# Risk Factor and Countermeasure on Non Suicidal Self Injuring Behavior

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**Abstract:** Non suicidal self-injuring behavior is a common social phenomenon in the youth world. This paper analyzes the dilemma of non-suicidal self-injuring behavior from the sociological perspective, and puts forward relevant suggestions and countermeasures to promote social stability and harmonious development. This article mainly used the way of follow-up and investigation to analyze the way, quantity and influencing factors of non suicidal self injuring behaviors. The survey data shows that beating oneself is the most common way of self-injuring behavior, and about 6% of students use this way to self harm. The self-injuring behavior of men is higher than that of women.

#### 1. Introduction

Non suicidal self-injuring behavior is a common psychological disease. At present, many teenagers are in poor mental state due to various pressures. Among them, the number of patients with depression is increasing year by year. Of course, there are some NSSI patients. Although they will not kill themselves for the purpose of death, they always hurt themselves unconsciously. It can be seen from the relevant data of some NSSI patients that the incidence rate of young people in China is increasing year by year, so this phenomenon has attracted the attention of the country.

There are many scholars and theories studying the risk factor analysis and countermeasures of non-suicidal self-injury behavior. For example, some scholars have studied the relationship between teenagers' static behavior and non-suicidal self-injurious behavior [1-2]. Some experts also point out that non suicidal self-mutilation is more common among young people [3-4]. In addition, some scholars have established a multi-step model to study the current situation and the factors related to students' own injury behavior [5-6]. Therefore, this article will start from the concept of suicidal self-injury, analyze the nature of non-suicide, and propose preventive measures for this practice.

This paper first studies the non-suicidal self-injuring behavior, and analyzes its basic theory and social harm. Secondly, it discusses the risk factors of non-suicidal self-injury and discusses them in different points. Then we investigated the non-suicidal self-injury behavior. Finally, through the form of questionnaire, the author studies the self-injury behavior and puts forward relevant measures to prevent it.

## 2. Risk Factor Analysis and Countermeasures of Non Suicidal Self Injuring Behaviors

#### 2.1 Non Suicidal Self Injury Behavior

Non suicidal self-mutilation is a kind of non-suicidal behavior that intentionally harms oneself and directly harms body tissues. People who commit suicide are more likely to commit suicide than those who do not commit suicide. Some people carry out serious self-mutilation, resulting in serious physical injury or even death, which means that self-mutilation increases the risk factors of suicide. The more serious the self-mutilation, the greater the possibility of suicide. Self-harming behavior can be to eliminate negative emotions such as anger and fear, seek stimulation, obtain or improve their sense of existence, escape responsibility or be criticized [7-8].

Self-mutilation itself will not only cause damage to body tissues, but also be a risk factor for suicide. Long term and repeated self-mutilation is not only a direct harm to the body tissues, but also a greater harm to the physical and mental health of young people, causing serious consequences for family and social health. Due to the lack of consistency in the definition, measurement methods and research objects of self-harm, the reporting rates of adolescents' self-harm behaviors vary greatly. With the increasing reporting rate of juvenile self-destruction, it has become a social problem to take effective measures to prevent and control juvenile self-destruction and investigate the mechanism and causes of juvenile self-destruction. Resilience and personal happiness are directly related to depression, anxiety and other negative psychological and emotional symptoms, and are negatively related to them. Resilience negatively predicted suicidal thoughts. Resilience can protect abandoned children from behavioral problems. Self-mutilation is regarded as a mechanism to compensate individuals for their insufficient ability to regulate emotions under psychological pressure, as well as a means to deal with negative emotions. When the number or quality of personal social networks is lower than expected, loneliness is a subjective emotional experience. Adolescence is a dangerous period of loneliness and the most common cause of adolescent health threats [9-10].

#### 2.2 Risk Factors of Non Suicidal Self Injury

Impulsive personality is significantly related to the incidence rate and severity of NSSI. Borderline personality disorder (BPD) is a serious and complex behavioral disorder. People with NSSI have less intimate relationship with their parents than people without NSSI. In a poorly structured family, it is difficult for members to express their feelings. They get the attention and care of their families through self-mutilation. In addition, young people face prejudice from classmates and friends [11].

