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Exploring the Mediating Role of Stress in the Relationship between Childhood Trauma and Personality Traits

¹**Sanchi Gupta**, *Student, Integrated BA-MA (Clinical Psychology), Amity Institute of Psychology and Allied Sciences, Amity University, Noida, Uttar Pradesh, India*
runjhunsanchi11@gmail.com

²**Dr. Rajat Kanti Mitra**, *Professor, Amity Institute of Psychology and Allied Sciences, Amity University, Noida, Uttar Pradesh, India*
rkmitra@amity.edu

Abstract: The present study investigates the relationship between childhood trauma, perceived stress, and maladaptive personality traits, and examines the mediating role of stress in this relationship within a non-clinical Indian adult population. A total of 135 participants aged 18–35 years were administered the Childhood Trauma Questionnaire Brief form (CTQ-BF), the Perceived Stress Scale (PSS), and the DSM 5 Personality Inventory Brief Form (PID-5-BF). Pearson correlation analysis was conducted to assess associations between subtypes of childhood trauma and the five maladaptive personality domains: negative affectivity, detachment, antagonism, disinhibition, and psychoticism. Along with it, a mediation analysis was done to study the mediating role of stress in the relationship between childhood trauma and the development of personality traits. Results revealed significant positive correlations between emotional and physical abuse and several maladaptive traits, particularly detachment ($r = .471, p < .01$), psychoticism ($r = .461, p < .01$), and antagonism ($r = .370, p < .01$). An independent samples t-test showed that individuals with higher levels of childhood trauma reported significantly greater perceived stress ($M = 70.1, SD = 9.02$) than those with low or no trauma ($M = 50.0, SD = 5.18$), with a large effect size (Welch's $t = 16.1, p < .001$, Cohen's $d = 2.72$). Mediation analysis confirmed that stress significantly mediated the relationship between childhood trauma and personality traits (indirect effect = 0.0959, $p = .038$), while the direct effect was non-significant ($p = .221$), indicating full mediation.

Keywords: *Childhood Trauma, Personality Traits, Perceived Stress, Young Adults*

1. Introduction

An individual's psychological structure is based on their early experiences, which have an impact on their cognitive schemas, emotional control, and social conduct. Adverse childhood experiences (ACEs), which are collectively referred to as childhood trauma, are of particular concern. These include neglect, being exposed to dysfunction in the home, and experiencing emotional, physical, and sexual abuse. When such occurrences take place during crucial developmental windows, they become ingrained in a person's psychological makeup rather than being isolated hardships (Felitti et al., 1998).

Stress is an essential system that has drawn attention in the study of how childhood trauma results in long-term psychological effects. According to the American Psychological Association (2023), stress is the body's or mind's reaction to stressors that upset a person's balance, whether they are external or internal. It has been demonstrated that chronic or toxic stress, in particular—stress that is persistent, frequent, and insufficiently protected by supportive relationships—interferes with neurological development, impacting the systems in charge of impulse control and regulation of emotions (McEwen, 1998).

According to McCrae and John (1992), personality traits are recurring trends of feelings, ideas, and actions that are largely constant over time and in many situations. A strong foundation for comprehending variations among people is offered by the Five-Factor Model (FFM), which includes neuroticism, extraversion, agreeableness, conscientiousness, and openness to experience. Notably, conscientiousness and agreeableness frequently act as protective factors against distress-related pathology, whereas qualities like neuroticism have been closely associated with maladaptive stress responses and negative affectivity (Costa & McCrae, 1992). The objective of this research is to investigate how stress functions as a mediator in the association between personality traits and childhood trauma. Although previous studies have examined the direct connections between trauma and personality, less is known about the indirect relationships, particularly when it comes to stress as a psychological process, especially in the socioeconomic and cultural environment of India. The present study aims to advance a more sophisticated understanding of how early adversity shapes long-lasting personality structures by fusing well-established theoretical models with empirical data. Clinical practice, establishing policies, and the larger area of developmental psychopathology are all directly impacted by this understanding.

It is becoming increasingly acknowledged that one of the main ways that childhood trauma affects how people develop personalities is through stress, particularly chronic or cumulative stress (Lupien et al., 2009). It has been demonstrated that extended stress exposure at vulnerable developmental stages can change brain regions such as the prefrontal cortex, the hippocampus and amygdala—regions in charge of memory, organizational skills, and emotion regulation (McEwen, 2000; Teicher & Samson, 2016). Notably, stress is not just a result of trauma but also a crucial mediator—a link that allows the impacts of childhood hardship to be assimilated and manifested in adult thought, behavior, and interpersonal patterns (Hammen, 2005).

