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Self-Control and Cyberbullying Behavior Dynamics Among University Students: A Correlational Study within Aceh's Academic Context

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ABSTRACT

Cyberbullying has increasingly emerged as a significant psychological issue among university students, particularly as digital communication becomes deeply embedded in higher education settings. While self-control is commonly conceptualized as a protective mechanism against aggressive conduct, empirical findings have produced mixed evidence regarding its effectiveness in predicting cyberbullying involvement among emerging adults. The present study sought to investigate the association between self-control and cyberbullying behavior among university students in Aceh. A quantitative approach with a correlational framework was applied, involving 136 active students aged 17–25 years who were recruited using a convenience sampling technique. Data were gathered through Indonesian-adapted forms of the Self-Control Scale and the Cyberbullying Scale. Prior to hypothesis testing, assumptions of normality and linearity were examined, after which Pearson's Product Moment correlation analysis was performed. The findings revealed no statistically significant association between self-control and cyberbullying behavior ($r = -0.107$; $p = 0.214$; $p > 0.05$). The majority of participants exhibited moderate levels of self-control and minimal engagement in cyberbullying activities. These results suggest that self-control may not serve as a direct determinant of cyberbullying among university students in Aceh. Instead, cyberbullying behavior during emerging adulthood may be more strongly shaped by external psychosocial influences, including peer norms, situational dynamics, and culturally embedded values that operate within digital interaction contexts.

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1. INTRODUCTION

Indonesia has gradually experienced growth in recent years, as reported by Katadata.co.id, where device usage reached 5.63 hours per day in 2020 and increased to 6.05 hours per day in 2023 (Annur, 2024). This data is further strengthened by reports showing that in the last six years, device penetration has increased rapidly by up to 25.9%, with projections indicating that by 2025, 89% of people in Indonesia will use such devices (Pusparisa, 2020). The ease and accessibility of devices are the main factors behind this trend, which has the potential to impact both mental and physical health (Ahmed & others, 2023), such as insomnia and fatigue due to disrupted sleep patterns (Saraswati, Chandhika, & Lie, 2021), as well as increased levels of anxiety and depression (Rashid & others, 2021). Recent data indicate that device

usage is more dominant for social media platforms compared to educational access or online gaming (Kurugodiyavar & others, 2017).

Moreover, excessive use can trigger aggressive behavior among individuals (Lee & others, 2023). The widespread use of devices and their misuse lead to actions such as cyberbullying, which is often experienced by university students (Aloufan & others, 2023). Although devices have positive impacts, such as increasing learning motivation (Putri & Arham, 2024), they also produce negative effects in the form of psychological consequences such as cyberbullying, where hate speech and harassment toward female students emerge (Putri & Arham, 2024). Individuals affected by these actions experience negative impacts in several aspects, such as depression, anxiety, and decreased self-esteem (Arafa & Senosy, 2017), the risk of academic failure, interpersonal relationship problems, family issues, depression, and self-esteem concerns (Peled, 2019). Victims of cyberbullying often experience mental health problems in the form of increased anxiety and higher levels of depression (Putri & Arham, 2024).

Recent studies have emphasized that cyberbullying among university students is influenced by complex interactions between individual and social factors within digital environments. A meta-analysis conducted by Chen et al., (2021) found that the predictive role of self-control in cyberbullying behavior varies across developmental stages, with weaker effects observed among young adults compared to adolescents. Similarly, Zhao & Yu, (2021) reported that online disinhibition in anonymous digital settings reduces the effectiveness of internal regulatory mechanisms such as self-control. Furthermore, recent findings by Martínez-Monteagudo et al., (2022) and Wachs & Wright, (2023) indicate that self-control becomes a less significant predictor when variables such as moral disengagement, peer conformity, and online group norms are included in the analysis. These findings suggest that cyberbullying behavior in higher education contexts is more situational and socially driven rather than solely determined by individual psychological traits.

Recent studies have consistently highlighted cyberbullying as a growing concern among university students, particularly in the digital era where online interactions have become an integral part of daily life. Research conducted by Zhu et al., (2021) and Martínez-Monteagudo et al., (2022) found that cyberbullying is significantly associated with various psychological and behavioral problems among young adults. Furthermore, studies by Camerini et al., (2020) and Barlett & Gentile, (2021) emphasized that individual factors such as self-regulation and self-control play a crucial role in predicting individuals' involvement in cyberbullying behaviors. Individuals with lower levels of self-control tend to exhibit impulsive online behavior, which increases the likelihood of engaging in aggressive digital interactions (Kokkinos & Antoniadou, 2020).

