



The Impact of College Students' Self-Compassion Response to Stress Under The COVID-19 Pandemic Based on SPSS Data Analysis

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Abstract

The new coronavirus pneumonia epidemic (referred to as the "new crown" epidemic) has caused a serious impact on people's life, work and study, and with the continuous development of the Internet, the speed of information dissemination is getting faster and faster, during the epidemic period, college students will receive a lot of information about the epidemic every day, which is closely related to their lives, resulting in many negative psychological reactions, and stress response is the next typical negative result of the epidemic. This study uses SPSS data analysis methods to explore the effects of self-compassion on stress with social support as a mediator, so as to make recommendations to alleviate the stress caused by repeated epidemics in college students, and maintain mental health.

Keywords: self-compassion, stress, social support, SPSS data analysis

1. INTRODUCTION

Since December 2019, the new coronavirus pneumonia has broken out in various regions of China. The National Health Commission stipulates that the disease as an acute respiratory infectious disease is a Class B infectious disease, which is prevented and controlled in accordance with the Class A infectious disease. On February 11, 2020, the World Health Organization named it "Co-rona Virus Disease 2019" (COVID-19), or COVID-19 for short. On 11 March 2020, WHO assessed that the current COVID-19 pandemic could be described as a "pandemic".

In order to control the spread of the epidemic and ensure the safety of students, universities across the country will delay returning to online teaching from the first half of 2020. Due to the developed network and the fast speed of information dissemination, excessive attention to the development of the epidemic will be easy to listen to false rumors, college students are prone to stressful psychological problems, and long-term stress will have a greater impact on the body and spirit. Taking the COVID-19 epidemic as an example, it is important to understand the impact of students' self-sympathy and other factors on stress, so as to relieve the stress caused by the repeated epidemic situation.

2. LITERATURE REVIEW

2.1 Self-compassion

Before we understand the concept of "self-compassion," we can first understand the concept of "compassion", because the two concepts are closely related. Wispe (1991) argues that compassion refers to being able to understand and tolerate others, to be able to appreciate the suffering of others well, and to alleviate the suffering of others through their own actions. Compassion generally refers to others, and when directed at oneself, it becomes self-compassion. In 2003, after borrowing Buddhist thought, Neff redefined the concept of self-compassion, believing that self-compassion is to be able to treat one's own suffering with an objective and tolerant attitude, to care for oneself in a friendly way, to treat oneself with a non-critical attitude toward one's own shortcomings and failures, to regard personal success or failure as a life experience, not to pay too much attention to one's negative emotions, and to maintain physical and mental harmony.

Neff (2005) [6] shows that individuals with high self-compassion are more receptive and able to actively interpret these events than individuals with low self-compassion when they encounter difficulties and

are hit. There are also studies that show that in the face of stress events, self-compassion can be a very effective predictor of an individual's level of happiness, that is, the higher the level of self-compassion, the higher the individual's sense of happiness.

After studying the relationship between self-compassion and mental health, Hou Jiajie (2007) concluded that there was a significant positive correlation between the level of self-compassion and psychological abnormalities in college students, that is, the higher the level of self-compassion, the higher the level of mental health. [2] Liu Yeying's (2015) study also showed that depression among graduate students was significantly negatively correlated with self-compassion, and that the increase in self-compassion had a significant effect on the alleviation of depressed mood. [3]

2.2 Stress

Seley introduced the concept of psychological stress into the field of medicine, he pointed out that after individual exposure to stressors, there are three stages: the alert phase, the resistance phase, and the exhaustion phase, and different physiological and psychological reactions will occur at each stage, and long-term stress is easy to cause physical and mental diseases, so corresponding measures need to be taken to alleviate stress psychology.[7]

In the 1950s and 1960s, the American psychologist Lazarus proposed the importance of cognitive factors in the process of psychological stress, arguing that psychological stress refers to the response that occurs when the adaptability of individuals and various systems fails to meet the environment or internal needs.

