

Childhood trauma and psychopathy in emerging adults: the mediating role of family cohesion

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Abstract

Objective: To identify the mediating role of family cohesion in the relationship between childhood trauma and psychopathy in Chinese emerging adults.

Method: The cross-sectional study was conducted from November 2022 to February 2023 in China, and comprised individuals aged 18-25 years who had experienced childhood maltreatment, like abuse and neglect. Data was collected online through screening for experiences of childhood trauma, psychopathy and family cohesion. Data was analysed using SPSS 22.

Results: Of 696 participants, 106(15.2%) were males and 590 (84.8%) were females. The overall mean age was 21.01±1.92 years. A significant positive correlation between childhood trauma and psychopathy ($p<0.05$), and significant negative correlations between childhood trauma and family cohesion ($p<0.05$), and between family cohesion and psychopathy ($p<0.05$) were found. Significant predictive effects between childhood trauma and family cohesion, family cohesion and psychopathy, childhood trauma and psychopathy were identified ($p<0.05$). Family cohesion partially mediated the relationship between childhood trauma and psychopathy. After controlling family cohesion as a mediator, the predictive effects between childhood trauma and psychopathy were weakened ($R^2=0.31$ to $R^2=0.24$).

Conclusion: Childhood traumatic experiences could predict psychopathy, and increasing family cohesion could mediate this relationship, potentially mitigating the impact of childhood trauma and reducing psychopathic symptoms, successfully navigating emerging adults through the transitional phase.

Key Words: Childhood trauma, Family cohesion, Psychopathy, Emerging adults.
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Introduction

The period between age 18 years and 25 years, known as emerging adulthood, is a critical stage when people become adults from late adolescence, which lays the foundation for future development.¹ The experiences, relationships and characters formed during these formative years greatly impact one's mental health, behaviour and psychological wellbeing in adulthood. Specifically, the manifestation of psychopathic traits during this phase not only adversely impacts the quality of current life, but also serves as an indicator of potential mental health disorders, low psychological wellbeing, and the likelihood of physical complications in later stages of life.²

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Psychopathy (PS) is a multifaceted personality condition characterised by a lack of empathy, interpersonal manipulation, and a disorganised lifestyle, which can lead to destructive and harmful behaviours and even criminal activity.³ Previous studies, particularly informed by psychodynamic and attachment theories, have revealed significant correlations between the experience of exposure to traumatic events in childhood and the subsequent emergence of psychopathic characteristics in later stages of life, especially during emerging adulthood. These enduring effects can persist across the lifespan, and are major determinants of personality organisation and psychological disturbance, usually through parent-child attachment bonds, transgenerational transmission and even genetic change.⁴⁻⁶ To help those in this psychopathic situation, clinical psychologists and researchers have tried to investigate the risk or protective factors of PS.⁷

Among those factors, family dynamics have received considerable attention. According to family systems theory, individual behaviour, emotional regulation, relational patterns, and psychological wellbeing are significantly shaped by family dynamics, and even can be transmitted across generations.⁸ Family cohesion (FC),

considered one of the most critical family processes, refers to the emotional bonding and the sense of connection among individuals in a family.⁹ The greater the FC level, the more supportive, empathic interaction family members have, and it leads to more flexibility, adaptability, effective emotional regulation and resilience the individual has, and this includes even those who experienced adverse events in childhood.¹⁰⁻¹¹

Grounded in developmental psychology, psychodynamic and attachment perspectives, and family systems theory⁸, the current study was planned to explore the interplay between childhood trauma (CT) and psychopathic traits among emerging adults, with a specific emphasis on the mediating role of FC between the two elements.

