, anxiety, and depression, providing evidence to support targeted interventions for improving student well-being.

Methods

Study Design and Population

A quantitative cross-sectional study was conducted among undergraduate students aged 18–22 years at Universitas Nurul Jadid, Paiton, Probolinggo. A total of 110 participants were selected using simple random sampling. The independent variable is Social media use intensity, measured by frequency, duration, and perceived engagement using a structured questionnaire. The dependent variable is Mental health outcomes, including stress, anxiety, and depression, measured using the DASS-21 scale.

Data Collection

Data were collected online from January to March 2026. Before completing the questionnaire, all participants were informed about the purpose of the study and were asked to provide consent as a form of willingness to participate.

Data Analysis

Descriptive statistics summarized demographic characteristics, social media use, and mental health outcomes. Spearman correlation analysis tested the relationship between social media use intensity and mental health. Statistical significance was set at p value < 0.05 .

Results

Distribution of Social Media Use

To examine the social media engagement of Gen Z students at Universitas Nurul Jadid, the respondents' usage intensity was categorized into high, moderate, and low levels. Table 1 presents the distribution of social media use intensity among the participants.

Table 1. Distribution of Social Media Use Intensity among Gen Z Students

Social Media Use Category		
	N	%
High	65	59,1
Moderate	35	31,8
Low	10	9,1
Total	110	100

The data indicate that most students (59.1%) engage in social media at high intensity, while a smaller proportion use it moderately (31.8%) or at low intensity (9.1%). This demonstrates that frequent and prolonged social media use is common among Gen Z students in this context, which may have implications for their mental health outcomes.

Distribution of Mental Health Outcomes

The mental health status of students was measured using the DASS-21 scale, categorizing outcomes as normal, mild distress, moderate distress, or severe distress. Table 2 summarizes the distribution of mental health outcomes.

Table 2. Distribution of Mental Health Outcomes (DASS-21) among Gen Z Students

Mental Health Category	N	%
Normal	22	20
Mild distress	48	43.6
Moderate distress	32	29.1
Severe distress	8	7.3
Total	110	100

A considerable proportion of students (43.6% mild distress; 29.1% moderate distress) experience mental health challenges, highlighting the prevalence of stress, anxiety, and depression symptoms in this population. Only 20% of respondents exhibited normal mental health, suggesting that mental well-being concerns are widespread among these students.

Correlation between Social Media Use and Mental Health

The relationship between social media use intensity and mental health outcomes was analyzed using Spearman correlation. Table 3 shows the correlation coefficient and p-value.

Table 3. Spearman Correlation between Social Media Use Intensity and Mental Health Outcomes

Variables	Spearman's r	p-value (Sig. 2-tailed)	Interpretation
Social Media Use X Mental Health Distress	0.482	0.000	Positive correlation

The Spearman correlation coefficient of 0.482 shows that the relationship between social media use and mental health outcomes is moderate and positive. In other words, the higher the intensity of social media use, the greater the likelihood of experiencing symptoms of stress, anxiety, and depression. The p-value of 0.000 (< 0.05) confirms that this correlation is statistically significant, supporting the hypothesis that higher social media engagement is associated with poorer mental health among Gen Z students.

Discussion

The findings of this study show that most Gen Z students at Universitas Nurul Jadid had a high intensity of social media use. A total of 65 respondents, or 59.1%, were classified as having high social media use, while 35 respondents, or 31.8%, were in the moderate category, and only 10 respondents, or 9.1%, were in the low category. This finding indicates that social media has become an important part of Gen Z students' daily lives. As explained by Farhi et al., (2025), this condition is understandable because this generation has grown up in a digital environment where access to information, communication, entertainment, and social interaction takes place rapidly through various social media platforms.

