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Empathy in the Digital Age: The Role of Self-Control and Social Control in Addressing Cyberviolence

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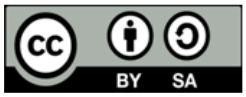

ABSTRAK

Di era digital yang semakin maju, fenomena kekerasan siber atau kekerasan digital semakin meresahkan. Penelitian ini bertujuan untuk menganalisis pengaruh pengendalian diri (self-control) dan pengendalian sosial (peran orang tua dan teman sebaya) terhadap cyber violence. Penelitian ini menggunakan pendekatan kuantitatif, sampel terdiri dari 250 siswa sekolah menengah atas. Analisis data menggunakan model transaksi struktural (SEM). Hasil penelitian menunjukkan korelasi signifikan antara empati dan cyber violence, di mana individu dengan tingkat empati rendah cenderung terlibat dalam perilaku kekerasan secara online. Pengendalian diri juga berkorelasi signifikan dengan cyber violence; tingkat pengendalian diri rendah berhubungan dengan perilaku merugikan secara online. Temuan menarik adalah peran orang tua, di mana hubungan emosional yang buruk dan kurangnya pengawasan orang tua berkontribusi pada cyber violence. Tidak ditemukan korelasi antara pengaruh teman sebaya dan cyber violence, menunjukkan teori pembelajaran sosial lebih kuat dalam konteks perilaku nakal dengan teman sebaya daripada cyber violence. Empati juga berperan sebagai mediator antara self-control dan cyber violence, di mana empati tinggi memperkuat pengaruh positif self-control dalam menghindari perilaku merugikan secara online. Penelitian ini memberikan wawasan penting untuk pencegahan dan penanggulangan cyber violence, menekankan pentingnya empati, self-control, dan peran orang tua dalam membentuk perilaku positif di dunia maya.

ABSTRACT

The increasingly advanced digital era, the phenomenon of cyber violence or digital violence is increasingly disturbing. This study aims to analyze the influence of self-control and social control (the role of parents and peers) on cyber violence. This study uses a quantitative approach, the sample consists of 250 high school students. Data analysis uses a structural transaction model (SEM). The results of the study showed a significant correlation between empathy and cyber violence, where individuals with low levels of empathy tend to engage in violent behavior online. Self-control is also significantly correlated with cyber violence; low levels of self-control are associated with detrimental behavior online. An interesting finding is the role of parents, where poor emotional relationships and lack of parental supervision contribute to cyber violence. No correlation was found between peer influence and cyber violence, indicating that social learning theory is stronger in the context of delinquent behavior with peers than cyber violence. Empathy also acts as a mediator between self-control and cyber violence, where high empathy strengthens the positive influence of self-control in avoiding detrimental behavior online. This study provides important insights for the prevention and control of cyber violence, emphasizing the importance of empathy, self-control, and the role of parents in shaping positive behavior in cyberspace.

1. INTRODUCTION

In the increasingly advanced digital era, the phenomenon of cyber violence or digital violence is becoming increasingly disturbing. Cyber violence refers to aggressive actions, intimidation, and threats carried out through electronic media, such as the Internet and social media platforms. Forms of cyber violence can include online harassment, insults, unauthorized dissemination of personal information, or verbal attacks online (Choi et al., 2022; Samsudi & Muhid, 2020). In addition, cyber violence is also a

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means used by various groups to spread content that has the potential to damage and negatively affect society. For example, terror groups use social media as a tool to show their power by sharing videos showing acts of extreme violence, as well as to recruit sympathizers of violent extremism (Holt, 2012; Kennedy & Weimann, 2011). On the other hand, hate groups use online chat rooms to incite and encourage interracial violence, increasing social tensions in society. Not only that but cyber violence is also used by customers of prostitutes or PSKs who seek non-illegal sexual services online, as well as by paedophiles and sexual predators who use the internet as a means to find and gain access to vulnerable potential victims (Cava et al., 2020; Glaser et al., 2002). This phenomenon underlines the importance of awareness and joint efforts to overcome the problem of cyber violence in this increasingly advanced digital era. One aspect of concern in research on cyber violence is its impact on individual self-control. Self-control refers to an individual's ability to control themselves, refrain from impulsive actions or respond negatively to situations that trigger emotions. In the context of cyber violence, an individual's level of self-control can affect their behaviour in dealing with digital violence. Self-control theory states that individuals with low levels of self-control tend to see crime as attractive because they are unable to consider the consequences of their actions (Billore et al., 2023). This theory also links the psychological concept of impulsivity, which is closely related to criminal behaviour (Krueger et al., 2007; Laird et al., 2011). It has been shown to be one of the strongest predictors of criminal behaviour in both adolescents and adults.

