ISSN 3109-9831 (Electronic)

Jurnal Keilmuan Pendidikan

Volume 2 Number 1, 1-14 (2026)
https://doi.org/10.63203/040951500

Article/Review/Book Review/Editorial

From Wounds to Self-Worth: Understanding the Psychological Link Between Self-Esteem and Self-Harm Among Students

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Received : March 2, 2026
Revised : Jun 29, 2026
Accepted : Jun 30, 2026

Keywords:

Self-esteem
Self-harm
Guidance
Counseling
Early Adolescents

ABSTRACT

Self-harming behavior has become an important mental health concern among adolescents and is frequently associated with various psychological factors, including self-esteem. This study aimed to examine the effect of self-esteem on self-harm among junior high school students and to identify its implications for school guidance and counseling services. A quantitative cross-sectional correlational design was employed involving 214 Grade VIII students from SMPN 14 Bekasi, Indonesia, who were selected using simple random sampling. Data were collected using researcher-developed self-esteem and self-harm questionnaires and analyzed using descriptive statistics and simple linear regression with IBM SPSS Statistics version 20. The findings revealed a significant negative effect of self-esteem on self-harm ($\beta = -0.415$, $p < .001$), indicating that students with higher self-esteem were less likely to engage in self-harming behavior. Self-esteem explained 31.6% of the variance in self-harm, suggesting that additional psychological and environmental factors may also contribute to adolescents' self-harming behavior. These findings highlight the protective role of self-esteem in reducing self-harm among adolescents and provide empirical support for the development of school-based counseling interventions that strengthen students' self-esteem and adaptive coping skills as part of preventive mental health programs.

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Introduction

Adolescence is a critical developmental stage characterized by rapid physical, cognitive, emotional, and social changes. During this period, adolescents encounter numerous developmental challenges that often give rise to internal and external conflicts. Hall (in (Santrock, 2019) described adolescence as a period of emotional turbulence, while Keskiner et al. (2025) argued that unresolved conflicts may develop into psychological distress when individuals fail to regulate their emotions effectively. Although many adolescents cope with these challenges through adaptive strategies such as exercise, social interaction, or recreational activities, others experience persistent emotional difficulties that increase their vulnerability to depression, anxiety, stress, and maladaptive behaviors. These psychological difficulties are frequently associated with individuals who possess low self-esteem or perfectionistic tendencies.

One maladaptive coping strategy that has received increasing attention is self-harm, defined as the deliberate act of injuring one's own body without suicidal intent. Common forms of self-harm include cutting, scratching, biting, pulling out hair, hitting oneself, or banging one's head. Klonsky et al. (2014) describe self-injury as an

intentional attempt to regulate overwhelming emotional pain rather than an attempt to end one's life. Similarly, Ma et al. (2025) explains that although self-harm is destructive, it often provides temporary emotional relief, making the behavior repetitive over time. Current evidence suggests that non-suicidal self-injury primarily serves as a maladaptive emotion regulation strategy used to alleviate intense emotional distress rather than resolve its underlying causes (Baek, Lee, Park, & Kim, 2026)

The emergence of self-harm is particularly concerning during adolescence because this developmental stage is marked by identity formation, emotional instability, and increasing social pressures. Recent evidence suggests that individuals who engage in non-suicidal self-injury may attribute personal meanings to their scars, viewing them as symbols of identity, validation of emotional experiences, or markers of their lived experiences rather than merely physical injuries (Kharboutli, Pitman, Davies, Clarke, & Rowe, 2025). Furthermore, (Hamilton et al., 2025) reported that 50% of adolescents had been exposed to self-harm-related content on social media, and such exposure was associated with an increased risk of self-harm, highlighting the role of social learning in the development of NSSI.

Previous studies consistently identify multiple psychological factors associated with self-harm. Recent studies emphasize that non-suicidal self-injury functions as a maladaptive emotion-focused coping strategy, in which individuals attempt to alleviate emotional distress rather than resolve the underlying source of stress (Yudiyasiwi & Anganthi, 2024). Likewise, Lei et al. (2024) identified emotional dysregulation, stress, depression, hopelessness, and low self-esteem as important psychological correlates of self-harming behavior. Consistent with the findings of Cao et al. (2024) found that adolescents engaging in non-suicidal self-injury exhibited significantly higher levels of depression, alexithymia, and childhood trauma than those without self-harming behaviors. These studies collectively indicate that self-harm is influenced by complex psychological processes rather than a single risk factor.

Despite its serious psychological consequences, self-harm often remains hidden because many adolescents conceal their behavior due to shame or fear of social judgment. Gaspar et al. (2025) compared this phenomenon to an iceberg, where only a small proportion of cases are visible while many remain undisclosed. Nevertheless, available evidence indicates that self-harm among adolescents is becoming increasingly prevalent. Despite its serious psychological consequences, self-harm frequently remains concealed because many adolescents avoid disclosing their behavior due to shame and fear of social judgment. Nevertheless, recent epidemiological evidence indicates that self-harm among adolescents is increasingly recognized as a major public health concern, with lifetime prevalence estimates ranging from 16% to 22% in community populations (Farkas, Takacs, Kollárovics, & Balázs, 2024). A 2020 UNICEF survey reported that more than 5% of Indonesian adolescents aged 13–17 had experienced suicidal thoughts during the previous year, with female adolescents and those aged 16–17 showing greater vulnerability. In addition, Rahmanda & Qoyyimah (2025) found that exposure to self-harm-related social media content and peer interaction jointly explained 34.4% of adolescents' motivation to engage in self-harm, with social media exposure contributing more strongly than peer interaction. These findings demonstrate that self-harm represents an important public mental health concern that requires preventive intervention.

