The Relationship between Self-Control and Cyber Aggressive Behavior in Adolescent Social Media Users

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Abstract. Cyber aggression has a serious impact on the mental and social well-being of adolescents. This study aims to fill the gap by exploring the relationship between self-control and cyber aggression in adolescent social media users in Kupang City. The sample determination was carried out using a purposive sampling technique. The data analysis techniques employed were normality tests, linearity tests, and correlation tests. he test results revealed a correlation between self-control and cyber aggression, indicating a significant negative relationship between the self-control variable and the cyber aggression variable. The results of the measurement of the level of self-control obtained 237 participants (62.5%) in the high category, so the level of self-control among adolescent social media users in Kupang City was in the high category. There were 247 participants (65.2%) in the low category, so cyber aggression in adolescent social media users in Kupang City was in the low category.

Keywords: self-control, cyber aggression, adolescents, social media

Abstrak. Agresi siber memiliki dampak serius terhadap kesejahteraan mental dan sosial remaja. Penelitian ini bertujuan untuk mengisi kesenjangan tersebut dengan mengeksplorasi hubungan antara kontrol diri dan agresi siber pada remaja pengguna media sosial di Kota Kupang. Penentuan sampel dilakukan dengan menggunakan teknik *purposive sampling*. Teknik analisis data yang digunakan yaitu uji normalitas, uji linearitas, dan uji korelasi. Hasil uji korelasi menghasilkan koefisien korelasi kontrol diri dan agresi siber menunjukan bahwa terdapat hubungan negatif yang signifikan antara variabel kontrol diri dengan variabel agresi siber. Hasil pengukuran tingkat kontrol diri di dapatkan sebanyak 237 partisipan (62,5%) berada pada kategori tinggi, maka tingkat Kontrol diri pada remaja pengguna media sosial Kota Kupang berada pada kategorisasi tinggi. Terdapat sebanyak 247 partisipan (65,2%) berada pada kategori rendah, maka agresi siber pada remaja pengguna media sosial di Kota Kupang berada pada kategori rendah.

Kata kunci: kontrol diri, agresi siber, remaja, media sosial

Introduction

Social media usage among adolescents has increased significantly in recent years. According to data released by We Are Social and Hootsuite (2022), the number of active social media users in Indonesia has surpassed 170 million, with most users belonging to the teenage age group. Social media has become an essential part of teenagers' daily lives, both as a means of communication, entertainment, and a source of information. However, behind these benefits, social media also has negative impacts, one of which is the increasing cases of cyber aggression among teenagers. Cyber aggression refers to aggressive behavior carried out through digital technology, such as insulting, threatening, or degrading someone through social media platforms (Tokunaga, 2010).

Cyber aggression has a serious impact on the mental and social well-being of adolescents. Research conducted by Hinduja and Patchin (2018) shows that victims of cyber aggression are more susceptible to depression, anxiety, and social isolation than those who do not engage in such behavior. In some cases, cyber aggression can even cause victims to experience severe psychological disorders and extreme actions such as suicide. For example, in Kupang City, data shows that children and adolescents in this city are vulnerable to becoming victims of online violence, including online sexual harassment and exploitation through social media. Based on reports from the Kupang City Communication and Information Service and several related institutions, cases of online violence are increasing, with adolescent girls being the group most affected by cyber harassment and exploitation through digital platforms (Dukcapil Kupang, 2023; Katong NTT, 2023).

One of the cases that emerged in Kupang involved a teenager who was the victim of harassment and threats through a social media platform, where the victim's

photos were disseminated without permission by the perpetrator, who then blackmailed the victim for profit. This case reflects the high risks faced by teenagers in Kupang City when using social media without good self-control (Katong NTT, 2023). Therefore, it is essential to understand the factors that influence cyber aggressive behavior, particularly among teenagers, so that preventive measures can be implemented. One important factor related to cyber aggressive behavior is self-control. According to Baumeister, Heatherton, and Tice (1994), self-control refers to a person's ability to regulate emotions, thoughts, and actions according to applicable standards or rules. Good self-control can help individuals avoid impulsive behavior, including aggressive behavior in cyberspace. Research by Tangney, Baumeister, and Boone (2004) found that individuals with high self-control tend to have better social relationships and are less involved in aggressive behavior, both directly and through online platforms. In the context of cyber aggression, low self-control can lead adolescents to be more easily provoked and commit aggressive acts online.

