

The impact of childhood abuse on adolescent school bullying: the chain-mediated effects of self-loathing and peer relationships

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Abstract: To explore the chain mediating effect of peer relationship and self-disgust between childhood abuse and school bullying, a total of 587 adolescents were investigated with the Childhood Trauma Questionnaire, Self-disgust Scale, peer Relationship Scale for Children and Adolescents, and Olweus Bullying Questionnaire. The results showed that childhood abuse, self-loathing, peer relationship and bullying were significantly correlated with each other. The direct effect of childhood abuse on school bullying was significant. Peer relationship and self-loathing had significant mediating and chain mediating effects between childhood abuse and school bullying.

Keywords: Childhood abuse; School bullying; Self-loathing; Peer relationship

1. Introduction

In recent years, school bullying happens frequently, which seriously threatens and even harms the physical and mental health of teenagers. In November 2016, the Ministry of Education jointly issued the Guiding Opinions on the Prevention and Treatment of Bullying and Violence among primary and secondary School Students, demonstrating the importance the country attaches to the issue of school bullying. Campus bullying refers to an incident that occurs on campus where one student bullies the other through physical, verbal and network means, causing physical and psychological harm to the other. Campus bullying includes physical bullying, verbal bullying, relationship bullying and cyber bullying [1]. In primary and secondary schools, verbal bullying is the most common way of bullying, after entering junior high school, the way of campus bullying is gradually hidden and cruel, showing a scale in number. Junior high school boys with poor academic performance, high study pressure and bad behavior habits are more likely to bully or be bullied by others, and students from poor family economic conditions are more likely to be bullied. Experiences of peer aggression during adolescence can predict lower self-worth, lower self-esteem, and lower self-efficacy. This study focuses on the role of self-loathing and peer relationships in the relationship between childhood abuse and school bullying.

1.1. Relationship between childhood abuse and school bullying

Childhood abuse refers to the abuse and neglect of children under the age of 18, including various forms of abuse, neglect, and other deprivation [2]. In the stage of personality development, the previous stage is the premise and basis for the development of the later stage, and childhood precedes adolescence. Therefore, the abuse suffered in childhood has more or less an impact on adolescents, and children who are abused are more likely to exhibit aggressive behavior. Therefore, this study proposes hypothesis 1: Childhood abuse can predict the school bullying behavior of adolescents.

1.2. The mediating role of self-loathing

Self-loathing is a long-term or repeated aversion to certain aspects of the self, resulting in a series of negative avoidance and rejection reactions [3]. Self-loathing is a negative emotion. Childhood abuse can distort a child's sense of self. Sometimes they even think that it is their own fault that caused the abuse, so that the inner guilt can not be let go and then loathe themselves. Studies have found that people who have experienced childhood abuse have a higher degree of self-loathing, and children with poor emotional regulation are more likely to be aggressive [4]. Therefore, this study proposes hypothesis 2: Childhood abuse can predict school bullying by self-loathing.

1.3. The mediating role of peer relationship

Peer relationship refers to a common activity and mutual cooperation between children of similar age, or an interpersonal relationship established and developed between individuals with a similar level of psychological development in the process of communication [5]. Good peer relationship can enhance individual social ability, and mutual communication with peers can help ease mood and self-knowledge. Studies on child abuse and peer relationships have found that children who are abused have more adverse peer relationships [6]. Other studies have shown that individuals who communicate more with their peers are less likely to be bullied in school [7]. Therefore, this study proposes hypothesis 3: Childhood abuse can predict adolescent school bullying through peer relationship.

1.4. The multiple mediating effects of self-loathing and peer relationship

Self-loathing is a negative self-conscious emotion, a negative and unclear part of the self-concept. Previous studies have found that the clearer adolescents' self-concept, the better the quality of intimate relationships [8]. Self-loathing individuals have a negative perception of themselves, making it difficult for them to have normal and healthy peer relationships. Therefore, this study proposes hypothesis 4: Childhood abuse can positively predict school bullying through the chain mediation of self-loathing and peer relationship.

2. Research object and method

2.1. Research object

A total of 600 middle and high school students were selected by stratified random sampling. There were 587 valid questionnaires, the effective rate was 97.8%. Among them, 262 were boys and 325 were girls. There are 358 middle school students and 229 high school students.

2.2. Research Tools

2.2.1. Childhood abuse

The childhood trauma questionnaire compiled by Bernstein et al., and revised by Zhao Xingfu et al. [9] was adopted. The questionnaire consisted of 28 questions, including five dimensions of emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect. A Likert 5-point score is used, with 1 representing "never" and 5 representing "always". The higher the score is, the higher the degree of abuse an individual has suffered in childhood. The reliability of the questionnaire in this study was 0.910.