Coyne and Downey (1991) argue that psychological stress is a multifactorial process in which stressors are influenced by psychological mediators to produce psychosomatic responses. [1]

Chinese scholars also have a lot of research on response to stress, Chen Yizhang (1985) proposed that psychological stress is a non-specific response when an individual feels external adverse factors. Liang Baoyong (1987) and others believe that psychological stress is due to the internal tension caused by the realization that you have to face very important environmental requirements. [4] Wang Xiaodao and Xu Bin (1989) believe that psychological stress is a state of physical and mental tension caused by nervous stimuli, accompanied by changes in physical function and mental activity. Modern psychological stress theory emphasizes that psychological stress is the interaction of individual cognition with environmental changes, and the process by which individuals make efforts to adapt to changes in the environment.

Different scholars have different definitions of psychological stress, combined with the views of various scholars, this study believes that psychological stress refers to a state of psychological and physiological response caused by individuals facing external environmental stimuli and being affected by their own adverse psychological factors.

Psychological stress is inextricably linked to an individual's physical and mental health. Some studies have pointed out that most modern human diseases are related to psychological stress [8], psychological stress has a direct predictive effect on mental health, the higher the level of psychological stress, the more individuals will realize their psychological symptoms [5].

Liang Baoyong (1987) also proposed that psychological stress affects the psychology of individuals and also affects people's social behavior, so it may lead to psychological disorders and social functions, and the psychological and physiological responses generated by psychological stress will affect the biological system and cause diseases. [4]

2.3 Social Support

Social support refers to the spiritual or material help and support given to individuals from all aspects of society, including parents and relatives and friends, and studies have shown that people with good social support can face negative events in life more actively, shift their attention faster, think more positively about events, and reconstruct their cognition of events.

Studies have shown that college students in the high social support group are more likely to choose the way to respond positively, and college students in the low social support group are more likely to choose the way to cope in a negative way. The findings of Yin Di and Zhang Xinli [9] show that a quality social support system can buffer the adverse reactions caused by psychological stress to a certain extent. Li Qingbo pointed out that social support and psychological stress of college students are significantly negatively correlated.

Study found that college students with higher self-compassion are able to give more social support to others (Crocker and Canevello, 2008).

In the process of dealing with others, people with higher levels of self-compassion will have a better understanding of others' feelings and will be more receptive and proactive to help others (Neff and Beretvas 2013)

3. RESEARCH HYPOTHESES

H1: College student self-compassion was

significantly and negatively correlated with stress

H2: Social support in college students plays an intermediary role in the mechanism of the influence of self-compassion on psychological stress, and self-compassion can indirectly affect psychological stress through social support.

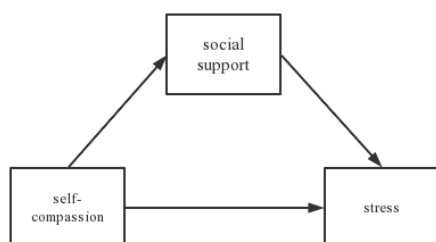


Figure 1: Diagram of the theoretical hypothesis model

4. MATERIALS AND METHODS

4.1 The Research Object

A total of 350 valid questionnaires were obtained through the distribution of stress response questionnaires, self-compassion scales and social support scales, of which 91 were boys and 264 were girls.

4.2 Research Tools

4.2.1 Self-Compassion Scale

Using Neff's Self-Compassion Scale. The scale consists of 26 items and contains six dimensions: self-friendliness, self-criticism, universal humanity, isolation, mindfulness, and overidentification. Thirteen of these items are reverse scoring questions. The scale is scored on a 5-level scale, and the higher the score, the higher the level of self-compassion. In this study, the scale's internal consistency α coefficient was 0.98.