Life conditions in the campus environment can further worsen this issue, as university students often experience academic, social, and emotional pressures that may affect their mental health. Individuals with lower levels of self-control may be more vulnerable to adverse experiences on social media platforms. Research by Gohal & others, (2023) indicates that individuals who become victims of cyberbullying are more likely to face negative impacts on mental health, including anxiety and depression, which in turn can affect their sense of self-esteem (Gohal & others, 2023). Individual factors, such as the level of empathy, also play a role in shaping the association between self-control and cyberbullying. Empirical evidence indicates that students who exhibit lower levels of empathy are more likely to engage in cyberbullying behavior (Brewer & Kerslake, 2015), while social contexts, such as peer support and school culture, also play an important role in determining the impact of self-control on cyberbullying.

Theoretical approaches to self-control vary, but this study aligns with the findings of , who conceptualize self-control as an individual's capacity to regulate or alter internal reactions, as well as to prevent undesirable behaviors and restrain themselves from such actions. Tangney, Baumeister, & Boone, (2004) distinguish inhibitory and initiatory forms of self-control. Most theoretical perspectives on self-control propose that the capacity to suppress impulses yields positive outcomes, especially by avoiding undesirable outcomes. The theoretical description of these two types of self-control has been examined by Myrseth & Fishbach, (2009)whose model highlights the conflict experienced in self-control through a

new approach that distinguishes between conflict identification and resolution, and further elaborated by de Ridder, de Boer, Lugtig, Bakker, & van Hooft, (2011) regarding initiative and inhibition in self-control.

The practical implications of this issue are directly related to the way cyberbullying is measured with certain variations. If traditional bullying is defined as aggressive actions intended to cause harm or stress, usually carried out repeatedly, and occurring between individuals in relationships with an imbalance of power (Olweus, 1993), then cyberbullying, according to Smith et al., (2008), is an intentional aggressive act by an individual or group using electronic platforms, carried out repeatedly over a certain period against victims who cannot easily defend themselves. The main difference that distinguishes cyberbullying is the use of technology to carry out the acts, and cyberbullying perpetrators often use fake or anonymous identities (Kowalski, Giumetti, Schroeder, & Lattanner, 2014).

Cyberbullying does not only occur in educational contexts, but also in workplace environments, such as continuous harassment, offensive comments, or social exclusion by coworkers. In general, other forms that also appear include doxing, trolling, sextortion, online mobbing, and mass harassment on social media. The distribution of private content without consent, where personal photos or videos are shared without the victim's permission, is another form. Such actions are more frequently experienced by women. According to the Ministry of Women's Empowerment and Child Protection, the majority of cyberbullying victims come from the 18–25 age group (57%), which generally consists of university students, followed by children under 18 years old (26%) across various educational levels.

Furthermore, cyberbullying refers to the dissemination of harmful messages or content, as well as the engagement in various forms of social aggression through digital platforms. This behavior can continue without interruption due to digital technology, where harmful texts and images can spread rapidly and are difficult to remove completely. In a more detailed explanation, Willard, (2007) identifies forms of cyberbullying such as flaming, harassment, denigration, impersonation, outing, and trickery. This also includes manipulation to obtain sensitive data, which is then used to attack the individual. It also includes excluding someone from online groups or social media communities with the intention of hurting or humiliating the victim.

Empirical studies examining the association between self-control and cyberbullying have produced mixed results. Several investigations have identified a significant negative correlation between the two variables, particularly among adolescents, indicating that lower self-control is linked to a higher likelihood of engaging in online aggressive behavior (Vazsonyi & others, 2011). However, recent research among young adults, including university students, has begun to show that the relationship may be weak or not significant. Studies by Wachs & Wright, (2023) and Martínez-Monteagudo, Delgado, & Inglés, (2022) reveal that among university students, self-control no longer functions as a primary predictor of cyberbullying when social and moral variables are considered in the analysis. These findings indicate a shift in focus from individual factors to situational and social factors in explaining cyberbullying among young adult populations.

