



Cyberbullying Patterns Psychological Impacts and Coping Strategies on Social Media among Adolescents

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ARTICLE INFO	ABSTRACT
<p>Keywords:</p> <p>Digital Security Awareness Generation Z Mental Health Self-Regulation Cyber Risks</p>	<p>Background/Context: The rapid expansion of social media has transformed patterns of interaction among adolescents, creating opportunities for communication but also posing serious challenges such as cyberbullying. This phenomenon has become a significant concern due to its potential to harm victims' self-confidence, social relationships, academic performance, and mental health.</p> <p>Objective/Purpose: This study aims to analyze patterns, impacts, preventive efforts, and personal attitudes toward cyberbullying on social media, as perceived by adolescents.</p> <p>Method: A quantitative descriptive approach with a cross-sectional design was employed. Data were collected from 71 respondents through a Likert-scale questionnaire covering four aspects: cyberbullying patterns, impacts, preventive measures, and personal attitudes.</p> <p>Results: The findings indicate that respondents strongly acknowledged the presence of cyberbullying patterns on social media, recognized its negative impacts on victims, emphasized the importance of preventive measures, and expressed firm personal attitudes against such behavior. The responses consistently reflected a shared recognition that cyberbullying is a serious issue in digital interactions.</p> <p>Conclusion: The study concludes that cyberbullying is a pervasive problem in adolescent social media use, requiring structured prevention strategies, legal reinforcement, digital literacy education, and collective participation. Collaborative efforts among individuals, communities, educators, and technology platforms are crucial to create safer and healthier online environments for young people.</p>
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INTRODUCTION

The development of information technology, particularly in communication media, has enabled humans to access and view the world digitally. Various daily activities can now be conducted via the internet and social media, allowing individuals to share and exchange information more easily (Ananda & Marno, 2023). Social media has a significant influence on people's lives, both positive and negative. In the digital age, social media has removed traditional boundaries in socializing, allowing people to communicate without the constraints of time and space (Hidajat et al., 2015). However, despite these benefits, technology and social media also have significant negative impacts, particularly related to bullying behavior that impacts the self-confidence of elementary school students. Children today are increasingly able to connect with others through platforms like Facebook, Instagram, and Twitter, ultimately increasing the risk of cyberbullying (Wijayati et al., 2024). Cyberbullying is defined as bullying carried out via digital media or the internet, where individuals or groups carry out actions that demean or hurt other people (Marlef et al., 2024). Numerous studies show that cyberbullying not only

threatens children's psychological health, but also has long-term impacts on their academic and social development.

Bullying is not simply a passive act experienced only by the victim, but rather a process that also involves the active participation of the perpetrator, witnesses, and the surrounding community. According to several studies, a deeper understanding of bullying requires the active participation of all parties (Alotaibi & Mukred, 2022), similar to the educational concept that encourages students to think critically, ask questions, and be actively involved in learning. In the context of social media, the phenomenon of group behavior often arises when a number of individuals band together to target one or more victims, a condition that psychologists believe can give the perpetrator a sense of power and provide a false sense of security through the anonymity of cyberspace (Sekarayu & Santoso, 2022), (Anisa & Ikawati, 2020). The impact of cyberbullying, as shown in various studies, is not only hurtful, but can also have serious implications for psychological health, including anxiety, depression, and long-term trauma (Muzdalifah & Deasyanti, 2020), (Prayuni et al., 2024). Therefore, prevention and intervention strategies that involve the wider community are considered important to protect victims and reduce the rate of digital bullying.

A number of previous studies have revealed that the development of information technology and social media has had a significant impact on social behavior, including the emergence of the phenomenon of cyberbullying which affects the psychological health and self-confidence of elementary school students (DePaolis & Williford, 2019), (Lee et al., 2022), (Touloupis & Athanasiades, 2022). However, existing studies generally focus on the direct impact of cyberbullying on the psychological or academic well-being of victims, without linking it to the broader role of the digital environment, such as group interaction patterns on social media that provide a sense of power and anonymity for perpetrators. Furthermore, although prevention strategies have been widely discussed, there is still a lack of research that integrates character education and digital literacy perspectives as a comprehensive approach to suppressing online bullying behavior. Thus, there is a research gap to explore how social media interactions, character values, and digital literacy-based intervention strategies can play a role in building student resilience while reducing the rate of cyberbullying among school-age children.

The purpose of this study is to analyze how psychological factors and digital awareness influence college students' vulnerability to cyberbullying practices, as well as its impact on their mental health and social interactions. Furthermore, this study also seeks to explore the application of self-regulation theory in helping college students manage their social media use more effectively and responsibly. The results are expected to provide practical contributions to the development of prevention and intervention strategies on campus, as well as serve as a basis for educators and policymakers to strengthen the role of higher education in building college students' digital awareness.

