

The Relationship between Perceived Social Support and Junior High School Students' Post-Stress Growth: The Mediating Effect of Psychological Capital

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Abstract

Purpose: To explore the mediating effect of psychological capital on the relationship between the perceived social support and junior high school students' post-stress growth. **Method:** Measured a total of 474 junior high school students with the Perceived Social Support Questionnaire, Positive Psychological Capital Questionnaire and Children's Post-Stress Growth Scale. **Results:** 1) There is a significant positive correlation between perceived social support, psychological capital and junior high school students' post-stress growth; 2) Psychological capital has a mediating effect on the relationship between perceived social support and junior high school students' post-stress growth. **Conclusion:** Cultivating junior high school students' ability of perceived social support, developing and enhancing their level of psychological capital can promote their post-stress growth.

Keywords

Junior High School Students, Perceived Social Support, Psychological Capital, Post-Stress Growth, Mediating Effect

1. Introduction

Post-stress growth (PSG) refers to an individual who, after experiencing a stressful event, is better able to get rid of stress, regain psychological balance, and gain further psychological maturity and development during this process (Wu & Fang, 2014). Students in the junior high school stage inevitably face the larger pressures and challenges brought by the studies, interpersonal relationship, adaptation and so on. Because they have immature mind and cognition, these pressures may make

them occur psychological problems. So how to guide and help the junior high school students to obtain the change and growth after experiencing the stress event from the perspective of positive psychology. Based on self-determination theory, social cognition theory and related research, this study believes that Perceived social support and psychological capital have an important effect on post-stress growth.

Perceived social support refers to an individual's expectation and evaluation on social support and a belief in possible social support (Barrera, 1986; Dunkel Schetter, & Bennett, 1990). According to the self-determination theory (SDT), people have a positive instinctive tendency, but this tendency is subject to the influence of the external environment. To realize the development of individuals, it is necessary to interact the instinctive developmental tendency with the supportive environment (Deci & Vanteenkiste, 2004). At the same time, Bandura's social cognitive theory holds that individual development is influenced by three-dimensional interactions of environment, behavior and individuals (Bandura, 1989). Studies have shown that perceived social support has a significant predictive effect on post-stress growth (Zhang Luci, 2018; Fu Zhigao, 2016). When individuals experience stressful events, the higher the level of social support from family, friends, teachers and classmates, the higher the level of post-stress growth they can achieve. It can be seen that perceived social support is an important resource for an individual's active and healthy growth. Therefore, this study proposes Hypothesis 1: perceived social support has a significant positive predictive effect on junior high school students' post-stress growth.

Psychological capital refers to an individual's positive psychological state in the process of growth and development. The core elements include hope, optimism, tenacity and self-efficacy (Luthan, Avolio, Avey, & Norman, 2007). Studies have shown that hope (Snyder, 2002; Zhou Xiao et al., 2017a, 2017b), optimism (Ma Lan et al., 2013), tenacity (Zhang Jinfeng et al., 2012) and self-efficacy (An Yuan-yuan et al., 2013) have significant positive predictive effects on post-traumatic growth, while researches have found that hope (Chen Benyue, 2016), optimism (Qin Chunwang, 2016) and self-efficacy (Fu Zhigao, 2016) have positive predictive effects on post-stress growth. So we can see that the higher the level of hope, optimism, tenacity and self-efficacy, the better for individual growth. However, the Multiple Component Resource Theories hold that the role of psychological capital as a whole is much greater than that of a single dimension. It is found that psychological capital as a whole has positive effects on individual work performance (Wang Gang et al., 2015), social adaptability (Lu & Wang, 2019), learning satisfaction (Feng Jingying et al., 2015) and so on. At the same time, it is found that perceived social support can positively predict psychological capital (Wang Jiankun et al., 2018; Liu Lianlong et al., 2014), so as to improve life satisfaction and subjective well-being. It can be seen that perceived social support can effectively promote the improvement of psychological capital level, and psychological capital has a direct positive effect on the outcome variables. Therefore, this study proposes hypotheses 2: psychological capital has a mediating effect on

the relationship between perceived social support and junior high school students' post-stress growth.

2. Research Methods

2.1. Research Subjects

This study adopted a cluster sampling method. 502 questionnaires were distributed by class in two junior high schools of Guangxi. Excluding the questionnaires that were not answered seriously and had missing answers more than 20%, 474 effective questionnaires were collected, and the effective rate was 96.15%. Among them, 204 were male students, 270 were female students; 224 were grade seven, 110 were grade eight, 140 were grade nine; 375 came from rural areas, and 99 came from urban areas.

