Research Article

The effects of childhood trauma and moral disengagement on the trait of callousness in college students

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ABSTRACT

This study explores the role of moral disengagement in the relationship between childhood trauma and callousness traits among adolescents, aiming to provide scientific evidence for the prevention and intervention of callousness traits among college students. A total of 865 students from three universities in Guangdong and Henan provinces were surveyed using the Childhood Trauma Questionnaire, the moral disengagement Questionnaire, and the Inventory of callousness traits. The SPSS 19.0 software was utilized to construct a structural equation model elucidating the relationships among moral disengagement, childhood trauma, and callousness traits. The results indicated significant positive correlations among childhood trauma, moral disengagement, and callousness traits. Childhood trauma significantly predicted both moral disengagement and callousness traits, and moral disengagement significantly predicted callousness traits. Additionally, moral disengagement mediated the relationship between childhood trauma and callousness traits. Childhood trauma and moral disengagement emerged as risk factors for callousness traits, suggesting that reducing moral disengagement among individuals with childhood trauma could alleviate their callousness traits.

Keywords: callousness; childhood trauma; mediating role; moral disengagement

1. Introduction

Callousness trait is one of the core traits of psychopathy, an abnormal emotional and interpersonal style that manifests itself as indifference to people, exploitation of others, lack of guilt, low empathy, and is often closely associated with antisocial behaviors such as violence and aggression[1,2]. Individuals with high trait have higher probability of violent crime in life[3], which seriously endangers the safety and stability of society, and colleges and universities are the callousness microcosm of society, higher callousness trait of individuals will lead to higher probability of bullying and other violent behaviors, and the probability of bullying behaviors of adolescents in China is as high as 34%, which poses a serious threat to the campus environment[4]. Therefore, exploring the causes of callousness trait has certain reference value for preventing and correcting violent crimes among college students, and is of great practical significance for maintaining the safety and stability of campuses. Childhood trauma refers to emotionally distressing and frustrating experiences endured by children, which often leads to lasting psychological and physiological impacts on

them. Existing research has found that trauma reduces physiological arousal, disrupts emotional functioning, and hinders the production of empathetic functioning in individuals[5]. On the basis on studies, moral disengagement may mediate the relationship between childhood trauma. Related studies have found that direct victimization experiences (e.g., abuse, neglect), are significantly and positively associated with individual callousness traits[6]. Previous studies have found that individuals who have experienced abuse may suffer from impaired empathy, which in turn can lead to the development of ruthless traits.

The callousness, as an important personality trait, can be influenced not only by the environment (childhood trauma), but possibly by individual factors (moral disengagement). Moral disengagement refers to a specific cognitive tendency that individuals develop to redefine their behaviors to make them appear the least harmful and reduce the level of responsibility and suffering in the consequences of the behavior[7]. Studies have found that maltreatment affects an individual's moral cognitive tendencies[8], and if an individual is subjected to maltreatment, he or she becomes cognitively desensitized to the traumatic and offensive event and develops irrational moral cognitive tendencies, i.e., moral disengagement[9]. Studies have revealed that adverse experiences (abuse, poor interactions) positively predict the level of moral disengagement in college students, i.e., the longer or more frequent the adverse experiences, the higher the level of moral disengagement[10,11], while higher levels of moral disengagement lead to individuals having higher tolerance after committing a moral violation, lack of empathy for the suffering and interests of others, show more negative behaviors, and show more indifference to some bullying behaviors more indifference[12], and consequently become callousness. It shows that moral disengagement may play a mediating role in childhood trauma and the callousness traits. According to related studies, moral deferral is an important mediator between childhood psychological abuse and problematic behaviors, and individuals with callousness trait often show problematic behaviors such as aggression, according to which, the studies hypothesized that moral deferral plays a mediating role between childhood trauma and the callousness trait[13-15]. Based on literature, studies speculate that moral disengagement may mediate between childhood trauma and callous-unemotional traits.

