



The Attitude of Chinese College Students towards Suicide Survivors: An Exploration of the Influencing Factors of Stigma Attitude

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ABSTRACT. In today's society with a high suicide rate, suicide survivors have become a group that cannot be ignored. In addition to feeling sad, they are often stigmatized by others. The purpose of this survey is to explore the factors that affect the public stigma of Chinese college students on suicide survivors. 76 Chinese college students completed the questionnaire online. After OLS regression analysis, the results showed that students with more obvious type a personality traits and higher grades had a higher level of public stigma for suicide survivors, while subjective socioeconomic status and familiarity with the concept of "suicide" had no significant impact. At the same time, the reliability and validity of the STOSASS Chinese version scale were tested, and its effectiveness was confirmed.

Keywords: suicide survivors, stigma attitude, college students, type a personality

1 INTRODUCTION

It is estimated that 703000 people worldwide die of suicide every year [1]. For every suicide death, it is estimated that more than 60 people will be directly and negatively affected [2]. Visible, suicide survivors are a very large group. Research shows that the situation for suicide survivors are at great risk, physically and mentally affected by the event. In a study, among the 272 suicide survivors, the major depressive disorder was 9 times higher than that of the general population, and suicide attempts were 6 times higher than that of the general population. Compared with most people, suicide survivors show higher levels of depression and impulsivity, and have a worse quality of life [3], they would feel a high degree of shame, guilt, anger, social stigma, and exclusion [4]. Suicide survivors often assume that they are at least partially responsible for the suicide, because of this concept, they often face a sense of social stigma. As early as the 1990s, some scholars suggested that bereavement after suicide is different from bereavement after natural death. Shame and avoidance are the core issues for suicide survivors. The psychological cognition of rejection and the actual social behavior response to the relatives and friends of the suicides do not seem to coincide completely.

This difference makes the social support experienced by suicide survivors different from the actual level of social support. This will greatly affect the survivors' ability to interact socially with adults. The result is often complete isolation of the bereaved for some time following the suicide. This also leads to a greater risk of mental and physical problems for suicide survivors [5]. In Yamanaka's experiment [6], college students were asked to respond to four fictional cases of a college student whose father had died. The causes of death described in these fictional cases are suicide, cancer, AIDS or murder. By comparing college students' attitudes toward these four fictional characters, we can find out whether the general public has a significantly negative attitude toward suicide survivors. However, there is still much room to explore the factors that affect the stigma of suicide survivors. Therefore, this study attempts to explore the influencing factors of College Students' attitudes towards stigma among suicide survivors, to further explore how stigma came into being and developed.

Understanding intergroup attitudes are very meaningful, especially in China's socio-cultural environment. The results can not only be compared with the results of the original literature to supplement or support the conclusions of the original literature but also can be compared with the data of other subjects to understand the differences in social attitudes towards suicide survivors in different cultural backgrounds.

2 THEORETICAL REVIEW

Studies found that many suicide survivors can recognize negative attitudes toward them from those around them [7]. The perceived negative attitudes of suicide survivors likely complicate their grief, this could explain why survivors' levels of psychological distress do not decrease over time after a suicide [8]. However, most studies have focused on suicide survivors, and few have confirmed whether the general public has the negative attitudes they perceive toward suicide survivors. Calhoun, Selby, and Walton [9] conducted a survey to ask the public to evaluate the spouses of people with different causes of death. The results showed that the public's attitude towards suicide survivors was indeed negative. Therefore, this research provides preliminary evidence for the existence of negative intergroup attitudes towards suicide survivors.

Theoretical and empirical studies have distinguished the types of stigma related to suicide, including public stigma, self stigma and perceived stigma, which are both different and interrelated. Public stigma is a phenomenon that social groups recognize all kinds of negative stereotypes imposed on stigmatized groups and take special actions accordingly [10]. The key to judging whether public stigma exists is whether people agree with the stigmatization attitude towards the target group, that is, the degree of recognition of stigma. Stigma recognition in the target population is usually used to measure the degree of suicide stigma suffered by this group [11]. At present, many scales have been developed to measure various types of suicide stigma [12]. The Stigma of Suicide Scale(SOSS) is designed and published by batterham et al.[13], which is widely used to measure suicide public stigma. Among them, the adapted STOSAFS focuses on groups that fail to commit suicide, as well as STOSASS mainly assesses the stigma of suicides and suicide survivors. Some literature uses shows that suicide stigma

may be affected by some factors, such as suicide exposure, psychological distress, and suicidal and perceived suicide entity [14].

Socioeconomic status refers to the wealth, power, and relative social status controlled by individuals or families [15]. Because most teenagers are economically dependent, their socioeconomic status usually refers to family socioeconomic status, which is divided into the objective socioeconomic status and subjective socioeconomic status. The former involves objective indicators such as parents' education, occupation, overall family income and savings, while the latter is a subjective cognition of their socioeconomic status. Research shows that adolescents with low socioeconomic status have relatively higher levels of anxiety and depression, and their subjective well-being and life satisfaction are relatively low [16]. Adolescents with anxiety, depression, and lack of life happiness are more likely to have suicidal ideation. Similarly, they are more likely to recognize and agree with the existence of suicide stigma. To explore this possibility, this study takes socioeconomic status as one of the independent variables that may affect the public stigma of suicide. At the same time, considering that most teenagers may not know the actual economic situation of their families, we only measured the subjective socioeconomic status of the subjects.