In addition, social control is reviewed from the influence of peers and the role of parents. Both of these factors have a significant role in shaping individual behaviour and contribute to overall social control. The influence of social control (the role of parents and peers) through empathy is also an important factor in research on cyber violence. Social control involves social norms, values, and expectations that exist in the environment that help control individual behaviour. In this case, social control is shown in the role of parents and peers as being very important in the development and facilitation of traditional forms of aggression and violence (Hußner et al., 2024; Peterson & Densley, 2017). A recent study found that poor emotional ties with parents and lack of parental monitoring were specifically related to aggression in cyberspace (Ang, 2015). According to other study social learning theory applies specifically in the context of cyber aggression through association with peers who have delinquent behavior (Holt et al., 2010). In the online environment, individuals connect with various peers through social media platforms or online forums. Suppose they interact with peers who exhibit delinquent behaviour, such as committing cyber violence or digital violence. In that case, the individual may be exposed and encouraged to imitate the behaviour.

Furthermore, empathy is a significant predictor of cyberbullying perpetrators (Ang & Goh, 2010; Casas et al., 2013; Goldsmith & Brewer, 2015; Steffgen et al., 2011). Empathy, on the other hand, involves an individual's ability to understand and feel the feelings of others. Through empathy, one can develop a better understanding of the negative effects of cyber violence on victims and avoid behaving aggressively online. Empathy also plays a key role in overcoming cyber violence. In the context of digital violence, having the ability to empathize can help individuals understand the negative consequences of their actions on others and encourage them to act responsibly and respectfully. In addition, empathy also influences the likelihood of "bystander" involvement in online bullying, so when empathy levels are low, the chances of cyberbullying perpetrators increase (Barlińska et al., 2013; Goldsmith & Brewer, 2015).

The novelty of this study is that it offers a multidimensional integration of self-control and social control, thus providing a holistic approach to understanding cyber violence. The novelty of this study not only emphasizes the role of empathy but also expands the analysis with self-control variables that include the individual's ability to regulate their emotions, as well as social control carried out by parents and peers, which shape behavior norms and social values. This approach enriches the understanding of internal and external factors that influence online behaviour. In addition, this study uses diverse research methods such as surveys and in-depth interviews to obtain a more complete and accurate picture. The focus on a specific population also provides specific contextual relevance.

Thus, the results of this study provide not only theoretical contributions but also practical implications for effective educational policies and programs, which can develop training modules for parents, teachers, and adolescents on the importance of empathy and self-control in online interactions. From the explanation that has been presented regarding self-control, social control (the role of parents and peers), and empathy in the context of cyber violence, it can be concluded that this model provides valuable guidance for individuals, groups, and communities in efforts to combat cyber violence. This study aims to analyzing the relationship between cyber violence and self-control, as well as social control through empathy. It is hoped that this study can provide deeper insight into the factors that influence cyber violence.

2. METHOD

This study consisted of 250 high school students in Indonesia aged between 15 and 21, with 135 female students and 115 male students. The sampling technique used random sampling, which ensured that each member or unit in the population had an equal chance of being selected as part of the sample. The cyber violence scale in this study was adapted from cyber-aggression. The scale consists of 12 items using a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). The scale consists of 9 items on a 5-point Likert scale, using a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). The level of reliability is acceptable (alpha = 0.87). Social control can be viewed from the influence of peers and the role of parents. The level of reliability is acceptable (alpha = 0.83). The measurement of empathy in this study was adapted from the basic empathy scale. This scale has been widely used to measure adolescent empathy in various cultural backgrounds. The empathy scale is divided into two. The first is affective empathy and cognitive empathy, which consists of 20 items using a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). The level of reliability is acceptable (alpha = 0.72). AMOS data analysis performed path analysis and structural equation modelling (SEM). Structural Equation Modeling (SEM) is a versatile statistical analysis tool. SEM measures "unobserved latent variables measured by multiple indicators and identifies relationships among them" (Kim et al., 2020). SEM was chosen as the data analysis method because it allows research to explore complex relationships between variables. This method estimates the relationship between observed variables and latent variables (measurement model) as well as between latent variables (construct model). In addition, SEM provides estimates of direct, indirect, or mediation effects. Meanwhile, to see the significant value of the mediation results, researchers use the Sobel Test.

3. RESULTS AND DISCUSSION

Result

The requirement in testing the hypothesis using the SEM model is the multicollinearity test. The multicollinearity test aims to see the linear influence or strong influence between endogenous variables and other exogenous variables in a regression model. To see multicollinearity, it is seen based on the variance inflation factor (VIF) value and the tolerance value. If the tolerance value is > 0.10 and the VIF coefficient value is less than <10.00, then there is no multicollinearity. Table 1 The model does not show multicollinearity problems. Therefore, the indicators and endogenous variables of the study can be used for further analysis.

