

## PREVENTION OF NON-SUICIDAL SELF-INJURY BEHAVIOR IN ADOLESCENTS THROUGH ASSERTIVENESS TRAINING

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### ABSTRACT

**Background:** Non-suicidal self-injury is a mental health phenomenon that occurs when a person uses physical pain as a maladaptive coping method to deal with emotional stress, but health professionals experience a lack of information regarding effective management in Non-Suicidal Self-Injury behavioural interventions. Furthermore, the assertive training technique is an assistance to overcome difficulties in expressing feelings and emotions, as well as in showing assertiveness appropriately. **Objective:** This study aimed to describe the effect of assertiveness training on the behaviour of adolescents' abilities to prevent non-suicidal self-injury. **Method:** The research design is a quasi-experiment with a pre- and posttest and a control group. This study was conducted with 30 students selected using a purposive sampling technique after consulting with the guidance counselor about students at risk of non-suicidal self-injury at SMK 10 November in Semarang in October-November 2025. The instrument to measure the ability of adolescents to prevent the risk of Non-Suicidal Self-Injury behaviour uses the Self-Harm Inventory (SHI) before and after assertiveness training and subsequent analysis using univariate analysis in the form of frequency distribution and percentage. **Results:** The majority of respondents in this study were at risk of NSSI behaviour, namely 12 students before assertiveness training and 11 after. **Conclusion:** This study shows that the majority of respondents were at risk of engaging in NSSI behaviour after assertiveness training, a decrease compared to before assertiveness training. Continuous mentoring, health education, and counselling by various stakeholders are needed to ensure that these risks are appropriately managed.

**Keywords:** adolescent; assertiveness training; non-suicidal self-injury

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### INTRODUCTION

Non-suicidal self-injury is a mental health phenomenon that occurs when someone uses physical pain as a maladaptive coping method to deal with emotional stress (Woodley et al., 2021). Although self-harm is an unhealthy coping strategy, some adolescents view it as an objective approach that can lead to addiction and repetition (Alifiando et al., 2022). Non-suicidal self-injury is very common, yet most healthcare providers lack the necessary information regarding the prevention and management of non-suicidal self-injury (Alabi, 2022).

Non-suicidal self-injury in adolescents is a significant problem worldwide. A total of 229 adolescents (52.8% male and 15.76 years old

(1.24)) were involved. A total of 29.7% of adolescents reported suicidal ideation, and 4.8% indicated they had attempted suicide in the previous 2 weeks (Eslava et al., 2023). In the UK, non-suicidal self-injury is among the top 5 causes of death from acute medical problems. In a primary healthcare sample, the prevalence of non-suicidal self-injury increased to 22% from 2.7% in the overall population (Woodley et al., 2021). From children to adults, non-suicidal self-injury can occur in anyone of any age. According to research conducted in China, 14.84% of elementary school students have self-harmed (Li et al., 2020). Another study found that 42% of adolescents engage in self-harming behavior (Hidayati & Widyana, 2021). Another study found

that 41% of participants reported a history of non-suicidal self-injury. The prevalence rate of non-suicidal self-injury is 5.5% in adults, 13.4% in young adults, and 17.2% in adolescents. In Australia, the prevalence of non-suicidal self-injury ranges from 20% to 32%. Adolescents in Spain have a similar percentage, with 32.2% having engaged in significant self-harming activities. A similar study found that 7% of young adults frequently engage in non-suicidal self-injury, with the most common frequency being 2–5 times per week. Of these, 45% have self-harmed (Sibarani et al., 2021). In Indonesia, of 1,018 respondents to a YouGov Omnibus survey, 36.9% reported having engaged in non-suicidal self-injury. In Semarang City, the majority of 570 adolescents were at risk of engaging in NSSI behavior (59.6%), where the majority are aged 16-19 years, namely late teenagers, female, and living at home with their parents.

Adolescents who engage in non-suicidal self-injury behavior do not intend to commit suicide. However, several incidents of non-suicidal self-injury behavior end in death. Adolescents who engage in non-suicidal self-injury behavior are 1.68 times more likely to commit suicide. Individuals who engage in non-suicidal self-injury behavior experience severe tissue damage, leading to complications and even death (Elvira & Sakti, 2021). The detrimental impacts caused by NSSI behavior are significant and include psychological harm such as tension or loss of social relationships, as well as feelings of shame and guilt (Hidayati & Widyana, 2021). Given this, non-suicidal self-injury behavior cannot be considered a minor problem. Therefore, managing the risks and dangers associated with non-suicidal self-injury behavior is crucial.

