

## The Impact of Psychological Factors on Cyberbullying Behaviors among Youth in Selangor, Malaysia

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### Abstract

Addressing the rising concern of cyberbullying among young people, this study holds critical importance as it delves into the psychological underpinnings specifically depression, anger, and self-esteem that influence such behaviors on social media among the youth in Selangor. Utilizing a sample of 394 young residents, the research employed a comprehensive questionnaire disseminated via online platform to measure these emotional and psychological variables. Instruments such as the Depression PHQ-9, Clinical Anger Scale, Self-esteem Scale, and Cyberbullying Offending Scale were utilized to gauge the corresponding attributes. The research reveals a significant gender disparity in cyberbullying incidents with males showing higher levels than females. Notably, depression and anger were found to be positively correlated with cyberbullying, suggesting that these emotional states may serve as catalysts for cyberbullying activities. Conversely, self-esteem shows a negative correlation, implying that higher self-esteem may act as a safeguard against cyberbullying. Of particular interest is the finding that anger emerges as a unique predictor for cyberbullying behaviors, thereby highlighting the importance of targeted interventions aimed at anger management. The study conclusively shows that emotional conditions like depression and anger, along with self-esteem, play a pivotal role in shaping cyberbullying tendencies among the youth. By providing a deeper understanding of these influential psychological factors, the study serves as a valuable resource for policymakers, educators, and mental health professionals looking to design effective interventions, thereby contributing to the reduction of cyberbullying and fostering a safer online atmosphere for young individuals.

**Keywords:** Cyberbullying, Youth, Depression, Anger, Self-esteem

### Introduction

Technological advancements in communication have given rise to a digital society where

social media platforms are integral for interpersonal relationships, particularly among young generations (Smith & Anderson, 2018). This transition, while enabling global connectivity has also led to the dark phenomenon of cyberbullying, which is defined as the use of digital technology to harass or threaten individuals (Patchin & Hinduja, 2016). A rise in cyberbullying incidents particularly among women, has been recorded in Malaysia that leads to adverse psychological outcomes such as depression and anxiety (MCMC, 2019). With the increasing penetration of social media networks, instances of cyberbullying have markedly increased whereby posing severe consequences for mental health. According to statistics released by the Malaysian Communications and Multimedia Commission (MCMC), cyber harassment cases have risen by 109.4% in the year 2020 compared to the previous year where women make up almost 60% of the victims.

Cyberbullying is defined as the use of technology-based communication platforms, such as mobile phones, emails, instant messaging, and social networks with the intent to harass or threaten an individual online (Brady, 2010). In Malaysia, this involves derogatory comments, impersonations, and continuous harassment which affects the emotional well-being of the victims. According to the MCMC, young people between the ages of 20-24 make up the highest percentage of internet users contributing to the growing concerns surrounding cyberbullying. Furthermore, data from Cyber Security Malaysia (CSM) shows an escalating trend in cybercrimes. Among the key factors motivating individuals to engage in cyberbullying on social media is an inability to handle stress and control their emotions (Nor, 2019).

Academic research has shown a correlation between cyberbullying and increased levels of depression and anxiety, especially among teenagers (Abdul Rashid et al., 2020; Cankaya, 2010; Eksi, 2012 & Tpocu et al., 2010). AS reported by UNICEF, Malaysia ranks sixth globally and second in Asia for cyberbullying issues. These statistics reveal a critical situation that demands immediate intervention. In Malaysia, current legislation under Section 233 of the Communications and Multimedia Act 1998 can penalize cyberbullies with fines or imprisonment. However, this does not seem to be an adequate deterrent.