Subjects and Methods

The cross-sectional study was conducted from November 2022 to February 2023 in China after approval from the ethics review committee of Guangdong Medical University, China. The recruitment flyers were released online via Wechat, Weibo and other Chinese websites. Those targeted were individuals aged 18-25 years who had experienced childhood maltreatment, like abuse and emotional or physical neglect. Those who signed the informed consent form were screened online for demographic information, CT experience, family cohesion and psychopathic tendencies. Those outside the target age range and those who provided apparently unreliable responses, such as consistently selecting the same answer, were excluded. The final sample surpassed the required minimum of 250 subjects for ensuring correlation stability.¹²

Basic demographic information, including gender, age, family structure, main caregiver in childhood and history of mental illness, were obtained. The Childhood Trauma Questionnaire Short Form (CTQ-SF) was employed to assess the traumatic experiences in childhood.¹³ The questionnaire, with 5-subtype childhood traumatic experiences, has 28 items that are measured on a 5-point scale, ranging from 1 = "never" to 5 = "always", and a high score indicates a higher level of trauma. The cut-off point for emotional abuse was ⁹, physical abuse⁸, sexual abuse⁶, emotional neglect¹⁰, and physical neglect.⁸ A score equal to or greater than the cut-off point indicated the presence of CT.¹⁴ The Chinese version of CTQ-SF has demonstrated acceptable reliability and validity among adults.¹⁵ In the current study, the Cronbach alpha (α) coefficient of CTQ-SF was 0.86, indicating a good internal consistency.

The Family Cohesion Scale (FCS) was based on the Family Adaptability and Cohesion Scale II (FACES-II), consisting of 16 items scored on a 5-point Likert scale, ranging from 1 =

almost never to 5 = almost always.¹⁶ High scores denoted higher emotional connection among family members. The scale has shown a good reliability and validity in Chinese culture.¹⁷⁻¹⁸ A good internal consistency ($\alpha=0.86$) was found in the current study.

The Self-Report Psychopathy Scale-Short Form (SRP-SF) had 29 items selected from the 64-item complete SRP version, and they were answered on a 5-point Likert scale, ranging from 1 = disagree strongly to 5 = agree strongly, with high scores indicating higher psychopathic tendencies.¹⁹ The revised Chinese version of SRP-SF has shown good reliability, test-retest reliability and internal consistency.²⁰ In the current study, the α value was 0.92, indicative of an excellent internal consistency.

Data was analysed using SPSS 22. Frequencies and percentages were calculated for demographic variables, and mean \pm standard deviation were calculated for continuous variables, including CT, FC and PS. After normality tests, bivariate correlations were conducted to explore the relationships involving CT, FC and PS. Spearman's rank correlation analysis was performed, based on the outcomes of the normality tests. To examine the mediating effect of FC in the relationship between CT and PS, mediation analysis was conducted in line with literature.²¹ $P<0.05$ was considered statistically significant.

Results

Of the 760 subjects enrolled initially, 696(91.6%) formed the final sample; 590(84.8%) females and 106(15.2%) males with mean age 21.01 ± 1.92 years. The majority of the sample 484(69.5) resided in nuclear families, 505(72.6%) were mainly raised by their parents, and 65(9.3%) reported a history of mental illness (Table 1).

There were significant negative correlations between CT

Table-1: Characteristics of the participants (n=696)..

Variables	Categories	Age (M \pm SD)	F(%)
Gender	Male	21.33 \pm 1.88	106(15.2)
	Female	20.95 \pm 1.93	590(84.8)
Family Structure	Nuclear	20.99 \pm 1.93	484(69.5)
	Extended	21.08 \pm 2.00	133(19.1)
	Single parent	20.93 \pm 1.79	46(6.6)
	Intergenerational	21.08 \pm 2.02	12(1.7)
	Reconstituted	21.24 \pm 1.67	21(3.0)
Main caregiver (0-6 years)	Parent	21.02 \pm 1.93	505(72.6)
	Grandparent	21.03 \pm 1.93	177(25.4)
	Others	20.50 \pm 1.70	14(2.0)
History of mental illness	Yes	21.37 \pm 1.76	65(9.3)
	No	20.97 \pm 1.94	631(90.7)

M: Mean, SD: Standard deviation.

Table-2: Correlation among childhood trauma (CT) experience, family cohesion (FC) and psychopathy (PS).

Variables	M	SD	CT	FC	PS
CT	37.50	11.88	-	-	-
FC	65.56	11.50	-.59*	-	-
PS	52.65	15.06	.46*	-.38*	-

SD: Standard deviation, M: Mean. *p<0.05. CT= Childhood Trauma. FC= Family Cohesion PS= Psychopathy

and FC (p<0.05), and between FC and PS (p<0.05), and a positive correlation between CT and PS (p<0.05) (Table 2).