In Kupang City, the use of social media by teenagers also shows a significant increasing trend. According to the Communication and Information Service (2021), more than 60% of teenagers in Kupang City spend over 3 hours per day on social media, making digital platforms their main interaction space. However, this increase in social media use is also accompanied by a rise in cases of cyber aggression among teenagers. This phenomenon raises concerns about the long-term impact on the social and psychological well-being of teenagers in Kupang.

This study aims to fill the gap by exploring the relationship between self-control and cyber aggression in adolescent social media users in Kupang City. This study is expected to provide significant contributions to academic literature related to self-control and cyber aggression behavior, as well as provide a deeper understanding of the factors that influence adolescent aggressive behavior in cyberspace. In addition, this study is also expected to be a reference for parents, educators, and policy makers in designing programs aimed at improving self-control and preventing cyber aggression behavior among adolescents. This study is

important to conduct considering the large negative impact of cyber aggression on adolescent welfare, as well as the high use of social media among adolescents in Kupang City.

Method

This research was conducted in Kupang City, East Nusa Tenggara, for ± 3 months, from February to April 2025. This research is correlation research. The use of a correlational research design aims to analyze the relationship and mixture between variables.

The population in this study consisted of adolescents aged 15-19 years in Kupang City, with an age range based on the World Health Organization (WHO) guidelines. The total population in this study was 30,882 people. The criteria used in the study are as follows:

1. Teenagers who are active users of social media (Facebook/ Twitter/ YouTube/ Instagram/ WhatsApp/ TikTok/ Telegram/ Line)
2. Use social media for 5 hours/day
3. Aged around 15-19 years and domiciled in Kupang City
4. Willing to participate in research

The determination of the sample is done using the purposive sampling technique, which is a method for selecting samples or data sources with specific characteristics that align with the researcher's criteria to facilitate the study. The method for determining the number of samples in this study uses the Krejcie and Morgan (1970) table with an error rate of 0.5%. The sample from the calculation results using this formula is 379 respondents.

The data collection technique in this study is the Self-Control and Cyber Aggression scale utilizes the Likert scale. The self-control scale consists of 22 items with 5 response options, namely strongly agree (SS), agree (S), neutral (N), disagree (TS), and strongly disagree (STS). Meanwhile, the cyber aggression scale consists of 12 items with 5 response options, namely never (TP), ever (P), sometimes (KK), often

(s), very often (SS The data analysis techniques employed in this study include the assumption tests (normality and linearity tests) and hypothesis testing using the Pearson product-moment correlation test.

Result

A. Self-Control

Table 1. *Categorization of Respondents based on Gender*

Gender	Low	Medium	High	Total
Male	0 (0,00%)	0(0,00%)	120 (100%)	120(100%)
Female	52 (20,1%)	45 (17,4%)	162 (62,5%)	259 (100%)
Total				**379**

Based on Table 1, all male participants (100%) are in the high self-control category, while female participants are more varied, with the majority (62.5%) also falling into the high category. This shows that male participants tend to have more consistent self-control than female participants.

Table 2. *Table of Self-Control Categorization by Education Level*

Education Level	Low	Medium	High	Total
Junior High School	33 (20,9%)	33 (20,9%)	92 (58,2%)	158(100%)
High School	38 (17,2%)	38 (17,2%)	145 (65,6%)	221 (100%)
Total				**379**

Categorization of self-control variable data based on education level showed that high school student had a higher proportion of high self-control (65.6%) compared to junior high school student participants (58.2%). This shows that the higher the level of education, the better the level of self-control.

Based on the overall results of categorizing self-control in adolescent social media users in Kupang City, it can be concluded that self-control in these users is categorized as High.

B. Cyber Aggression Variables

Table 3. *Categorization of Cyber Aggression by Gender*

Gender	Low	Medium	High	Total
Male	80 (66,67%)	15 (12,5%)	25 (20,83%)	120(100%)
Female	170 (65,6%)	44 (17,0%)	45 (17,4%)	259 (100%)
Total				**379**

Based on the table of categorization of cyber aggression variables by gender above, male participants (66.67%) and female participants (65.6%) are also in the low cyber aggression category. This shows that there is no striking difference between men and women in terms of cyber aggression levels, and both tend to show low cyber aggression.