Furthermore, cultural context also plays a crucial role in influencing cyberbullying behavior. In societies with strong social and religious norms, external control in the form of cultural values, religion, and social supervision can function as a barrier to aggressive actions, including in the digital realm. However, empirical investigations that directly explore the association between self-control and cyberbullying among university students in Aceh are still relatively scarce. Current research reports on cyberbullying still focus on students at the school level, as shown in studies Rachmatan & Ayunizar (2017), Zuhra & Sari (2017), and Nadila & Syam (2018). These research findings have not comprehensively addressed cyberbullying issues among university students, which are also prevalent. The association between self-control and cyberbullying among university students who frequently use digital devices, within a broader context of self-control and its impact on cyberbullying behavior, becomes highly important, especially with the rapid development of digital technology today.

2. METHODS

A quantitative correlational approach was deemed suitable for this research, as it seeks to analyze the statistical association between self-control and cyberbullying behavior without manipulating the variables being studied. This design allows researchers to identify the direction and strength of associations between naturally occurring psychological variables within a real-world context (Creswell & Creswell, 2018). The research was conducted through several stages. First, the instruments were adapted into Bahasa Indonesia using a forward–backward translation procedure to ensure semantic equivalence across cultures (Beaton et al., 2000). Second, data were collected from active university students aged 17–25 years through convenience sampling. Third, the obtained data were screened to test the assumptions of normality and linearity. Finally, Pearson's Product–Moment correlation was conducted to assess the association between self-control and cyberbullying behavior using SPSS version 20.

This research adopted a quantitative approach employing a correlational design to investigate the association between self-control and cyberbullying behavior among university students in Aceh. The study population was active students at universities in Aceh. The research sample consisted of 136 active students, consisting of 32 males and 104 females, with an age range of 17–25 years. The age distribution showed that 66 respondents were aged 17–20 years, 69 respondents were aged 21–22 years, and 1 respondent was aged 23–25 years. This sample size is sufficient for quantitative correlational research, because research on relationships between variables generally requires a minimum of 30–100 respondents for statistical analysis to have sufficient power (Creswell & Creswell, 2018). The sampling technique used was convenience sampling**.**

Table 1. Demographic Characteristics of Student Respondents (N = 136)

Characteristic	**Category**	**Frequency**	**%**
Gender	Male	32	23.5
Female	104	76.4	
Age	17–20 years	66	46.3
21–22 years	69	50.7	
23–25 years	1	0.73	
University Type	Public		
University	136	100.0	

Data were gathered through two psychological measurement instruments, namely the Self-Control Scale and the Cyberbullying Scale. The Self-Control Scale was adapted from the original instrument developed by (Tangney et al., 2004), and the The scale was adapted from the Cyberbullying Scale originally developed by Patchin & Hinduja, (2015), which measures individual involvement in cyberbullying behavior. Both instruments were originally in English and were adapted into Indonesian using Beaton (2000) adaptation guideline procedures, including forward translation, back translation, and review by a psychologist to ensure equivalence of meaning and cultural context before being used in data collection.

Data were analyzed using the Pearson Product–Moment correlation method to assess the association between self-control and cyberbullying. In addition, descriptive statistics and categorical analyses were performed to illustrate the levels of self-control and cyberbullying according to participants' gender and age. The entire data analysis process was conducted using Statistical Product and Service Solutions (SPSS v20) software.

3. FINDINGS AND DISCUSSION

Normality Test

The assumption of normality was evaluated using z-skewness and z-kurtosis statistics for each variable. For the self-control variable, the calculated z-skewness was 0.462 (0.096/0.208), while the z-kurtosis value was 0.371 (0.153/0.413). Both values fall within the range of −3.29 to +3.29 (Kim, 2013), indicating that the self-control variable is normally distributed.

Meanwhile, for the cyberbullying variable, the computed z-skewness was 2.933 (0.610/0.208), while the z-kurtosis was −0.676 (−0.279/0.413). These values also fall within the range of −3.29 to +3.29. Therefore, it can be inferred that the cyberbullying variable also follows a normal distribution. Based on these normality test results, the research data meet the assumption of normality and are suitable for analysis using parametric statistical tests.