Table 1. VIF values for Multicollinearity assessment

Variable	Collinearity Statistics		Information
	Tolerance	VIF	
Empathy	0.823	1.214	No multicollinearity
Self Control	0.925	1.081	No multicollinearity
Parents' role	0.708	1.413	No multicollinearity
Peers	0.775	1.291	No multicollinearity

In Table 1 of the model test, it can be seen that the chi-square index value (CMIN) or p-value has a description of not feasible, but Chi-Square (CMIN) or p-value cannot be used as the only measure to assess Goodness of Fit in a model, and values from other Goodness of Fit indicators are needed. As in the results of CMIN/DF (0.039≤ 0.08), RMSEA (0.039≤ 0.08), TLI (0.976≥ 0.95), CFI (0.981≥ 0.95), GFI (0.901≥ 0.90) and NFI (0.922≥ 0.90), so that from these criteria it is declared feasible. In other words, the model built by researchers based on theoretical data is no different from empirical data. The model test is show in Table 2.

Table 2. Model Test

Index	Goodness of Fit	Criteria	Information
Chi Square	253.959 (p value = 0.004)	p value > alpha 5%	Sig
CMIN/DF	1.289	≤ 3.00	Good of fit
RMSEA	0.039	≤ 0.08	Good of fit
TLI	0.976	≥ 0.95	Good of fit
CFI	0.981	≥ 0.95	Good of fit
GFI	0.901	≥ 0.90	Good of fit
NFI	0.922	≥ 0.90	Good of fit

The focus of this study is to test the hypothesis; the first hypothesis is that there is a correlation between self-control, social control (parental and peer roles), and empathy towards cyber violence. The results in Table 2 show that of the four direct influences, three show significant between the role of parents (p = 0.003, t = 2.947), empathy (p = 0.043, t = 2.027), self-control (p = 0.003, t = 2.974). One shows no significant peers (p = 0.088, t = -1.705) towards cyber violence. The role of parents (0.264) has the strongest influence on cyber violence, self-control (0.232), empathy (0.183) and peers (-0.132), each having a direct influence on cyber violence. Model test result is show in Figure 1.

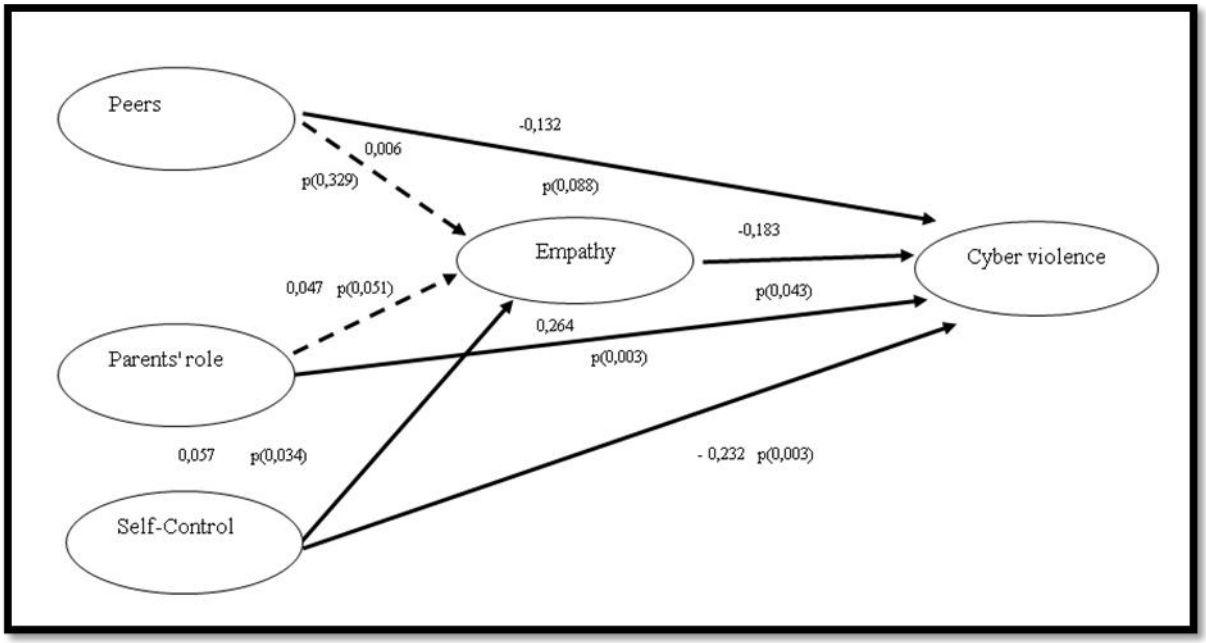

Figure 1. Model Test Result

The second hypothesis posits that empathy mediates the relationship with cyber violence. In this case, the researcher tested the mediation effect using the Sobel test, which can determine the significance between variables through mediation. The result of indirect effect is show in Table 3.

Table 3. Indirect Effects

No	Exogenous	Mediation	Endogenous	Total Effect	Indirect Effects	p-value	Result
1.	Peers	Empathy	Cyber violence	-0.132	0.006	0.329	Not Significant
2.	Self-Control	Empathy	Cyber violence	-0.232	0.057	0.034	Significant
3.	Parents' role	Empathy	Cyber violence	0.264	0.047	0.051	Not Significant

Table 3 shows that peers do not have a mediation effect with empathy on cyber violence, with a value (p=0.329). Furthermore, parental role has a mediation effect with empathy on cyber violence, with a value (p=0.050), and self-control has a mediation effect with empathy on cyber violence, with a value (p=0.034). However, the variable "parent" does not show a mediation effect with empathy on cyber violence, with a value (p=0.051).