2.2. Research Tools

2.2.1. Perceived Social Support Scale

The Perceived Social Support Scale (PSSS) was revised by Jiang Qianjin (2001) based on Zimet's Perceived Social Support Multidimensional Scale. According to the different subjects, the study changed "leaders, relatives, colleagues" to "teachers, classmates, relatives". The scale consists of 12 items, including family support, friend support and other support. The higher the score of Likert-7 points (1 = "highly disagreed", 7 = "highly agreed"), the higher the level of social support perceived by the individual. In this study, the Cronbach's α coefficient of the scale was 0.88.

2.2.2. Positive Psychological Capital Questionnaire

The positive psychological capital questionnaire (PPQ) was revised by Zhang Kuo et al. (2010) on the basis of PCQ-24. The questionnaire includes 26 items, including self-efficacy, tenacity, hope and optimism, and used Likert-7 points score (1 = "fully disagreed", 7 = "fully agreed"), of which 5 items were negative scores, and the higher the score, the higher the positive psychological capital level of the individual. In this study, the Cronbach's α coefficient of the scale was 0.87.

2.2.3. Children's Post-Stress Growth Scale

The Children's Post-stress Growth Scale (CPSGS), compiled by Qin & Wu (2016), consists of 15 items, including three dimensions: interpersonal relationship, life philosophy and coping style, and uses the Likert-5 score (0 = "fully disagreed", 4 = "fully agreed"). The higher the score, the higher the level of post-stress growth. The Cronbach's α coefficient of the scale was 0.92.

2.3. Data Collection and Processing

The cluster sampling method was adopted. The junior high school students from 10 classes were selected to test. Each class was led by 1 chief examiner. Before the questionnaires were distributed, the chief examiner read out the guidance and the principle of confidentiality to the subjects to be tested, then issued the questionnaires, and asked students to answer the questionnaires in the prescribed time.

After students completed the questionnaires, they were collected by the responsible person. In this study, EpiData3.1 was used to input data, SPSS20.0 was used to analyze the data, and Process program was used to analyze the Bootstrap mediating effect by performing deviation correction.

3. Results

3.1. Common Method Bias Test

Harman single factor test was used to test the common method bias. The results show that there are 12 factors whose characteristic root value is greater than 1, and the variation explained by the first factor is 26.64%, less than 40% of the critical standard value, which indicates that there is no serious common method bias in this study.

3.2. Descriptive Statistics and Correlation Analysis of Variables

From **Table 1**, we can see that perceived social support and psychological capital are significantly positively correlated with the junior high school students' post-stress growth, and that perceived social support is significantly positively correlated with psychological capital.

3.3. Mediating Effect Test of Psychological Capital

In addition to gender, grade and place of student source, all variables were standardized, and gender, grade and place of student source were taken as control variables, perceived social support as an independent variable, psychological capital as a mediating variable, and post-stress growth as a dependent variable into regression equations. The results are shown in **Table 2**. From **Table 2**, it can be seen that there is a significantly positive predictive effect of perceived social support on post-stress growth ($\beta = 0.61$, $t = 15.14$, $p < 0.001$), supporting Hypothesis 1. In addition, after the mediating variable psychological capital was introduced, the direct positive predictive effect of perceived social support on post-stress growth was significant ($\beta = 0.33$, $t = 7.90$, $p < 0.001$), the positive predictive effect of perceived social support on psychological capital was significant ($\beta = 0.55$, $t = 14.23$, $p < 0.001$), and the positive predictive effect of psychological capital on post-stress growth was also significant ($\beta = 0.49$, $t = 11.86$, $p < 0.001$), which suggests that psychological capital has a mediating effect on the relationship between perceived social support and post-stress growth, supporting Hypothesis 2.

Non-parametric percentile bootstrap method for bias correction was adopted to sample 5000 times repeatedly, and the 95% confidence interval was calculated. The results are shown in **Table 3**. The 95% confidence interval for the direct effect of perceived social support on post-stress growth measured by Bootstrap is (0.29, 0.39), excluding 0, indicating that the direct effect is significant, and the 95% confidence interval for the mediating effect of psychological capital measured by Bootstrap is (0.22, 0.29), excluding 0, indicating that the mediating effect is significant, and the direct effect value is 60.29% of the total effect value, and the mediating effect value is 45.59% of the total effect value.

Table 1. The relationship between perceived social support, psychological capital and junior high school students' post-stress growth.

Variables	M	SD	Perceived social support	Psychological capital	Post-stress growth
Perceived social support	55.07	13.76	1		
Psychological capital	111.9	21.55	0.53**	1	
Post-stress growth	42.36	10.67	0.58**	0.63**	1

Note: ** means $p < 0.01$.

Table 2. Mediating analysis of psychological capital in the relationship between perceived social support and post-stress growth.

