CYBERBULLYING IN SCHOOLS: PREVENTION AND INTERVENTION STRATEGIES IN THE DIGITAL AGE

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Abstract
Cyberbullying is one of the main challenges in schools in the digital age, where technological advances and the widespread use of social media have expanded the space for bullying among students. This phenomenon has a significant impact on students' mental health, academic achievement, and social well-being, with victims often experiencing psychological distress, anxiety, and even depression. This study uses a literature review method to identify forms of cyberbullying, its causes, and analyse effective prevention and intervention strategies in schools. The findings indicate that prevention efforts can be implemented through digital literacy education, character building, parental involvement, and the creation of a safe and inclusive school culture. Meanwhile, effective interventions involve psychological support, counselling services, and collaboration between schools, families, and digital platforms. With integrated and collaborative strategies, it is hoped that cases of cyberbullying in schools can be minimised, thereby creating a healthy learning environment that supports the optimal development of students in the digital era.
Keywords: Cyberbullying, School, Prevention Strategies, Intervention in the Digital Era

Introduction

Cyberbullying is now one of the most serious problems in educational environments, especially in schools. Cyberbullying is the intentional and repeated act of bullying or violence carried out through digital media, such as social media, messaging apps, or other online platforms, with the aim of hurting, humiliating, or intimidating the victim, who is often unable to defend themselves (Imani et al., 2022). This phenomenon has emerged alongside the rapid development of information and communication technology, which has led to an increase in social interactions among teenagers in the

virtual world. The widespread use of social media among students has opened up opportunities for negative behaviour, one of which is cyberbullying (Campbell, 2022).

According to the Indonesian Internet Service Providers Association (APJII), the number of internet users in Indonesia continues to increase every year, reaching 171.17 million people or approximately 64.8% of the total population in 2018. Children and adolescents are the most active users of the internet and social media, making them the most vulnerable group to become victims or perpetrators of cyberbullying (Dredge, 2022).

Data from the Indonesian Child Protection Commission (KPAI) shows an increasing trend in cyberbullying cases in Indonesia from year to year. In 2016, there were 45 cases, increasing to 100 cases in 2017, and surging to 209 cases in 2018. Furthermore, a survey conducted by UNICEF and the Ministry of Women's Empowerment and Child Protection in 2020 revealed that 15% of boys and 17% of girls in Indonesia have experienced bullying, either verbally, physically, or through social media (Kowalski, 2021).

Other research reveals that the prevalence of cyberbullying in Indonesia is quite high, reaching 69.64% among adolescents. Cyberbullying most often occurs through social media platforms such as Facebook, WhatsApp, and Instagram, where perpetrators can easily spread abusive words, hack accounts, and humiliate victims by sharing photos or personal information (Humaira & Zalikha, 2023).

The factors influencing cyberbullying among students are diverse. Internal factors such as low empathy, low self-esteem, and previous experiences of being bullied can increase the risk of someone becoming a perpetrator. External factors include inappropriate parenting, minimal supervision, and a social environment that is permissive towards bullying behaviour (Kowalski, 2021).

The impacts of cyberbullying are far-reaching and serious, not only for the victims but also for the perpetrators and bystanders. Victims of cyberbullying often experience a decline in self-confidence, academic performance, depression, anxiety, and in extreme cases, suicidal thoughts. Perpetrators themselves tend to become impulsive individuals with low empathy and are often shunned by their social environment (Kowalski & Limber, 2022).

This phenomenon also raises concerns among educators and parents, as cyberbullying is difficult to detect directly and often occurs outside the supervision of schools or families. Many cases of cyberbullying go unreported because victims feel ashamed, afraid, or lack the confidence to seek help. This leads to cyberbullying issues often persisting without adequate intervention (Cassidy, 2021).

Efforts to prevent and intervene in cyberbullying in schools still face various challenges. Consultations with guidance counsellors have not been fully effective, and school policies often fail to provide optimal protection for victims. Therefore, comprehensive and collaborative strategies between schools, families, and

communities are needed to prevent and address cyberbullying cases effectively (Suryani, 2024).

Prevention strategies can be implemented through digital literacy education, character building, and the development of strict school policies against all forms of bullying. In addition, interventions involving counsellors, psychologists, and relevant parties are crucial to restore the psychological condition of victims and deter perpetrators (Anas et al., 2023).

Thus, this literature review aims to identify various prevention and intervention strategies that have been implemented and analyse their effectiveness in the context of schools in Indonesia. By understanding the causes, impacts, and efforts that have been made, it is hoped that this study can provide applicable recommendations for schools, teachers, and parents in creating a safe and cyberbullying-free learning environment. The importance of this research is also based on the need to strengthen the role of schools as the primary protectors of students from all forms of violence, both physical and virtual. Schools need to establish an easily accessible reporting system, foster a culture of mutual respect, and enhance students' digital skills so they can use technology wisely and responsibly.