Table 2. Results of the Normality Test

Variable	Zskewness = Skewness / SE	Zkurtosis = Kurtosis / SE	Description
Self-Control	0.096/0.208 = 0.462	0.153/0.413 = 0.371	Normal
Cyberbullying	0.610/0.208 = 2.933	−0.279/0.413 = −0.676	Normal

Linearity Test

A linearity test was performed to assess whether the association between self-control and cyberbullying follows a linear pattern. The analysis indicated that the significance value for deviation from linearity was p = 0.468 (p > 0.05). This result suggests that the observed data do not significantly deviate from a linear model. Accordingly, the association between self-control and cyberbullying can be considered linear, thereby satisfying the assumption required for Pearson Product–Moment correlation analysis.

Table 3. Results of the Linearity Test

Variable	F Value (Deviation from Linearity)	Significance Value	Description
Self-Control and Cyberbullying	1.003	0.468 (p > 0.05)	Linear

Descriptive Analysis and Correlation Test Results

Descriptive statistics indicated that the self-control variable had a mean of 25.89 with a standard deviation of 5.69, whereas cyberbullying showed a mean score of 28.79 and a standard deviation of 5.38. Further descriptive analyses were performed to compare the mean scores and variability of both variables across gender and age categories.

Table 4. Descriptive Analysis Results

Variable	Gender Age	
	Male (n = 32)	Female (n = 104)
Self-control	M = 23.72, SD = 5.91	M = 26.56, SD = 5.47
Cyberbullying	M = 30.59, SD = 5.98	M = 28.24, SD = 5.08

Based on the gender-based descriptive analysis, male participants exhibited a lower mean score on self-control compared to female participants. In contrast, the average cyberbullying score was higher among males than females.

The descriptive analysis based on age showed that the mean self-control score in the 21–22 age group was the lowest compared to the other two age groups. In contrast, for the cyberbullying variable, the lowest mean score was found in the 17–20 age group.

The Pearson correlation test produced a coefficient of r = −0.107 with a p-value of 0.214 (p > 0.05). This finding suggests a very weak inverse association between self-control and cyberbullying; however, the relationship is not statistically significant. Thus, it can be concluded that there is no significant relationship between self-control and cyberbullying among university students. Therefore, the null hypothesis (H_0) is accepted, while the alternative hypothesis (H_1), which states that there is a relationship between self-control and cyberbullying, is rejected.

Table 5. Correlation Test Results

Variable	Correlation Coefficient	Significance Value
Self-Control and Cyberbullying	−0.107	0.214 (p > 0.05)

Categorization of Self-Control and Cyberbullying Scales

The categorization results show that most respondents were in the moderate self-control category, totaling 82 individuals. Respondents with high self-control numbered 37, while those with low self-control numbered 17. This distribution indicates that, in general, students have a fairly good level of self-control.

The categorization of the cyberbullying scale shows that the majority of respondents were in the low category, totaling 129 individuals. Respondents in the moderate cyberbullying category numbered 7, and no respondents were in the high cyberbullying category. These findings indicate that the level of cyberbullying involvement among students is very low.

Table 6. Categorization of Self-Control and Cyberbullying Scale Levels

Variable	Low	Moderate	High
Self-Control	17 (12.5%)	82 (60.3%)	37 (27.2%)
Cyberbullying	129 (94.9%)	7 (5.1%)	0 (0%)

Categorization by Gender

Based on gender, the categorization results show that among male respondents, there were 10 individuals with low self-control, 18 with moderate self-control, and 4 with high self-control. Meanwhile, among female respondents, there were 7 individuals with low self-control, 64 with moderate self-control, and 33 with high self-control. These results indicate that female respondents tend to have higher levels of self-control compared to male respondents.

Table 7. Categorization by Gender

Variable	Male (n = 32)			Female (n = 104)		
	Low	Moderate	High	Low	Moderate	High
Self-Control	10 (31.2%)	18 (56.2%)	4 (12.5%)	7 (6.7%)	64 (61.5%)	33 (31.7%)

Cyberbullying	28 (87.5%)	4 (12.5%)	0 (0%)	101 (97.1%)	3 (2.9%)	0 (0%)

The categorization of cyberbullying by gender shows that among male respondents, most were in the low category (28 individuals), while the remaining were in the moderate category (4 individuals). Among female respondents, most were also in the low category (101 individuals), with a small number in the moderate category (3 individuals). There were no male or female respondents in the high cyberbullying category.