### **Cyberbullying among Youth**

The prevalence of cyberbullying among youth has reached alarming levels in recent years and gain significant attention from researchers, educators, and policymakers alike. According to a 2021 study by UNESCO, approximately 32% of students worldwide have been bullied online (UNESCO, 2021). The rise of social media platforms, messaging apps, and online gaming has provided new venues for bullies to victimize their peers. Online platforms often provide a veil of anonymity, emboldening perpetrators and making it more difficult for victims to avoid the bullying or seek help (Smith & Anderson, 2020). Cyberbullying activities range from spreading rumors and posting derogatory messages to more severe actions like doxing or revenge porn which leads to severe emotional and psychological consequences for the victims (Fisher et al., 2020).

The impact of cyberbullying on youth is notably significant as demonstrated by a multitude of studies. Research has shown that victims of cyberbullying often experience higher rates of depression, anxiety, and suicidal thoughts (Kowalski et al., 2014). Moreover, cyberbullying can exacerbate existing mental health issues, further isolating victims and reducing their academic performance and general well-being (Campbell et al., 2022).

Contrary to common perceptions, the perpetrators themselves often suffer from a range of psychological issues. Studies have found that bullies demonstrate increased rates of emotional troubles and higher proclivity for substance abuse (Wang et al., 2019). The act of bullying often stems from issues like low self-esteem, although paradoxically, some research suggests that bullies may sometimes possess inflated self-views (Fanti & Henrich, 2015).

In Malaysia, cyberbullying among youth has been a growing concern that poses a unique set of challenges. It is reported that nearly 28% of Malaysian adolescents have experienced some form of online bullying with rates higher among those engaged in multiple social media platforms (Lee et al., 2023). Furthermore, cultural nuances in Malaysia, such as the emphasis on community harmony and saving face often stigmatize victims and discourage them from reporting the bullying incidents (Ibrahim & Vi, 2021). These dynamics make it even more challenging to curb cyberbullying effectively as victims remain silent and perpetrators go unpunished.

In addressing this issue, Malaysian schools have been slow to integrate effective cyberbullying prevention programs with many educators lacking the training and resources to address the problem (Fredrick et al., 2023). Moreover, there is limited legislation specifically targeting online harassment among youth. Although the government has incorporated cyber-harassment as part of the amended Penal Code, it is often criticized for its vagueness and limited application to cases involving minors (Razali et al., 2022).

In light of the above concerns, this study aims to look at the depression, anger, self-esteem and cyberbullying with specific research questions as follows:

1. What are the levels of depression, anger, self-esteem, and cyberbullying among youth in Selangor, Malaysia?
2. What are the relationships between depression, anger, self-esteem, and cyberbullying among youth in Selangor, Malaysia?
3. What are the unique factors that predicts cyberbullying among youth in Selangor, Malaysia?

## **Factors of Cyberbullying**

### ***Depression***

Cyberbullying and its correlation with mental health disorders, such as depression and anxiety have become a significant concern among mental health professionals. According to a meta-analysis conducted by Hamm et al (2015), there is a strong link between cyberbullying victimization and depression among adolescents. The study recommends interventions at multiple levels to reduce these mental health issues.

The phenomenon is not confined to any single geography; as seen in the Malaysian context, it is a global issue. In a 2018 study by the Cyberbullying Research Center, about 36.5% of students between the ages of 12-17 reported being cyberbullied at some point in their life, and approximately 14.9% admitted to cyberbullying others. This study also suggested a significant relationship between experiencing cyberbullying and elevated levels of anxiety and depression (Hinduja & Patchin, 2018). Both the victims and the perpetrators are at risk of experiencing symptoms of depression, highlighting the cyclical nature of cyberbullying and mental health issues. Therefore, it becomes crucial to explore the bidirectional relationship between depression and cyberbullying to devise targeted interventions.

The influence of social media on mental health is undeniable, especially among young individuals. While platforms like Facebook, Instagram, and Twitter offer a plethora of benefits, they also pose significant mental health risks through issues like cyberbullying. Both victims and perpetrators are found to suffer from mental health conditions such as depression and anxiety (Keles et al., 2020). These findings are not isolated but are consistent across various studies. This emphasizes the urgent need for interventions that address both sides of the problem that focuses on supporting the victims and treating the perpetrators.