Not willing to talk with others or seek social help. The experience of sexual abuse and neglect is related to the severity of NSSI. Parental behavior includes support and control. Parental support can improve the adaptive level of psychosocial function and reduce the degree of maladjustment. Inadequate parental care, over protection and inadequate control have been identified as risk factors that may lead to mental illness in children/adolescents. The influence of teenagers' peers is not only reflected in psychology, but also in sociology, public health, politics, criminology and marketing. In order to keep closer contact with peers and share common secrets, teenagers are attracted to NSSI behaviors by peers. Excessive learning pressure, poor performance, punishment of teachers, and high expectations of parents will lead to self-mutilation. Nowadays, the network is more and more developed, and live video is favored by teenagers to a large extent. NSSI is closely related to sexual orientation. Homosexuality and bisexuality will increase the risk of NSSI. The emotion regulation disorder is a difficulty for ordinary people in identifying, understanding, accepting and flexibly using strategies to take appropriate behavior. Depression is also a risk factor for self-destructive

behavior. After practicing NSSI behaviors, teenagers feel relaxed and calm. The incidence of non-suicidal self-mutilation often involves many aspects, such as medical treatment, marriage, family, etc. Therefore, all sectors of society must work together to prevent and solve these problems [12-13].

## 3. Investigation on Non Suicidal Self Injury Behavior

## 3.1 Respondents

The object of this survey is to follow up 500 freshmen from two schools in the city and conduct a baseline survey. After a one-year interval, a second questionnaire survey will be conducted in the coming year. The survey is conducted by class. After reading the content and purpose of the questionnaire, the respondents agree to fill in the questionnaire and fill in the questionnaire on the spot. The questionnaire will take about 20 minutes to complete, and then it will be taken back on the spot. The questionnaire was sorted out in the early stage, with 25 invalid questionnaires removed, and the effective questionnaire rate was 95%. The baseline personnel were followed up in the second year. On the day of follow-up, 480 respondents agreed to fill in the follow-up questionnaire. In the early stage, 23 invalid questionnaires were sorted out, and the effective questionnaire rate was 95.2%.

#### 3.2 Questionnaire Content

In this paper, non-suicidal self-injuring behaviors were sampled and questionnaires were filled out among school freshmen. This questionnaire lasts for one year, and the content of the second questionnaire is determined through the first questionnaire. This questionnaire involves some basic information such as the gender, family and income of the person filling in the questionnaire. Secondly, this paper also studies the emotion, identity and life events of the respondents. According to the survey data, the common ways of self-injury mainly include cutting and piercing the skin, burning the skin, hitting oneself, biting, wearing the skin, and inserting foreign objects into the skin. The second questionnaire mainly investigates the life and study pressure of self-injured people. Therefore, this paper mainly studies the students' self-injurious behavior, the incidence of self-injurious behavior, and the descriptive analysis of various dimensions of life events.

#### 3.3 Analysis of Survey Data

Use Epidata 5.0 to enter questionnaire data, duplicate data entry, and related logic checks. The statistical analysis software uses SPSS21.0 for statistical evaluation. Demographic variables are described using mean, standard deviation and percentage statistics, continuous variables are compared using t-test and ANOVA, classified data are compared using chi square test, and influencing factors are analyzed using logistic regression model. The t-test formula of relevant samples is:

$$T = \frac{\overline{A}_{1} - \overline{A}_{2}}{\sqrt{\frac{\mu_{A_{1}}^{2} + \mu_{A_{2}}^{2} - 2\kappa\mu_{A_{1}}\mu_{A_{2}}}{m - 1}}}$$
(1)

Here,  $\overline{A}_1$ ,  $\overline{A}_2$  are the average of two samples respectively.  $\mu_{A_1}^2$ ,  $\mu_{A_2}^2$  are the two sample variances.  $\kappa$  is the correlation coefficient of the relevant sample. The variance formula is expressed as:

$$S^{2} = \frac{\left\{ (a_{1} - n)^{2} + (a_{2} - n)^{2} + (a_{3} - n)^{2} + \dots + (a_{m} - n)^{2} \right\}}{m}$$
 (2)