2.2.2. Self-loathing Table Chinese version

The single-dimensional self-disgust scale compiled by Overfton et al. [10] was adopted. The scale contains 12 questions. Likert was scored on a 7-point scale, with 1 representing "strongly agree" and 7 representing "strongly disagree". The higher the score, the more serious the individual's self-loathing. The reliability of this scale in this study was 0.895.

2.2.3. Peer relationship scale for children and adolescents

Adopt the Peer Relationship Scale for Children and Adolescents compiled by Guo Boliang et al., which contains 22 questions [11]. Likert4 points were used to score, with 1 representing "not like this" and 4 representing "always like this". The higher the score, the worse the peer relationship of the individual. The reliability of this scale in this study was 0.882.

2.2.4. Olweus Bullying Questionnaire

The Olweus bullying questionnaire revised by Zhang Wenxin et al was adopted, including two parts: the bullying behavior questionnaire and the bullied behavior questionnaire [12]. A total of 12 questions, each part has three dimensions: body, speech, relationship. They were asked how often they had engaged in different bullying behaviors in the past few months, and the higher the score, the more severe the bullying or bullying. In this study, the reliability of the questionnaire is 0.913, the reliability of the bullying part is 0.897, and the reliability of the bullied part is 0.828.

2.3. Data Processing

The PROCESS plug-in compiled by SPSS26.0 and Haye was used to input and analyze the data.

3. Research Results

3.1. Common method deviation test

The Harman single factor test was used to test the common method deviation by statistical method. The results showed that there were 15 factors with feature roots greater than 1, and the cumulative variance explained by the first factor was 22.251%, which was less than the critical value of 40%. It shows that there is no serious common methodology bias in this study.

3.2. Correlation analysis of childhood abuse, self-loathing, peer relationship and school bullying

Pearson product difference correlation analysis was conducted on the relationship between childhood abuse, self-loathing, peer relationship and school bullying. The results showed that school bullying was positively correlated with childhood abuse, self-loathing and peer relationship. Peer relationship was positively correlated with childhood abuse and self-loathing, and self-loathing was positively correlated with childhood abuse. See Table 1.

Table 1: Correlation analysis of childhood abuse, self-loathing, peer relationship and school bullying (n=587)

Variable	Childhood abuse	Self-loathing	Peer relationship	School bullying
Childhood abuse	1			
Self-loathing	0.362***	1		
Peer relationship	0.520***	0.570***	1	
School bullying	0.414***	0.205***	0.356***	1
<i>M</i>	1.535	2.581	1.912	0.236
<i>SD</i>	0.539	1.029	0.522	0.473

3.3. The mediation test of self-loathing and peer relationship between childhood abuse and school bullying

From the data in Table 2, it can be seen that childhood abuse has a significant effect on school bullying ($\beta=0.360$, $p < 0.001$), that is, childhood abuse suffered by adolescents has a significant impact on school bullying, so hypothesis 1 is valid. The effect of childhood abuse on self-loathing was significant ($\beta=0.797$, $p < 0.001$), that is, the level of self-loathing of adolescents was significantly affected by childhood abuse, but the effect of self-loathing on bullying was not significant ($\beta=-0.023$, $p > 0.05$), so hypothesis 2 was not valid. Childhood abuse had a significant effect on peer relationship ($\beta=0.374$, $p < 0.001$), that is, childhood abuse suffered by adolescents had a significant effect on their peer relationship, and peer relationship had a significant effect on school bullying ($\beta=0.169$, $p < 0.001$), that is, peer relationship had a significant impact on school bullying, so hypothesis 3 was established. The effect of self-loathing on peer relationship was significant ($\beta=0.219$, $p < 0.001$), that is, the level of self-loathing significantly affected peer relationship. The results also showed that childhood abuse and peer relationship had significant effects on school bullying ($\beta=0.360$, $\beta=0.169$, $p < 0.001$), that is, childhood abuse and peer relationship had significant effects on school bullying, so hypothesis 4 was valid. See Table 2.