### **Anger**

Anger is a common emotion for humans. Some individuals may display clinical anger which is chronic and pervasive. The difference between anger and clinical anger may be similar to the difference between feeling sad and clinical depression. In other words, when a common emotion becomes long-lasting, it turns into a clinical issue. Victims of cyberbullying have a direct and positive association with the factor of anger (Serife et al., 2015). Furthermore, Wang, et al (2017) found that anger plays a significant role in cyberbullying issues. The anger towards cyberbullies becomes irrelevant if they have a high moral identity.

Meanwhile, Arıcak (2009) conducted a study on adolescents and found that the most important predictor in cyberbullying is symptoms of anger and hostility. The findings of the study conducted by Şahin et al (2012) also agree with this discovery concerning anger being a major factor for cyberbullying issues. Numerous studies have reported that anger, or the manner in which it is expressed is an important predictor of anger (Ak, et al., 2015; Arıcak et al., 2016; Erreygers et al., 2019). Individuals direct their anger towards various aspects and release their anger onto specific people. Internalizing anger refers to the absence of visible expression, keeping it under pressure; directing anger refers to hitting objects, physically injuring others, or verbally harming others by hurling insults and criticisms (Spielberger et al., 1991, Özer, 1994). When someone has a high level of anger and doesn't know how to properly release it, they end up venting it by cyberbullying others. This can provide them relief and satisfaction in seeing the person they bully feel sad.

The relationship between anger and cyberbullying extends beyond mere correlation. Studies have increasingly focused on anger as a mediating or moderating variable in the development of cyberbullying behavior. According to a study by Modecki, et al. (2014), high levels of anger among adolescents can act as a trigger for aggressive behaviors such as cyberbullying. The study calls for interventions that include anger management techniques to minimize cyberbullying incidents (Modecki, et al., 2014).

The consequences of anger-related cyberbullying can be severe. According to Kowalski, et al. (2014), victims of cyberbullying who experience elevated levels of anger are more likely to engage in retaliatory behavior, perpetuating a cycle of online aggression and victimization. This highlights the necessity for interventions that not only treat the symptoms of anger but also address the underlying emotional and psychological issues that contribute to cyberbullying (Kowalski, et al., 2014).

### **Self-esteem**

Self-esteem has a significant relationship with the emotional well-being of cyberbullying victims. It is observed that self-esteem is intricately linked with feelings of anger, sadness, and

empathy towards the victims, as well as in defending them from ongoing bullying (Balakrishnan & Fernandez, 2018). A study by Hinduja and Patchin (2012) found that individuals with low self-confidence are more likely to engage in bullying behaviors which resort to sending demeaning messages, pictures, or videos without having to confront the victim face-to-face. When someone has low self-esteem, they often lack confidence and feel inferior to others who seem to have more advantages. As a result, they resort to derogatory language aimed at undermining the confidence of their targets and boosting their own self-esteem by making themselves feel superior to their victims.

Furthermore, some argue that individuals with higher self-esteem are more likely to become victims rather than perpetrators of bullying on social media. This is because, if they experience cyberbullying, they are more likely to consider reporting the issue. However, the stigma associated with being a victim of what is often considered a trivial issue may deter them from seeking help and makes them more inclined to internalize the problem rather than report it.

In Malaysia, the issue of self-esteem and cyberbullying among youth has garnered attention and warrant academic investigation. A study conducted by Acar et al (2022) reveals a compelling link between low self-esteem and a higher susceptibility to becoming a victim of cyberbullying. The study notes that Malaysian youth with lower self-esteem tend to internalize their problems, which makes them an easier target for bullies online. Furthermore, these youths are less likely to report the incidents to authorities or seek help from trusted adults and often exacerbating the emotional toll the experience has on them.

Additionally, the role of self-esteem has been examined in the context of the perpetrators as well. According to a study by Lei et al (2020), youths with low self-esteem may engage in cyberbullying as a means to assert control and gain a sense of empowerment which they lack in their offline lives. In the Malaysian cultural context, where open discussions about emotional well-being are often stigmatized, the act of cyberbullying may serve as a distorted outlet for self-expression and self-affirmation for these youths.