Table 4. *Cyber Aggression Categorization by Education Level*

Education Level	Low	Medium	High	Total
Junior High School	102 (64,6%)	29 (18,4%)	27 (17,1%)	158 (100%)
High School	145 (65,6%)	39 (17,6%)	37 (16,7%)	221 (100%)
Total				**379**

The table of categorization of cyber aggression variables based on education level above indicates that most of the participants from junior high school level (64.6%) and high school level (65.6%) falls into low cyber aggression category. This means that both junior high school and high school students in Kupang City tend to have low levels of cyber aggression.

Based on the overall results of the categorization of cyber aggression in adolescent social media users in Kupang City, it can be concluded that cyber aggression in adolescent social media users in Kupang City is in the Low Categorization.

C. Assumption Test

a. Normality Test

Table 5. *Normality Test*

	Unstandardized Residual
N	379
Kolmogorov-Smirnov Z	,880
Asymp. Sig. (2-tailed)	,421

Based on Table 5, the results of the normality test show a significant value of 0.421>0.05. So, it can be concluded that the residual value is normally distributed.

b. Linearity Test

Table 6. *Linearity Test Results*

Variable	N	*Linearity*	*Deviation From Linearity*
Cyber Aggression Self-Control	379	0,000	0,467

Based on Table 6, the results of the Linearity test show a Significance value of 0,000<0,05. So, it can be concluded that there is a linear relationship between independent variable self-control, and the dependent variable, cyber aggression.

c. Hypothesis Testing

Table 7. *Correlation Test*

Variable	N	Correlation Coefficient	P
Self-Control Cyber Aggression	379	-0,683	0,000

Based on Table 7, the relationship between self-control and cyber aggression in adolescent social media users in Kupang City is significant because the p-value is 0.000 <0.05. The correlation coefficient between self-

control and cyber aggression in adolescent social media users in Kupang City is -0.683, indicating a negative relationship between the two variables. This suggests that higher self-control is associated with lower cyber aggression, and vice versa: lower self-control is associated with higher cyber aggression.

The basis for decision making in the correlation test is by looking at the significance <0.05 value; then there is a relationship or correlation between the independent variable and the dependent variable. Moreover, examine the correlation coefficient value to determine its interpretation. The results of the Hypothesis test are evident from the correlation coefficient value, which is used to determine the effect size based on the effect size guideline table. Based on the practical rules of Rea and Parker (1992), the value of r = -0.683 is included in strong correlation category.

Discussion

Based on the data analysis that has been done, the results show that the correlation coefficient between the self-control variable and cyber aggression in adolescent social media users in Kupang City shows a significant value of 0.000 (p <0.05) and the correlation for the self-control variable and cyber aggression is -0.683 which means the hypothesis is accepted so that there is a relationship between the self-control variable and the cyber aggression variable which is negative. This suggests that higher self-control is associated with lower cyber aggression, and vice versa: lower self-control is associated with higher cyber aggression.

The results of this study are in line with previous studies that stated that there is a negative relationship between self-control and cyber aggression in adolescents, where the higher self-control, the lower the cyber aggression in social media users and vice versa, the lower the self-control, the higher the cyber aggression (Gandawijaya, 2020; Mardianto et al., 2022). This can happen because self-control is a human capacity to shape behavior to suit their social environment, so that they can live socially in the existing cultural system and provide benefits to society (Baumester,

Vohs & Tice,. 2007). The relationship between self-control and cyber aggression occurs because self-control functions as a regulator of behavior and emotions in social situations that have the potential to trigger conflict. The stronger this ability, the less likely adolescents are to act impulsively or aggressively online (Denson et al., 2012).

Based on the categorization results obtained from 379 adolescent social media users in Kupang City, the self-control variable falls into the high self-control category (62.5%). This finding aligns with the results of Gandawijaya's (2020) research, which found that self-control in social media users in the transition period to adulthood is also in the high category. In his research, he found that individuals with high self-control tend not to be easily provoked and are able to resist negative impulses, especially in the use of social media. These results are also supported by Nofriandi and Mardianto (2022), who stated that most adolescents who are active on social media have high self-control, especially in terms of standards and capacity to change. This means that they have strong moral and social values and are able to consciously adapt to the demands of the digital environment.

The high self-control of adolescents in Kupang City can be explained through cultural and social environmental factors. Kupang City is renowned for its strong family values, close-knit community, and strict social norms. These values form the internalization of behavioral standards that serve as guidelines for adolescents in their actions. In line with Averill's theory (1973), self-control is formed through three aspects, namely behavioral control, cognitive control, and decision control. All three appear strong in the Kupang cultural context, which emphasizes the importance of maintaining the good name of the family and community. Religious life and closeness to social institutions such as churches and schools also help strengthen the formation of self-control through character education and social ethics. Therefore, the high self-control of adolescents in this study is the result of an interaction between personality factors and positive, structured environmental support.