In addition, hostility, as an indispensable feature of type A personality traits, is likely to produce unreasonable cognition and hostility attribution to suicide survivors, resulting in a series of stigmatization phenomena such as discrimination and prejudice [17]. Therefore, this experiment hopes to explore the relationship between the public stigma of suicide survivors and type A personality.

Exposure to suicide related information, such as witnessing suicide in movies, workplaces or personal life, or experiencing the suicide of relatives, may make the public experience suicide stigma, thereby raising awareness of suicide stigma. On the one hand, suicidal bereavement experience may increase the stigma of suicide, which is more likely to lead to the emergence of suicidal thoughts [18]; On the other hand, many studies have shown that providing relevant psychological education can reduce stigma and improve mental health literacy [19]. The relationship between suicide exposure and public stigma is complex and needs further exploration. This study intends to start with people's understanding of the concept of suicide and explore whether the knowledge reserve of suicide will affect the public's stigma of suicide.

As a result, the grade may also be one of the important factors affecting the generation of stigma. With the growth of grades, college students learn more and more knowledge. Will this affect the stigma level of college students for suicide survivors? This is also one of the research purposes of this experiment.

3 RESEARCH DESIGN

3.1 Hypotheses

To further fill the gap of the public stigma of suicide survivors and understand their possible influencing factors, the following assumptions are put forward

H1: Type A personality is positively correlated with the public stigma of suicide survivors.

H2: The grade of college students is negatively correlated with the public stigma of suicide survivors.

H3: Familiarity with the concept of "suicide" is negatively correlated with the public stigma of suicide survivors

H4: The subjective socioeconomic status of college students is negatively correlated with the public stigma of suicide survivors.

3.2 Participants

An online survey aims to investigate the public stigma of college students on suicide survivors and discuss possible influencing factors. Through convenient sampling, 76 college students (24 males, 31.58%) from China filled in the questionnaire online.

3.3 Variables

The public stigma of suicide survivors is the dependent variable of this experiment, which is measured by The Stigma of Suicide and Suicide Survivor Scale (STOSASS). STOSASS was developed and translated into Chinese by Yang Wu [11]. STOSASS is a 12-item scale, using a six-point Likert scale, ranging from 1 ("strongly disagree") to 6 ("strongly agree"). There are two versions of stosass, of which three questions are different. Version a describes the people who die of suicide, and version b describes the family and friends around the suicides. According to the research topic, stosass-b was selected for this study.

Grade, type A personality traits, subjective socioeconomic status, and familiarity with the concept of suicide are the independent variables of this experiment. For grades, according to the group of college students, this experiment divides grades into five options: "freshman, sophomore, junior, senior, senior, and above". For type A personality, a simplified type A personality questionnaire compiled by Wang and Feng [17] was used. The participants rated each item on a six-point Likert scale, ranging from 1 ("strongly disagree") to 6 ("strongly agree"). For subjective socioeconomic status, a scale developed by Nancy [20] was used. For familiarity with the concept of suicide, a question, "How much do you know about the concept of 'suicide'?", using a six-point Likert scale, ranging from 1 ("strongly disagree") to 6 ("strongly agree").

3.4 Model

OLS regression model was adopted in this study. The estimation equation of this experiment is as follows:

$$Y_t = \alpha + \beta X_t + \mu_t \quad (t=1, \dots, n)$$

Among them, Y_t is the public stigma of suicide survivors, X_t is 4 different independent variables, and α and β is the regression coefficient. μ_t is a random error term.

4 RESULT AND DISCUSSION

Table 1. OLS regression models for the stigma of suicide survivors

	Coef	Std.Err	p
constant	75.279	7.836	0.000**
type A personality	-0.385	0.097	0.000**
grade	2.120	1.051	0.044*
subjective socioeconomic status	-1.296	0.729	0.075
familiarity with the concept of "suicide"	-1.159	1.198	0.333

4.1 Type A personality

The regression coefficient value of type A personality is -0.385 and shows a significant level of 0.01 ($t=-3.968$, $p=0.000<0.01$), which means that people with higher levels of type a personality traits are more likely to make stigmatized judgments about suicide survivors, because the lower the score of STOSASS scale, the higher the stigma degree, that is, type A personality is negatively correlated with the public stigma of suicide survivors.

The main characteristics of type a personality are impatience, emotional instability, wariness or hostility, competitiveness, obsession with work, fast action, high efficiency, lack of patience, often a sense of time urgency, etc [21]. Among them, hostile cognition is one of the most important characteristics. A study on job bullying shows that for employees with obvious type a personality traits, a highly political and unsupported work environment will increase the likelihood that they will regard some behaviors of their superiors and colleagues as bullying [22]. Therefore, people with obvious type a personality traits are more likely to be impulsive, quick and lack of theoretical basis to make a cognitive evaluation of suicide survivors and are more likely to attribute the cause of death of suicide survivors to suicide survivors, resulting in prejudice and discrimination against suicide survivors, and eventually form a stigma.