2. Related work

2.1. Childhood trauma

Childhood trauma is one of the topics of particular interest to researchers in the context of family environmental factors. Currently, there is no fully agreed upon conceptualization of it in the academic world. Scholars have defined it in both a broad and a narrow sense: broadly, childhood trauma refers to negative events experienced by an individual prior to adulthood, which may have a negative impact on the individual; the narrower aspect refers to physical and psychological abuse of a child by a primary caregiver as well as the resulting psychological effects[16]. In this study, Paulina and Rybakowski's[17] definition was used: actual or potentially injurious behaviors committed by a person who has a duty of care to a child that are sufficient to cause actual or potential harm to the child's health, survival, dignity, etc., including physical abuse, emotional abuse, physical neglect, emotional neglect, and sexual abuse. Of these, physical abuse is when a child is physically assaulted by a person older than the child, causing physical injury; emotional abuse is when a child's sense of worth and behavior is verbally attacked or demeaned by a person older than the child; physical neglect is when a caregiver fails to meet a child's basic physical needs, including food, shelter, clothing, safety, and health care; emotional neglect is when a caregiver fails to meet a child's basic emotional needs, including love , belonging, and support; and sexual abuse is sexual contact or sexual behavior between a child and a person older than the child[18]. In adolescent population, the prevalence of physical

abuse, emotional abuse, physical neglect, emotional neglect, and sexual abuse were 20%, 30%, 47%, 44%, and 8.9%-9.1%, respectively[19].

Traumatic experiences during childhood are often unpredictable and unavoidable, typically occurring when individuals are unprepared, leaving victims feeling overwhelmed and powerless. As a result, the impact of traumatic events on children is often profound, directly affecting their healthy development. Firstly, childhood trauma influences the plasticity, cognition, and decision-making of the brain's nervous system. Different parts of the brain develop at varying speeds from infancy through late adolescence. For instance, brain regions involved in cognitive control exhibit neuroplasticity development in early childhood, while regions associated with reward behaviors (such as the ventral striatum) continue to develop from adolescence into early adulthood[20,21]. Consequently, experiencing trauma during childhood can affect individuals' brain plasticity and behavioral development. Furthermore, both domestic and international research indicates that trauma experienced during childhood hinders physical and mental health during adolescence and adulthood[22-24]. Salokangas et al.[25] found that, among the five dimensions of childhood trauma, physical abuse and emotional neglect have the strongest associations with mental illness. Specifically, physical abuse predicts depression, mania, psychosis, and anxiety disorders, while emotional neglect predicts depression, anxiety, and substance abuse disorders.

2.2. Moral disengagement

Moral disengagement arises from the theory of moral agency, according to Bandura[26], human moral agency has a dual aspect, expressed in the ability to refrain from immoral behavior and the ability to initiate moral behavior. The theory states that moral functioning is governed by the ego and that the self-regulatory mechanisms that govern moral behavior do not come into play unless they are activated and awakened. There are many ways to free individuals from self-regulation of immoral behavior, and the selective activation and deactivation of self-sanctions allows two people to act in opposite ways even if they have the same moral standards, thus giving rise to the concept of moral disengagement.

According to Bandura[26], individuals generally exercise moral disengagement through eight mechanisms of action. These eight mechanisms include blame shifting, moral justification, diffusion of responsibility, euphemistic labeling, dehumanization, favorable comparisons, distorted outcomes, and blame attribution. Responsibility shifting refers to the individual's attribution of blame to others or to the environment in order to shirk responsibility for the consequences of unethical behavior. Diffusion of blame refers to an individual's belief that responsibility for unethical behavior is to be diffused to everyone in the presence of others so that his or her own responsibility is minimized. Distortion of consequences is when the individual conceptualizes or even outright ignores the negative consequences of his or her unethical behavior in a way that avoids the condemnation of his or her conscience in his or her mind. Moral justification is where the individual changes his or her interpretation of the unethical behavior, thus justifying the behavior and making it seem less harmful. Euphemistic labeling refers to the use of neutral language when an individual's behavior is condemned, which puts a mask over the immoral behavior, and favorable comparison refers to the individual's comparison of the original unacceptable behavior with the more immoral behavior, thus making his or her bad behavior seem less harmful. Dehumanizing mechanisms refer to the individual's cognitive perception of the victim as a non-human individual, thus making him or her immune to self-blame. Blame attribution is understood as the individual cognitively blaming the victim for the responsibility arising from the unethical behavior that he or she has done.