The results of the categorization of self-control variables based on gender showed that all 120 male participants (100%) were in the high self-control category,

while female participants showed a more varied distribution, although the majority of 162 participants (62.5%) were also in the high self-control category. This finding suggests that male participants in this study tended to have more consistent self-control than female participants. This difference can be explained by the way men and women manage their emotions. According to Denson, DeWall, and Finkel (2012), women are more emotionally expressive, so in certain situations they are more easily influenced by emotions, especially when facing social pressure in the media. Meanwhile, men tend to use calmer and more direct self-control strategies, such as thinking twice before reacting. Research by Nofriandi and Mardianto (2022) also explains that adolescents with high self-control have standards and the ability to adapt to social situations. This is likely more stable in men because of social influences that emphasize a calm and assertive attitude, so they are better able to control their actions, including when using social media.

The results of the categorization of self-control variable data according to education level, found that high school student participants had a higher proportion of high self-control, which was 65.6%, compared to junior high school student participants who were at 58.2%. These results indicate that the higher the level of education, the better the level of self-control. This can be explained through the aspect of psychological development, where adolescents at the high school level have generally reached a more mature stage of cognitive and emotional development than junior high school adolescents. This finding is in line with the view of Gandawijaya (2020), which states that self-control is closely related to an individual's ability to adjust behavior to social norms and situations faced, this ability will develop with age and experience. Meanwhile, according to Nofriandi and Mardianto (2022), with high self-control have better standards of behavior and adaptability, which are generally formed through social and educational experiences. High school students who have interacted longer in various social and academic environments tend to have more stable self-regulation, including in dealing with pressure or provocation on social media.

The results of the study showed that most adolescents in Kupang City had low levels of cyber aggression (65.2%). This shows that adolescents do not tend to engage in aggressive behavior such as insulting, teasing, or spreading negative content through social media. One of the main reasons for this low level of cyber aggression is because most adolescents also have high self-control. Gandawijaya (2020) stated that high self-control can suppress the impulse to behave aggressively, especially in electronic contexts such as social media. When someone is able to manage their emotions and consider the social consequences of their actions, they are less likely to vent their anger or dissatisfaction online. In addition, Denson, DeWall, and Finkel (2012) also emphasized that self-control helps individuals respond to provocation without behaving aggressively. In this context, adolescents who have this ability are able to restrain themselves from revenge or online verbal attacks that can trigger cyber aggression. The social environment and cultural norms in Kupang City, which tend to uphold family values and ethics, also contribute to low levels of cyber aggression. These values support the formation of good self-control, as well as creating social awareness of the importance of maintaining behavior in digital media.

The results of the table of categorization of cyber aggression variables based on gender, it is known that most male participants (66.67%) and female participants (65.6%) are in the low cyber aggression category. This finding shows that there is no striking difference between men and women in terms of the level of cyber aggression. Both tend to show low levels of aggression in interactions on social media. This study is in line with the results of a study by Kezia Isabel et al. (2022), which also found that there was no significant difference in the level of cyber aggression between men and women. In addition, based on Bandura's theory (in Kezia Isabel et al., 2022), adolescents who have high self-efficacy in controlling online actions will tend to avoid cyber aggression. In this context, both men and women in Kupang City may have sufficient self-confidence in managing digital social interactions, so they are able to refrain from committing aggressive acts. Thus, these results show that gender differences are not the main determinant of cyber aggression, but psychological

factors such as self-control, self-confidence, social values, and a supportive environment are also important determinants. This is proof that both male and female teenagers have the potential to become responsible social media users.