Conversely, a study by Aliyev and Gengec (2019) suggests that youths with higher self-esteem tend to be more resilient against cyberbullying. They are also more proactive in employing coping strategies such as blocking the perpetrator or reporting the incident. However, the study also indicates that the relationship between self-esteem and resilience to cyberbullying is complex and influenced by a variety of factors, including family support and cultural norms. Therefore, while self-esteem plays a critical role in shaping the experiences of Malaysian youth in the realm of cyberbullying, it is only one piece of a much larger puzzle.

## **Method**

### **Participants**

Three hundred and ninety-four respondents (n women = 211; n men = 183) among the Selangor state youth were recruited. Participants completed a series of self-report questionnaires (described below) using an online survey management platform. The average age of participants was 22.45 years (SD = 3.81; range = 15– 30).

The majority of the respondents in this study consisted of ethnic Malays, comprising 73.6% (290 individuals) of the total sample. This was followed by ethnic Chinese at 14.5% (57 individuals) and ethnic Indians at 11.9% (47 individuals). In terms of occupational status,

31.5% (124 individuals) were full-time students, while 25.6% (101 individuals) were employed full-time. The survey also included part-time workers, accounting for 12.9% (51 individuals), and those who were both working and studying, making up 12.2% (48 individuals). Additionally, 17.8% (70 individuals) reported being unemployed.

Regarding daily social media usage, the study found that the majority of respondents spent between 2 to 5 hours per day on social media platforms, totaling 56.1% (221 individuals) of the sample. Those who reported using social media for 5 to 10 hours daily made up 34.8% (137 individuals), while a minority of 9.1% (36 individuals) reported spending more than 10 hours per day on these platforms.

The study also analyzed the respondents' preferences for specific social media applications. WhatsApp and Instagram were the most frequently used, with 23.85% (239 individuals) of the sample using these platforms. TikTok was the second most popular, used by 20.26% (203 individuals), followed by Facebook with 16.87% (169 individuals), and Twitter with 11.78% (118 individuals). The category denoted as "others," which included various less commonly used social media platforms, constituted 3.39% (34 individuals) of the sample.

### **Procedure and Measures**

After participants had completed the informed consent process, they anonymously completed the online survey packet, consisting of the following self-report measures.

#### **Depression**

The Patient-Health Questionnaire-9 (PHQ-9), established by Kroenke, Spitzer, & Williams (2001), functions as a self-administered diagnostic instrument designed to evaluate the presence and severity of depressive symptoms. It is distinct in its aim to closely align with the diagnostic criteria for depression as specified in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). The PHQ-9 consists of nine questions that are rated on a 4-point Likert scale, which ranges from 0 ("not at all") to 3 ("nearly every day"). The questionnaire assesses various aspects of depressive symptoms such as mood fluctuations, sleep quality, and energy levels. Some example statements featured in the PHQ-9 are "Little interest or pleasure in doing things," and "Feeling down, depressed, or hopeless." In this specific sample, the reliability of the PHQ-9, as measured by Cronbach's alpha, was 0.85.

#### **Anger**

The Clinical Anger Scale (CAS) is a self-administered questionnaire formulated to quantify an individual's levels of anger. Developed by Snell et al (1995), the CAS distinguishes itself by offering a comprehensive evaluation tailored to understand anger symptoms in both general and clinical settings. The instrument consists of 21 items, each scored on a 4-point Likert scale ranging from 0 to 3. The overall CAS score is calculated as the sum of all item scores and can range from 0 to 63, with higher scores indicating increased symptoms of anger. Sample questions from the CAS might include: "I do not feel angry," "I feel angry," "I am angry most of the time now," and "I am so angry and hostile all the time that I can't stand it." In a student sample, the average CAS score was around 10 points. The tool can offer valuable insights for clinicians in understanding the severity of a client's anger, guiding treatment planning, and

evaluating therapeutic progress. In the study where the CAS was employed, it demonstrated good internal consistency reliability with a Cronbach's alpha of 0.84.

