

The Effect Of Personal Fable On Cyberbullying Tendencies Among Junior High School Students In Medan

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Abstract: The digital era has transformed adolescent social interactions, introducing new risks such as cyberbullying. Adolescents are particularly vulnerable to engaging in or becoming victims of online aggression due to developmental factors, including cognitive and emotional immaturity. This study aims to examine the effect of personal fable on cyberbullying tendencies among adolescents. A quantitative approach was used with 235 students from SMP Negeri 31 Medan as participants. Instruments used include the adapted New Personal Fable Scale (Lapsley et al.) and a researcher developed cyberbullying scale based on Willard's typology. The data obtained were then processed using simple regression analysis. The results indicate a significant positive relationship between personal fable and cyberbullying tendencies. These findings suggest that adolescents with high levels of personal fable are more prone to engage in online aggressive behavior due to a heightened sense of uniqueness and perceived immunity from consequences. The findings are expected to contribute to educational psychology by providing insights for developing effective interventions in schools.

Keywords: Personal Fable, Cyberbullying, Adolescents

1. INTRODUCTION

The rise of digital technology has significantly reshaped adolescent communication patterns. Social media platforms are now central to how young people express themselves, connect socially, and form identities. However, this digital immersion also exposes them to new forms of interpersonal harm, most notably cyberbullying. Defined as repeated aggression via digital communication [7], cyberbullying often takes subtle yet damaging forms such as harassment, exclusion, or the spread of harmful content. Global surveys by UNICEF indicate that nearly one-third of adolescents have experienced cyberbullying [9].

Adolescents are particularly vulnerable to cyberbullying, both as victims and perpetrators. This developmental stage is characterized by identity exploration, heightened sensitivity to peer influence, and cognitive egocentrism. Research has shown that adolescents with high personal fable beliefs are more prone to risky behaviors, including cyberbullying. Bayar et al. found a significant correlation between egocentrism and digital aggression [2]. Lapsley and Stey explained how adolescent egocentrism impacts moral reasoning and behavior [4]. Widyastuti and Yuniarti also demonstrated that personal fable can predict online aggression, particularly through diminished empathy [11].

Personal fable is a facet of adolescent cognitive development characterized by beliefs in personal uniqueness and immunity to harm [3]. It includes three dimensions: invulnerability (belief in being unaffected by harm), omnipotence (a sense of exceptional power), and uniqueness (a belief that one's experiences are incomprehensible to others) [5]. Adolescents who believe they are untouchable may downplay the risks of cyberbullying or justify their actions as harmless. Widyastuti and Yuniarti found that higher scores on personal fable subscales are associated with decreased empathy and increased aggressive online behavior [11]. Lapsley and Stey also emphasized the role of egocentric bias in diminishing moral sensitivity [4].

This study integrates Elkind's theory of adolescent egocentrism with Bandura's model of moral disengagement. Bandura et al. explained how individuals rationalize unethical behavior by detaching from its consequences. Moral disengagement mechanisms, such as minimizing the impact of actions or blaming victims, align with the core beliefs of the personal fable [10]. Wang and Ge supported this by demonstrating that adolescents with stronger personal fable beliefs are more likely to engage in cyberbullying through moral disengagement [10]. Li et al. confirmed this finding in a recent meta-analysis, emphasizing the mediating role of disengagement [6].

This study examines the influence of personal fable on cyberbullying tendencies in a specific cultural and developmental context: junior high school students in Medan, Indonesia. By focusing on this urban adolescent population, the research aims to illuminate the psychological mechanisms behind digital aggression and support the creation of more responsive educational interventions.

2. PURPOSE AND METHODS

This study uses a quantitative approach with regression analysis to estimate the influence of personal fable on cyberbullying tendencies. A total of 235 students aged 12–15 years from SMP Negeri 31 Medan participated as respondents. The participants were selected using purposive sampling to ensure relevance based on active social media usage. His approach aligns with Azwar's definition of quantitative methods as systematic procedures for testing hypotheses through measurable data and statistical tools [1].

Data collection was conducted through the distribution of psychological scales in the form of structured questionnaires. These instruments were developed to measure two variables in the study: personal fable and cyberbullying tendencies. Each item was organized based on theoretical indicators from relevant literature and underwent validity and reliability testing to ensure accurate measurement.

The first instrument was the Cyberbullying Tendency Scale, developed by the researcher based on Willard's typology [12], which includes seven dimensions of cyberbullying behavior: flaming, harassment, denigration, impersonation, outing and trickery, exclusion, and cyberstalking. Initially, the scale consisted of 37 items. However, after a series of psychometric analyses including item discrimination testing and confirmatory factor analysis (CFA), 17 items were removed due to low factor loadings (< 0.30). The final version of the scale contained 20 valid items. Each item used a modified Likert format with four response categories: 1 (never), 2 (rarely), 3 (often), and 4 (very often), with scoring adjusted for favorable and unfavorable items.