4.2.2 Stress

The "Stress (Stress) Response Questionnaire" compiled by Jiang Qianjin was used. The questionnaire consisted of 28 entries, including three aspects of psychological, physiological and behavioral responses, for a total of 28 entries. The questionnaire was scored on a 5-level scale to assess the degree of an individual's corresponding psychosomatic response to stress, with the degree of stress response expressed in terms of the total score of the item. In this study, the questionnaire had an internal consistency α coefficient of 0.98.

4.2.3 Social Support

The perceived social support scale (PSSS) is divided

into 3 dimensions: friend support, family support, and other support. The higher the score, the more social support the participants felt. The internal consistency coefficient of this scale in this study was 0.945.

4.3 Statistical Methods

Common method deviation testing, descriptive statistics, and correlation analysis of data were performed with SPSS 18.0, and mediating effects testing was performed using the Process macro program. Test level $\alpha = 0.05$.

5. STATISTICAL RESULTS

5.1 Correlation analysis between college students' self-compassion and stress and social support

Using Pearson correlation for self-compassion, stress, and social support, the overall scores for self-compassion, stress, and social support were significantly correlated. See Table 1 for details.

Table 1 Correlation between college students' self-compassion and stress and social support

VARIABLE	M±SD	1	2	3
1self-compassion	17.84 ±5.02	1		
2stress	20.86 ±4.46	-0.338**	1	
3social support	43.78 ±8.41	0.259**	-0.167**	1

ps: * $p < 0.05$, ** $p < 0.01$

The results showed that stress was significantly negatively correlated with self-compassion ($r = -0.338$, $P < 0.01$), social support was negatively correlated with stress ($r = -0.167$, $P < 0.01$), and social support was significantly positively correlated with self-compassion ($r = 0.259$, $P < 0.01$).

5.2 The mediating effect of social support between stress and self-compassion

According to the test procedure of the mediation effect, this study examines the mediating effect between self-compassion and stress of social support, and the results show that self-compassion has a negative predictive effect on stress, and when self-compassion

and social support are simultaneously used as independent variables, self-compassion can still predict stress, which shows that social support can then act as a mediator between self-compassion and stress. Self-compassion negatively predicted stress. After adding social support, social support negatively predicted psychological stress ($\beta=-0.319$, $p<0.01$), and self-compassion negatively predicted psychological stress ($\beta=-0.380$, $p<0.01$). The ratio of the mediating effect to the total response was $0.319 \times 0.123 / 0.380 = 10.3\%$.

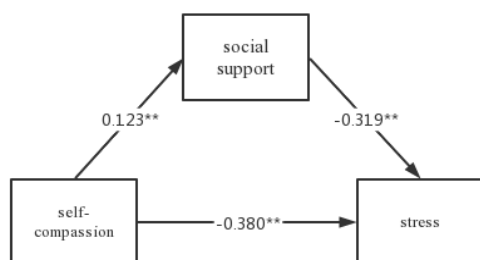


Figure 2: The mediating effect of social support between stress and self-compassion

6. CONCLUSIONS

This study used SPSS data analysis to draw the following conclusions: college students' self-compassion is significantly negatively correlated with stress; and social support plays a partial mediating role between self-compassion and stress.

7. RECOMMENDATIONS

First of all, we must continue to do a good job in epidemic prevention and maintain public health in schools. The establishment of college students' psychological health service center, professional psychological support can alleviate the adverse psychological impact of the event. When students are in a state of stress for a long time, the relevant psychological personnel of the school should organize the investigation, and provide the corresponding psychological counseling and counseling platform, to help students to better deal with related problems.

Secondly, in the face of psychological stress brought about by adverse events, we should fully tolerate and understand our own psychological state and emotional response, especially in areas where the epidemic is more serious and in individuals who are isolating, maintain a

rational and objective attitude towards external information, reasonably distinguish, and actively identify with our own value, realize that in the general environment, many things cannot be avoided, understand our own difficulties, so as to tolerate ourselves, not overly harsh on ourselves, and alleviate the stress psychology brought by the epidemic.

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