According to the social cognitive theory view, environmental factors may act on an individual's moral cognition[26,27] and thus have an impact on his or her behavior. Negative environmental factors (childhood

trauma) may cause individuals to develop moral cognitive biases (e.g., moral disengagement). Individuals who suffer from childhood trauma may perceive such treatment as unfair, and when faced with dilemmas, they may believe that they are irrelevant, and moral disengagement may occurs to alleviate their internal stress. Therefore, it is important to study individual callousness traits from the perspective of moral disengagement theory.

3. Hypotheses development

3.1. Childhood trauma and callousness trait

Environmental factors are important influences on individual callousness traits[28]. It was found that parental interaction styles were significantly associated with individual callousness trait levels. When parents actively improve their interaction styles, individuals' callousness trait levels decrease. Therefore, the influence of family environment on individual callousness traits should be emphasized. Among them, childhood trauma is a family factor that should not be ignored, and research has also revealed that self-reports of adolescent violent offenders are significantly more likely to be childhood maltreatment than non-offending adolescents, and that adolescents' levels of callousness trait are significantly higher than non-offending adolescents[29]. Childhood maltreated individuals have higher levels of aggressive traits and impulsive traits compared to non-maltreated individuals, and the development of aggressive and impulsive personality traits relies heavily on a combination of an individual's genetic traits and the environment in which they grow up (e.g., maltreatment experiences, maternal deprivation, etc.) In a study by Kimonis et al. a significant correlation was also found between experiences of abuse/neglect in childhood, particularly emotional neglect, and callousness[30].

Therefore, the study proposed Influence H1: Childhood trauma significantly and positively influences individual callousness traits.

3.2. Childhood trauma and moral disengagement

During individual moral development, Rest[31] argued that empathy (sympathy) occurs prior to moral judgment and affects an individual's sensitivity to moral issues. Individuals who are low in empathy will show less sensitivity to others' dilemmas, increase motivation to harm others, and are likely to morally justify harming others in order to reduce internal stress. Detert et al. stated[32] that empathy is the foundation of morality and that a keen awareness of others' needs and feelings inhibits moral disengagement. Individuals who experience childhood trauma may have affected the brain nerves and have a harder time recognizing inappropriate emotions in themselves and others, and have a hard time adopting rational strategies to cope with emotional processing problems in the moment[33], which in turn can lead to moral justification of their actions and moral disengagement.

Therefore, the study proposes hypothesis H2: Childhood trauma significantly and positively affects individual moral disengagement.

3.3. Moral disengagement and callousness trait

Moral disengagement, as a psychological mechanism in individuals, are significant predictors of callousness traits. Studies have shown that college students with higher levels of moral deferral are more likely to exhibit callousness traits, such as lack of empathy and disregard for the feelings of others[12]. This may be related to the failure of self-regulation and ambiguity of moral judgment due to moral deferral.

Moral disengagement refers to the process by which an individual reduces his or her own moral pressure by attributing responsibility to external factors through psychological mechanisms when facing moral

conflicts. As a special group, college students are in the critical period of value formation and personality shaping, and moral disengagement may have far-reaching effects on their moral judgments and behaviors[33]. Individuals with a high level of moral disengagement have difficulty in understanding the pain and difficulties of others, become apathetic, and are prone to behaviors such as avoidance.

Accordingly, the study proposes Hypothesis H3: moral disengagement significantly and positively affects individual callousness traits.

3.4. The mediating role of moral disengagement

Moral disengagement plays an important role in the process of individual psychological development, especially in the association between childhood trauma and the trait of callousness in adulthood. It has been found that those in the college population who have experienced childhood trauma tend to be more likely to exhibit a tendency toward moral disengagement, which in turn may serve as a mediator in the development of their callousness trait[13].