Research Method

The research methodology employed in this study is a qualitative approach using library research, which involves collecting and analysing data from various scientific literature sources such as books, articles, journals, and relevant documents discussing cyberbullying in schools, prevention strategies, and interventions in the digital age; the data obtained is then analysed descriptively to provide a comprehensive overview of the phenomenon and solutions that have been proposed or implemented based on previous findings.

Results and Discussion
The Phenomenon of Cyberbullying in Schools

The phenomenon of cyberbullying in schools is becoming increasingly concerning with the rapid development of digital technology and the use of social media among students. Easy and widespread access to the internet has made students more active in interacting in the virtual world, but on the other hand, it has also opened up opportunities for negative behaviour such as cyberbullying.

Cyberbullying in schools generally occurs through social media, chat applications, and online gaming platforms, with social media being the most widely used platform for this behaviour (Espelage, 2021). Forms of cyberbullying commonly found in schools include defamation, verbal abuse, negative comments on social media, exposing embarrassing information, and stalking in the virtual world.

Students can be victims or perpetrators, and in some cases, an individual may experience both roles alternately. This phenomenon is not limited to secondary schools but also occurs at primary and upper secondary levels, indicating that cyberbullying has become a cross-level issue in education (Smith, 2022).

Data from the Center for Digital Society's 2021 research shows that 45.35% of junior high and senior high school students have been victims of cyberbullying, while 38.41% have been perpetrators. A 2022 UNICEF report also revealed that 45% of children in Indonesia have experienced cyberbullying.

These figures confirm that cyberbullying is not a rare phenomenon, but rather a widespread social problem in schools (Humaira & Zalikha, 2023). Cyberbullying in schools can take many forms, ranging from insults, spreading rumours, threats, to online harassment. This behaviour is often carried out anonymously, allowing perpetrators to feel more at liberty to hurt their victims without fear of being identified. In addition, the speed at which information spreads in the virtual world makes the impact of cyberbullying even more widespread and difficult to control (Smith, 2022). The impact of cyberbullying is very serious, especially for victims. Victims of cyberbullying at school can experience psychological disorders such as depression, anxiety, severe stress, and loss of self-confidence. It is not uncommon for victims to feel afraid to come to school, become antisocial, and in extreme cases, even want to end their lives. This condition certainly greatly disrupts children's learning and social development (Bauman, 2021). The academic impact of cyberbullying is also no less important.

Many victims experience a decline in academic performance, difficulty concentrating, and a loss of interest in school activities or extracurriculars. The victim's social circle also tends to shrink, as negative news or rumours spread quickly online, influencing their peers' perceptions. As a result, victims feel increasingly isolated and lose social support (Salmivalli, 2022).

This phenomenon also indicates that students' awareness of the dangers of cyberbullying still needs to be improved. Although some students are aware of cyberbullying incidents around them, many believe its impact is smaller compared to traditional bullying. This perception leads to many cyberbullying cases not being reported or taken seriously, allowing perpetrators to feel free to repeat their actions (Humaira & Zalikha, 2023).

The causes of cyberbullying in schools are diverse, ranging from suboptimal parenting, lack of supervision, to a digital culture that is permissive of aggressive behaviour in the virtual world. In addition, the lack of education on digital ethics and responsible use of social media also exacerbates this phenomenon (Santoso, 2022).

Efforts to prevent and address cyberbullying in schools still face various obstacles. Many schools do not have specific policies or programmes to handle cyberbullying cases, leaving victims often without adequate protection or support. Teachers and parents also lack a full understanding of how to detect and address

cyberbullying cases. Some schools have begun to innovate by providing education on the dangers of cyberbullying and strategies for dealing with it through various media, such as educational videos and seminars. These efforts are expected to increase students' understanding and awareness, so that they are more vigilant and able to protect themselves from the threat of cyberbullying (Cross, 2022).

The phenomenon of cyberbullying in schools requires collaboration between schools, families, and the community to create a safe and inclusive learning environment. Effective prevention and intervention must be carried out continuously, involving all components of education and utilising technology wisely. Thus, it is hoped that cases of cyberbullying in schools can be minimised and students can learn and develop in a healthy and supportive environment.

Effective Prevention and Intervention Strategies in the Digital Age

Prevention and intervention strategies for cyberbullying in the digital age require a comprehensive, collaborative, and adaptive approach to technological developments. The phenomenon of cyberbullying in schools not only affects the mental health of victims but also disrupts the learning process and social climate in educational environments.

Therefore, various strategies have been developed to prevent and address cyberbullying cases effectively (Ortega-Ruiz, 2021). An important first step is early digital literacy education.

Digital literacy not only teaches technical skills in using devices but also instils internet ethics, understanding of privacy, and how to report and avoid inappropriate content. With digital literacy, students will be better equipped to recognise the risks and consequences of unethical online behaviour and develop responsible attitudes when interacting in the digital world (Williford, 2022).