Among the various psychological factors associated with self-harm, self-esteem has received considerable attention because it reflects how individuals evaluate and value themselves. García et al. (2019) argued that individuals with high self-esteem generally demonstrate greater life satisfaction, social adjustment, and psychological well-being. Similarly, Sabilah et al. (2025) stated that self-esteem plays a central role in successful social interaction and adaptation, as individuals with positive self-evaluations tend to appreciate themselves and interact more effectively with others. Conversely, Lei et al. (2024) reported that adolescents engaging in self-harm commonly exhibit characteristics of low self-esteem, including low self-confidence, hopelessness, indecisiveness, social withdrawal, and poor self-awareness. According to Muris & Otgaar (2023) argued that healthy self-esteem is rooted in self-acceptance and self-respect rather than being solely dependent on external achievements or social approval. Taken together, these findings suggest that self-esteem may function as an important psychological protective factor against self-harming behavior.

Previous studies have consistently demonstrated that self-esteem is significantly associated with self-harming behavior among adolescents. Lei et al. (2024) found that low self-esteem predicted subsequent self-injury through the mediating role of depression. Similarly, Alini et al. (2025) reported that adolescents with low self-esteem were 3.1 times more likely to engage in self-harm than those with moderate or high self-esteem. More recently, Yandri et al. (2026) found that self-esteem and body image jointly explained 44.4% of the variance in self-harm behaviors among secondary school students, indicating that self-esteem is an important predictor but also suggesting that additional psychological factors remain unexplored. Nevertheless, previous studies have generally examined self-esteem together with other psychosocial variables, such as depression, body image, bullying, or peer-related problems, rather than investigating its specific contribution to self-harming behavior. Furthermore, empirical

evidence focusing specifically on Indonesian students remains limited. Given the increasing prevalence of self-harm among Indonesian adolescents, clarifying the unique role of self-esteem is important because self-esteem represents a modifiable psychological resource that can be strengthened through school counseling interventions. A better understanding of this relationship may therefore provide a stronger empirical foundation for preventive mental health programs aimed at reducing self-harming behavior among students. Accordingly, the present study aims to examine the relationship between self-esteem and self-harm among Indonesian students.

The study is grounded in the theoretical assumption that self-esteem represents an individual's overall evaluation of self-worth, which influences emotional adjustment and coping responses when facing psychological distress. Individuals with positive self-esteem are more likely to employ adaptive coping strategies, whereas those with negative self-evaluations are more vulnerable to maladaptive responses, including self-harm. Based on this theoretical perspective and previous empirical findings, this study hypothesizes a significant negative relationship between self-esteem and self-harm among students. If this hypothesis is supported, the findings will provide an empirical basis for school counselors to design preventive interventions that strengthen students' self-esteem and psychological resilience. Rather than focusing solely on resolving existing emotional problems, counseling services may emphasize the development of positive self-worth as an important protective factor against self-harming behavior.

Methods

This study employed a quantitative survey using a correlational research design to examine the relationship between self-esteem and self-harm among junior high school students. A correlational design was considered appropriate because the study aimed to determine the direction and strength of the relationship between the two variables without manipulating them. In this study, self-esteem served as the independent variable, while self-harm was treated as the dependent variable. The study was conducted at SMPN 14 Bekasi during the 2024/2025 academic year. The total student population consisted of 1,242 students enrolled across Grades VII, VIII, and IX, distributed into 28 classes

Since the purpose of this study was to examine self-esteem and self-harm among students at the same developmental stage, only Grade VIII students were included as the target population. This group comprised 461 students from 10 classes. Participants were selected using a simple random sampling technique to ensure that each Grade VIII student had an equal opportunity to be included in the study. The required sample size was determined using the Slovin formula with a 95% confidence level and a 5% margin of error, resulting in a minimum sample of 214 students. Accordingly, 214 students were randomly selected to participate in the study, consisting of 98 (45,8%) male students and 116 (54,2%) female students. Only students who were actively enrolled in Grade VIII at SMPN 14 Bekasi during the 2024/2025 academic year were eligible to participate. Data were collected using an online questionnaire administered through Google Forms.

The study employed two researcher-developed instruments to measure self-esteem and self-harm. Both instruments used a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). The self-esteem scale was constructed based on Coopersmith (1967) theoretical framework, encompassing four dimensions: Power, Significance, Virtue, and Competence. The initial instrument consisted of 37 items. Item validity was examined using the corrected item-total correlation with a minimum criterion of r = 0.242. The analysis indicated that 8 items did not meet the validity criterion. The scale demonstrated good internal consistency, with a Cronbach's Alpha coefficient of 0.795, indicating that the instrument was reliable for measuring students' self-esteem.

The self-harm scale was constructed based on the theoretical framework proposed by Klonsky & Muehlenkamp (2007), including Negative Emotionality, Difficulty Expressing Emotions, and Self-Directed Anger. The initial instrument consisted of 25 items. The validity analysis showed that 4 items did not meet the established criterion (r = 0.242). The instrument demonstrated satisfactory internal consistency, yielding a Cronbach's Alpha coefficient of 0.756, indicating that it was sufficiently reliable for assessing self-harming tendencies among students.

