

The Relationship between Loneliness and Self-Harm Behavior among Adolescents

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Abstract. The inability of adolescents to deal with personal issues often results in the feeling of unpleasant emotions, which may have a detrimental impact on the adolescents' psychological well-being. These feelings might result in actions that are harmful to oneself if they are not addressed properly. Loneliness is one of the primary variables that contribute to self-harm because it amplifies the mental suffering that one is experiencing and raises the likelihood that one may hurt themselves. The purpose of this research was to investigate the connection between feelings of isolation and behaviors that lead to self-inflicted damage in teenagers. An approach known as cross-sectional design was used, and the UCLA Loneliness Scale Version 3 and the Self-Harm Inventory were utilized in order to gather the necessary data. The selection process consisted of using probability random sampling to pick a total of one hundred students from grades 10 and 11. According to the findings, 48 percent of the respondents had experienced acute loneliness, and 52 percent of them had engaged in activities that were harmful to themselves. A strong correlation between feelings of isolation and self-inflicted injury was found via the use of chi-square analysis ($p = 0.000$). Counseling services in schools should be strengthened in order to assist teenagers in properly managing feelings of isolation.

Keywords: Adolescent, Loneliness, Self-harm

1 Introduction

Adolescence is a transitional stage between childhood and adulthood, often characterized by confusion and emotional instability. In this phase, individuals may act childishly in some situations but are expected to behave like adults in others. Such conflicting demands can lead to difficulties in controlling behavior and emotions. Alongside age-related changes, adolescents also experience significant mental, physical, and emotional shifts [1].

Self-harm refers to the deliberate act of inflicting injury upon oneself or causing damage to one's body. Methods may include cutting, burning, hitting oneself, or even breaking bones. Self-harm refers to the deliberate act of inflicting injury upon oneself or causing damage to one's body. Methods may include cutting, burning, hitting oneself, or even breaking bones. Among adolescents, the most common forms are moderate or superficial self-mutilation, such as scratching or cutting [2].

A 2019 YouGov Omnibus survey found that over one-third (36.9%) of Indonesians had engaged in self-harm, with the highest prevalence among individuals aged 18–25 years. Of these, 7% reported engaging in self-harm frequently. The behavior is more common among females than males [3].

Self-harm often manifests as a repetitive behavior influenced by psychosocial factors such as family conflict and loneliness. When adolescents experience difficulties in forming supportive social connections and lack emotional engagement from their families, they become more vulnerable to psychological distress and self-destructive coping strategies. Thus, fostering open family communication and strengthening social support networks are crucial to mitigate loneliness and reduce the risk of self-harm among adolescents [4].

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A preliminary interview-based study with 20 students at SMA Negeri 1 Ciruas revealed that 12 students reported persistent loneliness, citing the absence of someone to confide in, recurring problems they could not express, and being left alone at home due to working parents. Some felt socially excluded. Sixteen students admitted to engaging in self-harm by repeatedly hitting themselves—sometimes more than 25 times—on the head, hands, or chest. Given these findings, this study aimed to determine the relationship between loneliness and self-harm among adolescents at Ciruas 1 High School in 2024.

2 Methods

This study was conducted at High School 1 Ciruas from May to June 2024. A quantitative approach with a cross-sectional design was used. The study population consisted of 1,079 students, with a sample of 100 students selected via probability random sampling.

Data were collected using the UCLA Loneliness Scale Version 3 (Russell, 1996; Cronbach's $\alpha = 0.89$) and the Self-Harm Inventory (Sansone & Sansone, 1998; Cronbach's $\alpha = 0.80$), both of which have demonstrated good reliability and validity in adolescent populations [5].