Table-3: Regression coefficient, standard error (SE,) and model summary for childhood trauma (CT), family cohesion (FC), and psychopathy (PS).

	Antecedent	Consequent						
		M(FC)			Y(PS)			
		β	SE	P	β	SE	P	
CT(X)	a	-0.54	.03	<.001***	c'	.50	.05	<.001***
FC(M)	-	--	--	--	B	-.19	.05	<.001***
Constant	i	85.86	1.20	<.001***	i	46.09	4.78	<.001***
		R ² =0.31	81.15		R ² =0.24	172.80		
		F(1,694)=315.17, P = <.001***			F(1,694)=109.75, P = <.001***			

***p < 0.001

Mediation analysis showed significant predictive effects between CT and FC, between FC and PS, and between CT and PS (Figure). FC partially mediated the relationship between CT and PS (p<0.001), and after controlling FC as a mediator, the predictive effects between CT and PS were weakened (Table 3).

The mediation model revealed significant path coefficients depicting the influence of FC on the relationship between CT and PS, with the impact of CT on FC (path a) being negative and significant (a=-0.54). The relationship between FC and PS (path b) was also negative and significant (b=-0.19). The direct effect of CT on PS (path c) was significant and positive (c=0.50). The total effect of CT on PS (path c) was also significant and positive (c=0.60). In terms of mediation, a significant

indirect effect (a × b = 0.10) was observed, suggesting that the influence of FC partially explained the relationship between CT and PS.

Discussion

During emerging adulthood, individuals undergo significant transitions in terms of identity exploration, setting up the stable structure of adult life, establishing personal and professional goals, and committing to enduring love relationships.²² On the contrary, people mostly in the phase of emerging adulthood may encounter increased instability and potential mental problems due to multiple pressures and challenges.²³ Based on current findings and supported by psychodynamic and attachment theories, it is evident that emerging adults with CT history are particularly vulnerable to developing psychopathy, which aligned with numerous prior studies.²⁴⁻²⁵

To decrease psychopathy that impedes individuals' development, transforming the negative CT impact is highly necessary. Individual development is not an isolated entity, and is deeply influenced by the family system in which FC significantly influences an individual's emotional regulation, coping strategies, characteristics and overall psychological development. As one of the most important protective factors for mental health, FC serves as a buffer against psychological distress and promotes resilience. Cohesive families typically communicate well, solve problems collectively, and provide emotional support to individual members of the family.^{10,26} The result of mediation analysis in the current study showed FC served as a mediator, significantly associated with CT experience and PS, and partially mediated the relationship between CT and PS. This finding implied that though childhood trauma itself is a significant PS predictor, FC does significantly influence the pathway of CT and PS, which is consistent with the concept of partial mediation in family systems. Thus, the enhancement of FC presents a potential avenue for alleviating the adverse effects of CT, mitigating PS, and successfully navigating emerging adults through the transitional phase of emerging adulthood.

The present study possesses certain limitations. The data collection relied on voluntary online participation. Secondly, the participants entirely belonged to an Eastern cultural context, and cultural nuances were not considered. Thirdly, the intricate interplay between an individual's mental health and the family system is multifaceted, but the focus of the current study was exclusively on FC. All these constraints warrant careful consideration in future research endeavours.

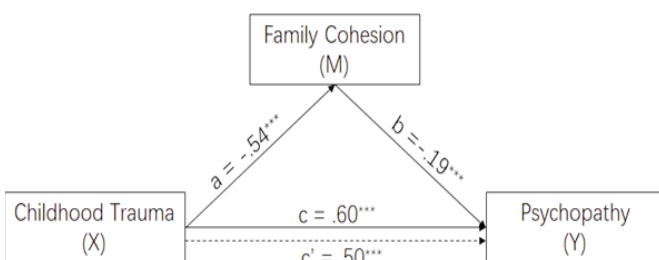


Figure: Mediating effect of family cohesion (FC) on the relationship between childhood trauma (CT) and psychopathy (PS). (***p<0.001)

Conclusion

CT had predictive associations with both PS and FC. Additionally, FC demonstrated predictive capability for PS. Furthermore, FC partially mediated the relationship between CT and PS.

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JWT: Concept, data analysis, writing-original draft, review and editing.

YYL: Data collection and analysis.

HL: Concept, writing, review and editing.