

The Influence of Childhood Trauma Experiences on Social Avoidance and Distress in Secondary School Students: The Mediating Role of Psychological Capital

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Abstract

Objective: To explore the influencing mechanism of childhood trauma experiences on social avoidance and distress among middle school students, and to examine the mediating role of psychological capital. **Methods:** A total of 389 middle school students were investigated by using the Childhood Trauma Questionnaire-Short Form (CTQ-SF), the Social Avoidance and Distress Scale (SAD), and the Positive Psychological Capital Questionnaire (PPQ). **Results:** Childhood trauma experiences significantly positively predicted social avoidance and distress, and negatively predicted psychological capital. Psychological capital played a partial mediating role between childhood trauma experiences and social avoidance and distress, with the mediating effect accounting for 31.40%. **Conclusion:** Reducing childhood trauma experiences and enhancing psychological capital can alleviate middle school students' social avoidance and distress to a certain extent.

Keywords

Childhood trauma; social avoidance and distress; psychological capital; mediating effect.

1. Introduction

Childhood traumatic experiences have become an important global public health issue. Their implications for individuals' long-term psychological development and intergenerational transmission have attracted widespread social attention. Childhood trauma refers to single or multiple adverse events experienced during childhood and adolescence, such as physical or emotional abuse, physical or emotional neglect, bereavement, family dysfunction, natural or social disasters, etc[1]. Felitti et al. found that more than half of adult respondents had experienced at least one form of traumatic event including abuse, neglect or domestic violence in their childhood[2]. Such long-term traumas not only affect individuals immediately and trigger a range of emotional disorders such as depression and anxiety, but also may continuously impair their social functioning and hinder long-term personal development. Social avoidance and distress are proven to be influenced by adverse childhood experiences[3]. As a core concept in positive psychology, psychological capital provides a new perspective for explaining individual differences in coping with adversity. Proposed by Jensen(2003), psychological capital consists of four dimensions: self-efficacy (confidence in coping with challenges), hope (persistence in pursuing goals), resilience (recovery from setbacks), and optimism (positive attribution), which is regarded as a develop-able state-like psychological resource[4]. Studies have shown that individuals with high psychological capital are more likely to regard stress as opportunities for growth and adopt proactive coping strategies in

interpersonal conflicts[5]. This characteristic indicates that for individuals with childhood trauma experiences, psychological capital can help them reconstruct the meaning of traumatic experiences to a certain extent and buffer the negative impacts of childhood trauma on their social functioning. Yu Junxin et al. (2025) pointed out that improving psychological capital is an effective strategy to promote social adaptation among trauma-exposed individuals[6]. Since social avoidance and distress are manifestations of poor social adaptation, psychological capital serves as a favorable factor in alleviating the negative effect of childhood trauma on social avoidance and distress.

Accordingly, the present study puts forward the following hypotheses: Childhood traumatic experiences positively and significantly predict social avoidance and distress; psychological capital plays a mediating role between childhood traumatic experiences and social avoidance and distress.

2. Subjects and Methods

2.1. Research Subjects

Paper questionnaires were distributed on a class basis in four secondary schools around Xianning. A total of 450 questionnaires were issued, 419 were retrieved, and 389 valid questionnaires were obtained. The questionnaire recovery rate was 93.1%, and the effective rate was 92.8%. Among the participants, there were 163 junior high school students (41.9%) and 226 senior high school students (58.1%); 205 males (52.7%) and 184 females (47.3%).

2.2. Research Instruments

2.2.1. Childhood Trauma Questionnaire-Short Form (CTQ-SF)

Compiled and revised by David P. Bernstein et al. in 1998, this questionnaire is used to assess childhood traumatic experiences. It consists of 28 items, including 25 clinical items and 3 validity items[7]. All items adopt the 5-point Likert scoring method, and higher scores indicate more severe childhood traumatic experiences. In the study conducted by Cui Lixia et al. (2011), the internal consistency coefficients of each subscale ranged from 0.70 to 0.88[8].

2.2.2. Social Avoidance and Distress Scale (SAD)

Developed by Watson and Friend in 1969, the SAD is mainly applied to measure individuals' social avoidance behaviors and social anxiety. The scale contains 28 items covering two dimensions: social avoidance and social distress. It adopts the 5-point Likert scoring method; higher scores represent higher levels of social avoidance and distress, with the internal consistency reliability of 0.77[9].