### **Self-esteem**

The Rosenberg Self-Esteem Scale (RSES) is a widely-utilized self-report instrument designed to evaluate an individual's self-esteem. Originally conceived by Rosenberg (1965), the RSES offers a thorough measurement of global self-worth by assessing both positive and negative feelings about oneself. The questionnaire consists of 10 items, each rated on a 4-point Likert scale that ranges from "Strongly Agree" to "Strongly Disagree." The cumulative score can vary from a minimum of 0 to a maximum of 30, with higher scores indicative of greater self-esteem. The scale is considered unidimensional, focusing solely on the concept of self-esteem. Sample items from the RSES include: "On the whole, I am satisfied with myself," and "At times I think I am no good at all." In the research where the RSES was deployed, it exhibited strong internal consistency reliability, as evidenced by a Cronbach's alpha of 0.87.

### **Cyberbullying**

The *Cyberbullying Offending Scale (COF)*, created by Burgess-Proctor et al (2009), serves as a self-report tool designed to measure the frequency and overall prevalence of engaging in cyberbullying activities. This instrument aims for precise identification of cyberbullying incidents as described by the respondents. Comprised of 9 items, each question on the scale allows individuals to report their level of involvement in cyberbullying. Responses are totaled, with higher scores representing a greater engagement in cyberbullying activities. The score range for this scale is between 0 and 27. In terms of reliability, the instrument has demonstrated robust internal consistency with a Cronbach's alpha of 0.85. Sample items from the scale include: "I cyberbullied others," and "I posted mean or hurtful comments about someone online."

### **Data Analysis**

Analyses were conducted using SPSS 29.0. Descriptive statistics and correlations among study variables were calculated. A bivariate correlation analysis was then conducted to examine the relationship between depression (PHQ-9), anger (CAS), and self-esteem (RSES) in relation to cyberbullying. Finally, a regression analysis was conducted to evaluate whether depression, anger, and self-esteem served as unique predictors for cyberbullying among the youth.

### **Results and Discussion**

According to Table 1, a significant majority, 42.6%, of respondents reported experiencing mild depression. The second most prevalent group experienced moderate depression, accounting for 25.9% of the total. It was noteworthy that a small fraction, 2.3%, reported no symptoms of depression, while 11.7% fell into the minimal depression category. At the more severe end of the spectrum, 10.7% exhibited moderate to severe depression, and 6.9% were classified as having severe depression.

In terms of anger levels, the majority, 68.0%, displayed moderate levels of anger. A further 24.9% demonstrated low anger levels, and a smaller proportion, 7.1%, were identified with high anger levels. As for self-esteem, a considerable 87.1% of respondents were categorized within the moderate self-esteem range. Conversely, 12.7% showed low self-esteem, and a negligible 0.3% were found to have high self-esteem. With respect to cyberbullying, an overwhelming 95.4% of respondents indicated low levels of engagement in cyberbullying

activities on social media. A minor 4.1% exhibited moderate levels, and a scant 0.5% were identified with high levels of cyberbullying behavior.

Regarding depression, 42.6% of the youth respondents experience mild symptoms, while 25.9% report moderate depression. The substantial number of young people experiencing depressive symptoms aligns with existing literature indicating an increasing prevalence of depression among adolescents (Twenge & Joiner, 2020). This high percentage calls for immediate interventions, particularly in educational settings where support systems may be most accessible (Loades et al., 2020).

For anger, 68% of respondents reported moderate levels. The elevated levels of anger among the youth sample might echo findings that link increased screen time and social media use to higher levels of unhappiness and anger (Primack et al., 2018). Also, societal factors such as heightened political polarization and social unrest could contribute to these moderate to high anger levels, as suggested by research on the impact of societal stressors on youth mental health (Patalay et al., 2019).