Categorization by Age

Based on age, respondents aged 17–20 years were mostly in the moderate self-control category (36 individuals), followed by the high category (23 individuals) and the low category (7 individuals). In the 21–22 age group, most respondents were also in the moderate category (45 individuals), followed by the high category (14 individuals) and the low category (10 individuals). Meanwhile, in the 23–25 age group, there was only one respondent in the moderate category.

For cyberbullying, respondents aged 17–20 years were mostly in the low category (65 individuals), with one individual in the moderate category. In the 21–22 age group, there were 63 individuals in the low category and 6 individuals in the moderate category. Meanwhile, in the 23–25 age group, there was only one respondent in the low category.

Table 8. Categorization by Age

Variable	**17–20 Years (n = 66)**			**21–22 Years (n = 69)**			**23–25 Years (n = 1)**		
	Low	Moderate	High	Low	Moderate	High	Low	Moderate	High
Self-Control	7 (10.6%)	36 (54.5%)	23 (34.8%)	10 (14.5%)	45 (65.2%)	14 (20.3%)	0 (0%)	1 (100%)	0 (0%)
Cyberbullying	65 (98.5%)	1 (1.5%)	0 (0%)	63 (91.3%)	6 (8.7%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)

Discussion

The findings of this study demonstrate that no significant association was found between self-control and cyberbullying behavior among university students in Aceh. ($r = -0.107$; $p = 0.214$; $p > 0.05$). All prerequisite assumptions for statistical analysis were satisfied, with the data demonstrating normal distribution and a linear association between the variables. Consequently, the absence of a significant relationship cannot be attributed to methodological violations, but instead represents the actual empirical characteristics of the sampled population.

The results of this study reveal a statistically significant association between self-control and cyberbullying behavior among university students. This result is in line with previous studies conducted by Kowalski et al., (2014) and Li et al., (2023), which demonstrated that individuals with lower levels of self-control are more likely to engage in cyberbullying behavior. From a theoretical perspective. This result lends support to the self-control theory advanced by Gottfredson and Hirschi, which posits that individuals with weaker regulatory capacities are more prone to engaging in impulsive and deviant behaviors to engage in impulsive and risk-taking behaviors, including aggressive actions in online environments. Moreover, recent empirical evidence by Li et al., (2023) and

Muhdi et al., (2020) confirmed that self-control functions as an internal protective factor that reduces the likelihood of engaging in harmful digital interactions such as cyberbullying.

The lack of a statistically significant association between self-control and cyberbullying behavior observed in this study aligns with recent empirical research focusing on emerging adult populations. Previous studies have shown that self-control does not always function as a direct predictor of cyberbullying behavior in university populations. For instance, (Martínez-Monteagudo et al., 2022) reported that the influence of self-control becomes non-significant when social-cognitive variables such as moral disengagement and peer norms are included in the analytical model. Similarly, Wachs & Wright, (2023) demonstrated that low self-control predicts cyberbullying behavior only under certain conditions, such as high social media intensity or permissive online group norms. These findings suggest that cyberbullying behavior in young adults may be influenced more by situational and contextual factors rather than by individual dispositional traits alone.

From a theoretical perspective, the findings of this study can be interpreted using the dual-process model of self-control proposed by de Ridder et al., (2011) , which distinguishes between inhibitory and initiatory self-control mechanisms. In online environments characterized by anonymity and reduced social accountability, inhibitory control may become less effective in regulating impulsive or aggressive responses. This phenomenon aligns with the concept of online disinhibition, where individuals tend to exhibit behaviors in digital interactions that they would typically suppress in face-to-face settings (Zhao & Yu, 2021). Accordingly, the absence of a significant association in this study may suggest that internal regulatory mechanisms, such as self-control, are not adequate to inhibit cyberbullying behavior when external social pressures and the dynamics of digital interactions come into play.

The absence of a significant association between self-control and cyberbullying in this study is reinforced by prior research suggesting that self-control does not consistently operate as a direct predictor of cyberbullying behavior. A descriptive study by Anastasya, Julistia, & Astuti, (2023) ashowed that cyberbullying perpetrators generally had moderate levels of self-control, with behavioral control as the weakest dimension, indicating that self-control did not function optimally in the context of social interactions with peers. This finding suggests that the presence of self-control does not automatically prevent involvement in cyberbullying, especially when individuals are in intense social environments. Furthermore, research by Rashid & others, (2021) on TikTok users clearly found that self-control had no significant relationship with cyberbullying behavior, either partially or simultaneously, while emotion regulation showed a significant negative relationship. These results emphasize that the ability to manage emotions is more decisive than merely the ability to restrain impulses. In contrast, another study incorporating conformity as a mediating variable found that self-control exerted a significant influence on cyberbullying only when operating indirectly through social conformity, reinforcing the idea that self-control functions more as a supporting variable in complex psychosocial mechanisms rather than as a direct causal factor.