Discussion

Cyber Violence Model

Overall, the results of the cyber violence model test show that although the Chi-Square test does not support the model, other Goodness of Fit indices (CMIN/DF, RMSEA, TLI, CFI, GFI, and NFI) provide strong evidence that the model fits well with the data. These findings align with previous studies that emphasize the importance of empathy and social factors in understanding and preventing cyber violence. Therefore, this model can be considered suitable and relevant in the context of cyber violence research, providing a solid foundation for interventions and educational programs to increase empathy and reduce online anonymity. Empathy plays a crucial role in individual online behavior. Previous research indicates that individuals with higher levels of empathy tend to engage in prosocial behavior and are more able to understand and feel others' suffering (Yang et al., 2020). In the context of cyber violence, a lack of empathy can result in a lack of sympathy for victims and, consequently, an increased tendency to engage

in aggressive actions such as insults, threats, or taunts via digital platforms. Previous research shows that empathy significantly predicts cyberbullying behavior (Ang & Goh, 2010; G. Brewer & Kerslake, 2015). Individuals with low empathy are more likely to disregard the negative impacts of their actions on others. Therefore, interventions to increase empathy among internet users, such as emotional education programs or empathy training, could effectively reduce cyber violence incidents.

The anonymity provided by the internet allows individuals to act without fear of immediate consequences, often lowering moral and social barriers to aggressive actions (Dasmana et al., 2022; Kowalski et al., 2014). This anonymity can create a false sense of freedom, enabling behaviors typically restrained in face-to-face interactions. Research by other study on the effects of online disinhibition indicates that anonymity can reduce the psychological barriers that usually prevent aggressive or harmful behavior (Dosil et al., 2019). In addition to anonymity, the prevailing social norms within online groups also influence individual behavior. Previous study highlight that the digital social environment can encourage or discourage violent behavior (Rutta et al., 2021). For example, in communities where aggressive or verbally violent behavior is normalized or accepted, individuals may feel encouraged to engage in such behavior. Conversely, in environments that promote positive and supportive norms, individuals are more likely to exhibit respectful behavior toward others.

This model provides a comprehensive framework for designing effective interventions against cyber violence. Educational programs that enhance empathy can help individuals develop the emotional skills necessary to understand and respond positively to others' feelings. This aligns with studies which show that interventions focused on increasing empathy can reduce cyberbullying incidents (Casas et al., 2013; Steffgen et al., 2011). Policies that reduce anonymity on digital platforms could also help decrease aggressive behavior. For example, user identity verification and stricter monitoring could reduce the willingness to engage in cyber violence. Research also shows that creating and promoting positive social norms within online communities can help prevent cyber violence. Awareness campaigns and education emphasizing the importance of respectful behavior can foster a safer and more supportive digital environment.

The Role of Peers in Cyber Violence

Social control can be examined through attachment to peers. Research on the role of attachment to peers in cases of cyber violence shows that a strong emotional connection with peers can act as a protective factor against involvement in cyber violence behavior. Studies show that adolescents with good peer attachment are less likely to engage in cyber aggression as perpetrators or victims (Liu et al., 2021; Wright et al., 2015). However, this study did not find a correlation between peer influence and cyber violence, which is inconsistent with the social learning theory posited. According to this theory, relationships with delinquent peers can encourage cyber violence (Holt et al., 2010). This discrepancy may be explained by the characteristics of online communication, which differ from traditional face-to-face interactions. Computer-mediated interactions allow for a higher level of anonymity, encouraging aggressive behaviors like hate speech and violent attacks on social media (Canestrari et al., 2023; Christopherson, 2007; Obonyo, 2022). Users who behave anonymously have a greater opportunity to engage in hate speech and attack others brutally on social media (Chang, 2008). Interestingly, the mediation test showed that empathy could not mediate the relationship between peer attachment and cyber violence. Although empathy involves the ability to feel and understand others' emotions and predict their behavior, it is not significant enough to influence or prevent cyber violence behavior, especially in the context of peer attachment (Chen et al., 2020; Liu et al., 2021). Other more dominant factors may mediate this relationship, such as the trait of gratitude, which has been identified as a variable that can mediate cyber violence (Canestrari et al., 2023; Chen et al., 2020). Gratitude can improve psychological well-being and reduce the tendency toward aggressive behavior, including in the context of cyber violence.