N is the average number of data, m is the number of data, and  $S^2$  is the variance. Chi square test is calculated by test statistics:

$$\lambda^{2} = \sum_{i=1}^{1} \frac{(g_{i} - mq_{i})^{2}}{mq_{i}}$$
 (3)

Where, m represents the number of experiments, and q represents the distribution rule. This paper makes statistics on students' self-harming behavior through questionnaire survey. The main ways of self-mutilation in this paper are cutting and puncturing skin, burning skin, hitting oneself, biting, wearing skin, and inserting foreign matters into skin. The way of self-injury between male and female students is generally consistent, but there are some differences. In terms of skin abrasion, boys accounted for 2.3% and girls accounted for 0.8%. The variance was 7.35, which was statistically significant. In terms of skin foreign body insertion, boys and girls accounted for 0.6% respectively, with a small difference of 0.001. The specific results are shown in Table 1:

	Male	Female	Variance	P
Cutting	1.4	1.1	1.12	0.28
Scald	1.1	0.7	1.57	0.21
Strike	8.1	3.5	15.6	0.001
Bite	5.1	6.2	1.1	0.29
Wear skin	2.3	0.8	7.35	0.007
Skin inserts	0.6	0.6	0.001	0.98

Table 1: Students' Self-Harm Behavior Mode

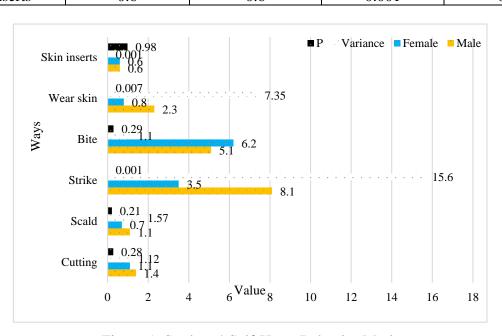


Figure 1: Students' Self-Harm Behavior Mode

As shown in Figure 1, we can see that in terms of skin cutting, boys account for 1.4% and girls account for 1.1%, with a variance of 1.12. In terms of scalding skin, boys accounted for 1.1% and girls for 0.7%, with a variance of 1.57. In terms of beating themselves, the proportion of boys

accounted for 8.1%, and the proportion of girls accounted for 3.5%, with the variance of 15.6, the most significant difference, with statistical significance. In terms of biting skin, boys accounted for 5.1% and girls accounted for 6.2%, with a variance of 1.1.

#### 4. Analysis of Follow-Up Investigation

#### 4.1 Occurrence Rate of Self Injurious Behaviors

Of the 480 people surveyed, 50 reported self-mutilation, with a incidence rate of 10.4%. In terms of gender, the self-mutilation rate of boys is 13.5%, and that of girls is 8.4%, with a variance of 5.88. The incidence rate of boys is higher than girls, with a statistically significant difference. The specific situation of students' self-injurious behavior is shown in Table 2:

	Self-harm	Variance	P
Male	13.5	5.88	0.01
Female	8.4	5.88	0.01
Rural Area	11.5	1.7	0.19
Town	9.8	1.7	0.19
Only child	10.5	0.001	0.98
Non-only child	10.5	0.001	0.98

Table 2: The Incidence Rate of Self-Harm Behavior

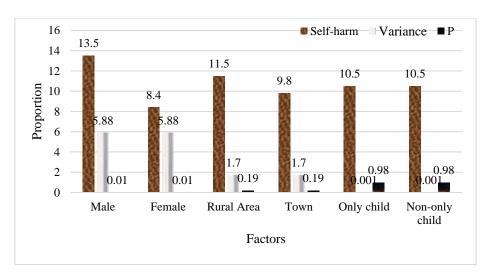


Figure 2: The Incidence Rate of Self-Harm Behavior

As shown in Figure 2, we can see that the incidence of self-mutilation of only children and non-only children is 10.5%, and the variance is 0.001. In terms of family location, the self-handicapping rate of rural students is 11.5%, higher than that of urban students 9.8%, and the variance is 1.7, with no statistical significance.