Theoretically, self-control is often viewed as a protective factor against aggressive behavior, including online aggression. However, the results of this study indicate that within the context of cyberbullying among university students, self-control does not operate as a direct determinant. These findings are consistent with the no-direct-effect perspective, which posits that the impact of self-control on cyberbullying is not straightforward or linear, but instead occurs indirectly through its interaction with other psychological and contextual variables.

These findings are consistent with Nodeland (2018), who reported that self-control did not exert a direct influence on cyber offending behavior, but showed significant interaction effects with other variables. Wachs & Wright (2023) also reported that low self-control became a significant predictor of cyberbullying only when moderated by factors such as the intensity of social media use. In addition, cross-cultural research by Vazsonyi & others, (2011) showed that the effect of self-control on cyberbullying is contextual and varies across cultures, while Li, Li, & Zhang, (2023) emphasized that self-control acts as a mediator between moral disengagement and cyberbullying rather than as a direct cause.

A national study by Anastasya et al., (2023) in Aceh also showed that self-control did not directly explain variations in cyberbullying behavior. Behavioral control was found to be the weakest aspect, while factors such as peer involvement and social conformity had a more dominant influence on online aggressive behavior. This indicates that the presence of self-control is not always effective as a deterrent to cyberbullying when individuals are in social environments that are permissive toward online aggression.

Recent international studies involving young adults further strengthen these findings. Wachs & Wright, (2023) and Martínez-Monteagudo et al., (2022) showed that the influence of self-control on cyberbullying becomes weak or non-significant when factors such as online group norms, moral disengagement, and digital social dynamics are considered. In addition, the phenomenon of online disinhibition causes self-control mechanisms that are usually effective in face-to-face interactions to become less functional in anonymous online environments (Zhao & Yu, 2021).

The non-significant finding may partly result from restricted variance in cyberbullying scores among participants, indicating a potential restriction of range effect, where the majority of students were in the low cyberbullying category and moderate to high self-control categories. Statistically, this condition can weaken the relationship between variables, even though a theoretical relationship may exist. In addition, the socio-cultural context of Aceh, which is characterized by strong religious and social norms, may function as a form of external control that is more dominant than individual self-control in regulating students' behavior in the online environment (Damayanti, Alfiasari, & Islamiah, 2024). From a developmental perspective, the respondents were in the early adulthood phase, in which self-control has developed relatively stably, so individual differences become less extreme and their contribution to behavioral variation becomes smaller (Chen, Ho, & Lwin, 2021).

Overall, the results of this study indicate that the lack of a significant association between self-control and cyberbullying should not be considered an anomalous finding, but rather consistent with literature that views self-control as a contextual, moderating, or mediating variable. These results reinforce the perspective that cyberbullying is a multidimensional behavior that cannot be adequately explained by a single psychological variable.

4. CONCLUSION

This study sought to investigate the association between self-control and cyberbullying behavior among university students in Aceh. The results indicated that self-control was not significantly related to cyberbullying behavior, suggesting that it cannot be regarded as a direct determinant of students' engagement in cyberbullying activities. This result indicates that cyberbullying behavior among university students may not be primarily determined by individual regulatory capacity, but instead appears to be shaped by external psychosocial influences, including patterns of peer interaction, prevailing social norms, and the structural characteristics of digital environments where online communication takes place.

However, several limitations must be acknowledged when interpreting the results of this study. The correlational nature of the research design prevents the establishment of causal inferences between the examined variables. Additionally, the reliance on a convenience sampling method may limit the extent to which the findings can be generalized to a wider university student population. In addition, this study focused solely on self-control as an individual variable without incorporating other relevant psychosocial factors such as moral disengagement, emotion regulation, or peer conformity. Therefore, future research is recommended to employ more comprehensive research models by including social and cognitive variables, as well as using more representative sampling techniques to gain a more comprehensive understanding of the multifaceted nature of cyberbullying among university students.

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