The main factors contributing to NSSI behavior in adolescents are feelings of loneliness, greater difficulty with negative experiences than with problems, the use of emotion-focused coping in problem-solving, and poor communication with parents (Apsari & Tarigan, 2021). Furthermore, individual factors, such as emotional dysregulation contribute (Cipriano et al., 2017). Adolescents experiencing stressful life events have lower self-

esteem and more negative attitudes, which are then linked to the risk of NSSI behavior (Lan et al., 2019). Promotion and prevention of emotional problems through assertiveness training are essential (Rizki & Keliat, 2021) to reduce NSSI behavior among adolescents and to maintain assertiveness during social interactions (Parray et al., 2020).

Assertiveness is a skill that enables individuals to express themselves, their ideologies, and their desires directly without harming their own rights or the rights of others (Musfiroh et al., 2024). Meanwhile, the assertive training technique is an assistance to overcome difficulties in expressing feelings and emotions, as well as in showing assertiveness appropriately. Assertive training aims to strengthen the individual's courage in demonstrating the expected behaviour, thereby fostering self-confidence (Zahra & Wangid, 2025).

Healthcare professionals experience a lack of information regarding effective management of non-suicidal self-injury interventions. This is consistent with interviews with several nurses at Dr. Amino Gondohutomo Regional Psychiatric Hospital, where nurses stated that until now, they only provide care in accordance with applicable norms and do not delve deeper into cases of patients with Non-Suicidal Self-Injury behavior. Nurses still assume that patients who engage in Non-Suicidal Self-Injury behavior are making a suicide attempt. Prevention of Non-Suicidal Self-Injury behavior in adolescents using psychiatric nursing modalities such as Assertiveness Training has not been developed in mental health services. This study aimed to describe the effect of Assertiveness Training on the behavior of adolescents' abilities to prevent Non-Suicidal Self-Injury.

## **METHOD**

The research design was a quasi-experimental study with a pre- and posttest with a control group (Nursalam, 2020). The study population comprised all students at SMK 10 November in Semarang. The sample for this study was 30 students selected using a purposive

sampling technique after consulting with the guidance counselor about students at risk of non-suicidal self-injury. The inclusion criteria for this study were: Active students at SMK 10 November, Semarang City, Willingness to be informants, Adolescents at risk of non-suicidal self-injury. The exclusion criteria for this study were: Unwillingness to be informants and adolescents at risk of suicide.

This research was conducted at SMK 10 November, Semarang City. The research period was October-November 2025. The independent variable in this study was assertive training, and the dependent variable was non-suicidal self-injury behavior. The research instruments consisted of a demographic characteristics checklist and an instrument to assess adolescents' ability to prevent the risk of non-suicidal self-injury using the Self-Harm Inventory (SHI). The Self-Harm Inventory consists of 22 open-ended questions, scored 0–22, with 1 for a “yes” answer and 0 for a “no” answer. A score of 0 indicates no non-suicidal self-injury, a score of 1-5 indicates a risk of non-suicidal self-injury. A cut-off score >5 is sufficient to indicate mild non-suicidal self-injury, and a cut-off score >11 indicates psychopathological tendencies.

Data Collection Procedure; Research Phase 1 aimed to develop an Assertiveness Training module through consultation with psychiatric nursing experts. The experts selected by the researcher were academics with a doctorate in psychiatric nursing and clinical practitioners specializing in psychiatric nursing from Dr. Amino Gondohutomo Mental Hospital (RSJD) in Central Java Province to obtain input and validation helpful for module development. The final result research phase 1 was an Assertiveness Training module as an effort to improve adolescents' ability to prevent the risk of non-suicidal self-injury. Research Phase 2 was a pilot test of the Assertiveness Training module. The researchers provided interventions according to the Assertiveness Training module in four sessions: Session one: Understanding the causes of NSSI and practicing assertive behavior. Session two: Expressing needs and desires

assertively. Session three: Saying “no” to irrational requests. Session four: practicing accepting differences of opinion and expressing opinions assertively. Conducting a posttest: The posttest is conducted after receiving Assertiveness Training treatment, and the implementation gap is approximately 1 month from the intervention.

Data Analysis Technique is non-suicidal self-injury risk data from the Self-Harm Inventory (SHI) questionnaire were compared before and after the Assertiveness Training intervention using univariate analysis in the form of frequency distributions and percentages.