Childhood trauma, such as domestic violence, parental divorce, or abuse, may lead individuals to develop a psychological defense mechanism to alleviate psychological pain and stress[8]. Moral disengagement is just such a defense mechanism, which enables individuals to reduce their own moral stress by blaming external factors when facing moral dilemmas[32]. In addition, the higher the level of moral disengagement, the more likely an individual is to display a callousness trait in their behavior[14]. This trait manifests as a lack of empathy and neglect for others' feelings, etc., making it challenging for individuals to empathize and show concern in response to others' suffering[14].

Accordingly, the study proposes hypothesis H4: Moral disengagement plays a mediating role between childhood trauma and individual callousness trait.

During November 2023, this study randomly selected college students from two universities in Guangdong Province and one university in Henan Province in China to conduct a questionnaire survey, aiming to construct a model (**Figure 1**) to explore the influence of childhood trauma on individual callousness traits and the role mechanism of moral disengagement in it, to provide reference value for the prevention and intervention of college students' callousness traits, and to make some campus violence prevention Contribution.
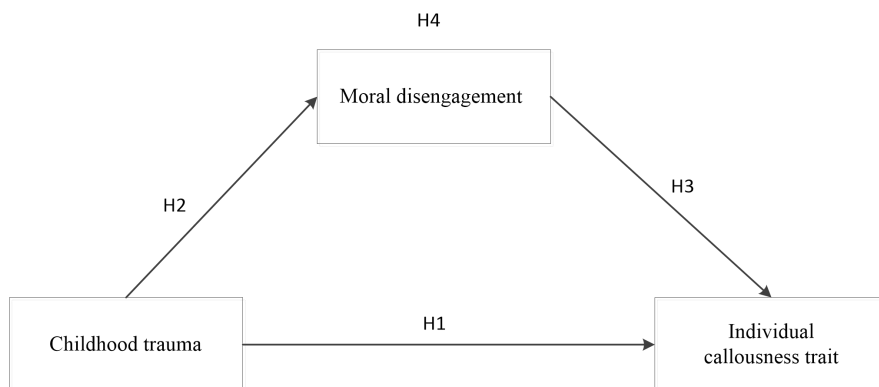
Figure 1. The research model.

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4. Methods

4.1. Participants

Using a convenience sampling method, in March 2023, students from three universities in Guangdong Province and Henan Province, China, were selected as participants. Questionnaires set up lie detector questions, the final elimination of invalid questionnaires 30, the remaining valid questionnaires 865, the effective recovery rate of 96.65%. Among them, 693 were from Guangdong (80.12%), 172 were from Henan (19.88%), 332 were male (38.38%), 533 were female (61.62%); 197 were only children (22.77%), 668 were non-only (77.23%), 413 were from towns and cities (47.75%), and 452 were from rural areas (52.25%). 52.25%), aged 16-25 years with a mean age of 18.59±0.90 years.

4.2. Research tools

4.2.1. Childhood trauma questionnaire (CTQ-SF)

The questionnaire that effectively tests childhood trauma is the Childhood Trauma Questionnaire (CTQ-SF), which was translated and revised and introduced by Zhao[34] et al. The questionnaire consists of 28 questions on a 5-point scale consisting of five dimensions: emotional abuse (EA), emotional neglect (EN), physical abuse (PA), and sexual abuse (SA), with higher scores indicating higher levels of trauma. The internal consistency reliability of this questionnaire in this measurement was 0.73.

4.2.2. The moral disengagement questionnaire

The Chinese-specific scales or questionnaires. developed by Yang et al.[35] was used . The questionnaire consisted of 32 questions including 8 dimensions: moral justification, blame dispersion, blame attribution, blame dispersion, euphemistic labeling, blame shifting, distorted results and dehumanization. The questionnaire was scored on a 5-point Likert scale, with higher scores indicating higher levels of moral disengagement. This questionnaire is widely used in the Chinese cultural context and has good reliability and validity. The internal consistency reliability of this questionnaire in this measurement is 0.96.

4.2.3. Cold-heartedness characteristics scale

The Coldness and Ruthlessness Scale, revised by Deng et al[36] was used, with a total of 24 entries. The scale includes three dimensions of coldness, callousness and indifference. The scale is scored on a 4-point Likert scale ranging from 1 (completely untrue) to 4 (completely true), half of which is reverse scored, with higher scores indicating more pronounced callousness traits. The internal consistency coefficient of this scale in this study was 0.80.

