

Correlational Research on the Relationship Between the Psychological Resilience and the Psychological Health of College Students*

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Abstract—By using psychological resilience scale, self-rating depression scale and self-rating state anxiety scale, this paper takes 306 college students as subjects to examine the relationship between psychological resilience and psychological health, and carries out correlation and regression researches on the relationship between psychological resilience and psychological health (depression and anxiety) of college students. **Results:** there is a significant negative correlation between the total score of anxiety and the factors of resilience and the total score of resilience and there is a significant negative correlation between the total score of depression and the factors of resilience and the total score of resilience, which reaches an extremely significant level. There is a significant positive correlation between anxiety and depression. The multiple linear stepwise regression analysis is carried out by taking psychological resilience and its dimensions as independent variables, which indicates that the three variables of sense of relationship, sense of control and emotional response all enter into the regression equation. **Conclusion:** psychological resilience and psychological health are closely related. The relationship between anxiety and depression is extremely close. Psychological resilience can predict the level of psychological health.

Keywords—college students; psychological health; resilience; anxiety; depression

I. INTRODUCTION

College students are facing all kinds of pressure from life, learning, employment and other aspects. Compared with young people of the same age, the pressure they are facing is often more complex and concentrated. Some scholars investigate the psychological stress condition of 2007 college students in 13 universities, and find that 49.3% of college students have moderate psychological stress. [1] The research shows that in recent years, the proportion of college students with psychological problems in China has been increasing year by year. [2] It can be seen that the psychological health problems of college students under high pressure need to be paid special attention.

At present, psychological resilience has become an

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important research field of positive psychology. With the emergence of positive psychology, researchers have changed the previous pathological psychology model and then advocated positive psychology ideas. [3] Psychological resilience also arises with the in-depth research of stress handling and individual development model. Psychological resilience refers to the ability and personality traits that enable individuals to recover and maintain adaptive behavior, grow up in adversity when facing stressful events. [4] Psychological resilience serves as a dynamic process of development and change, and a dynamic process in which individuals adapt well to dangerous environments. [5] When individuals are under great pressure and danger, the action mechanism of psychological resilience is to recover quickly and cope successfully through a series of dynamic interactions between abilities and traits. The protective factors of psychological resilience come from the dynamic system and process of interaction among individuals, family and society, which jointly stand up to the negative effects of the environment. Research on psychological resilience cannot only promote individuals to better cope with and adapt to stress, but also further explore the source of strength for individual survival and growth.

The research on psychological resilience at home and abroad mainly includes the definition of concepts and the exploration of variables. Psychological resilience focuses on the research of special groups, rarely involves ordinary individuals, especially college students, as a result, the results lack universal significance. From the perspective of psychological resilience, this research explores the relationship between psychological health and psychological resilience and the positive role of psychological resilience in promoting mental health on the basis of understanding the psychological health status of college students and analyzing the essence of psychological resilience.

II. METHODS

A. Research Object

College students of different majors and grades in a university in Heilongjiang Province are selected for the research object. 350 questionnaires are sent out and 306 valid

questionnaires are collected. The basic information of the subjects includes 182 boys and 124 girls, 168 people in towns and 138 people in countryside, 175 people who are only children and 131 people who are non-only children.

B. Measuring Tools

1) *Psychological resilience scale*: The scale that was compiled by Sandra Prince-Embury in 2006 consists of 11 factors and 64 items in three subscales, that is, the sense of control, the sense of relationship and emotional response. The control subscale includes optimism, self-efficacy and adaptability factors; the relationship subscale includes interpersonal trust, social support, interpersonal comfort and tolerance factors; and the emotional response subscale includes emotional sensitivity, emotional recovery and emotional destructive factors. The domestic application has good reliability and validity about this scale.

2) *Self-rating depression scale and self-rating anxiety scale*: The two scales all consist of 20 items, and the self-rating scale for scoring with a rating standard of 1-4 has better reliability and validity in domestic application. The

state anxiety scale (SAS) is compiled by Charles D. Spielberger et al. that describes a temporary unpleasant emotional experience. The self-rating depression scale is compiled by Zung that can reflect the subjective feelings of the subjects in an intuitive manner. The scale can not only help to diagnose depressive symptoms, but also determine the severity of depression degree.

C. Statistical Software

The data are analyzed by adopting SPSS 17.0 software.

III. RESULTS AND ANALYSIS

A. Correlation Analysis Between Psychological Resilience and Psychological Health

From "Table I", it can be seen that there are negative correlations between college Students' total score of psychological resilience, the sense of control, the sense of relationship, anxiety and depression. Except for emotional response, they all have reached a very significant level; there is a significant positive correlation between anxiety and depression.