Furthermore, social control through peer influence must also be considered in a broader context. Although this study did not find a significant correlation, other studies indicate that peers can strongly influence individual behavior, both positively and negatively. In an online context, the anonymity and emotional distance offered by technology can reinforce aggressive behaviors that might not appear in face-to-face interactions (Hart et al., 2021; Liu et al., 2021). This complexity suggests that solutions to reduce cyber violence should be multifaceted, including education on responsible internet use, empathy development, and cultivating positive values such as gratitude. A holistic approach encompassing individual, school, and community interventions could be more effective in reducing cyber violence incidents and improving adolescents' overall well-being (Canestrari et al., 2023; Liu et al., 2021).

The Role of Parents in Cyber Violence

Social control can be examined from the role of parents. Parental involvement in addressing cyber violence is crucial and influential in prevention and mitigation efforts. Research highlights several ways in

which parents can contribute effectively. First, monitoring and limiting children's internet use can reduce their risk of engaging in high-risk online behaviors and decrease impulsiveness, which may lead to cyber victimization. Good supervision also helps identify children's applications or websites, enabling parents to recommend safe usage practices (Álvarez-García et al., 2019; Kimaro & Machumu, 2015). Second, a loving family environment and good communication between parents and children effectively prevent cyber violence. Children who feel comfortable sharing their online activities and experiences with their parents are less likely to engage in risky behaviors or become victims of cyber violence (Álvarez-García et al., 2019; Cava et al., 2020). Third, parents need to be prepared to assist when their child experiences cyber violence. Teaching children to report incidents to parents or a trusted adult is essential. Although some children may be reluctant to report for fear of losing privileges, a supportive and non-judgmental approach from parents can help overcome this barrier. Fourth, educating children about digital etiquette (netiquette) and the risks of the digital world is an essential preventive step. Schools also play a critical role through internet safety policies and training students on safe online interactions (Cowie, 2013; Irmayanti et al., 2024).

Research shows that parental monitoring and restrictions have a protective effect, but their impact may be limited if not accompanied by effective communication and emotional support. Therefore, an optimal parental role involves a combination of supervision, restriction, open communication, and continuous emotional support (Álvarez-García et al., 2019; Cowie, 2013).

The Role of Self-Control in Cyber Violence

Self-control correlates with cyber violence. One survey study involving nearly 500 undergraduate students found that low self-control levels could predict online deviant behaviors, such as making harassing or threatening posts and engaging in illegal hacking (Donner et al., 2014). Another study involving over 25,000 adolescents from 25 countries aged 9–16 found a link between online and offline bullying and low self-control levels. The direct effect was more substantial in online bullying behavior than in traditional bullying (Vazsonyi et al., 2012). Students with low self-control are more prone to engage in violent behaviors. Lack of self-control can lead to impulsive reactions to tense situations or online conflicts, making it easy to engage in bullying or hacking, which can harm others emotionally or even physically. Conversely, individuals with high self-control are more likely to manage anger, frustration, or other negative feelings when interacting online. With good self-control, one can consider the impact of their actions before engaging in harmful or aggressive online behavior.

Testing empathy as a mediator effectively plays an essential role in this dynamic. A lack of empathy can exacerbate the effects of low self-control. Adolescents unable to feel or understand others' suffering may not feel remorse or guilt when committing cyber violence. Research indicates low empathy can contribute to aggressive online and offline behavior (Ang & Goh, 2010). Therefore, efforts to prevent cyber violence should include improving self-control and empathy in children and adolescents. This approach can help reduce harmful impulsive behaviors and increase awareness of the emotional consequences of their actions on others.

The Role of Empathy in Cyber Violence

Empathy significantly correlates with cyber violence, in line with several researchers who state that empathy is a significant predictor for cyberbullying perpetrators (Ang & Goh, 2010; Gayle Brewer & Kerslake, 2015; Casas et al., 2013; Steffgen et al., 2011). Findings show a negative correlation between empathy and cyber violence, indicating that individuals with lower empathy levels tend to lack sympathy for victims in online contexts. This lack of empathy can lead to aggressive or verbally violent behaviors, such as insulting, threatening, or mocking others through digital platforms like social media, online forums, or messaging apps. A lack of empathy can deeply influence an individual's behavior in the virtual world. Individuals lacking empathy may struggle to understand or feel the suffering experienced by cyber violence victims, thereby reducing their sense of guilt or remorse for their actions. This can be attributed to various factors, including the lack of face-to-face interaction in online communication, which can diminish emotional awareness of their behavior's impact (Chen et al., 2020; Silvia, 2020). Furthermore, anonymity and physical distance can worsen empathy deficits in a digital environment. Anonymity allows individuals to act without fear of immediate consequences or exposure to their identity. At the same time, physical distance removes social cues that usually help develop empathy, such as facial expressions and body language. This creates a situation where individuals feel freer to express aggression or hatred without considering the impact on others.