4.3. Data collection

The QR code of the questionnaire (Questionnaire Star) was distributed on the spot, and the investigators were trained in advance, adopting a unified instruction and survey method, filling out the questionnaire on the spot after obtaining the informed consent of the respondents, and the backstage audited the questionnaire on the spot, reminding the students to answer the questionnaire carefully to ensure the validity of the questionnaire.

4.4. Validated factor analysis

In this study, validation factor analysis was used to test the fitness of the data and the model and to analyze the discriminant validity. SPSS26.0 was used for statistical analysis of data, PROCESS program was used to construct structural equation model to test the relationship between childhood trauma, moral disengagement and callousness traits, Pearson correlation was used for correlation analysis, and Bootstrap program was used to test the fit of the model. The results of the unrotated factor analysis showed that a total

of 16 factors had an eigenroot greater than 1, and the total variance of the first factor was 20.40%, which was lower than the critical value of 40%; therefore, it can be assumed that the model was not significantly improved by the addition of the common method factor, and that there was no significant common method bias in the measurements.

5. Results

5.1. Analysis of variance of control variables

Utilizing the independent samples t-test to investigate potential disparities across three demographic variables: gender, sole status (i.e., being an only child), and residence (urban versus rural), the analysis revealed the following findings. Firstly, regarding the gender variable, a statistically significant difference (P<0.001) was observed in both sexual abuse experiences and the endorsement of moral disengagement, with boys exhibiting higher scores than girls. Secondly, in terms of sole status, a notable difference (P<0.05) emerged in the manifestation of callousness traits, where only children scored higher than those with siblings. Lastly, concerning the urban-rural divide, no significant differences (P>0.05) were detected across any of the aforementioned variables, indicating that residence did not significantly impact the outcomes studied (**Table 1**).

Table 1. Analysis of descriptive statistics and demographic differences between variables.

Program	Emotional Abuse	Physical Abuse	Sexual Abuse	Emotional Neglect	Physical Neglect	moral disengagement	callousness Traits
Boys:332	1.44±0.56	1.24±0.52	1.16±0.49	4.04±0.95	2.70±0.66	2.00±0.67	2.41±0.37
Girls:533	1.51±0.56	1.20±0.45	1.08±0.30	4.10±0.92	2.69±0.55	1.68±0.58	2.44±0.28
t	-1.71	1.40	3.03***	-0.56	0.01	7.21***	-0.59
Only Child:197	1.49±0.62	1.25±0.59	1.14±0.53	4.08±0.94	2.66±0.63	1.76±0.63	2.48±0.35
Non-Only Child:668	1.48±0.55	1.20±0.44	1.1.±0.33	4.05±0.93	2.69±0.58	1.81±0.64	2.42±0.31
t	0.24	1.16	1.39	0.30	-0.62	-1.04	2.22*
Urban:413	1.47±0.60	1.22±0.53	1.11±0.42	4.07±0.94	2.68±0.57	1.77±0.62	2.45±0.32
Rural:452	1.50±0.53	1.21±0.43	1.10±0.34	4.06±0.93	2.70±0.61	1.83±0.66	2.42±0.32
t	-0.75	0.46	0.23	0.30	-0.45	-1.29	1.31

*Note: *P<0.05, **P<0.01, ***P<0.001, similarly for the following.*

5.2. Correlation analysis of college students' childhood trauma, moral disengagement and callousness traits

Pearson's correlation analysis showed that the dimensions of college students' childhood trauma (except for emotional neglect), were significantly positively correlated with moral disengagement and the callousness traits (all P-values less than 0.05), and moral disengagement was significantly positively correlated with the callousness traits (P-values less than 0.01). The details are as follows in **Table 2**.

Table 2. Correlation analysis of dimensions of childhood trauma, moral disengagement and the callousness traits.