In terms of self-esteem, the majority (87.1%) of the sample fell into the moderate category, which may reflect general normative adolescent development (Orth et al., 2018). However, the 12.7% reporting low self-esteem is a concern, as low self-esteem has been linked to higher susceptibility to depression, social anxiety, and poorer academic outcomes (Sowislo & Orth, 2013).

Finally, the low level of engagement in cyberbullying (95.4%) might align with the decline in traditional bullying behaviors observed in some recent studies (Olweus & Limber, 2018). However, the presence of even a small percentage involved in moderate or high levels of cyberbullying warrants attention, as such behavior is associated with both mental health risks for the victims and disciplinary repercussions for the perpetrators (Hinduja & Patchin, 2020). In sum, these percentages sketch a complex emotional and behavioral profile of contemporary youth, reaffirming the need for tailored mental health and educational interventions.



Table 1

*Level of study variables*

Level	n	%	Mean	SD	Min	Max
<u>Depression</u>			9.76	4.30	12	35
None (0 -10)	55	14.0				
Mild (11- 20)	168	42.6				
Moderate (21 – 30)	102	25.9				
Moderately severe (31 – 40)	42	10.7				
Severe (20 – 27)	27	6.9				
<u>Anger</u>			37.52	11.43	21	84
Low (0 – 28)	98	24.9				
Moderate (29 - 56)	268	68.0				
High (57 - 84)	28	7.1				
<u>Self-esteem</u>			16.56	3.12	9	30
Low (0 - 13)	50	12.7				
Moderate (12 - 26)	343	87.1				
High (27 - 40)	1	0.3				
<u>Cyberbullying in social media</u>			2.52	4.267	0	27
Low (0 - 12)	376	95.4				
Moderate (13 - 24)	16	4.1				
High (25 – 36)	2	0.5				

Table 2 reveals the difference between gender on cyberbullying. A t-test revealed a statistically significant difference in cyberbullying scores between males ( $M = 3.07$ ,  $SD = 4.964$ ) and females ( $M = 2.03$ ,  $SD = 3.496$ ),  $t(392) = 2.423$ ,  $p = .016$ . The results suggest that males report higher levels of engagement in cyberbullying compared to females. This aligns with prior research indicating that males are often more likely to engage in both traditional and cyberbullying behaviors (Wang et al., 2009; Hinduja & Patchin, 2020). The higher standard deviation among males may indicate a wider range of behaviors, which could be driven by several factors such as social norms, peer influence, or even anonymity provided by online platforms (Suler, 2004; Williams & Guerra, 2007).

The statistical significance supports the notion that gender may play a role in cyberbullying behavior, which echoes the findings of Ybarra et al (2007) who found gender differences in online harassment. The findings also underscore the need for targeted prevention efforts that take gender differences into account (Espelage et al, 2012). Given the social and psychological

ramifications of cyberbullying, it is crucial to understand these demographic patterns in order to inform educational programs, public policy, and individualized interventions.

Table 2

*Differences in gender on cyberbullying*

Variables	Gender				t(df)	Sig.
	Female		Male			
	Mean	Sd.	Mean	Sd.		
Cyberbullying	2.03	3.496	3.07	4.964	2.423 (392)	0.016

Meanwhile, Table 3 reported the results on the correlations between depression, anger, and self-esteem on cyberbullying. A Pearson correlation analysis was conducted to examine the relationships among cyberbullying, depression, anger, and self-esteem. There was a significant positive correlation between cyberbullying and depression,  $r(392) = .273$ ,  $p < .001$ , as well as between cyberbullying and anger,  $r(392) = .345$ ,  $p < .001$ . No significant correlation was observed between cyberbullying and self-esteem,  $r(392) = -.051$ ,  $p = .312$ .