This finding aligns with research which found that those not involved in cyberbullying tended to have higher positive empathy levels than those engaged in cyberbullying behaviors (Yuan et al., 2020). This research supports the argument that empathy plays an essential role in preventing cyberbullying involvement, as highly empathetic individuals are more likely to understand and feel others' emotions, making them less likely to engage in aggressive online behaviors. Additionally, empathy serves as a

mediator between self-control and cyber violence. Empathy mediates the relationship between self-control and violent behaviors. Good self-control makes individuals more likely to avoid aggressive or harmful online behaviors (Chen et al., 2020; Runions, 2013). However, the presence of empathy can strengthen the positive influence of self-control on online behavior. Individuals with good self-control and high empathy are likelier to choose socially positive actions and avoid cyber violence. Empathy helps individuals understand the consequences of online actions and encourages them to avoid behaviors that harm others (Doane et al., 2016; Eisenberg et al., 2010). High empathy inhibits cyber violence, as students with high empathy levels are less inclined to engage in cyber violence. In contrast, students with low empathy may become perpetrators due to their low intent to harm others.

It is recommended that educational and training programs focused on enhancing empathy and self-control among adolescents be developed and implemented widely. Parents should be educated about the importance of supervision and maintaining a strong emotional bond with their children to prevent cyber violence. Psychological interventions to increase empathy and self-control should be integrated into school curricula and youth counseling programs. Governments and policymakers should consider regulations that encourage positive online behavior and reduce the anonymity that enables aggressive behavior in cyberspace. Consequently, efforts to prevent and address cyber violence can be more effective, contributing to a safer and healthier digital environment.

4. CONCLUSION

The findings of this study conclude that there is a significant correlation between empathy, self-control, and parental roles with cyber violence. Individuals with low levels of empathy and self-control tend to engage in aggressive online behavior. Additionally, inadequate parental roles, including poor emotional connections and lack of supervision, also contribute to an increase in cyber violence. Empathy acts as a mediator between self-control and cyber violence, where high levels of empathy can strengthen the positive influence of self-control in avoiding harmful or aggressive online behavior. This conclusion highlights the importance of considering psychological and social aspects in preventing and addressing cyber violence in this digital era. New insights contributing to the development of psychology as a science include a deeper understanding of how empathy and self-control interact to influence online behavior and the importance of parental roles in guiding children's behavior in the online world.

5. REFERENCES

Álvarez-García, D., Núñez, J. C., González-Castro, P., Rodríguez, C., & Cerezo, R. (2019). The effect of parental control on cyber-victimization in adolescence: The mediating role of impulsivity and high-risk behaviors. *Frontiers in Psychology*, *10*, 1159. https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01159/full.

Ang, R. P. (2015). Adolescent cyberbullying: A review of characteristics, prevention and intervention strategies. *Aggression and Violent Behavior*, *25*, 35–42. https://doi.org/10.1016/j.avb.2015.07.011.

Ang, R. P., & Goh, D. H. (2010). Cyberbullying among adolescents: The role of affective and cognitive empathy, and gender. *Child Psychiatry & Human Development*, *41*(4), 387–397. https://link.springer.com/article/10.1007/s10578-010-0176-3.

Barlińska, J., Szuster, A., & Winiewski, M. (2013). Cyberbullying among adolescent bystanders: Role of the communication medium, form of violence, and empathy. *Journal of Community & Applied Social Psychology*, *23*(1), 37–51. https://onlinelibrary.wiley.com/doi/abs/10.1002/casp.2137.

Billore, S., Anisimova, T., & Vrontis, D. (2023). Self-regulation and goal-directed behavior: A systematic literature review, public policy recommendations, and research agenda. *Journal of Business Research*, *156*(October 2022), 113435. https://doi.org/10.1016/j.jbusres.2022.113435.

Brewer, G., & Kerslake, J. (2015). *Cyberbullying, self-esteem, empathy and loneliness*. Computers in Human Behavior; Elsevier Ltd. https://doi.org/10.1016/j.chb.2015.01.073.

Brewer, Gayle, & Kerslake, J. (2015). Cyberbullying, self-esteem, empathy and loneliness. *Computers in Human Behavior*, *48*. https://doi.org/10.1016/j.chb.2015.01.073.

Canestrari, C., Arroyo, G. D. M., Carrieri, A., Muzi, M., & Fermani, A. (2023). Parental attachment and cyberbullying victims: the mediation effect of gelotophobia. *Current Psychology*, *42*(19), 16401–16412. https://link.springer.com/article/10.1007/s12144-021-01642-6.

Casas, J. A., Del Rey, R., & Ortega-Ruiz, R. (2013). Bullying and cyberbullying: Convergent and divergent predictor variables. *Computers in Human Behavior*, *29*(3), 580–587. https://doi.org/10.1016/j.chb.2012.11.015.

Cava, M.-J., Tomás, I., Buelga, S., & Carrascosa, L. (2020). Loneliness, Depressive Mood and Cyberbullying

Victimization in Adolescent Victims of Cyber Dating Violence. *International Journal of Environmental Research and Public Health*, *17*(12), 4269. https://doi.org/10.3390/ijerph17124269.