	Physical Abuse	Emotional Abuse	Sexual Abuse	Emotional Neglect	Physical Neglect	Moral Disengagement	callousness Traits
Emotional Abuse	-						
Physical Abuse	0.65**	-					
Sexual Abuse	0.42**	0.57**	-				
Emotional Neglect	-0.32**	-0.23**	-0.13**	-			
Physical Neglect	-0.04	0.02	0.03	0.53**	-		
Moral Disengagement	0.20**	0.23**	0.21**	-0.04	0.07*	-	
callousness Traits	0.21**	0.20**	0.17**	0.17**	0.19**	0.24**	-

5.3. Mediation model test

With callousness trait as the dependent variable, childhood trauma as the independent variable, and moral disengagement as the mediator variable, structural equation modeling was constructed for path analysis based on controlling for the variables of gender and sole status, and the various evaluation indexes showed that the model's goodness of fit was effective. Childhood trauma directly predicted the callousness trait (effect value 0.30, 95% confidence interval 0.00-0.24, P<0.001), and hypothesis H1 was verified. With the addition of the mediating variable moral disengagement, childhood trauma significantly predicted moral disengagement (effect value of 0.35, 95% confidence interval of 0.02-0.13, P<0.001), hypothesis H2 was verified, and moral disengagement significantly predicted childhood trauma (effect value of 0.10, 95% confidence interval of 0.03-0.15, P<0.001), hypothesis H3 was tested, while childhood trauma could also indirectly affect the callousness trait through the mediating effect of moral disengagement (effect value of 0.04, 95% confidence interval of 0.01-0.06, P<0.001), and hypothesis H4 was tested. The path coefficients between the variables were statistically significant (all p-values less than 0.001), and the proportions of the direct (0.20) and mediating (0.14) effects to the total effect (0.34) were 58.82% and 41.18%, respectively. The details are as follows in **Table 3** and **Table 4** and **Figure 2**.

Table 3. Mediation model test for moral disengagement.

Program	Callousness Traits		Moral Disengagement		Callousness Traits (Adjusted Model)	
	β	*t*	*β*	*t*	*β*	*t*
Gender	0.02	1.00	-0.31	-7.23***	0.05	2.51*
Only Child Status	-0.05	-2.20*	0.07	1.49	-0.06	-2.57*
Childhood Trauma	0.34	10.72***	0.35	5.44***	0.30	9.63***
Moral Disengagement					0.10	6.33***
R^2	0.12		0.09		0.16	
F	40.38***		28.42***		41.69***	

Table 4. Decomposition of direct, mediated and total effects.

Program	Effect	BootSE	BootLLCI	BootULCI	Efficiency Ratio
Direct Effect	0.20	0.30	0.24	0.36	58.82%
Mediation Effect	0.14	0.035	0.12	0.16	41.18%
total Effect	0.34	0.34	0.27	0.40	
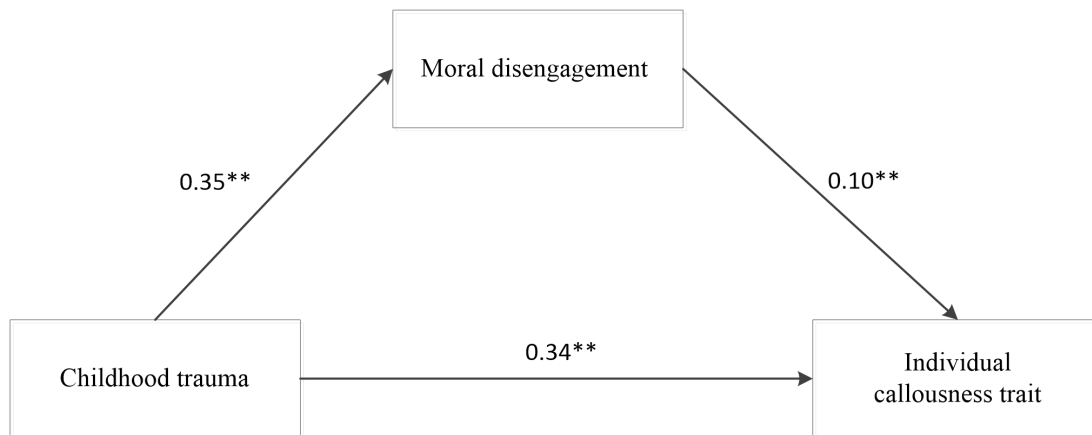
Figure 2. Model diagram of the mediating role of moral disengagement.