Figure 1. Inter item Relationship of the Self-Esteem Variable

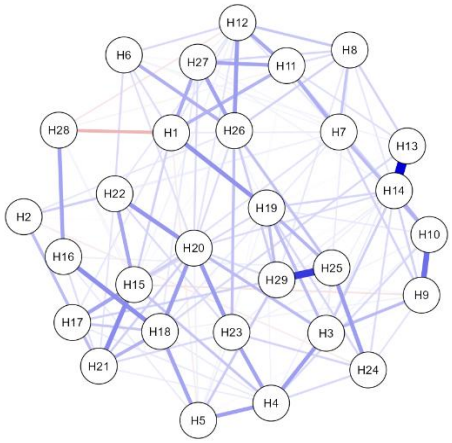


Figure 1 illustrates the inter-item relationship network of the self-esteem scale. The visualization provides an overview of the correlations among the instrument items and was used to examine the internal structure of the scale. By using this visual approach, researchers can make more informed decisions when revising the instrument for further testing, developing new instruments, or conducting cross-validation with different population groups. Next, refer to Figure 2, which illustrates the relationships among the items of the Self-Harm variable.

Figure 2. Inter-item Relationship of the Self-Harm Variable

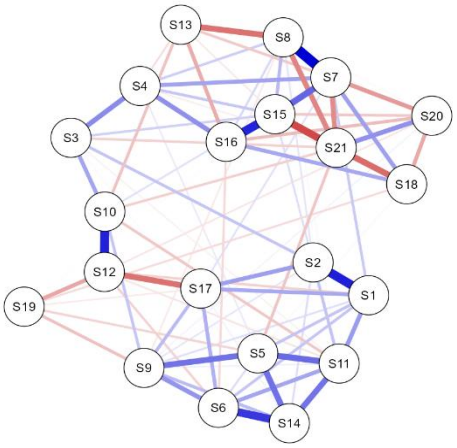


Figure 2 presents the inter-item relationship network of the self-harm scale. The visualization illustrates the correlation patterns among the items and provides evidence of the internal structure of the instrument.

Data collection was conducted online using Google Forms. The questionnaire link was distributed to Grade VIII students of SMPN 14 Bekasi with the assistance of the school's guidance and counseling (BK) teachers. Before accessing the questionnaire, participants were presented with an informed consent form explaining the purpose of the study, the voluntary nature of participation, the confidentiality of their responses, and their right to withdraw from the study at any time without any consequences. Only students who agreed to participate by providing informed consent were allowed to proceed to the questionnaire. All responses were collected anonymously and used solely for research purposes.

All data were analyzed using IBM SPSS Statistics version 20. Descriptive statistical analysis was conducted to describe the demographic characteristics of the participants as well as the distribution of self-esteem and self-harm scores. To test the research hypothesis, simple linear regression analysis was performed, with self-esteem serving as the independent variable (X) and self-harm as the dependent variable (Y). The level of statistical significance was set at $p < .05$.

Results and Discussion

Based on the research conducted at SMPN 14 Kota Bekasi, this section presents the findings of the study. The research involved a sample of 214 eighth-grade students who completed a questionnaire distributed by the researcher. This study employed a quantitative research design with a correlational approach to examine the relationship between the two variables under investigation. The sampling technique used was simple random sampling, a method in which every individual in the population has an equal chance of being selected as a sample. The descriptive results are presented in the table below:

Tabel 1. Descriptive Test Results

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Hargadiri	214	61.00	113.00	18673.00	87.2570	9.15051
Selfharm	214	32.00	67.00	10055.00	46.9860	6.76117
Valid N (listwise)	214					

As shown in Table 1, participants reported relatively high levels of self-esteem (M = 87.26, SD = 9.15), whereas the average self-harm score was considerably lower (M = 46.99, SD = 6.76). These findings provide an initial overview of the distribution of the study variables before further analyses were conducted. To determine the results of the data processing for the self-esteem instrument from all 214 student respondents, as presented in Table 2.

Tabel 2. Self-Esteem Categorization Results

Interval Score	Category	Frequency	Persen %
95-116	Very High	39	18.22
73-94	High	159	74.30
51-72	Low	16	7.48
29-50	Very Low	0	0
	Total	214	100

As shown in Table 2, the majority of participants (74.30%) were categorized as having high self-esteem, whereas only 7.48% demonstrated low self-esteem. No participants were classified as having very low self-esteem. Overall, these findings indicate that the participants generally possessed positive self-evaluations and a favorable perception of their self-worth. Next, to present the results of the data processing for the self-esteem instrument from all 214 student respondents, the data is shown in Table 3.

Tabel 3. Self-Harm Categorization Results

Interval Score	Category	Frequency	Persen %
69-84	Very High	0	0
53-68	High	36	16.82
37-52	Low	168	78.50
21-36	Very Low	10	4.67
Total		214	100

As shown in Table 3, the majority of participants (78.50%) were categorized as having low levels of self-harm, whereas 16.82% were classified in the high category. Only 4.67% of participants fell into the very low category, and none were categorized as having very high self-harm. Overall, these findings suggest that self-harming tendencies among the participants were generally low.