The CFA results confirmed that the remaining 20 items met model fit criteria. Specifically, the fit indices : Chi-square p -value < 0.001 (acceptable under ML estimation), CFI = 0.926, TLI = 0.904, and RMSEA = 0.0559—all of which meet the thresholds for model adequacy (CFI and TLI > 0.90 , RMSEA < 0.08). The reliability of this scale was tested using Cronbach's alpha, which yielded a value of 0.844, indicating strong internal consistency. Further item-level analysis showed that Cronbach's alpha remained above 0.83 when any single item was removed, confirming the robustness of the measurement.

The second instrument was the New Personal Fable Scale (NPFS), adapted from Lapsley et al. [5] and validated in the Indonesian context. This scale originally included 46 items, classified into three dimensions: invulnerability, omnipotence, and personal uniqueness. The instrument demonstrated strong psychometric properties. Rasch analysis results showed item reliability of 0.80 and person reliability of 0.76. The item separation index was 2.41, while person separation was 1.78, confirming the scale's ability to differentiate between levels of the construct. Furthermore, PCA of the residuals indicated unidimensionality, with eigenvalues of the second contrast < 2.0 .

Validity was also confirmed using outfit MNSQ statistics, with most items falling between 0.5 and 1.5, indicating that they fit the Rasch model. The NPFS employed a 5-point Likert scale format for responses, ranging from 1 (strongly disagree) to 5 (strongly agree) for favorable items, and the reverse for unfavorable ones. Reliability analysis using Cronbach's alpha revealed a coefficient of 0.826, supporting the internal consistency of the scale.

Data analysis was conducted using SPSS software. A simple linear regression model was employed to assess the predictive relationship between personal fable and cyberbullying tendencies. Prior to model testing, standard assumptions such as normality of residuals, linearity and homoscedasticity were confirmed to meet the requirements for regression analysis.

3. RESULTS AND DISCUSSIONS

Tabel 1. Demographic Data of Respondents

Characteristic	Number of Respondents (n=235)	Percentage (%)
Sex		
Male	90	38.3%
Female	145	61.7%
Grades		
VII	98	35.3%
VIII	83	41.7%
IX	54	23%
Age Range		
12	73	31.1 %
13	77	32.8 %
14	72	30.6 %
15	13	5.5 %
Term of phone use		
Less than 1 hour	35	14.9 %
1-3 hour	90	38.3 %
3-5 hour	65	27.7 %
More than 5 hours	45	19.1 %
Peak Usage		
Early Morning (00.00-06.00)	6	2.6 %
Morning (06.00-12.00)	27	11.5 %
Afternoon (12.00-18.00)	136	57.9 %
Evening (18.00-24.00)	66	28.1 %
Digital Activity		
Playing Online Games	65	27.7 %
Browse Internet	3	1.3 %
Chatting (WhatsApp, Line, Telegram)	24	10.2 %
Social Media (Instagram, TikTok, twitter, etc)	129	54.9 %
Others	14	6.0 %

The sample consisted of 235 students, with 61.7% females and 38.3% males. Class levels were distributed across Grades VII (35.3%), VIII (41.7%), and IX (23%). Respondents' ages ranged from 12 to 15 years, with most being 12 or 13 years old.

In terms of phone use, the majority reported using their phones between 1–3 hours daily (38.3%), with peak usage occurring in the afternoon (57.9%) and evening (28.1%). Social media (54.9%) was the most common digital activity, followed by online gaming (27.7%).

These findings show that adolescents are highly active in digital environments, especially on social media. This context is relevant to understanding online behaviors like cyberbullying. The demographic spread supports the study's focus on adolescents, while usage patterns highlight key periods and platforms for potential interventions.

Table 2. Normality Test Results

	Kolmogorov-Smirnov ^a		
	Statistic	Df	Sig.
<i>Unstandardized Residual</i>	.044	235	.200

Based on Table 2, Before interpreting the results of the linear regression analysis, the assumption of normality of residuals was tested using the Kolmogorov–Smirnov test. To test the assumption of normality of residuals, the Kolmogorov–Smirnov test was conducted. The results showed that the unstandardized residuals followed a normal distribution, with a test statistic $D(235) = 0.044$ and a significance level of $p = .200$. Since the p-value exceeds the threshold of .05, the null hypothesis of normality cannot be rejected. This indicates that the residuals are normally distributed.