In addition to education, strengthening social and emotional skills is also key to preventing cyberbullying. Character development programmes, empathy training, self-control, and effective communication can help students build resilience and the ability to cope with social pressure in the digital environment. These skills are important so that students are not easily provoked and are able to build healthy relationships with their peers (Navarro, 2021).

Creating a safe and inclusive school culture is the next strategy. Schools need to establish an environment that rejects all forms of bullying, both physical and digital. Anti-cyberbullying policies must be consistently enforced, accompanied by clear reporting channels and protection for victims. Extracurricular activities, mentoring, and anti-bullying programmes can strengthen solidarity and care among students (Lee, 2021).

The active role of parents is also crucial in preventing cyberbullying. Parents should monitor their children's online activities, teach digital ethics, and establish open

communication so that children feel comfortable sharing negative experiences online. Collaboration between parents and schools can strengthen supervision and protection for children (Livingstone, 2022).

Cooperation with digital platforms and technology companies is an important part of prevention strategies. Social media platforms need to provide easily accessible reporting features, automatic detection systems for problematic content, and strict policies against cyberbullies. This collaboration can speed up case handling and deter perpetrators (Sari, 2021).

The use of technology can also support prevention and intervention efforts. Monitoring software, content filters, and anti-bullying apps can help parents and schools monitor students' digital activities. Additionally, artificial intelligence and machine learning technologies can be used to detect communication patterns that may lead to cyberbullying at an earlier stage (Hinduja & Patchin, 2024).

Effective intervention strategies must involve psychological support for victims and perpetrators. Counselling, therapy, and peer support groups can help victims recover from trauma and rebuild their self-confidence. For perpetrators, psychological intervention aims to change behaviour and increase empathy, thereby preventing the recurrence of similar actions (Mishna, 2021).

Schools can collaborate with psychologists, counsellors, and digital security experts to design comprehensive intervention programmes. The role of counsellors is crucial in accompanying victims, educating perpetrators, and facilitating mediation between the parties involved (Bauman, 2021).

Local wisdom-based approaches have also proven effective in building character and strengthening students' cultural identity. Integrating cultural and religious values into the curriculum, religious activities, and extracurricular activities can increase students' awareness and understanding of the importance of mutual respect and maintaining ethics in interactions, both in person and online (Wright, 2022).

In addition to efforts at the school and family levels, community involvement is essential. Communities can organise awareness campaigns, discussion forums, and training on digital safety. By building a strong support network, communities can create an inclusive and supportive environment for both victims and perpetrators of cyberbullying (Hinduja & Patchin, 2024).

Evaluation and monitoring of prevention and intervention programmes must be conducted regularly. Anonymous surveys, incident data analysis, and feedback from students, teachers, and parents can be used to assess the effectiveness of programmes and make necessary adjustments (Agrawal & Mishra, 2023).

Law enforcement is also an important part of intervention strategies, especially for severe cases of cyberbullying. Schools and families must understand when to involve authorities, such as the police or child protection agencies, to provide legal protection for victims and take firm action against perpetrators (Slonje & Smith, 2022).

Ultimately, cyberbullying prevention and intervention strategies in the digital age must be holistic, involve all stakeholders, and be able to adapt to technological developments. Synergy between education, character building, school policies, parental roles, psychological support, and the use of technology will create a safer and healthier digital ecosystem for children and adolescents.

Therefore, effective prevention and intervention efforts against cyberbullying in the digital age require cross-sectoral collaboration, technology-based innovation, and a shared commitment to building a positive digital culture. With an integrated strategy, it is hoped that cases of cyberbullying in schools can be minimised, and a safe, inclusive, and supportive learning environment that fosters optimal student development can be realised.

Conclusion

Cyberbullying in schools is a major challenge in the digital age that has serious impacts on students' mental, social, and academic health and damages the overall school climate. This phenomenon is becoming increasingly prevalent with the ease of access to technology and social media, where perpetrators can easily engage in anonymous and widespread bullying.

Therefore, addressing cyberbullying requires collaboration among all parties in the educational environment, including students, teachers, school staff, and parents, with the support of clear policies and procedures as well as ongoing education. Effective prevention and intervention strategies in the digital age include early digital literacy education, training in internet ethics, strengthening students' character and social-emotional skills, and creating a safe and inclusive school culture.

Additionally, active parental involvement, monitoring of online activities, counselling services, and the use of supportive technology are crucial for detecting and addressing cyberbullying cases promptly. Collaboration with digital platforms and external parties, such as cybersecurity experts, can also strengthen prevention efforts and responses to new trends and methods of cyberbullying.

Therefore, preventing and addressing cyberbullying in schools requires a holistic, sustainable, and cross-sectoral approach involving the government, education authorities, schools, families, and the community. With integrated strategies and shared commitment, schools can create a safe, educational, and supportive learning environment that fosters optimal student development in the digital age, thereby significantly minimising the risks and impacts of cyberbullying.

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