According to (Sugiyono, 2020), the normality test is conducted as a prerequisite for data analysis to determine whether the data are normally distributed or not. Normality is assessed based on the significance value: if the p-value is greater than 0.05, the data are considered normally distributed; if the p-value is less than 0.05, the data are considered not normally distributed. The normality test in this study was conducted using the SPSS version 20.0 software and was applied to both variables: Self-Esteem (X) and Self-Harm (Y). The normality test is part of the classical assumption tests. Its purpose is to determine whether the residual values are normally distributed. A good regression model should have residuals that follow a normal distribution. 1). If the significance value > 0.05, the residuals are normally distributed. 2). If the significance value < 0.05, the residuals are not normally distributed. the data is shown in Table 4.

Tabel 4. Normality Test Results

		Hargadiri	Selfharm
N		214	214
Normal Parameters[a,b]	Mean	87.2570	46.9860
	Std. Deviation	9.15051	6.76117
Most Extreme Differences	Absolute	.058	.090
	Positive	.058	.090
	Negative	-.057	-.046
Kolmogorov-Smirnov Z		.847	1.315
Asymp. Sig. (2-tailed)		.469	.063
a. Test distribution is Normal.			

Based on the table above, it can be seen that the significance value for the Self-Esteem variable is 0.469, which is greater than 0.05, while the significance value for the Self-Harm variable is 0.063, which is less than 0.05. Therefore, the data obtained in this study are considered to be normally distributed. The significance value obtained shows an Asymp. Sig. (2-tailed) of 0.034, which means it is greater than 0.05 (0.034 > 0.05).

The linearity test is used to determine whether the relationship between the variables being analyzed follows a straight line. In other words, it assesses whether an increase or decrease in the quantity of one variable is associated with a proportional change in another variable. It also helps determine whether the relationship between the independent and dependent variables is linear. This test is typically used as a prerequisite for correlation analysis.

According to Sugiyono (2020) “The linearity test is used to determine whether two variables have a significantly linear relationship.” This test is conducted to examine whether there is a linear relationship between the independent variable, Self-Esteem (X), and the dependent variable, Self-Harm (Y). 1). If the significance value of the deviation from linearity is greater than 0.05, it indicates a linear relationship between the self-esteem variable and the self-harm variable. 2). If the significance value of the deviation from linearity is less than 0.05, it indicates that there is no linear relationship between the self-esteem variable and the self-harm variable. the data is shown in Table 5.

Tabel 5. Linearity Test Results

			Sum of Squares	Df	Mean Square	F	Sig.
Selfharm * HargaDiri	Between Groups	(Combined)	4369.564	45	97.101	3.039	.000
		Linearity	3077.223	1	3077.223	96.317	.000
		Deviation from Linearity	1292.341	44	29.371	.919	.618
	Within Groups		5367.394	168	31.949		
	Total		9736.958	213			

Based on the analysis results in the table above, the significance (Sig.) value for the linearity test in the Linearity row is 0.000, which is less than the significance level of α = 0.05 (0.000 < 0.05). This indicates that there is a statistically significant linear relationship between the Self-Harm and Self-Esteem variables.

Meanwhile, the significance value in the Deviation from Linearity row is 0.618, which is greater than 0.05 (0.618 > 0.05). This indicates that there is no significant deviation from linearity, meaning the relationship between the two variables can be considered truly linear. Therefore, it can be concluded that the relationship between the Self-Harm and Self-Esteem variables meets the assumption of linearity, and the regression analysis can be appropriately continued. Next is the homogeneity test, which aims to ensure that the set of data being measured truly comes from a homogeneous (uniform) population. The homogeneity test was conducted using the SPSS version 20.0 software. as presented in Table 9.

Tabel 9. Homogeneity Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Sig. (2-failed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	T	Df				Lower	Upper
Selfharm	Equal Variances assumed	.415	.520	1.427	212	0.143	1.3606	.92443	-46161	3.18291
	Equal Variances not assumed			1.481	210.906	.140	1.3606	.91901	-45097	3.17227

Based on the results of the homogeneity test using Levene's Test for Equality of Variances, a significance value of 0.520 was obtained (p > 0.05). This indicates that the variance between the male and female groups for the self-harm variable is homogeneous, or in other words, not significantly different. Next, This hypothesis testing is used to evaluate the proposed hypothesis. In every research study, it is essential to test the hypothesis. The purpose of hypothesis testing is to verify the accuracy or validity of the formulated hypothesis.

According to (Sugiyono, 2020), the Pearson product-moment correlation is used to examine the relationship and test the hypothesis between two variables (bivariate) that are measured on an interval or ratio scale, where the data sources for both variables are the same. This type of correlation analysis is used to determine the strength of the relationship between the two variables, with the assumption that other influencing variables are controlled or held constant (as control variables). as presented in Table 10.

Tabel 10. Linear Hypothesis Test Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3077.223	1	3077.223	97.958	.000[b]
	Residual	6659.735	212	31.414		
	Total	9736.958	213			

An F-value of 97.958 was obtained with a significance value (Sig.) of 0.000. Since the significance value is less than 0.05 (Sig. < 0.05), it can be concluded that the regression model used is significant. This means that the self-esteem variable significantly predicts the self-harm variable. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted. This indicates that a person's level of self-esteem whether high or low has a statistically significant relationship with the tendency to engage in self-harm. Next is the data from the calculation of the linear regression coefficient results. as presented in Table 11.