## RESULTS

### Respondent Characteristics

**Table 1** Respondent Characteristics

Variable	Total	Percentage (%)
Gender		
Female	3	10
Male	27	90
Age		
15 years old	8	26,6
16 years old	15	50
17 years old	5	16,6
18 years old	2	6,6
Residence		
With parents	27	90
With other family members	2	6,6
Boarding house	1	3,3

Based on the table 1 above, it shows that the majority of respondents in this study were male students (90%), aged 16 years (50%), and living with their parents (90%).

### NSSI Pre Assertive Training Behavior

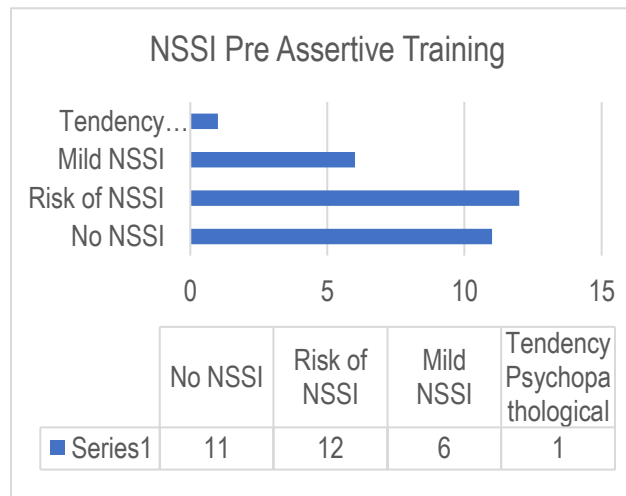


Figure 1 NSSI Pre Assertive Training

The figure above shows that the majority of respondents in the study were at risk of engaging in NSSI behavior before assertive training, namely 12 students.

### NSSI Post Assertive Training Behavior

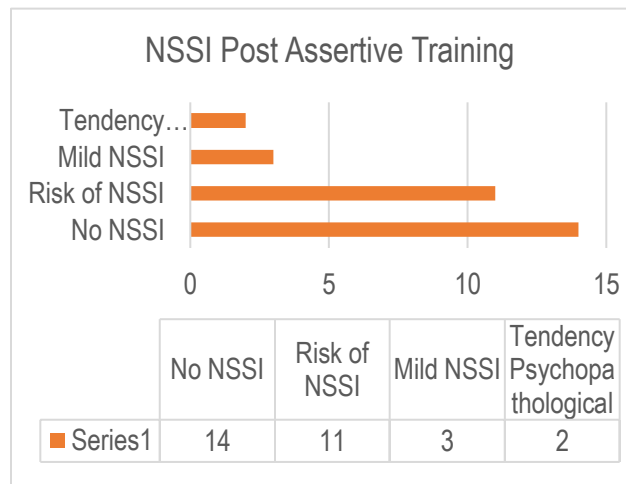


Figure 2 NSSI Post Assertive Training

Based on Figure 2 above, it shows that the majority of respondents in the study after assertive training were at risk of engaging in NSSI behavior, namely 11 students.

### DISCUSSION

The results of this study indicate that the majority of respondents were male. The study was conducted at a vocational high school specializing in Audio Video Engineering and Light Vehicle Automotive Engineering, so the majority of students were male. Although several previous studies have shown that females are at greater risk of engaging in NSSI (Iswanti et al., 2024; Kandar et al., 2024, 2025), this does not rule out the possibility that male students are also at risk. The study explained that NSSI behavior in adolescent boys is often triggered by various complex emotional and social factors, such as conflict with parents, experiences of loss and loneliness, and feelings of deep disappointment due to mistakes (Jannah et al., 2025).

All respondents were adolescents, the majority aged 16. Adolescents face various hormonal, cognitive, and psychosocial transitions, making them a vulnerable population for mental health issues (Kandar et al., 2024). Adolescents are more likely to engage in NSSI because adolescence is a time of transition (Rawit et al., 2024), particularly as they develop a sense of self-identity and belonging. Social acceptance is a crucial factor for them. Conversely, adolescents may not yet have the skills to identify appropriate judgments (Kandar et al., 2024).

The results of this study indicate that approximately 40% of respondents were at risk of engaging in NSSI behavior before assertiveness training. These behaviors ranged from self-cutting and self-hitting to risky behaviors such as reckless driving, deliberate starvation, and deliberately preventing wounds from healing. These results align with previous research that found that adolescents exhibit a broad spectrum of NSSI behaviors (Kandar et al., 2024).