2.2.3. Positive Psychological Capital Questionnaire (PPQ)

The Positive Psychological Capital Questionnaire (PPQ) compiled by Zhang Kuo et al. (2010) was adopted in this study. The scale includes 26 items involving four dimensions: self-efficacy, optimism, hope and resilience. It uses a 7-point Likert scale, ranging from 1 (totally inconsistent) to 7 (totally consistent). Among all items, five items (Item 8, 10, 12, 14 and 25) are reverse-scored. Higher scores mean richer positive psychological resources and higher level of psychological capital. Previous research has verified that the questionnaire has favorable construct validity, with factor loadings of nearly all items above 0.5 (average = 0.64) and item discrimination indices over 0.6 (average = 0.71). Confirmatory factor analysis further confirmed its good validity[10].

2.3. Data Processing

Data were collected via questionnaires and scales. SPSS 27.0 statistical software was used for correlation analysis, difference test and regression analysis.

3. Results

3.1. Common Method Bias Test

All items of childhood traumatic experiences, social avoidance and distress, and positive psychological capital were included in exploratory factor analysis. Fifteen factors with eigenvalues greater than 1 were extracted. The first common factor explained 22.71% of the total variance, which was lower than the critical value of 40%, indicating no serious common method bias existed in this study.

3.2. Correlation Analysis of Variables

Correlation analysis was conducted among childhood traumatic experiences, social avoidance and distress, and psychological capital. The results showed that childhood traumatic experiences were significantly positively correlated with social avoidance and distress, and significantly negatively correlated with psychological capital. Psychological capital was strongly negatively correlated with social avoidance and distress. Significant correlations were also found among all dimensions of the scales. Detailed correlation results are shown in Table 1.

Table 1. Correlation Analysis Results of All Variables (r)

	1	2	3	4	5	6	7
1.Childhood Trauma	1						
2. Social Avoidance and Distress	0.331**	1					
3.Psychological Capital	-	-	1				
4.Self-efficacy	-0.047	-0.285*	0.760**	1			
5.Resilience	-	-	0.843**	0.529**	1		
6.Optimism	-	-	0.837**	0.554**	0.587*	1	
7.Hope	-	-	0.838**	0.581**	0.531**	0.640**	1
\bar{x}	68.327	37.638	110.908	15.890	37.360	25.627	32.031
s	13.486	12.997	25.907	5.283	10.231	7.266	8.570

3.3. Mediating Effect of Secondary School Students' Psychological Capital Between Childhood Traumatic Experiences and Social Avoidance and Distress

Stepwise regression analysis was conducted on childhood traumatic experiences, psychological capital and social avoidance and distress. The results revealed that childhood traumatic experiences significantly positively predicted social avoidance and distress ($\beta=0.331$, $p<0.001$), and significantly negatively predicted psychological capital ($\beta=-0.233$, $p<0.001$). Psychological capital exerted a significant negative predictive effect on social avoidance and distress ($\beta=-0.446$, $p<0.001$). After introducing psychological capital into the regression model, the direct predictive effect of childhood traumatic experiences on social avoidance and distress decreased but remained statistically significant ($\beta=0.227$, $p<0.001$). It is indicated that psychological capital plays a partial mediating role between childhood traumatic experiences and social avoidance and distress.

Table 2. Regression Analysis of the Mediating Effect Model of Psychological Capital (Standardized)

Predictor Variable	Dependent Variable: Social Avoidance and Distress		Dependent Variable: Psychological Capital		Dependent Variable: Social Avoidance and Distress	
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>
Childhood Trauma	0.331	6.901***	-0.233	-4.715***	0.227	5.178***
Psychological Capital					-0.446	-10.155***
R^2	0.11		0.054		0.297	
<i>F</i>	47.627***		22.236***		81.660***	

The mediating effect was further tested via the Bootstrap method. The results are presented in the table. The indirect effect of psychological capital in the relationship between childhood traumatic experiences and social avoidance and distress was 0.104, and its 95% Bootstrap confidence interval did not contain zero, indicating that the mediating effect of psychological capital was statistically significant.

Table 3. Bootstrap Results of the Mediating Effect of Psychological Capital

	Effect	Boot SE	Lower bound of 95% Bootstrap CI	Upper bound of 95% Bootstrap CI	Relative Effect
Total effect (c)	0.331	0.046	0.228	0.41	
Direct effect (c')	0.227	0.042	0.136	0.302	68.60%
Mediating effect of psychological capital	0.104	0.025	0.057	0.155	31.40%

According to the results of mediating effect analysis, the specific path coefficients among childhood traumatic experiences, social avoidance and distress and psychological capital are shown in Figure 1.