Tabel 11. Linear Regression Coefficient Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	83.231	3.682		22.604	.000
	HargaDiri	-.415	.042	-.562	-9.897	.000
a. Dependent Variable: Selfharm						

Based on the data analysis in the table above, the resulting regression equation is as follows:

$$Y = a + bX, \text{ thus } Y = 83.231 + (-0.415).$$

From the equation above, it can be concluded that the self-esteem variable has a negative and significant effect on self-harm. This is indicated by the regression coefficient value of -0.415 with a significance level of 0.000 ($p < 0.05$). This means that for every one-unit increase in self-esteem, self-harm decreases by 0.415 units. In addition, the calculated t-value is -9.897 with a significance of $p = 0.000$, further confirming that the effect of self-esteem on self-harm is statistically significant. Therefore, it can be concluded that the higher a person's level of self-esteem, the lower their tendency to engage in self-harm. Next is the data from the calculation of the coefficient of determination results. as presented in Table 12.

Tabel 12. Coefficient of Determination Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.562[a]	.316	.313	5.60481	.316	97.958	1	212	.000
a. Predictors: (Constant), HargaDiri									

Based on Table 12, the results of the coefficient of determination analysis were obtained using SPSS version 20. From the Model Summary table, the R value of 0.562 indicates a strong relationship between the self-esteem and self-harm variables. The R Square value of 0.316 suggests that 31.6% of the variation in self-harm can be explained by the self-esteem variable, while the remaining 68.4% is explained by other variables not included in this regression model.

Figure 1. Distribution of self-esteem and self-harm data by gender

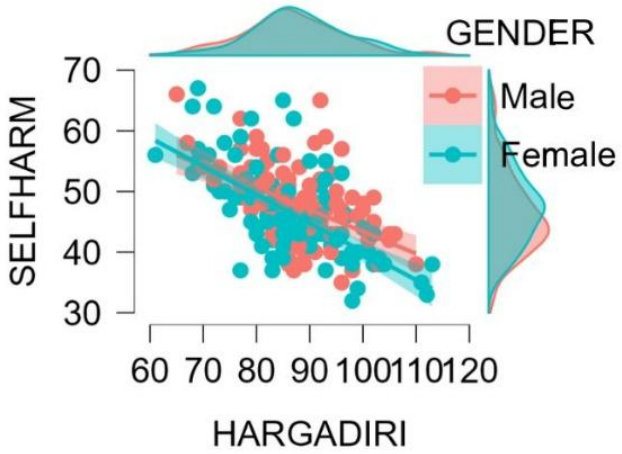


Figure 1 illustrates the distribution of data between self-esteem and self-harm behavior, separated by gender. The data are presented in a scatter plot with additional distribution curves and regression lines for each gender group. Pink dots represent males, while blue dots represent females.

The graph shows a negative relationship between self-esteem and self-harm in both gender groups. This means that the higher an individual's self-esteem, the lower their tendency to engage in self-harm. This trend is reflected in the downward slope of the regression lines for both groups.

Furthermore, the distribution patterns indicate that females tend to have higher self-esteem and lower levels of self-harm compared to males. The distribution of self-esteem and self-harm is also more dispersed among males, suggesting greater individual variation within this group.

The present study found a significant negative relationship between self-esteem and self-harm among junior high school students, indicating that students with higher self-esteem tended to report lower levels of self-harming behavior. This finding suggests that self-esteem may function as a protective psychological factor, enabling adolescents to cope more effectively with emotional challenges and reducing the likelihood of engaging in maladaptive coping strategies such as self-harm.

These findings are consistent with previous studies. Forrester et al. (2017) reported a significant negative relationship between self-esteem and non-suicidal self-injury (NSSI), demonstrating that individuals with lower self-esteem were more likely to engage in self-harming behaviors in both clinical and non-clinical populations. However, the authors also emphasized that this relationship is influenced by various psychological and environmental factors. One possible explanation is that adolescents with low self-esteem tend to evaluate themselves negatively, making them more vulnerable to emotional distress and less likely to use adaptive coping strategies when facing stressful situations.

The present findings can also be understood within the broader psychosocial context of adolescence. Sabilah et al. (2025) demonstrated that excessive gadget use, particularly social media, may reduce adolescents' self-esteem through continuous social comparison with idealized portrayals of others. Such negative self-evaluations may increase emotional vulnerability and indirectly contribute to self-harming behaviors. Therefore, self-esteem should be considered not only as an individual characteristic but also as a psychological construct that is influenced by adolescents' social environment.

Figure 3 illustrates the relationship between self-esteem and self-harm according to gender. Overall, the scatter plot demonstrates a consistent negative relationship between the two variables in both male and female students, indicating that higher self-esteem is associated with lower levels of self-harm regardless of gender. Although slight differences in the distribution of scores are visually apparent, these findings should be interpreted cautiously because gender was not examined as the primary predictor in the present study.

Previous studies provide several possible explanations for these gender-related patterns. Faisyah et al. (2025) found that body shaming has a stronger negative impact on female self-esteem, resulting in lower self-esteem scores among female adolescents. Similarly, Demuth & Demuthova (2022) reported that both the prevalence and intensity of self-harming behavior were generally higher among females than males, although the physical characteristics of self-harm did not differ significantly. Oktan (2017) likewise demonstrated that adolescents who engaged in self-harm reported significantly lower levels of self-esteem and body image than those who did not engage in self-harming behavior. In contrast, Ifdil et al. (2018) found that female students demonstrated higher levels of resilience than male students, which may be influenced by cultural and social factors, including the matrilineal traditions of the Minangkabau community that encourage stronger emotional adaptation among women. Furthermore, Syahputra et al. (2024) reported that stress, anxiety, and depression are highly interrelated among adolescents, suggesting that emotional distress may represent an important pathway linking low self-esteem with self-harming behavior. Collectively, these studies strengthen the present findings by highlighting that self-esteem interacts with emotional, social, and cultural factors in shaping adolescents' vulnerability to self-harm.