Fundamental personality qualities like neuroticism, introversion, or conscientiousness are shaped by elevated stress responses after trauma, which can result in enduring patterns of hypervigilance, mistrust, or emotional instability (Widiger & Oltmanns, 2017). There is a substantial knowledge vacuum about the relationships between these variables, nevertheless, as only a small number of studies have officially examined this mediating role.

Understanding how childhood trauma shapes personality via stress mechanisms is not just of academic interest—it holds significant clinical and societal value. Numerous life outcomes, such as professional achievement, relationship satisfaction, mental health, and physical well-being, are influenced by personality traits (Roberts et al., 2007). Early therapies that try to reduce stress or change appraisal and coping methods may prevent lifelong troubles if abnormal personality characteristics are developed as a result of chronic stress exposure caused by bad childhood events. This is particularly crucial in situations with limited resources, as early detection and intervention may prove to be more economical than long-term mental health treatment.

Moreover, trauma is incredibly common. According to the World Health Organization (2021), more than 30% of people worldwide have gone through some kind of trauma throughout their childhood. Despite its frequency, trauma is frequently overlooked or mistakenly ascribed to "flaws" in the psyche. This study contradicts simplified perspectives that consider personality to be solely dispositional or biologically determined by showing that persistent stress brought on by childhood trauma may, in part, alter personality traits.

A shortage of culturally appropriate research examining these linkages in non-Western populations is a major gap in the field. Since a large portion of the current study comes from Western settings, it is not as applicable to cultures with distinct family structures, socioeconomic circumstances, and trauma exposure patterns. By concentrating on an Indian

sample, this dissertation seeks to close that gap and advance both the theoretical knowledge of personality development and the creation of culturally sensitive treatment procedures.

The present research synthesizes the aforementioned concepts and suggests a paradigm in which stress from childhood trauma indirectly affects adult personality traits. In particular, traumatic events change a person's psychological assessment and stress physiology, which results in chronic stress states. Emotional control, cognitive style, and interpersonal behavior—all essential aspects of personality—are subsequently impacted by these stress events. Repeated emotional abuse, for instance, can lead to a persistent sense of threat, hypervigilance, and relational mistrust, which might eventually show up as low agreeableness and high neuroticism. Additionally, this conceptual structure acknowledges the diversity of trauma. Different kinds of trauma may have varying effects on stress reactions and, as a result, alter personality features. Furthermore, these interactions may be mediated or moderated by cultural elements including collectivism, family hierarchy, and the shame associated with mental health in India, which would add even more complexity. Few research, particularly in non-Western contexts, have empirically tested such an integrated model in spite of these tenable mechanisms. This research attempts to close that important gap.

Personality traits, perceived stress, and childhood trauma are all well-studied concepts in psychology, especially in Western settings. But in comprehensive, integrated frameworks, the complex interactions between these factors are still not well understood, particularly in non-Western, collectivistic civilizations like India. Although earlier research has demonstrated that early life adversity may affect long-term psychological and behavioral results, it is becoming increasingly clear that the processes by which childhood trauma moulds adult personality traits are far more intricate than straightforward linear correlations.

Perceived stress is one of the main processes thought to be responsible for this association; it may act as a mediator, converting early traumatic events into long-lasting personality dysfunctions. Research on stress as a mediating pathway between childhood trauma and personality traits is relatively lacking, especially in the Indian sociocultural context, even though numerous studies have independently looked at the effects of stress on personality or the impact of trauma on stress. Given that India's collectivistic culture, hierarchical family structures, and societal norms around emotional expression might affect how stress is felt and handled as well as how trauma is internalized, this disparity is noteworthy. Furthermore, early relationship contexts and continuous life stresses have a significant impact on personality development. However, maladaptive personality qualities like hostility, detachment, or psychoticism—traits that are frequently stigmatized or pathologized without contextual

understanding—frequently receive little attention in Indian research. However, little research has been done on the long-term psychological effects of emotional abuse and neglect on personality formation, although these behaviors may be accepted or downplayed in many Indian homes. This failure to consider how cultural norms may affect the interaction between trauma and personality reinforces a limited understanding of these concepts.