METHOD

This study used a quantitative descriptive approach with a cross-sectional design to examine the phenomenon of cyberbullying among adolescents (Abduh et al., 2023; Creswell & Creswell, 2018). The research subjects consisted of 71 respondents selected through the distribution of a questionnaire. The instrument used was a Likert-scale questionnaire ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), which was distributed to individuals with experience or insights related to cyberbullying. The questionnaire was developed based on a literature review and validated by experts to ensure the appropriateness of the indicators with the research variables (Sarstedt et al., 2021). This questionnaire was compiled based on a literature review and has undergone content validation by experts to ensure the suitability of the indicators with the research variables.

The collected data was then analyzed using Jamovi software. The analysis phase included data cleaning, descriptive analysis to calculate averages and percentages, and data visualization in tables and graphs (Martias, 2021; Rifka Agustianti et al., 2022). Inferential analysis was also conducted to examine

the influence of digital security awareness and psychological factors on digital technology use. Google Forms facilitated instrument distribution and data collection, while Jamovi was chosen because it supports transparent statistical analysis, allowing for verification and replication of research results in subsequent studies.

Table 1. Research instrument

No	Aspect/Sub-Factor	Statement	Reference
1	Aspects of Cyberbullying Patterns on Social Media	APC1	(Alotaibi & Mukred, 2022)
		APC2	
		APC3	
		APC4	
		APC5	
2	Aspects of the Impact of Cyberbullying on Social Media	ADC1	(Alotaibi & Mukred, 2022)
		ADC2	
		ADC3	
		ADC4	
		ADC5	
3	Aspects of Cyberbullying Prevention on Social Media	APGC1	(Alotaibi & Mukred, 2022)
		APGC2	
		APGC3	
		APGC4	
		APGC5	
4	Aspects of Personal Attitudes toward Cyberbullying on Social Media	ASPC1	(Alotaibi & Mukred, 2022)
		ASPC2	
		ASPC3	
		ASPC4	

The APC aspect focused on patterns of cyberbullying, such as spreading rumors, sending offensive messages, creating fake accounts, and sharing embarrassing content. The ADC aspect emphasized its impacts, including loss of confidence, emotional stress, social isolation, and academic decline. The APGC aspect highlighted prevention efforts, such as privacy settings, reporting abuse, blocking offenders, and promoting awareness. Finally, the ASPC aspect reflected personal attitudes, including rejecting harassment, supporting victims, encouraging respect, and fostering empathy. These statements were adapted from previous research, ensuring their relevance to adolescent social media use.

RESULTS AND DISCUSSION

Based on the questionnaire distribution, most respondents were 19 years old (nearly 40 individuals), followed by 20 years old. Other age groups contributed smaller proportions, with ages above 22 declining sharply and forming the minority (Isma et al., 2024).

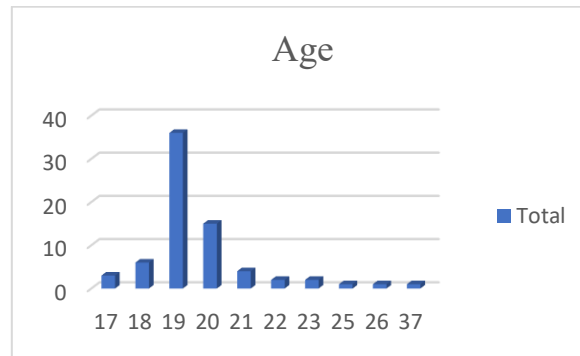


Figure 1. Distribution of Respondents by Age

Based on the data obtained, the majority of the population was in the 19-year-old age group, with nearly 40 individuals, making it the largest group. The 20-year-old group ranked second with a relatively significant number, while the 17, 18, and 21-year-old groups contributed less to the total population. Meanwhile, the age groups above 22 up to 37 years showed a sharp decline, classifying them as a minority.

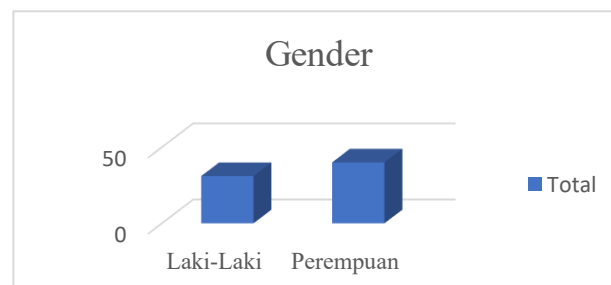


Figure 2. Distribution of Respondents by Gender

The data show that there were about 35 males and 40 females, indicating a slight female majority with a difference of five individuals. This distribution provides insight into the gender composition of the population, which may be relevant for understanding certain patterns or characteristics in the study (Isma et al., 2024).