The high intensity of social media use among students may have both positive and negative effects. On the one hand, social media can serve as a medium for communication, self-expression, social networking, and access to academic and non-academic information (Alhajjaj, Shredam, Al-halalat, & Tarawneh, 2025). On the other hand, excessive use may increase the risk of psychological problems, particularly when students are frequently exposed to negative information, engage in social comparison, feel pressured to remain constantly active online, or become dependent on social validation through comments, likes, and other forms of digital interaction (Alhajjaj et al., 2025). This suggests that the intensity of social

media use should be considered an important factor in efforts to maintain students' mental health.

The results also show that most respondents experienced mental health problems at varying levels. A total of 48 respondents, or 43.6%, were categorized as having mild distress, 32 respondents, or 29.1%, had moderate distress, and 8 respondents, or 7.3%, had severe distress. Meanwhile, only 22 respondents, or 20%, were in the normal category. These data indicate that most students experienced symptoms of psychological distress, including stress, anxiety, and depression. This condition highlights that students' mental health is an important issue that requires attention from the university environment, families, and related stakeholders.

The high proportion of students experiencing mild and moderate distress may be associated with several factors, such as academic pressure, social demands, changes in communication patterns, and intensive social media use. Students who spend long periods using social media may experience mental fatigue due to continuous exposure to information. In addition, the habit of accessing social media at night may disrupt sleep quality, which can eventually affect emotional condition and learning concentration (Saura, Gelashvili, Gabriel, & Navalón, 2025). Therefore, social media does not only function as a medium for entertainment or communication, but may also contribute to psychological distress when it is not used in a balanced way.

The Spearman correlation test showed a correlation coefficient of 0.482 with a significance value of 0.000. This result indicates a moderate positive relationship between the intensity of social media use and mental health problems. In other words, the higher the intensity of social media use, the greater the tendency for students to experience symptoms of stress, anxiety, and depression. The significance value of less than 0.05 indicates that this relationship is statistically significant. Thus, the findings of this study support the view that high social media use is associated with an increased risk of mental health problems among Gen Z students.

The positive relationship between social media use and mental health can be explained through several mechanisms (Voggenreiter, Brandt, Putterer, Frings, & Pfeffer, 2024). First, excessive social media use may increase social comparison, in which students compare their lives with the achievements, appearance, or lifestyles of others displayed on social media (Opoku, Donkor, Yeboah, & Quagraine, 2025). Second, social media may trigger fear of missing out, which refers to the feeling of being left behind from certain information or social activities (Servidio, Soraci, Griffiths, Boca, & Demetrovics, 2024). Third, excessive exposure to online

content may lead to cognitive and emotional fatigue (Sheng, Yang, Han, & Jou, 2023). Fourth, unhealthy digital interactions, such as negative comments, online conflict, or social pressure, may worsen students' psychological condition (Adedia et al., 2026).

Although the results show a significant relationship, this study cannot establish a causal relationship because it used a cross-sectional design. This means that the study only describes the relationship between social media use intensity and mental health at a specific point in time. Therefore, it cannot be determined whether high social media use causes mental health problems, or whether students with certain psychological conditions tend to use social media more frequently as a form of escape, entertainment, or social support seeking.

These findings have important implications for higher education institutions. Universities need to develop digital literacy programs that not only focus on the ability to use technology, but also on managing social media use, selecting information wisely, maintaining ethical digital communication, and recognizing the psychological effects of online activities. In addition, student counseling services should be strengthened so that students experiencing symptoms of stress, anxiety, or depression can receive appropriate support. Education on healthy social media use is also important and can be delivered through seminars, mental health campaigns, or integration into student activities (Liang, Chen, Hong, Li, & Han, 2025).

The findings of this study indicate that high-intensity social media use is associated with increased mental health problems among Gen Z students. Therefore, promotive and preventive efforts are needed to encourage wise, balanced, and productive use of social media. Future studies are recommended to use longitudinal designs or mixed-method approaches to further explore causal relationships, mediating factors, and students' subjective experiences in using social media and dealing with mental health problems.

Conclusion

High-intensity social media use among Gen Z students at Universitas Nurul Jadid is positively correlated with mental health challenges, including stress, anxiety, and depression. Preventive strategies, digital literacy education, and targeted psychological interventions are essential to support student well-being.

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