6. Conclusion

6.1. Research findings and theoretical contributions

In this study, male students suffered more sexual abuse than female students, and male students had a higher level of moral disengagement than female students. First of all, sexual abuse has a great impact on individuals in childhood trauma. This study found that male students suffered more sexual abuse, which is consistent with previous research[37]; in addition, boys' level of moral disengagement is higher than girls', which is consistent with previous research[38], which may be due to the fact that, boys' speed is more slow compared to girls' in the process of psychological development, and after suffering from traumatic experiences their biological network system is prone to disorders and cannot effectively regulate society-emotional relationships, which in turn increases the probability of undesirable psychological and risky behaviors[39], and in order to alleviate their own responsibility and inner pain, they will recognize their immoral behaviors and produce a higher level of moral disengagement. The study also found that only children have higher callousness trait than non-only children, which is basically consistent with the study of Wang et al[40], that is, there are differences in callousness trait between boys and girls, which may be due to the differences in emotional processing between boys and girls.

The study revealed that childhood trauma can directly and positively predict the callousness trait of college students, which validates the previous study[12], that is, individuals who suffered from childhood trauma may fall into a sense of betrayal and pain, and their own kindness and faith in the outside world will be overwhelmed, which will lead to the development of the "people are all evil, the world is very dangerous This can lead to a perception that "people are evil and the world is dangerous", which in turn makes it difficulty understand the pain of others, and leads to violence against others and the development of a cold and unfeeling personality trait. In addition, it was found that moral disengagement is closely related to the callousness trait, and people with higher levels of moral disengagement have higher tolerance after

committing a moral violation, empathize with others' suffering, and then become callous, validating the ideas of related studies.

The results of the mediating effect test in this study showed that moral disengagement plays a partially mediating role between childhood trauma and the callousness trait, specifically, college students with higher levels of childhood trauma will develop skewed cognitive tendencies, which will lead to cognitive desensitization to the traumatic event, and irrational cognition, i.e., they may re-perceive immoral behaviors as being reasonable behaviors, and produce higher levels of moral disengagement, which makes it difficult to understand the other people's pain and difficulties, becoming indifferent and uncaring, and even some violent behaviors such as aggression, validating previous research[8-10].

In summary, the present study found that childhood trauma, moral disengagement and the callousness trait are significantly and positively correlated; childhood trauma has a positive predictive effect on callousness trait, and this effect has both direct and indirect effects. Among the indirect effects, childhood trauma could influence the trait of callousness through the mediating effect of moral disengagement. The findings enriched the intrinsic mechanism of environmental factors childhood trauma and individual callousness trait, which has with some theoretical significance.

6.2. Practical significance

At the same time, this study found that some empathy training can be used to reduce the level of individual moral disengagement, thereby reducing the individual's callous-unemotional traits. In addition, future research can improve students' sense of responsibility education, and timely screen out individuals who have experienced childhood trauma, give them correct guidance and help, and prevent them from developing callous-unemotional traits, which has certain practical significance for maintaining the safety and stability of the campus.

6.3. Limitations and future research directions

Despite the value of this study, there are some shortcomings that require further refinement and improvement. First, although the results of the study show that the impact of common methodological bias is not serious, because the questionnaire survey takes the form of self-reporting, the assessment results are highly subjective, and future research can take the form of personal report plus supervisor evaluation to collect data. Second, this study used the questionnaire survey method to study the relationship between variables, which is a cross-sectional study and cannot infer the causal relationship between variables, which has certain limitations, and future research can utilize experimental research methods and longitudinal tracking methods to further explore the influence mechanism. Thirdly, this study only explores the influence mechanism of the callousness trait in a group of college students, which is a small-sample study, but the individual's personality trait of callous-unemotional is not only influenced by social, age, gender, and environmental factors, but also by individual psychological characteristics, and future studies can carry out tracking studies in large samples.

Conflict of Interest

The authors declare no conflict of interest.

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