Chang, J. (2008). The role of anonymity in deindividuated behavior: A comparison of deindividuation theory and the social identity model of deindividuation effects (SIDE). *The Pulse*, *6*(1), 1–8. https://www.academia.edu/download/3248133/The_Role_of_Anonymity_In_Deindividuated_Behavior_A_Comparison_of_Deindividuation_Theory_and_the_Social_Identity_Model_of_Deindividuation.pdf.

Chen, L., Wang, Y., Yang, H., & Sun, X. (2020). Emotional warmth and cyberbullying perpetration attitudes in college students: Mediation of trait gratitude and empathy. *PLoS One*, *15*(7), e0235477. https://doi.org/10.1371/journal.pone.0235477.

Choi, Y. J., Shin, S. Y., & Lee, J. (2022). Change in Factors Affecting Cyberbullying of Korean Elementary School Students during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, *19*(17). https://doi.org/10.3390/ijerph191711046.

Christopherson, K. M. (2007). The positive and negative implications of anonymity in Internet social interactions:"On the Internet, Nobody Knows You're a Dog." *Computers in Human Behavior*, *23*(6), 3038–3056. https://doi.org/10.1016/j.chb.2006.09.001.

Cowie, H. (2013). Cyberbullying and its impact on young people's emotional health and well-being. *The Psychiatrist*, *37*(5), 167–170. https://www.cambridge.org/core/journals/the-psychiatrist/article/cyberbullying-and-its-impact-on-young-peoples-emotional-health-and-wellbeing/B7DB89A2035CF347E73D21EAF8D91214.

Dasmana, A., Wasliman, I., Ujang, ;, Barlian, C., & Yoseptri, R. (2022). Implementation of Integrated Quality Management Strengthening Character Education in Realizing Pancasila Student Profiles. *International Journal Of Graduate Of Islamic Education*, *3*(2), 361. https://doi.org/10.37567/ijgie.v3i2.1342.

Doane, A. N., Kelley, M. L., & Pearson, M. R. (2016). Reducing cyberbullying: A theory of reasoned action-based video prevention program for college students. *Aggressive Behavior*, *42*(2), 136–146. https://doi.org/10.1002/ab.21610.

Donner, C. M., Marcum, C. D., Jennings, W. G., Higgins, G. E., & Banfield, J. (2014). Low self-control and cybercrime: Exploring the utility of the general theory of crime beyond digital piracy. *Computers in Human Behavior*, *34*, 165–172. https://doi.org/10.1016/j.chb.2014.01.040.

Dosil, M., Jaureguizar, J., & Bermaras, E. (2019). Variables related to victimization and perpetration of dating violence in adolescents in residential care settings. *The Spanish Journal of Psychology*, *22*, E36. https://www.cambridge.org/core/journals/spanish-journal-of-psychology/article/variables-related-to-victimization-and-perpetration-of-dating-violence-in-adolescents-in-residential-care-settings/2658D68BF1735353E9CE2C742DC07341.

Eisenberg, N., Eggum, N. D., & Di Giunta, L. (2010). Empathy-related responding: Associations with prosocial behavior, aggression, and intergroup relations. *Social Issues and Policy Review*, *4*(1), 143–180. https://spssi.onlinelibrary.wiley.com/doi/abs/10.1111/j.1751-2409.2010.01020.x.

Glaser, J., Dixit, J., & Green, D. P. (2002). Studying hate crime with the internet: What makes racists advocate racial violence? *Journal of Social Issues*, *58*(1), 177–193. https://spssi.onlinelibrary.wiley.com/doi/abs/10.1111/1540-4560.00255.

Goldsmith, A., & Brewer, R. (2015). Digital drift and the criminal interaction order. *Theoretical Criminology*, *19*(1), 112–130. https://journals.sagepub.com/doi/abs/10.1177/1362480614538645.

Hart, C., Costa, C., D'Souza, D., Kimpton, A., & Ljbusic, J. (2021). Exploring higher education students' critical thinking skills through content analysis. *Thinking Skills and Creativity*, *41*(May), 100877. https://doi.org/10.1016/j.tsc.2021.100877.

Holt, T. J. (2012). Exploring the intersections of technology, crime, and terror. *Terrorism and Political Violence*, *24*(2), 337–354. https://www.tandfonline.com/doi/abs/10.1080/09546553.2011.648350.

Holt, T. J., Blevins, K. R., & Burkert, N. (2010). Considering the pedophile subculture online. *Sexual Abuse*, *22*(1), 3–24. https://journals.sagepub.com/doi/abs/10.1177/1079063209344979.

Hußner, I., Lazarides, R., & Symes, W. (2024). The relation between self-efficacy and teaching behaviour: A video-based analysis of student teachers. *Learning and Instruction*, *91*, 101880. https://doi.org/10.1016/j.learninstruc.2024.101880.

Irmayanti, N., Soetjipto, B. E., Chusniyah, T., & Rahmawati, H. (2024). Exploring the Influence of Theoretical Factors on Students' Cyberbullying Behavior: A Bandura-Inspired Study. *Migration Letters*, *21*(1), 305–316.

https://www.jurnal.likmi.ac.id/Jurnal/11_2005/CYBERBULLYING_feri_.pdf.