This study employed descriptive analysis to describe quantitative data obtained from a questionnaire regarding students' perceptions of digital security. Three variables measured in this study were personal data protection, secure relationships, and safe internet use. Irrelevant data were removed, and responses were coded into numbers. Jamovi was used to analyze the mean, median, mode, total, and maximum and minimum values. The results of the analysis were presented in tables and graphs to facilitate visualization of data distribution and interpretation of relationships between variables. The table below presents descriptive data that illustrates various aspects or factors relevant to this study. This data provides an overview of the characteristics of the variables studied, including distribution, central tendency (mean, median, mode), and variability (minimum and maximum). Thus, this table serves as a basis for a deeper understanding of the patterns and relationships between the variables in the study.

	APC	ADC	APG	ASPC
N	71	71	71	71
Missing	0	0	0	0
Mean	4.28	4.41	4.48	4.36
Median	4.20	4.60	4.80	4.40
Mode	5.00	5.00	5.00	5.00

Sum	304	313	318	310
Standard deviation	0.582	0.728	0.715	0.701
Variance	0.339	0.530	0.512	0.491
Minimum	2.60	4.00	4.00	4.00
Maximum	2.40	1.00	1.00	1.00

Figure 3. Descriptive Data Analysis Results

Descriptive analysis shows that the mean values for cyberbullying patterns ranged from 4.17 to 4.48, with an overall mean of 4.28. The highest score was on APC2 (4.48), indicating that cyberbullying most frequently occurs on popular platforms such as Instagram, Twitter, and Facebook. Another important finding was verbal insults or harassment (APC5) with a mean of 4.20, confirming that most respondents acknowledge this pattern. These findings are consistent with (Hidajat et al., 2015b), who identified social media as the primary space for cyberbullying because of its openness and anonymity. Similarly (Ananda & Marno, 2023a) reported that perpetrators often exploit fake accounts or humor, such as memes, to disguise hate speech. This implies that cyberbullying patterns are diverse but largely concentrated on mainstream platforms, often masked by anonymity and disguised as humorous content.

The overall mean score for the impact of cyberbullying was 4.41, with median and mode values of 5, suggesting that most respondents strongly agreed with the negative impacts. The highest mean score was on ADC1 (4.61), reflecting significant effects on victims' mental health. Other impacts included feelings of fear (4.37), loss of self-confidence (4.48), decreased academic/professional performance (4.30), and long-term psychological harm (4.31). This result aligns (Kurniasari et al., 2021), who demonstrated a strong link between cyberbullying and adolescent depression and anxiety. Cyberbullying significantly affects academic outcomes and psychosocial well-being (Patchin & Hinduja, 2018). Thus, cyberbullying on social media generates profound and widespread negative impacts on victims' psychological, social, and academic lives.

Descriptive analysis indicates an overall mean of 4.48, with the highest score on APGC1 (4.59) related to education about the impacts of cyberbullying. Other efforts such as content filtering (4.52) and awareness campaigns (4.49) also received high agreement. Median and mode values were consistently 5, showing strong support from respondents. These findings are supported by Ybarra & Mitchell (Ybarra & Mitchell, 2014), who emphasized the importance of digital literacy and public awareness campaigns to reduce cyberbullying. Willard, also highlighted the role of platforms in providing blocking and reporting features (Willard, 2012). Therefore, prevention requires collaboration between users, communities, and social media platforms to establish safer digital environments.

The mean score for personal attitudes was 4.36, with the highest scores on ASPC5 (4.51), referring to legal sanctions, and ASPC3 (4.48), reflecting responsibility for maintaining ethical communication. Median and mode values of 5 indicate strong respondent support. This finding resonates with Willard (2012), who argued that laws and ethical norms are essential to address cyberbullying effectively. (Patchin & Hinduja, 2018) also stressed the importance of individual involvement in rejecting and reporting cyberbullying. Hence, individual awareness and proactive attitudes are critical in fostering healthy digital communication and reducing cyberbullying behavior.

CONCLUSIONS

This study highlights the crucial role of collaboration among communities, educational institutions, and technology platforms in addressing modern social issues, particularly within education

and digital interactions. The findings reveal a high level of awareness among respondents regarding both individual and collective responsibility in maintaining ethics and safety on social media. A proactive, data-driven approach has been shown to enhance the effectiveness of prevention and intervention, supported by digital education, strict regulations, advanced technologies for filtering harmful content, and community participation in reporting violations. Furthermore, continuous research is essential to develop innovative strategies, including technology-based education, fostering a sustainable synergy that promotes a healthy, inclusive, and just social environment.

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