The findings of the present study provide important implications for school-based counseling services. Strengthening students' self-esteem may reduce emotional vulnerability and encourage the development of more adaptive coping strategies. Consequently, guidance and counseling programs should incorporate interventions aimed at enhancing positive self-evaluation and psychological resilience as preventive strategies against self-harming behavior

Figure 4. Residuals of Harga Diri

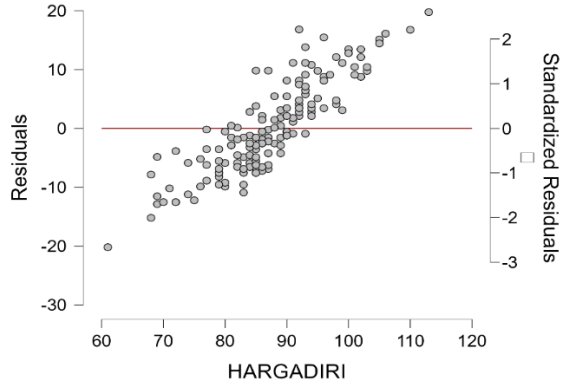


Figure 5. Residuals of Self-harm

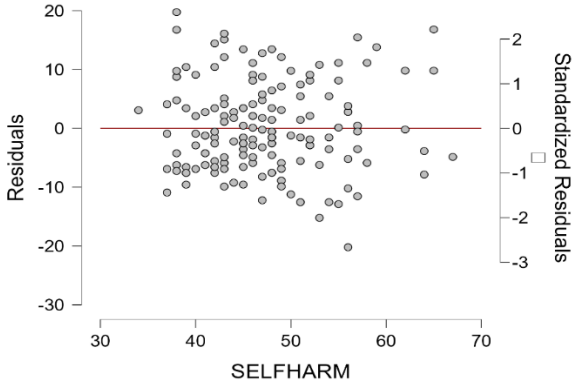
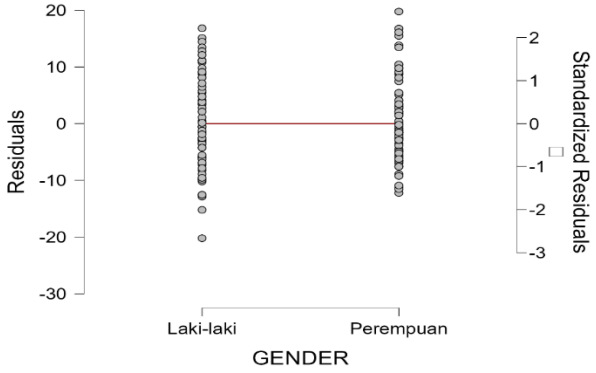


Figure 6. Residuals of Gender



Figures 4–6 present the residual plots used to evaluate the adequacy of the regression model. Figure 4 shows the relationship between the residuals and self-esteem. A slight curved pattern can be observed, suggesting that the linearity assumption should be interpreted cautiously and indicating the possibility of heteroscedasticity. As noted by Wadsworth et al. (2018), visual inspection of residual plots is important for identifying potential violations of regression assumptions that may influence the validity of linear regression models.

Figure 5 illustrates the residual distribution for the self-harm variable. Compared with Figure 4, the residuals appear to be more randomly distributed around the regression line, indicating that the assumptions of homoscedasticity and linearity are generally satisfied. Although several extreme observations are visible, Sugiyono (2023) emphasized that outliers should be carefully evaluated because they may influence regression estimates and the interpretation of statistical models.

Figure 6 presents the residual distribution according to gender. The residuals appear to be relatively balanced between male and female students, suggesting that no substantial systematic bias related to gender was observed in the regression model. This finding is consistent with Ifdil et al. (2018), who suggested that although gender differences may influence psychological characteristics, balanced data distributions do not necessarily indicate systematic gender bias in statistical analyses.

Overall, the residual plots complement the statistical assumption tests by providing a visual evaluation of the regression model. Although slight deviations from linearity are observed in the self-esteem variable, the overall pattern indicates that the regression model was sufficiently appropriate for examining the relationship between self-esteem and self-harm in the present study.

The findings of this study have important implications for school guidance and counseling services in preventing self-harming behavior among adolescents. Since self-esteem appears to function as a protective psychological factor, school counselors should prioritize interventions that strengthen students' positive self-evaluation, emotional regulation, and adaptive coping skills. Preventive efforts may be implemented through classroom guidance, information services, and psychoeducational activities that encourage students to recognize their personal strengths, develop self-acceptance, and manage emotional challenges in healthy ways.

For students who demonstrate low self-esteem or exhibit signs of self-harming behavior, responsive interventions such as individual and group counseling should be provided to help them identify emotional difficulties, develop healthier coping strategies, and build psychological resilience. Effective prevention also requires close collaboration among school counselors, classroom teachers, subject teachers, and parents to establish a supportive school environment that promotes students' psychological well-being. Furthermore, career guidance activities may contribute to strengthening students' confidence by encouraging them to recognize their potential, set realistic goals, and develop positive expectations for their future.