The lack of mediation theories that explain how and why childhood trauma causes certain psychiatric problems in Indian adults represents another significant gap. Despite being more prevalent in Western psychological literature, mediation models are still not widely used in Indian research. The subtle impacts of subclinical or less obvious trauma and stress on personality are still mainly unknown in Indian psychology due to the lack of attention paid to non-clinical samples.

This study, therefore, seeks to address these notable gaps by:

- a) Investigating stress as a mediator in the relationship between childhood trauma and maladaptive personality traits,
- b) Contextualizing the findings within the Indian cultural and social framework, where emotional expression, help-seeking behaviors, and definitions of trauma may differ from those in the West,
- c) Exploring multiple subtypes of childhood trauma (e.g., emotional abuse, physical neglect) and their specific associations with distinct personality domains,
- d) Using a non-clinical adult population that reflects a broader cross-section of Indian society.

This study attempts to provide theoretically sound, culturally aware, and clinically applicable insights into the long-term psychological effects of childhood trauma in India by combining these dimensions into a unified empirical framework. In addition to adding to the body of research on trauma and personality, the study emphasizes the necessity of stress-focused, trauma-informed therapies that take into account the particular cultural context of Indian adulthood.

2. Review of Literature

2.1 Childhood Trauma and Personality Traits

A substantial body of research has documented the long-term psychological and personality-related consequences of childhood trauma. Hengartner et al. (2014) found pervasive associations between emotional abuse and all Big Five personality traits, especially increased neuroticism and reduced extraversion, conscientiousness, openness, and

agreeableness. Similarly, Yöyen (2017) noted significant correlations between various types of trauma, such as neglect and sexual abuse, and personality traits like introversion, hostility, and rejection of novelty.

In clinical populations, Adanty et al. (2022) observed that childhood abuse, regardless of type, was positively associated with neuroticism among patients with schizophrenia. Carvalho et al. (2021) further demonstrated that emotional neglect was negatively related to self-directedness and cooperativeness, and emotional abuse was linked to higher harm avoidance and novelty seeking. Colman et al. (2012) and Pos et al. (2016) explored how childhood trauma shapes personality in ways that influence adult functioning. Colman et al. found that those with early trauma were more prone to depression and heavy drinking in the face of adult stressors. Pos et al. demonstrated that openness and extraversion partly mediated the effect of childhood trauma on adult life events, emphasizing personality's role in developmental trajectories.

2.2 Personality Traits and Stress Perception

Research has consistently shown that personality traits influence individual differences in stress reactivity and perception. Luo et al. (2023) conducted a meta-analysis examining Big Five traits across various stress constructs. Neuroticism was positively associated with all forms of stress, while extraversion, agreeableness, and conscientiousness were generally protective. These associations varied depending on how stress was conceptualized—psychologically, physiologically, or via stressor exposure.

Corroborating these findings, Saleh et al. (2017), Mousavi & Kamali (2021), and Mirhaghi & Sarabian (2016) reported that neuroticism consistently predicts higher levels of perceived stress across university students, nursing students, and emergency medical personnel, respectively. Conversely, extraversion and agreeableness were repeatedly associated with lower perceived stress. Ebstrup et al. (2011) added that general self-efficacy mediates the relationship between personality and stress, with extraversion and conscientiousness having the strongest indirect effects. Kim et al. (2016) further confirmed that personality traits not only directly affect stress but also mediate the relationship between gender and depressive symptoms through stress. This suggests that stress may serve as a conduit through which personality influences broader psychological outcomes.

2.3 Childhood Trauma and Stress Reactivity

Childhood trauma has also been found to influence stress responses in adulthood. Betz et al. (2021) differentiated between trauma types, showing that neglect was linked to diminished self-efficacy (deprivation-related stress), while abuse was related to helplessness (threat-related

stress). These distinct associations suggest tailored intervention approaches based on trauma type.

Kuzminskaite et al. (2020) reported mild increases in biological stress markers (e.g., cortisol and inflammatory activity) among adults with severe childhood trauma. Suzuki et al. (2014) similarly found blunted cortisol stress responses in trauma-exposed individuals, whether or not they were currently depressed. These biological disruptions may underpin vulnerability to psychological disorders in later life. Carr et al. (2013) and Greenberg et al. (2018) emphasized that early life stress, even when not resulting in clinical diagnoses, increases the likelihood of adverse psychological outcomes, including altered empathy and psychopathology, indicating lasting effects on emotional regulation systems.