To further analyze the mediating effects of self-loathing and peer relationships on childhood abuse and bullying, the mediating effect test method proposed by Fang Jie, Zhang Minqiang and Qiu Haozheng (2012) - deviation-corrected percentile Bootstrap method and the SPSS macro model compiled by Hayes(2012) were used to test the mediating effect of self-loathing and peer relationship between childhood abuse and school bullying. The results show that there are three indirect pathways for the mediating effect of childhood abuse on school bullying: childhood abuse \rightarrow self-loathing \rightarrow school bullying, childhood abuse \rightarrow peer relationship \rightarrow school bullying, childhood abuse \rightarrow self-loathing \rightarrow peer relationship \rightarrow school bullying. The indirect effect value of childhood abuse \rightarrow self-loathing \rightarrow school bullying was -0.018, and the 95% confidence interval of Bootstrap (5000 times) was [-0.080,0.024] contained 0. The mediating effect was not significant, so hypothesis 2 was not valid. The indirect effect

value of childhood abuse → peer relationship → school bullying was 0.063, and the 95% confidence interval of Bootstrap (5000 times) was [0.023,0.106] without 0, that is, the pathway mediation effect reached a significant level, so hypothesis 3 was valid. The indirect effect value of childhood abuse → self-disgust → peer relationship → school bullying was 0.030, and the 95% confidence interval of Bootstrap (5000 times) was [0.009,0.059] without 0, that is, the pathway mediation effect reached a significant level, so hypothesis 4 was valid. See Table 3.

Table 2: Regression analysis of childhood abuse, self-loathing, peer relationship and bullying (n=587)

Regression equation		Overall fit index			Significance of regression coefficient	
Result variable	Predictor variable	R	R ²	F	β	t
Self-loathing	Childhood abuse	0.400	0.160	90.504***	0.797	9.513***
Peer relationship	Childhood abuse	0.672	0.451	195.422***	0.374	9.975***
	Self-loathing				0.219	11.659***
School bullying	Childhood abuse	0.482	0.232	47.742***	0.360	7.922***
	Self-loathing				-0.023	-0.966
	Peer relationship				0.169	3.338***

Table 3: Mediating effects of self-loathing and peer relationship on childhood abuse and bullying (n=587)

The path	Effect size	SE	95% confidence interval	
			Upper limit	Lower limit
Childhood abuse → Self-loathing → School bullying	-0.018	0.027	-0.080	0.024
Childhood abuse → Peer relationships → School bullying	0.063	0.021	0.023	0.106
Childhood abuse → Self-loathing → Peer relationships → School bullying	0.030	0.013	0.009	0.059

4. Discussion

The results showed that childhood abuse, self-loathing, peer relationship and school bullying were significantly related to each other. The results of the mediation effect test show that childhood abuse can not only significantly affect the bullying behavior of adolescents directly, but also indirectly affect the bullying behavior through peer relationship or "self-loathing peer relationship".

4.1. Relationship between childhood abuse and school bullying

This study found that the higher the childhood abuse score, the more severe the school bullying behavior, that is, children or adolescents who suffered childhood abuse were more likely to suffer school bullying during adolescence. It is consistent with the results of Wang Liping et al., that is, childhood trauma has a significant positive predictive effect on school bullying^[13]. Adolescents who have been abused in childhood, when they agree with their parents' behavior, will attack others in the process of getting along with other peers and become bullies in the school. When children apply abusive relationship patterns to peer relationships, they may be bullied through unconscious behavior. Therefore, for parents, it is necessary to give children warmth, care and love in time, and reduce the use of abusive ways to punish children.

4.2. The mediating role of self-loathing

This study found that self-disgust was significantly positively correlated with childhood abuse indicators, but not significantly correlated with school bullying indicators. Individuals who experience childhood abuse may have negative cognitive and pessimistic views of themselves, the world and the future. They think that they are bad, guilty and worthless, so their parents will beat and scold themselves, and have the emotional experience of self-loathing, and over-interpret some threatening information in the social situation, so as to attack or avoid behaviors, resulting in poor peer relations and the emergence of campus bullying.

4.3. The mediating role of peer relationship

This study found that childhood abuse can indirectly influence school bullying through peer relationships. Angela et al. found that children who were abused in childhood were more rejected by their peers and had more aggression [14]. This is consistent with the results of this study. Children who are abused in childhood have poorer peer relationships, which increases the incidence of school bullying. Therefore, in the establishment of peer relationships for children, parents and teachers should help guide children to establish a correct concept of making friends.

4.4. The chain-mediated effect of self-loathing and peer relationship

Finally, this study also found that childhood abuse can indirectly affect school bullying through peer relationship and self-loathing → peer relationship, namely "childhood abuse → peer relationship → school bullying" and "childhood abuse → self-loathing → peer relationship → school bullying". The more severe the abuse in childhood, the worse the peer relationships, and the more likely they are to become bullies or victims of bullying. In addition, the more serious the abuse in childhood, the higher the degree of self-loathing, which further affects their normal peer relationships, resulting in the occurrence of school bullying. Therefore, adolescents who suffered abuse in childhood can cope with the occurrence of school bullying by changing negative cognition, reducing self-loathing and establishing positive and good peer relationships.

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