Ethical approval was obtained from the Universitas Faletahan Ethics Committee (No. 237/KEPK.UF/V1/2024). The UCLA Loneliness Scale Version 3 consists of 20 items rated on a 4-point Likert scale (1 = never to 4 = often), with total scores ranging from 20 to 80; higher

scores indicate greater loneliness, categorized as low (20–39), moderate (40–59), and high (60–80). The Self-Harm Inventory comprises 22 yes/no items, where a score of ≥ 5 indicates the presence of self-harming behavior [6].

3 Results

Table 1. Distribution of Loneliness Level Among Adolescents

Level of Loneliness	Frequency	Percentage (%)
Severe Loneliness	48 Respondents	48%
Moderate Loneliness	5 Respondents	5%
Low Loneliness	45 Respondents	45%
No Loneliness	2 Respondents	2%

Based on Table 1, out of 100 respondents, the majority experienced severe loneliness, totaling 48 respondents (48%).

Table 2. Distribution of Self-Harm Behavior Among Adolescents

Self-Harm Behavior	Frequency	Percentage (%)
Engaged in self-harm	52 Respondents	52%
No self-harm behavior	48 Respondents	48%

Based on Table 2, out of a total of 100 respondents, the majority engaged in self-harm behavior, totaling 52 respondents (52%).

Table 3. Relationship between Loneliness and Self-Harm Behavior among Adolescents

Loneliss	Self-Harm					Pvalue
	With self-harm behavior		Without Self-Harm Behavior			
Severe Loneliness	48	25,0%	0	23,0%	48	0,000
Moderate Loneliness	3	2,6%	2	2,4%	5	
Mild Loneliness	1	23,4%	44	21,6%	45	
No Lonelliness	0	1,0%	2	1,0%	2	

Table 3 show, the Chi-square test indicated a statistically significant relationship between loneliness and self-harm (p-value = 0.000). Adolescents experiencing severe loneliness were more likely to engage in self-harm compared to those with lower or no loneliness levels.

4 Discussion

The results of this study revealed a statistically significant correlation between loneliness and self-harming behaviors among adolescents, which is consistent with the findings reported by Muthia and Hidayati [7] as well as Ikhmahwati et al. [8]. Nearly half of the participants demonstrated a high level of loneliness, reinforcing the notion that adolescence represents a critical developmental period characterized by emotional fluctuations and a heightened need for peer validation. These findings imply that loneliness should not be perceived solely as a personal emotion but rather as a manifestation of broader social disengagement within the school context.

Persistent loneliness often triggers a range of negative emotional responses, including sadness, anxiety, anger, and low self-worth [9]. In the present study, some students acknowledged engaging in self-harm as a means of managing or releasing these distressing emotions. This suggests the presence of maladaptive coping patterns in which psychological pain is transformed into physical sensations to gain a temporary sense of relief. However, such behaviors are dangerous and fail to resolve the underlying emotional issues, highlighting the urgent need for interventions focused on emotional regulation and mental health support for adolescents.

The rate of loneliness and self-harming behavior observed in this study appeared higher than that reported in comparable studies conducted in urban settings. This discrepancy may be influenced by contextual variables such as limited access to psychological counseling, insufficient mental health literacy, and persistent stigma surrounding emotional vulnerability. Consequently, educational institutions are encouraged to develop comprehensive prevention strategies, including early detection programs, counseling initiatives, and peer-based support systems, to reduce emotional isolation and minimize self-harming tendencies among students.

5 Conclusion

This study found that nearly half of the adolescents experienced severe loneliness, and more than half reported engaging in self-harming behavior. Statistical analysis confirmed a significant association between loneliness and self-harm, indicating that emotional isolation is a key psychological factor influencing adolescents' maladaptive coping responses. Addressing this issue requires the implementation of school-based interventions that focus on strengthening social connectedness and emotional resilience. Priority interventions include establishing peer support groups to foster a sense of belonging, providing regular counseling sessions for students at risk, and integrating emotional regulation training into school activities. Through these approaches, schools can play a vital role in reducing loneliness and preventing self-harming behaviors among adolescents.

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