Variables	Post-stress growth			Psychological capital			Post-stress growth		
	β	SE	<i>t</i>	β	SE	<i>t</i>	β	SE	<i>t</i>
Gender	0.01	0.08	0.01	-0.34	0.08	-4.24***	0.17	0.07	2.29*
Grade	-0.06	0.05	-1.34	0.06	0.05	1.23	-0.09	0.04	-2.20*
Place of student source	0.06	0.10	0.61	0.29	0.10	2.91***	-0.08	0.09	-0.89
Perceived social support	0.61	0.04	15.14***	0.55	0.04	14.23***	0.33	0.04	7.90***
Psychological capital							0.49	0.04	11.86***
R^2		0.34			0.33			0.49	
<i>F</i>		47.46***			45.49***			74.77***	

* means $p < 0.05$, *** means $p < 0.001$.

Table 3. Bootstrap test of mediating effect and its effect value.

	Effect value	Bootstrap standard error	95% confidence interval		Relative effect value
			Lower limit	Upper limit	
Total effect	0.61	0.04	0.53	0.68	
Direct effect	0.33	0.04	0.25	0.41	60.29%
Mediating effect	0.27	0.03	0.21	0.31	45.59%

4. Discussions

The results show that perceived social support can positively predict junior high school students' post-stress growth, and the higher the level of perceived social support from family, friends, teachers, classmates and relatives, the higher the level of post-stress growth, which is consistent with the previous research results (Zhou & Fu, 2017; Zhang Luci, 2018). As an important psychological protection resource, social support plays an important role in individual's well-being (Luo & Mu, 2017), health (Zhang & Ye, 2019) and life meaning (Li et al., 2018). At the same time, perceived social support plays an important protective role in post-stress growth. When an individual encounters a stressful event, perceived

social support protects the individual's cognitive schema and belief from destruction, which makes the individual still have a certain psychological resources to carry on the correct cognition processing to the event, so as to promote the positive change and the growth of the individual's psychology. At the same time, [Ye Junjie \(2006\)](#) found that perceived social support has a greater impact on growth than actual social support, and pointed out that the ability to perceive social support is not only affected by the current stress, but also by the long-term state of life, that is, if the individual stays in the long-term state of stress, his ability to perceive social support is low. Therefore, in family and school education, it is necessary to help junior high school students to relieve stress consciously, to provide them with continuous, warm support and help, and to train them to perceive social support purposefully and systematically, which will play an important role in their healthy growth.

In this study, we found that psychological capital plays a part of mediating role between perceived social support and post-stress growth, that is, perceived social support can directly affect post-stress growth, or indirectly affect post-stress growth through psychological capital. This is consistent with related research results. [Wu Shuangshuang \(2013\)](#) found that perceived social support can indirectly affect college students' academic achievement through psychological capital. [Guo & Liu \(2014\)](#) found that perceived social support can indirectly affect the elderly's subjective well-being through psychological capital. [Fang & Zhai \(2018\)](#) found that college students' psychological capital plays a mediating role in perceived social support and entrepreneurial intention. It can be seen that the higher the level of perceived social support, the more conducive to the improvement of the level of psychological capital, the students will be more confident to face the challenge brought by pressure, and will have indomitable tenacity and more abundant psychological capital. They will be more willing to improve themselves, make great efforts to the positive direction, have more optimistic and positive attitude to meet difficulties and challenges, and more likely to grow positively and healthily. From these, we can see the importance of family-school combination in the process of children's growth. Teachers and parents not only need to pay attention to and cultivate junior high school students' ability of perceiving social support, in the sense of the harmonious atmosphere of support, but also need to fully tap their internal positive psychological quality, so as to lay a solid foundation for their healthy growth.

This study provides a theoretical guidance for junior high school students to alleviate stress and develop active post-stress growth, but there are still some limitations. In the first place, the sample range of this study is relatively limited, which can't fully reflect the overall situation of junior high school students. The results are not generalized. In the future, the sample range shall be expanded to make the results more convincing. In the second place, the study is restricted by objective factors and adopts cross-sectional study. Although previous researches have provided a solid foundation for the study, it still can't reveal exactly the mechanism of psychological capital on the perceived social support and post-stress

growth. In the future, the longitudinal research design can be used to further investigate the causal relationship between the variables, or the experimental research paradigm can be used to verify the relationship between the variables.

5. Conclusion

- 1) There is a significant positive correlation between perceived social support, psychological capital and junior high school students' post-stress growth;
- 2) Psychological capital has a mediating effect on the relationship between perceived social support and junior high school students' post-stress growth;
- 3) Cultivating junior high school students' ability of perceived social support, developing and enhancing their level of psychological capital can promote their post-stress growth.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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