This study has several limitations that should be considered when interpreting the findings. The study focused exclusively on the relationship between self-esteem and self-harm and did not examine other psychological, social, or environmental factors that may also contribute to self-harming behavior among adolescents. In addition, the use of a cross-sectional correlational design limits the ability to draw causal conclusions regarding the relationship between the study variables. The findings should therefore be interpreted within the context of the study design and participant characteristics. Future research is encouraged to investigate additional factors, such as emotional regulation, depression, anxiety, family support, peer relationships, and school climate, while involving more diverse samples from different educational settings. Longitudinal or more comprehensive research designs are also recommended to provide a deeper understanding of the mechanisms underlying self-harming behavior among adolescents.

Conclusion

This study demonstrates that self-esteem is an important psychological factor associated with self-harming behavior among junior high school students. Students with higher self-esteem were less likely to engage in self-harm, suggesting that positive self-evaluation serves as a protective factor against maladaptive coping behaviors during adolescence. These findings reinforce the importance of promoting self-esteem as part of efforts to support adolescents' mental health and well-being.

The study contributes to the existing literature by providing empirical evidence of the relationship between self-esteem and self-harm among Indonesian junior high school students, a population that has received relatively limited attention in previous research. Practically, the findings offer valuable insights for school guidance and counseling services, highlighting the importance of preventive interventions that strengthen students' self-esteem, emotional regulation, and adaptive coping skills to reduce the risk of self-harming behavior.

Several limitations should be acknowledged. The study employed a cross-sectional correlational design and involved participants from a single junior high school, which may limit the generalizability of the findings. In addition, the study focused solely on self-esteem as a predictor of self-harm, whereas other psychological, social, and environmental factors may also contribute to adolescents' self-harming behavior. Future research is therefore encouraged to examine additional influencing factors using more diverse samples and longitudinal or mixed-method approaches to provide a broader understanding of the mechanisms underlying self-harm among adolescents.

Acknowledgment

I would like to express my sincere gratitude to all those who have supported and contributed to the completion of this research. First and foremost, my deepest thanks go to my family for their unwavering support, encouragement, and prayers throughout this journey. I am also profoundly grateful to my material and technical advisors for their valuable guidance, insights, and continuous assistance during the research process. My heartfelt appreciation extends to the administration of SMPN 14 Bekasi for granting permission to conduct this study at their school. I am also thankful to the students of SMPN 14 Bekasi who participated seriously and thoughtfully in completing the research instruments. Lastly, I would like to thank all individuals and parties who have helped, supported, or contributed in any way to the writing and implementation of this research. Your support has been truly meaningful and instrumental in the successful completion of this work

References

Alini, A., Said, F. M., Aprilla, N., & Nofrika, B. (2025). Anxiety, Self-Esteem, Bullying, and Peer Problems as Correlates of Self-Harm Behavior Among Adolescents in Kampar Regency, Riau Province, Indonesia. *Journal of Health and Nutrition Research*, *4*(2), 747–755.

Baek, J., Lee, J., Park, W., & Kim, D. (2026). The Effectiveness of Emotion Regulation–Focused Interventions on Non-Suicidal Self-injury: A Meta-Analysis. *Cognitive Therapy and Research*. https://doi.org/10.1007/s10608-026-10726-1

Cao, P., Peng, R., Yuan, Q., Zhou, R., Ye, M., & Zhou, X. (2024). Predictors of non-suicidal self-injury in adolescents with depressive disorder: the role of alexithymia, childhood trauma, and body investment. *Frontiers in Psychology*, *15*. https://doi.org/10.3389/fpsyg.2024.1336631

Coopersmith, S. (1967). *The antecedents of self-esteem*. W. H. Freeman.

Demuth, A., & Demuthova, S. (2022). Gender differences in adolescent self-harming behaviour. *International Journal of Health Sciences*, *6*(S3), 12291–12299. https://doi.org/10.53730/ijhs.v6ns3.9026

Faisyah, N. S., Syahputra, Y., Mulyadi, M., & Rahmat, C. P. (2025). The Silent Erosion: Investigating Body Shaming's Influence on Student Self-Esteem and Its Counseling Implications at SMA PGRI Depok. *Jurnal Keilmuan Pendidikan Dasar*, *1*(2), 13–22.

Farkas, B. F., Takacs, Z. K., Kollárovics, N., & Balázs, J. (2024). The prevalence of self-injury in adolescence: a systematic review and meta-analysis. *European Child and Adolescent Psychiatry*, *33*(10), 3439–3458. https://doi.org/10.1007/s00787-023-02264-y

Forrester, R. L., Slater, H., Jomar, K., Mitzman, S., & Taylor, P. J. (2017). Self-esteem and non-suicidal self-injury in adulthood: A systematic review. *Journal of Affective Disorders*, *221*, 172–183. https://doi.org/10.1016/j.jad.2017.06.027

García, J. A., y Olmos, F. C., Matheu, M. L., & Carreño, T. P. (2019). Self esteem levels vs global scores on the

Rosenberg self-esteem scale. *Heliyon*, *5*(3). https://doi.org/10.1016/j.heliyon.2019.e01378