The significant positive correlation between cyberbullying and depression reaffirms a substantial body of evidence indicating a strong relationship between the two. This correlation suggests that as the frequency or severity of cyberbullying escalates, depression symptoms tend to increase correspondingly. This finding is consistent with the literature which has found that victims of cyberbullying are at an increased risk of depression (Patchin & Hinduja, 2010; Kowalski et al., 2014). It also opens the possibility for interventions that simultaneously address cyberbullying and depressive symptoms, potentially increasing their efficacy (Campbell & Bauman, 2018).

The lack of a significant correlation between cyberbullying and self-esteem ( $r = -.051$ ,  $p > .05$ ) in this study is intriguing, particularly because existing research often indicates a negative relationship (O'Dea & Campbell, 2011; Pabian & Vandebosch, 2016). This discrepancy could be due to a range of factors such as cultural context, age range of the sample, or even the specific self-esteem measure used. It also highlights the need for further research to better understand the conditions under which self-esteem may or may not be impacted by cyberbullying (Sticca & Perren, 2013).

Table 3

*Correlations among study variables*

	1	2	3	4
1. Cyberbullying	-			
2. Depression	.273**	-		
3. Anger		.345**	-	
4. Self-esteem			-.051	-

COS, Cyberbullying Offender Scale; PHQ-9, Patient Health Questionnaire; CAS, Clinical Anger Scale; RSES, Rosenberg Self-Esteem N = 394, \*  $p < .05$ , \*\*  $p < .01$

A multiple regression was conducted to predict cyberbullying based on depression and anger. Both predictors significantly predicted cyberbullying: Depression ( $B = .161$ ,  $SE = .037$ ,  $\beta = .206$ ,  $p < .001$ ) and Anger ( $B = .111$ ,  $SE = .018$ ,  $\beta = .297$ ,  $p < .001$ ) with depression as the strongest

predictor. The overall model explained 15.8% of the variance in cyberbullying (Adjusted  $R^2 = .158$ ,  $F(2, 392) = 36.74$ ,  $p < .001$ ). The adjusted  $R^2$  value suggests that approximately 15.8% of the variance in cyberbullying can be explained by the model. While this is a statistically significant amount, it also implies that other unmeasured variables account for the remaining variance, indicating the complexity of the factors influencing cyberbullying (Campbell & Bauman, 2018).

The results indicated a significant positive relationship between depression and cyberbullying, suggesting that higher levels of depression predict greater involvement in cyberbullying behaviors. This aligns with existing research which has consistently shown a positive association between depressive symptoms and cyberbullying involvement (Patchin & Hinduja, 2010; Kowalski et al., 2014). This relationship is thought to be mediated by feelings of helplessness or inadequacy often associated with depression, which may encourage engagement in cyberbullying as a coping mechanism (Wang et al., 2019).

Similarly, anger also showed a significant positive effect, indicating that higher levels of anger are associated with a greater likelihood of engaging in cyberbullying. This is congruent with previous research demonstrating that heightened emotional states, especially anger, are related to aggressive online behaviors (Barlett et al., 2016; Runions, 2013). The relatively larger beta value for anger suggests it might be a more potent predictor compared to depression. This underlines the importance of anger management interventions in combating cyberbullying (Wang et al., 2019).

Table 4

*Multiple regression in determining the main predictor of cyberbullying.*

Variable	Cyberbullying			
	B	SE. B	Beta, $\beta$	$p$
Depression	.161	.037	.206	.000
Anger	.111	.018	.297	.000
$R^2$	.158			
Adjusted $R^2$	.423			
F	36.74			

### **Psychological Implications depression and anger on cyberbullying**

Depression is often considered both a cause and consequence of cyberbullying. Some research suggests that individuals with depressive symptoms may resort to cyberbullying as a misguided coping mechanism, aiming to regain a sense of control or validate their own worth through the power dynamics involved (Wang et al., 2019). This creates a toxic cycle where the act of cyberbullying only deepens the depression, leading to further acts of online aggression as an unhealthy outlet for emotional turmoil (Patchin & Hinduja, 2010).