TABLE I. CORRELATION ANALYSIS BETWEEN PSYCHOLOGICAL RESILIENCE AND PSYCHOLOGICAL HEALTH

	Psychological Resilience	Sense of Control	Sense of Relationship	Emotional Response	Depression
Anxiety	-.486**	-.292**	-.757**	-.040	.671**
Depression	-.389**	-.378**	-.449**	-.054	1

^a. * 0.05 level significant, ** is level significant on 0.01.

B. The Stepwise Multiple Regression Analysis of Anxiety and Psychological Resilience Carries out Multiple Linear Stepwise Regression Analysis on the Basis of Correlation

By taking the dimensions of psychological resilience as independent variables and anxiety and depression as

dependent variables (entrance standard $F < 0.05$, removal standard $F > 0.10$), this paper detects whether psychological resilience has a significant predictive effect on psychological health (anxiety and depression).

TABLE II. STEPWISE MULTIPLE REGRESSION ANALYSIS OF PSYCHOLOGICAL RESILIENCE AND PSYCHOLOGICAL HEALTH

Dependent Variable	Independent Variable	B	SE	β	t	sig	F	R	R2
Anxiety	Sense of relationship	-2.338	.111	-.777	-21.021	.000	126.62	.795	.632
	Emotional response	.734	.113	.254	6.477	.000			
	Sense of control	-.591	.125	-.476	-4.726	.000			
Depression	Sense of relationship	-1.080	.156	-.416	-1.080	.000	33.80	.565	.319
	Sense of control	-.987	.177	-.357	-.987	.000			
	Emotional response	.521	.160	.207	.521	.000			

According to "Table II", it can be seen that when the three independent variables of psychological resilience predict the dependent variables of anxiety and depression, all three independent variables enter the regression equation. After entering the anxiety equation, the order is the sense of relationship, emotional response and the sense of control. The multiple correlation coefficient R is 0.795, R2 is 0.632, and the joint explanatory variable is 63.2%. That is, the three variables can jointly explain 63.2% of the variance of anxiety. The standardized regression equation: anxiety=-0.777 the sense of relationship + 0.254 emotional response-0.185 the sense of control. That is to say, when other predictive

variables remain unchanged, anxiety will be reduced by 0.777 units for each additional unit of sense of relationship.

After entering the depression equation, the order is the sense of relationship, the sense of control and the emotional response. The multivariate correlation coefficient R is 0.565, R2 is 0.319, and the joint explanatory variable is 31.9%. That is to say, the three variables could jointly explain 31.9% of the variance of depression. The standardized regression equation: depression=-0.416 the sense of relationship-0.357 the sense of control + 0.207 emotional response. That is, when other predictive variables remain unchanged,

depression will be reduced by 0.416 units for each additional unit of sense of relationship.

IV. CONCLUSION

Firstly, in addition to emotional reactions for the correlation analysis between psychological resilience and psychological health, there is a significant negative correlation between total score of college psychological resilience, sense of control, sense of relationship and anxiety and depression, namely, the higher the psychological resilience, the less the anxiety and depression symptoms, the stronger the sense of control, the fewer anxiety and depression symptoms, the stronger the relationship, the less anxiety and depression symptoms. It shows that there is a close relationship between psychological resilience and psychological health. There is a significant positive correlation between anxiety and depression, which indicates a close relationship between the two psychological symptoms.

Second is the stepwise multiple regression analysis of psychological resilience and psychological health.

Multivariate linear stepwise regression analysis finds that three variables, namely, the sense of relationship, the sense of control and emotional responses, enter into the regression equation, which indicates that psychological resilience has a much higher predictive effect on psychological health, with strong predictive power. It shows that psychological resilience is a variable that affects psychological health. When the sense of control and relationship is increasing, the total score of anxiety and depression is decreasing. It can be concluded that college students have optimistic attitude and high self-efficacy, and good adaptability of anxiety and depression significantly reduces and their psychological health level is becoming much higher. College students with good interpersonal relationships, social support and tolerant attitude can significantly reduce anxiety and depression, so as to improve their psychological health. The anxiety and depression degree of individuals who are more sensitive to emotions and have difficulty in recovering emotions increases significantly, which is not conducive to psychological health.

To enhance the positive effect of psychological resilience on psychological health, it is suggested to start from the following aspects: to cultivate positive and optimistic attitude of college students, and maintain good emotional state; to improve the sense of self-efficacy to help them adapt well; to make full and active use of social support to establish better interpersonal relationships. Psychological health can be maintained and boosted by improving psychological resilience and reducing unhealthy emotions.

This research analyzes the relationship between psychological resilience and its dimensions and psychological health, which verifies the previous theory that psychological resilience is the protective factor for psychological health, and further explains the factors and internal relationship of psychological resilience in affecting psychological health.

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