The results also indicate that approximately 36.6% of respondents in the study were at risk of engaging in NSSI behavior after assertiveness training, a decrease compared to before assertiveness training. Based on interviews during data collection, a student stated that he experienced NSSI behavior due to a history of bullying by adults in his neighborhood. This

condition made the student feel inferior and unable to socialize with friends at school.

This is consistent with several previous studies showing that bullying is a contributing factor to NSSI behavior. Some factors causing NSSI behavior include an inability to regulate emotions, resulting from problems with negative peers, such as bullying, and disharmony in family relationships (Zakaria & Theresa, 2020). Emotional dysregulation is a factor closely related to NSSI behavior (Mitchell et al., 2023). Various studies consistently show that individuals who engage in NSSI behavior have higher levels of emotional dysregulation than those who do not (Shafti et al., 2021). The exact mechanism by which emotional dysregulation leads to NSSI behavior remains unknown, but several theories attempt to explain it, including experiential avoidance theory and urgency theory. Additionally, research (Budiman et al., 2024) explains that there is a powerful relationship between anxiety and NSSI behavior in adolescents. So teenagers need to be able to control their feelings of anxiety.

Another factor contributing to NSSI behavior is a lack of self-confidence. Individuals with low self-confidence exhibit characteristics such as anxiety when faced with challenging situations, nervousness, and sometimes flustered speech, a lack of understanding of how to develop themselves to achieve specific strengths, frequent isolation from groups perceived as superior, being easily discouraged, a tendency to rely on others for problem-solving, and frequent adverse reactions (Hasanah et al., 2024). Factors influencing self-confidence include internal and external factors. Internal factors include self-concept, self-esteem, physical condition, and life experiences. External factors include education, employment, the environment, and life experiences (Hasanah et al., 2024).

One factor contributing to NSSI among adolescents is the lack of a place to share or communicate with others, such as parents, peers, teachers, or siblings. Assertive behavior is a person's behavior in interpersonal and group relationships, which involves expressing

emotions, feelings, thoughts, and desires firmly, openly, and honestly without causing anxiety to others and without harming oneself or others (Iswanti et al., 2024; Kandar et al., 2024; Kandar & Iswanti, 2019).

NSSI can be prevented through stress management. Stress management varies from person to person. Some manage stress by engaging in activities they enjoy, such as hobbies, approaching a spiritual context through devout worship, or confiding in others. Despite social stigma, having the courage to open up to others and seek treatment is a step in the right direction (Budiman et al., 2024)

Another way to prevent NSSI is through assertiveness training. Research results (Wastuti & Putri, 2023) from SMP Negeri 1 Galang showed that the implementation of assertiveness training through group guidance had a positive impact on students' behavior. With assertiveness training, students became bolder and more confident in expressing their thoughts and feelings when faced with abusive behavior or bullying. This indicates that assertiveness training techniques are effective in helping students be assertive and anticipate bullying behavior. Based on these findings, assertiveness training techniques can be a helpful alternative for helping students overcome behavioral and social interaction problems. Through group guidance, students can learn how to be assertive, express opinions clearly, and protect their rights without harming others. In addition, this technique also helps students understand and overcome fear, doubt, or anxiety that often prevent them from being assertive. Other studies have also shown that individual assertiveness training therapy has been proven effective in improving assertive communication skills in adolescents (Wulandari & Anikoh, 2025). This program provides a systematic approach to help adolescents understand and develop the communication skills necessary to express their thoughts, feelings, and needs positively and confidently.

Implications of Research Results; The results of this study indicate that, after assertiveness training, approximately 36.6% of

respondents were at risk of engaging in NSSI behavior, a decrease compared to before the training. However, ongoing mentoring, health education, and counseling by various stakeholders are needed to ensure that this risk is adequately managed. Research Limitations; The descriptive design only maps the phenomenon without examining causal relationships or influences between variables. Future researchers are advised to combine quantitative (for generalization) and qualitative (for in-depth exploration) approaches, expand the sample using probability sampling techniques (e.g., stratified sampling), and include a broader range of locations.

## CONCLUSION

This study shows that the majority of respondents were at risk of engaging in NSSI behaviour after assertiveness training, a decrease compared to before assertiveness training. Further research is needed to investigate the interplay among variables, deepen the exploration, and expand the sample to increase the likelihood of generalizability across a wider research setting.

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