Anger is another key emotional factor linked with aggressive online behaviors. Individuals who struggle with anger management are more likely to engage in cyberbullying as a way to vent their emotional tension (Barlett et al., 2016). The anonymity provided by the internet can lower inhibitions, making it easier for these individuals to lash out and engage in

destructive behavior. A study by Kowalski and Limber (2013) indicates that unresolved anger can directly translate into a greater likelihood of perpetrating cyberbullying.

Malaysia is a multicultural society with a variety of social norms and expectations. The societal pressure can be overwhelming for young individuals which may contribute to increased levels of depression and anger (Mishna et al., 2010). The unique cultural context could amplify the emotional struggles that young people experience, making them more susceptible to engaging in or being targeted by cyberbullying.

Additionally, the educational environment in Malaysia, like many other places often lacks a comprehensive emotional education curriculum. Without effective strategies to manage emotions like depression and anger, young people might resort to destructive outlets such as cyberbullying (Saarento et al., 2013). With a high penetration rate of internet usage among Malaysian youth, the incidence of cyberbullying is on the rise (Huang et al., 2018). The easy access to technology without the emotional maturity to handle conflicts responsibly can lead to a spike in cyberbullying incidents.

### **Limitations**

The present study has several methodological and theoretical limitations that warrant consideration. Firstly, the findings' generalizability is restricted, given that the sample consisted solely of youth from Selangor, a state in Malaysia, thereby limiting its applicability to other demographics or regions. Secondly, the research employed a single instrument to assess each construct—cyberbullying, depression, anger, and self-esteem—potentially narrowing the depth and breadth of these psychological phenomena under investigation. Additionally, all variables were captured through self-report questionnaires, which opens the door to potential reporting biases such as social desirability. Future studies could strengthen validity by incorporating a multi-method, multi-source assessment approach, encompassing behavioral observations and physiological measures. Thirdly, while the study utilizes established scales like the PHQ-9 for depression and CAS for anger, these self-report instruments still require cautious interpretation in the specific cultural context of Malaysian youth. Lastly, the cross-sectional design of the study does not allow for causal interpretations of the relationships between the variables assessed, limiting the insights into the dynamics and evolution of these constructs over time.

### **Conclusion**

The current study aimed to investigate the intricate relationships between cyberbullying, depression, anger, and self-esteem among Malaysian youth, a subject matter of critical importance in the era of pervasive digital communication. The findings of this research offer several notable insights. Firstly, it corroborates existing literature indicating that higher levels of depression and anger are positively associated with cyberbullying tendencies, reinforcing the urgency for preventive mental health programs that target these emotional states.

Additionally, while self-esteem appeared not to be significantly related to cyberbullying, this counter-intuitive result should not be dismissed hastily; rather, it prompts a deeper reflection on the complex interactions between self-esteem and online behavior. This study suggests that youth with different levels of self-esteem may engage in cyberbullying in unique ways, thereby necessitating a more nuanced approach to prevention and intervention. Moreover, the regression analysis indicated that both depression and anger serve as significant

predictors for cyberbullying. This finding adds an extra layer of complexity by suggesting that mitigating these emotional states could potentially reduce the incidence of cyberbullying among youth. However, these inferences should be drawn with caution due to the study's limitations, such as its restricted generalizability and reliance on self-report measures.

From a social perspective, the study calls attention to the crucial role that emotional well-being plays in the ethical and respectful use of digital platforms among youth, particularly in the Malaysian context. The need for more comprehensive, multi-disciplinary anti-cyberbullying interventions that integrate psychological counselling and educational programs becomes increasingly evident.

In conclusion, this research contributes significantly to the growing body of knowledge about the psychological factors affecting cyberbullying and serves as a cornerstone for future investigations and intervention programs tailored for Malaysian youth. While the study's limitations, such as its limited scope and cross-sectional design, offer avenues for future research, its findings provide a pivotal starting point for academics, educators, and policymakers aiming to mitigate the corrosive impact of cyberbullying on the mental health of today's youth.

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