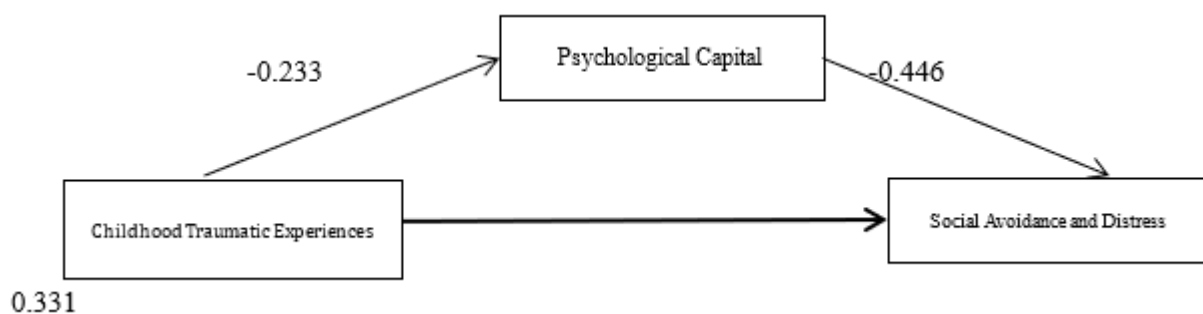


Figure 1. Mediating Model of Psychological Capital Between Childhood Traumatic Experiences and Social Avoidance and Distress (Standardized)

4. Discussion

This study confirmed that childhood traumatic experiences significantly positively predicted social avoidance and distress among secondary school students, and negatively predicted psychological capital. The findings indicated that stress caused by childhood trauma may gradually impair individuals' social functioning. For adolescents, long-term and high-intensity traumatic stress in the developmental stage may undermine their trust in normal interpersonal

relationships, thereby triggering social avoidance behaviors. Persistent traumatic stress also depletes psychological capital and reduces positive psychological qualities including self-efficacy, resilience, optimism and hope. The decline in psychological capital further intensifies negative emotional experiences in social situations, forming a vicious cycle of trauma exposure, psychological resource depletion and impaired social functioning. Notably, some traumatized participants in this sample still maintained favorable social adaptation levels, suggesting that psychological capital can offset the adverse impacts of trauma through the resource gain spiral. For instance, individuals with high resilience can derive growth significance from trauma rather than falling into self-denial[11].

Meanwhile, the direct association model between childhood trauma and adolescents' social problems can only explain partial variance. From the perspective of developmental psychology, the effects of trauma on social functioning vary across cognitive developmental stages. During adolescence, a critical period for self-identity formation, traumatic experiences may consolidate negative self-schemas and aggravate social avoidance. In early adulthood, individuals with higher cognitive flexibility are more capable of reconstructing the meaning of trauma relying on psychological capital. Additionally, this model failed to incorporate the buffering effect of social support systems. Further research is required to explore how environmental factors such as family cohesion and peer relationships moderate the dynamic association between trauma and psychological capital. In conclusion, the influence of childhood trauma on middle school students' social functioning is not a linear causal chain, but a complex network shaped by individual developmental trajectories and social ecological systems.

The partial mediating effect of psychological capital between childhood traumatic experiences and social avoidance and distress among secondary school students accounted for 31.40% of the total effect, which partly clarified the internal mechanism underlying how childhood trauma affects adolescents' social functioning. According to the post-traumatic growth theory, traumatic experiences can motivate individuals to reinterpret life meaning and facilitate the accumulation of psychological resources[12]. This study holds that as a high-order aggregate of psychological resources, psychological capital alleviates adolescents' social problems via two pathways. Firstly, it directly buffers trauma-induced irrational cognition and promotes proactive coping strategies. Secondly, it indirectly repairs trauma-impaired self-efficacy and enhances individuals' sense of control in social interactions. Specifically, individuals with high psychological capital tend to regard social setbacks as temporary challenges rather than proof of personal incompetence, thus preventing the decline of self-efficacy and reducing social avoidance.

Nevertheless, the explanatory power of the mediating model has certain limitations. First, the mediating effect of psychological capital only explained approximately thirty percent of the variance, implying that other potential mechanisms such as emotion regulation strategies and attachment patterns may also play joint roles. Second, the cross-sectional design cannot rule out reverse causality. Long-term social avoidance among middle school students may lead to psychological capital depletion and further worsen post-traumatic outcomes. This bidirectional relationship conforms to the dynamic effect model, which proposes that psychological capital and adolescents' social functioning mutually shape each other over time. Furthermore, cultural differences deserve full consideration. In collectivist cultures, factors related to family belonging may exert stronger effects on boosting psychological capital, while individualist cultures attach greater importance to the driving role of self-efficacy in social adaptation. Longitudinal follow-up surveys and cross-cultural comparative studies are recommended in future research to verify the universality and cultural specificity of this mediating model.

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