4.2 Grade

The regression coefficient value of the grade is 2.120 and shows a significant level of 0.05 ($t=2.018$, $p=0.044<0.05$), which means that the grade will have a significant positive impact on the public stigma of suicide survivors. Similarly, the final grade is negatively correlated with the public stigma of suicide survivors.

Previous studies have shown that majors will affect people's stigma level of suicide survivors, among which subjects majoring in medicine, psychology and other related disciplines have the lowest sigma level [11], which confirms that improving professional knowledge can indeed improve public cognition and reduce unnecessary cognitive distortion. The survey once again confirmed that with the growth of grades, the more knowledge college students learn, the lower the stigma level of suicide

survivors. This also re-emphasizes the importance of psychological literacy science popularization.

4.3 Subjective socioeconomic status

The regression coefficient value of subjective socioeconomic status is -1.296, but it does not show significance ($t=-1.779$, $p=0.075>0.05$), which means that subjective socioeconomic status will not affect the public stigma of suicide survivors.

Research shows that compared with college students with high subjective socioeconomic status, college students with low subjective socioeconomic status not only pay attention to whether their income is maximized but also reflect a certain degree of altruism [23]. However, this survey did not reflect the differences in inclusiveness among subjects with different socioeconomic statuses. It can be explained by the following reasons: first, the sample size is insufficient; Second, the subjects' social attitudes were not controlled; Third, for suicide survivors, the subjective socioeconomic status does not affect the level of public stigma.

4.4 Understanding of the concept of "suicide"

The regression coefficient value of the understanding of the concept of "suicide" is -1.159, but it does not show significance ($t=-0.967$, $p=0.333>0.05$), which means that the understanding of the concept of "suicide" will not have an impact on the public stigma of suicide survivors.

This independent variable is a further extension of the grade independent variable, which is used to explore whether the professional knowledge about "suicide" will affect the public's stigma of suicide survivors. However, this variable ultimately did not obtain meaningful results. This result can be explained by the following reasons: first, the subjects answered their subjective understanding of "suicide", and there may be a deviation between the subjective understanding and the real level; Second, the understanding of the concept of "suicide" itself has nothing to do with the public stigma of suicide survivors, and citizens' psychological knowledge needs to be comprehensively improved. Third, there are other factors.

4.5 Reliability and validity of STOSASS

In this study, STOSASS Chinese version compiled by Wu et al. [11] was used to measure the public stigma level of suicide survivors. After testing, the reliability and validity of the scale are good (Cronbach $\alpha=0.852$, KMO=0.739).

5 CONCLUSION

The survey shows that the more obvious the type a personality trait is, the deeper the public stigma it will have on the suicide survivor group; With the growth of grades, the public stigma of college students on suicide survivors will gradually decrease. In

addition, it is not found that subjective socioeconomic status and familiarity with the concept of "suicide" have a significant impact on the public stigma of suicide survivors.

This research is of great significance. In China, suicide survivors are a large group that is easy to be ignored. At present, few local studies pay attention to the psychological state, stigma, and influencing factors of this group, so it is difficult for existing studies in other countries to make horizontal comparisons with Chinese data. At the same time, the exploration of the influencing factors is conducive to a deeper understanding of the public stigma. Wu et al. [11] found that psychological pressure, profession, suicide experience, and other factors have an impact on the public stigma of suicide survivors. This survey further explored the impact of personality, the overall education level of college students, socioeconomic status, and other factors. This survey verifies the practicability of the STOSASS Chinese version scale, which has high reliability and validity applicable to Chinese participants.

There are still many aspects of this survey that can be improved in the future. For example, the sampling method of this survey can be more scientific and effective. Due to various conditions and time constraints, this survey adopts convenient sampling, and the subjects actively participate in this survey. In future research, we can try to randomly select various types of universities in more provinces and cities and conduct random sampling surveys on their students, which may better and more comprehensively show the public stigma of Chinese college students on Chinese suicide survivors. Similarly, due to the limitations of practical conditions and the matching degree of subjects, the number of subjects in this survey can be further supplemented and improved, and the proportion of men and women can also be adjusted. Another problem that needs to be adjusted and solved is the choice of control variables. Considering the cost of time and energy and the decline in quality caused by the increase in the number of questionnaire questions, this survey selects fewer control variables, and there will be a more perfect design in future research.

It is of great significance to explore the factors affecting the public stigma of suicide survivors, especially in the social and cultural context of China. In addition to the possible factors involved in this survey, many factors can be included in the survey, such as the gender of the suicide survivor, the socioeconomic status of the suicide survivor, the way and type of death of the suicide victim, and so on. Many mediating variables can be further considered, such as the impact of positive imagination contact on the public's stigmatization attitude towards suicide survivors. In addition, the group of subjects can also be further expanded, which is helpful to understand the attitude of the whole Chinese society toward suicide survivors.

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