The results of the table categorizing cyber aggression variables by school level indicate that most junior high school (64.6%) and high school (65.6%) participants fall into the low cyber aggression category. This finding indicates that both junior high school and high school students in Kupang City tend to exhibit low levels of cyber aggression in using social media. This condition is most likely influenced by good self-control among adolescents, which was previously also found in this study. As explained by Baumeister (2002), self-control is the ability to restrain impulses and adjust behavior to accepted social standards. This self-control not only develops due to age factors, but is also influenced by the social environment, education, and values instilled from an early age. In addition, the form of items in the cyber aggression questionnaire used in this study is explicit, asking directly whether respondents have ever committed aggressive acts such as mocking or insulting online. According to Willard (2007), actions like this are included in the category of aggression that is socially easily recognized as wrong behavior. This allows respondents, both from junior high school and high school levels, to reject or disown the behavior because it is contrary to the values they understand. The low level of cyber aggression can also be related to the socio-cultural context in Kupang City, which emphasizes family values, politeness, and mutual respect. School and family environments that encourage positive behavior indirectly become external controllers that prevent students from expressing emotions aggressively on social media.

Conclusion

Based on the results of data analysis and discussion that have been carried out in the study, using a correlation test produces a correlation coefficient of self-control and cyber aggression ($r = -0.683$; $p = 0.000$). These results indicate that there is a significant negative relationship between the self-control variable and the

cyber aggression variable. Therefore, the higher self-control, the lower the cyber aggression, and vice versa.

Based on the results of measuring the level of self-control, it was found that 237 participants (62.5%) fell into the high category, so the level of self-control among adolescent social media users in Kupang City is in the High Category. Based on the results of the measurement of the level of cyber aggression, 247 participants (65.2%) fell into the low category, indicating that cyber aggression among adolescent social media users in Kupang City is in the low category.

Reference

Averill, J.R. (1973). Personal control over aversive stimuli and its relationship to stress. Department of Psycology. University of Massachus etts, Amberst, MA. 80:268-303.

Baumeister, R. F., Heatherton ; Tice, D. M. (1994). Losing control: How and why people fail at self-regulation. San Diego, CA: Academic Press.

Denson, T. F., DeWall, C. N., & Finkel, E. J. (2012). Self-control and aggression. Current Directions in Psychological Science, 21(1), 20–25. https://doi.org/10.1177/0963721411429451

Dinas Kependudukan dan Pencatatan Sipil Kota Kupang. (2023). Kolaborasi Dukcapil-DP3A Kota Kupang Percepat Penanganan Korban Kekerasan Perempuan & Anak. Diakses dari https://dukcapil.kupangkota.go.id /kolaborasi-dukcapil-dp3a-kota-kupang-percepat-penanganan-korban-kekerasan-perempuan-anak/

Gandawijaya, L. E. (2020). Hubungan antara Kontrol Diri dan Agresi Elektronik pada Pengguna Media Sosial di Masa Transisi Menuju Dewasa (Issue April). https://www.researchgate.net/

Hamida, N. A., Laba, N. R., Al Mascaty, A., & Nahesti, N. (2023). Adaptasi dan Validasi Skala Cyber-Aggression Questionnaire for Adolescents. *Journal Psikologi Forensik Indonesia*, *3*(1).

Hinduja, S., & Patchin, J. W. (2018). Bullying beyod the schoolyard: Preventing and responding to cyberbullying (2nd ed.). Thousand Oaks, CA: Corwin Pre 7ss.

Isabel, K., Wijaya, S. C., & Garvin, G. (2022, July). Gambaran Cyber Aggression Pada Remaja di Jakarta. In *Seminar Nasional Psikologi dan Ilmu Humaniora (SENAPIH)* (pp. 68-78).

Katong NTT. (2023). Anak Kota Kupang Rentan Jadi Korban Kekerasan Online. Diakses dari https://katongntt.com/anak-kota-kupang-rentan-jadi-korban-kekerasan-online/

Mardianto, M. (2023). Pengaruh Kontrol Diri Terhadap Agresi Siber Pada Remaja. *Jurnal RAP (Riset Aktual Psikologi Universitas Negeri Padang)*, *13*(2), 184-196.

with SocialMedia. Curator: The Museum Journal, 51(1), 21–31. https://doi.org/10.1111/j.2151-6952.2008.tb00292.x

Schoffstall, C. L., & Cohen, R. (2011). Cyber aggression: The relation between online offenders and offline social competence. Social Development, 20(3), 587–604

https://doi.org/10.1111/j.1467- 9507.2011.00609.x

Utami, A. S. F., & Baiti, N. (2018). Pengaruh Media Sosial Terhadap Perilaku Cyber BullyinPada Kalangan Remaja. Cakrawala: Jurnal Humaniora Bina Sarana Informatika, 18(2), 257–262.

We Are Social, & Hootsuite. (2022). Digital 2022: Indonesia. Diakses dari https://wearesocial.com/digital-2022-indonesia.