Kennedy, J., & Weimann, G. (2011). The strength of weak terrorist ties. *Terrorism and Political Violence*, *23*(2), 201–212. https://www.tandfonline.com/doi/abs/10.1080/09546553.2010.521087.

Kimaro, A. R., & Machumu, H. J. (2015). Impacts of parental involvement in school activities on academic achievement of primary school children. *International Journal of Education and Research*, *3*(8), 483–494. http://www.ijern.com/journal/2015/August-2015/40.pdf.

Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, *140*(4), 1073. https://psycnet.apa.org/journals/bul/140/4/1073.html?uid=2014-04307-001.

Krueger, R. F., Markon, K. E., Patrick, C. J., Benning, S. D., & Kramer, M. D. (2007). Linking antisocial behavior, substance use, and personality: an integrative quantitative model of the adult externalizing spectrum. *Journal of Abnormal Psychology*, *116*(4), 645. https://psycnet.apa.org/journals/abn/116/4/645.html?uid=2007-17062-001.

Laird, R. D., Marks, L. D., & Marrero, M. D. (2011). Religiosity, self-control, and antisocial behavior: Religiosity as a promotive and protective factor. *Journal of Applied Developmental Psychology*, *32*(2), 78–85. https://www.sciencedirect.com/science/article/pii/S0193397310001322.

Liu, H., Dou, K., Yu, C., Nie, Y., & Zheng, X. (2021). The relationship between peer attachment and aggressive behavior among Chinese adolescents: the mediating effect of regulatory emotional self-efficacy. *International Journal of Environmental Research and Public Health*, *18*(13), 7123. https://www.mdpi.com/1660-4601/18/13/7123.

Obonyo, C. N. (2022). Collaborative learning with mobile technologies in teacher education. In *Handbook of Research on Facilitating Collaborative Learning Through Digital Content and Learning Technologies* (pp. 62–83). IGI Global. https://doi.org/10.4018/978-1-6684-5709-2.ch004.

Peterson, J., & Densley, J. (2017). Cyber violence: What do we know and where do we go from here? *Aggression and Violent Behavior*, *34*, 193–200. https://doi.org/10.1016/j.avb.2017.01.012.

Runions, K. C. (2013). Toward a conceptual model of motive and self-control in cyber-aggression: Rage, revenge, reward, and recreation. *Journal of Youth and Adolescence*, *42*, 751–771. https://link.springer.com/article/10.1007/s10964-013-9936-2.

Rutta, C. B., Schiavo, G., Zancanaro, M., & Rubegni, E. (2021). Comic-based Digital Storytelling for Content and Language Integrated Learning. *Educational Media International*, *58*(1), 21–36. https://doi.org/10.1080/09523987.2021.1908499.

Samsudi, M. A., & Muhid, A. (2020). Efek Bullying Terhadap Proses Belajar Siswa. *SCAFFOLDING: Jurnal Pendidikan Islam Dan Multikulturalisme*, *2*(02), 122–133. https://doi.org/10.37680/scaffolding.v2i02.466.

Silvia, R. J. (2020). The arts in health professions education: A music assignment to develop pharmacy students' empathy toward people with opioid use disorder. *American Journal of Pharmaceutical Education*, *84*(4), 484–488. https://doi.org/10.5688/ajpe7631.

Steffgen, G., König, A., Pfetsch, J., & Melzer, A. (2011). Are cyberbullies less empathic? Adolescents' cyberbullying behavior and empathic responsiveness. *Cyberpsychology, Behavior, and Social Networking*, *14*(11), 643–648. https://www.liebertpub.com/doi/abs/10.1089/cyber.2010.0445.

Vazsonyi, A. T., Machackova, H., Sevcikova, A., Smahel, D., & Cerna, A. (2012). Cyberbullying in context: Direct and indirect effects by low self-control across 25 European countries. *European Journal of Developmental Psychology*, *9*(2), 210–227. https://www.tandfonline.com/doi/abs/10.1080/17405629.2011.644919.

Wright, M. F., Aoyama, I., Kamble, S. V, Li, Z., Soudi, S., Lei, L., & Shu, C. (2015). Peer attachment and cyber aggression involvement among Chinese, Indian, and Japanese adolescents. *Societies*, *5*(2), 339–353. https://www.mdpi.com/2075-4698/5/2/339.

Yang, Y., Li, W., Zhang, Q., Zhang, L., Cheung, T., & Xiang, Y.-T. (2020). Mental health services for older adults in China during the COVID-19 outbreak. *The Lancet Psychiatry*, *7*(4), e19. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7128970/.

Yuan, G., Liu, Z., & An, Y. (2020). Machiavellianism, mindfulness and cyberbullying among Chinese junior high school students: The mediating role of empathy. *Journal of Aggression, Maltreatment & Trauma*, *29*(9), 1047–1058. https://www.tandfonline.com/doi/abs/10.1080/10926771.2019.1667467.