2.4 Mediating and Moderating Mechanisms

A growing body of literature highlights the mediating pathways that link childhood trauma to personality traits through stress or related constructs. Bach & Simonsen (2022) proposed that maladaptive personality traits function as mediators in translating childhood trauma into adult internalizing symptoms. Similarly, Kim et al. (2016) and Ebstrup et al. (2011) found perceived stress to mediate the impact of personality traits on depressive outcomes.

Van Beeck et al. (2024) examined whether insecure attachment styles mediate the relationship between childhood trauma and psychopathic traits. Their findings suggest that specific insecure attachments—particularly “Relationships as Secondary” and “Preoccupation with Relationships”—partially mediate this link, showing both shared and unique pathways across psychopathy domains. Lee-Baggley et al. (2011) and Dumitru & Cozman (2012) addressed the interaction between personality and situational stressors, concluding that coping strategies and vulnerability to stress are shaped by both dispositional traits and the nature of the environment. These findings highlight the need to consider both internal and external moderators when evaluating the long-term impact of childhood trauma.

2.5 Implications for Physical Health

Finally, childhood trauma and personality traits may also bear on physical health outcomes. Dortland et al. (2011) found that childhood sexual abuse and low openness predicted metabolic risk factors such as dyslipidemia and abdominal obesity. This suggests that psychological sequelae of trauma are not confined to mental health but extend to systemic physiological conditions, reinforcing the biopsychosocial model.

3. Methodology

The current chapter discusses the method and design followed by the researcher to

conduct the study on “Exploring the Mediating Role of Stress in the Relationship Between Childhood Trauma and the Development of Personality Traits”. It gives an overview of the research design, study participants, measures utilised, and statistical analysis followed.

3.1 Aim

To analyse the mediating role of stress in the relationship between childhood trauma and the development of personality traits among individuals in the Indian sub-continent.

3.2 Research Objectives

1. To examine the association between childhood trauma and the development of personality traits.
2. To assess the level of perceived stress in individuals with a history of childhood trauma.
3. To explore the mediating effect of stress in the relationship between childhood trauma and the development of personality traits.
4. To contribute to the understanding of how childhood trauma and stress interact to influence personality traits, particularly in the Indian socio-cultural context.

3.3 Hypotheses

1. There will be a significant positive relationship between certain types of childhood trauma and the development of certain types of personality traits.
2. Individuals with a history of childhood trauma will report significantly higher levels of perceived stress than individuals without a history of childhood trauma.
3. The level of perceived stress will mediate the relationship between childhood trauma and the development of strong personality traits.

3.4 Research Design

The present study employed a correlational cross-sectional design to examine the mediating role of stress in the relationship between childhood trauma and personality traits. Data were collected at a single point in time using standardized self-report questionnaires to assess the levels of childhood trauma, perceived stress, and personality dimensions among participants. This design was chosen to explore the associations and potential mediation effects among the variables without manipulating any conditions, thereby allowing for the identification of significant relationships within a naturalistic setting.

3.5 Sample and Data Collection

The sample for the present study consisted of 135 participants, aged between 18 and 35 years, residing within the Indian subcontinent who were selected based on the random sampling

method. To ensure a diverse and representative sample, individuals from both academic and non-academic backgrounds were included, irrespective of their educational discipline. Participants were eligible to take part if they fell within the specified age range, were currently residing in India, and were able to provide informed consent. Individuals with diagnosed cognitive impairments or serious psychological conditions that could affect their ability to understand or respond to the survey were excluded. Recruitment was carried out through convenience sampling, utilizing social media platforms and educational networks to reach a wider demographic. Data was collected using a structured self-report questionnaire, and ethical protocols were strictly adhered to, including voluntary participation, anonymity, confidentiality, and the right to withdraw at any stage of the study.