## 4.2 Descriptive Analysis of Various Dimensions of Life Events

In this study, the life event scale was divided into five dimensions: relationship, learning pressure, punishment, loss and health adaptation. The average score of life events was 0.6, the standard deviation was 0.48, the lowest score was 0, and the highest score was 5. The average score of learning related stressors is the highest, and the average score of each item is 1.06. The

proportion of self-injury can account for 1.51%. The data difference is significant. See Table 3 for details:

	Average value	Standard deviation	Self-harm	P
Interpersonal relation	0.85	0.83	0.96	0.0005
Academic stress	1.06	0.78	1.51	0.0007
Subject to punishment	0.18	0.36	1.62	0.0006
Lose	0.41	0.52	0.72	0.0005
Healthy adaptation	0.83	0.71	1.29	0.0006

Table 3: Descriptive Analysis of the Various Dimensions of the Life Events

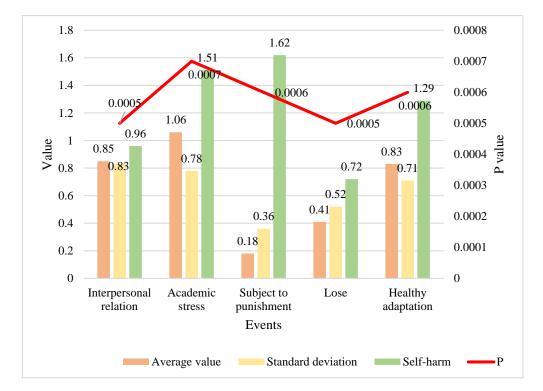


Figure 3: Descriptive Analysis of the Various Dimensions of the Life Events

As shown in Figure 3, we can find that the average score of interpersonal relationship is 0.85, the variance of each item is 0.83, and the proportion of self-injury can account for 0.96%. The average score of punishment was the lowest, 0.18, the variance score of each item was 0.36, and the proportion of self-injury was the highest, accounting for 1.62%. The average score of loss is 0.41, the variance score of each item is 0.52, and the proportion of self-injury can account for 0.72%. The average score of health adaptation is 0.83, the variance score of each item is 0.71, and the proportion of self-injury can account for 1.29%, with a statistically significant difference.

The study concluded that preventive measures against non-suicidal self-mutilation should focus on the following aspects: generally speaking, psychological treatment should be selected to intervene or reduce the incidence of non-suicidal self-mutilation. The whole society, including schools, should strengthen and attach importance to mental health work. Find out the causes of non-suicidal self-mutilation behaviors of different individuals and eliminate them. Life education courses should be offered to students of all ages to raise awareness of the importance of life. The occurrence of non-suicidal self-mutilation of adolescents is affected by their environment, including family, school and social environment. Democratic education promotes the healthy growth of children. Schools are the most important places for young people to learn. Teachers should pay attention to students' behavior and psychological changes, identify and solve problems in time, so that students love each other and grow together. The social environment affects the family and school environment. Create a good social environment conducive to the healthy development of young people. In order to establish a strong social support system, students must first understand their own mental health and psychological needs, and learn to maintain mental health. Students must form a healthy view of mental health: the family's social support is the most selfless, and the society is the strong support of social support. The main purpose of improving students' coping ability is to reduce negative coping styles and increase positive coping styles. We can start our daily life and emotionally teach us to reduce the frequency of non-suicidal self-harm behaviors. The school has set up many mental health courses, with themes including emotion, interpersonal relationship, communication, and even life education.

#### 5. Conclusion

Non suicidal self-injuring behavior is a disease with strong social harm and occupational disease risk, and there are also many deficiencies in mental health education. Therefore, we should guide them correctly. We should strengthen the cultivation of students' safety awareness and self-protection ability. Based on the analysis of risk factors of non-suicidal self-injury behaviors, the corresponding suggestions were put forward for different groups to implement psychological rehabilitation training. Based on the analysis of the motivation, current situation and causes of non-suicidal self-injury, this paper constructs the countermeasures for non-suicidal self-injury. The individual's own pressure resistance, social adaptability and stress response to environmental changes can effectively reduce the risk of self-injury through positive coping measures.

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