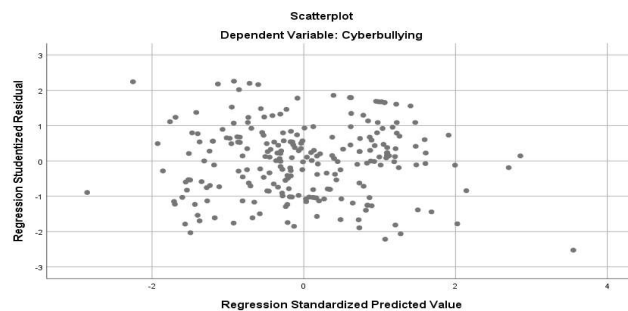
The relatively low test statistic and high significance value support the conclusion that the data meet the normality assumption. Consequently, the results of the regression analysis, including parameter estimates and significance tests, can be interpreted with greater confidence. Ensuring the normality of residuals is a critical assumption in parametric statistical analyses such as linear regression.

Table 3. Linearity Test Results

ANOVA Table

	Sum of Squares	df	Mean Square	F	Sig.
Cyberbullying * X Between Groups(Combined)	46147.983	231	199.775	4.757	.111
Linearity	2963.993	1	2963.993	70.571	.004
Deviation from Linearity	43183.990	230	187.756	4.470	.120
Within Groups	126.000	3	42.000		
Total	46273.983	234			

To examine the linearity assumption, ANOVA was conducted. The results indicated that the relationship between personal fable and cyberbullying tendencies is linear, as evidenced by a significant linearity value of $F = 70.571$ with $p = .004$. This value is below the .05 threshold, confirming that the model fits a linear pattern. Additionally, the non-significant deviation from linearity ($p = .120$) suggests that there is no substantial curvature in the data. Thus, the assumption of linearity for the regression model is satisfied, supporting the use of linear regression analysis in this study.



Tabel 5. Heteroscedasticity Test Results with Scataerplot

Based on the results of the heteroscedasticity test with the scatterplot above, it can be seen that there is no clear pattern, and the points spread above and below the number 0 on the Y axis, so there is no heteroscedasticity.

The hypothesis to be tested in this study is whether there is an influence of personal fable on cyberbullying tendencies among junior high school students.

Tabel 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.491 ^a	.241	.238	8.763

Predictors: (Constant), Personal_fable

Based on the results table above the model summary of the simple linear regression analysis showed an R value of 0.491 and an R Square value of 0.241. This indicates that 24.1% of the variance in cyberbullying tendencies can be explained by personal fable. The adjusted R Square value of 0.238 confirms this effect after adjusting for the number of predictors, while the standard error of estimate was 8.763, suggesting a moderate level of prediction accuracy.

Tabel 6. Anova

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5687.865	1	5687.865	74.070	.000 ^b
	Residual	17892.118	233	76.790		
	Total	23579.983	234			

a. Dependent Variable: Cyberbullying

b. Predictors: (Constant), Personal_fable

Based on the results table above, The ANOVA test also demonstrated that the regression model is statistically significant, with $F(1, 233) = 74.070$ and $p < .001$. This indicates that personal fable significantly predicts cyberbullying tendencies in adolescents, supporting the main hypothesis of the study.

Tabel 7. Model Coefficients

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.521	3.977		4.909	.000
	Personal_fable	.242	.028	.491	8.606	.000

a. Dependent Variable: Cyberbullying

Based on the coefficient table of simple regression analysis results above, the coefficients table shows that the unstandardized coefficient (B) for personal fable is 0.242 with a significance value of $p < .001$. This means that for every 1-unit increase in personal fable, the cyberbullying tendency increases by 0.242 units. The standardized coefficient (Beta) of 0.491 also confirms a moderate to strong effect size. Therefore, personal fable contributes 24.1% to the variation in cyberbullying tendencies among adolescents, indicating a meaningful psychological influence.

The categorization of research in this study is as shown in the following table.

Tabel 8. Empirical Data and Hypothetical Data Research Variables

Variabel	Data Empirik				Data Hipotetik			
	Min	Maks	Mean	SD	Min	Maks	Mean	SD
Cyberbullying	20	80	53.39	14.062	20	80	50	10
Personal fable	102	182	140.03	19.721	46	230	138	30.6

The descriptive comparison between empirical and hypothetical data also supports the high tendency of both variables. The empirical mean score for cyberbullying ($M = 53.39$, $SD = 14.062$) was higher than the hypothetical mean ($M = 50$, $SD = 10$), indicating a relatively elevated cyberbullying tendency among the respondents. Similarly, the empirical mean for personal fable ($M = 140.03$, $SD = 19.721$) exceeded the hypothetical mean ($M = 138$, $SD = 30.6$). These results show that the level of both personal fable and cyberbullying tendencies among the subjects is relatively high compared to the assumed normative levels, reinforcing the relevance of the research focus.