Gaspar, T., Serafim, C., Matos, M. G. de, & Carvalho, M. (2025). Trend Analysis of Self-Harm Behaviors and Stress Management Skills in Adolescents Between 2018, 2022, and 2024: A Comprehensive Ecological Model. *Children*, *12*(9). https://doi.org/10.3390/children12091230

Hamilton, J. L., Untawale, S., Dalack, M. N., Thai, A. B., Kleiman, E. M., & Yao, A. (2025). Self-Harm Content on Social Media and Proximal Risk for Self-Injurious Thoughts and Behaviors Among Adolescents. *JAACAP Open*, *3*(3), 431–438. https://doi.org/10.1016/j.jaacop.2024.11.008

Ifdil, I., Fadli, R. P., Syahputra, Y., Erwinda, L., Zola, N., & Afdal, A. (2018). Rasch stacking analysis: differences in student resilience in terms of gender. *Konselor*, *7*(3), 95–100. https://doi.org/10.24036/0201873101379-0-00

Keskiner, E. Ş., Şahin, E., Topkaya, N., & Yiğit, Z. (2025). Behavioral Emotion Regulation Strategies and Symptoms of Psychological Distress Among Turkish University Students. *Behavioral Sciences*, *15*(1). https://doi.org/10.3390/bs15010006

Kharboutli, O., Pitman, A., Davies, J., Clarke, C., & Rowe, S. (2025). A Systematic Review of Perceived Risks and Risk Management Strategies in Non-Suicidal Self-Harm. *Archives of Suicide Research*. https://doi.org/10.1080/13811118.2025.2602011

Klonsky, E. D., & Muehlenkamp, J. J. (2007). Self-injury: A research review for the practitioner. *Journal of Clinical Psychology*, *63*(11), 1045–1056. https://doi.org/10.1002/jclp.20412

Klonsky, E. D., Victor, S. E., & Saffer, B. Y. (2014). Nonsuicidal self-injury: What we know, and what we need to know. *Canadian Journal of Psychiatry*, *59*(11), 565–568. https://doi.org/10.1177/070674371405901101

Lei, H., Xiong, J., Rao, Y., Zhu, T., & Zhang, X. (2024). Relationships among self-esteem, depression and self-injury in adolescents: a longitudinal study. *Frontiers in Public Health*, *12*(May), 1–9. https://doi.org/10.3389/fpubh.2024.1406283

Ma, H., Liu, X., Du, X., Chi, D., Zhang, Y., Yu, H., & Zhou, D. (2025). The emotion regulation motive of nonsuicidal self-injury mediates the relationship between motor impulsivity and NSSI frequency in adolescents. *Frontiers in Psychiatry*, *16*. https://doi.org/10.3389/fpsyt.2025.1692721

Muris, P., & Otgaar, H. (2023). Self-Esteem and Self-Compassion: A Narrative Review and Meta-Analysis on Their Links to Psychological Problems and Well-Being. *Psychology Research and Behavior Management*, *16*, 2961–2975. https://doi.org/10.2147/PRBM.S402455

Oktan, V. (2017). Self-Harm Behaviour in Adolescents: Body Image and Self-Esteem. *Journal of Psychologists and Counsellors in Schools*, *27*(2), 177–189. https://doi.org/10.1017/jgc.2017.6

Rahmanda, S. S., & Qoyyimah, N. R. H. (2025). The Influence of Exposure to Social Media Content and Peer Interaction on Motivation to Engage in Self-Harm Among Adolescents. *Sains Psikologi*, *14*(2), 260–272. Retrieved from https://journal-fppsi.um.ac.id/index.php/jsp/article/view/78/81

Sabilah, N. H., Syahputra, Y., & Mulyadi, M. (2025). The Impact of Self-Esteem on Narcissistic Behavior Among Instagram-Active Students. *JITSS (Journal of Innovation and Trend in Social Sciences)*, *1*(3), 125–136.

Santrock, J. W. (2019). *Adolescence* (17th Ed). McGraw-Hill Education.

Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Edisi Ceta; Sutopo, ed.). Bandung: Alfabeta Bandung.

Sugiyono. (2023). *Metode Penelitian Kuatitatif Kualitatif & R&D* (5th ed.; Sutopo, ed.). A.

Syahputra, Y., Evitarini, A., & Sugara, H. (2024). Gender Differences and the Role of Social Media in Self-Harm Behavior among Primary School Students. *Konselor*, *13*(3), 297–306. https://doi.org/10.24036/0202413386-0-86

Wadsworth, I., Van Horn, M. L., & Jaki, T. (2018). a Diagnostic Tool for Checking Assumptions of Regression Mixture Models. *JP Journal of Biostatistics*, *15*(1), 1–20. https://doi.org/10.17654/bs015010001

Yandri, H., Juliawati, D., Alfaiz, A., Yuzarion, Y., Putri, R. M., & Hardi, E. (2026). The Role of Self-Esteem and Body Image as Predictors of Self- Harm Behaviors Among Secondary School Students : A Quantitative Analysis. *TheraEdu: Journal of Therapy and Educational Psychology*, *2*(1), 1–8. Retrieved from https://journal.aapbk.org/index.php/theraedu/article/view/567/163

Yudiyasiwi, F. R., & Anganthi, N. R. N. (2024). The role of family harmony, emotion-focused coping, stressful life events on non-suicidal self-injury behavior in adolescents. *Jurnal Ilmiah Psikologi Terapan*, *12*(1), 60–68. https://doi.org/10.22219/jipt.v12i1.29766