Tabel 9. Categorization of Cyberbullying Tendencies Variables

Formula	Category	Amount	Percentage
$X \leq 39$	Low	33	14.0 %
$X \geq 39, X \leq 67,45$	Curently	164	69.8 %
$X \geq 67,45$	Tall	38	16.2 %

Based on the categorization of cyberbullying tendency levels shows that the majority of students fall within the moderate category. Specifically, 33 students (14.0%) were classified in the low category ($X \leq 39$), 164 students (69.8%) in the moderate or current category ($39 < X \leq 67.45$), and 38 students (16.2%) in the high category ($X > 67.45$). This distribution reinforces the idea that while a significant number of students exhibit moderate levels of cyberbullying behavior, there remains a notable portion with high tendencies that require attention in educational and psychological interventions.

Tabel 10. Categorization of personal fable Variables

Formula	Category	Amount	Percentage
$X \leq 120.3$	Low	33	14.0 %
$X \geq 120.3 X \leq 159.8$	Curently	161	68.5 %
$X \geq 159.8$	Tall	41	17.4 %

Based on the categorization of personal fable levels also reveals a similar trend. Based on the data, 33 students (14.0%) were classified as having low personal fable levels ($X \leq 120.3$), 161 students (68.5%) were in the moderate category ($120.3 < X \leq 159.8$), and 41 students (17.4%) were in the high category ($X > 159.8$). This distribution suggests that the majority of adolescents possess a moderate level of personal fable characteristics, with a substantial number showing high levels, which may increase their susceptibility to risky online behaviors such as cyberbullying.

Based on the data obtained, there is a positive and significant influence of personal fable on cyberbullying tendencies among junior high school students. This is demonstrated through regression analysis, which confirms that an increase in personal fable is associated with an increase in cyberbullying behavior. The stronger the personal fable characteristics such as a belief in personal uniqueness, omnipotence, or invulnerability the more likely adolescents are to justify or engage in risky online behavior.

With a contribution of 24.1% from personal fable to the variation in cyberbullying tendencies, this study highlights the importance of understanding adolescent cognitive distortions in the digital context. The findings suggest that adolescents who feel uniquely different, immune to consequences, or exceptionally powerful may underestimate the impact of their actions on others in online interactions.

These results are consistent with the theory of adolescent egocentrism, which posits that adolescents often believe they are the center of attention and uniquely invulnerable [3]. This concept was later expanded into three dimensions: invulnerability, omnipotence, and uniqueness, all of which are reflected in the personal fable scale used in this study [5]. High levels of personal fable have also been found to impair empathy and are linked to maladaptive behaviors [4].

Supporting evidence comes from a study by Bayar et al., which found that adolescents with stronger personal fable beliefs are more likely to engage in cyberbullying due to reduced perception of risk and consequences [2]. Similarly, Widyastuti and Yuniarti showed that these beliefs increase adolescents' justification for harmful online behaviors, driven by feelings of uniqueness and invulnerability [11].

In addition, Li et al. demonstrated that personal fable is associated with moral disengagement strategies, such as minimizing harm and shifting blame, which facilitate aggressive behavior in digital contexts [6]. Wang and Ge also found that moral disengagement mediates the relationship between narcissistic traits and cyberbullying, indicating that adolescents may cognitively justify their online aggression when personal fable is present [10].

Therefore, it can be concluded that personal fable is one of the psychological constructs that play a significant role in shaping adolescents' online behavior. Addressing these cognitive patterns through psychoeducation, empathy training, and digital citizenship programs may help reduce cyberbullying incidents in schools. These findings reinforce the need for school-based interventions that target the developmental aspects of adolescent egocentrism and encourage reflective thinking in digital spaces.

4. Conclusion

This study concludes that there is a significant and positive relationship between personal fable and cyberbullying tendencies among adolescents. Adolescents who exhibit higher levels of personal fable, characterized by beliefs in their invulnerability, uniqueness, and omnipotence, tend to show higher levels of cyberbullying behavior. These findings highlight the cognitive and developmental factors that contribute to adolescents' online misconduct. They demonstrate that the personal fable plays an essential role in shaping risky and aggressive digital behavior.

Given that 24.1% of the variation in cyberbullying tendencies can be attributed to personal fable, it is recommended that educators and mental health professionals develop targeted interventions that address the psychological foundations of adolescent egocentrism. Intervention programs that focus on enhancing empathy, fostering critical thinking, and promoting digital responsibility may prove effective in preventing cyberbullying behavior. Additionally, future research is encouraged to investigate potential moderating variables such as peer conformity, parental monitoring, or digital literacy. These factors may provide a more comprehensive understanding of the mechanisms underlying cyberbullying among adolescents and contribute to the development of more nuanced prevention strategies.

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