3.6 Tools Employed

Childhood Trauma Questionnaire-Brief Form (CTQ-BF) (Bernstein et al., 2003) The original Childhood Trauma Questionnaire (CTQ) has been condensed into the Childhood Trauma Questionnaire-Brief Form (CTQ-BF). David Bernstein and his associates created the initial CTQ, which was released in 1998. It is a self-report questionnaire intended to evaluate experiences of trauma and maltreatment throughout childhood. From this initial version, the CTQ-BF was developed to offer a more condensed evaluation instrument. Because the CTQ-BF has fewer items than the full CTQ, it may be administered more quickly, which is especially helpful in clinical and research situations where time may be of the essence. The CTQ-BF is nevertheless able to capture important elements of childhood trauma despite its brevity. Subscales measuring several forms of childhood maltreatment, including emotional, physical, and sexual abuse, as well as emotional and physical neglect, are typically included. A more sophisticated understanding of the particular kinds of negative experiences a person may have had throughout their formative years is made possible by these subscales. In the CTQ-BF, respondents are asked to score how frequently they encountered specific events prior to turning 18. The CTQ-BF is widely used in clinical and research settings to assess the history of childhood maltreatment, which is a significant risk factor for several behavioral and psychological conditions. It is also a useful tool for understanding the effects of early adversity on psychological growth.

Perceived Stress Scale (PSS) (Cohen & Williamson, 1988) A prominent psychological tool for assessing how stressed out a person feels is the Perceived Stress Scale (PSS). This self-report questionnaire, created by Sheldon Cohen in 1983, gauges how much people believe their lives are chaotic, out of control, and burdened. The PSS stresses the subjective experience of stress, in contrast to measures that concentrate on particular stressful events. It investigates how

individuals feel about the things that are going on in their lives and records how stressful they perceive those things to be. Numerous studies have made considerable use of the PSS to investigate the connection between perceived stress and different psychological, behavioral, and health effects. Respondents are asked to assess how frequently they have felt or thought about specific topics over the last month, and the questionnaire usually has 10 or 14 items. The answers to these questions are added up to determine the PSS score, where larger scores denote higher levels of perceived stress. It is a useful tool in stress research because of its conciseness and emphasis on subjective experience.

DSM-5 Personality Inventory for DSM-5 (PID-5-BF 25 item) (American Psychiatric Association, 2013). A condensed version of the comprehensive Personality Inventory for DSM-5 (PID-5) is the DSM-5 Personality Inventory for DSM-5 (PID-5-BF). The PID-5 was created to evaluate personality characteristics related to the domains of personality disorders included in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). The more categorical approach of earlier DSM editions has given place to a dimensional model of personality disorder with the PID-5 and, by extension, the PID-5-BF. A more complex view of personality functioning is offered by the PID-5, a self-report test that assesses maladaptive personality characteristics. For circumstances where a shorter evaluation is required, the PID-5-BF 25 item is an especially condensed form. It assesses negative affectivity, disinhibition, antagonism, detachment, and psychoticism—the five core areas of personality pathology. A collection of connected maladaptive personality characteristics is represented by each of these categories. The PID-5-BF 25 item is a useful tool in clinical and research settings because it provides a brief but insightful evaluation of these important aspects of personality illness.

3.7 Procedure

The data collection was carried out in offline mode. A hard copy of the questionnaire, including all three scales, was circulated. The participants were briefed about the study and were informed about the confidentiality of the data provided by them. Informed consent was taken before administering the tool on the participants. Demographic details were also obtained. A total of 152 participants were selected randomly to participate in the study.

3.8 Statistical analysis

The data collected for the present study were analysed using IBM SPSS software. Descriptive statistics, such as means and standard deviations, were computed to summarize the key variables. To assess the relationship between different types of childhood trauma and

specific personality traits, Pearson's correlation analysis was conducted. An independent samples t-test was used to examine differences in perceived stress levels between individuals with and without a history of childhood trauma. To test the mediating role of perceived stress in the relationship between childhood trauma and personality traits, mediation analysis was performed using the PROCESS macro for SPSS (Model 4), developed by Andrew F. Hayes. This regression-based technique allowed for the testing of direct and indirect effects. \ This step-by-step analysis enabled a comprehensive examination of the hypothesized relationships and helped validate the role of stress as a mediator.

4. Result

The present study was conducted to assess the mediating role of stress in the relationship between childhood trauma and the development of personality traits. The age group of the sample ranges from 18-35 years. For this purpose, a group of 135 participants was asked to participate out of which 135 were screened.

Table 1: *Childhood trauma (Higher trauma or Lower/No Trauma) Group Descriptives*

	Group	N	Mean	Median	SD	SE
CTT	1	72	70.1	68.0	9.02	1.06
	2	63	50.0	50.0	5.18	0.652

H1 *Correlation Between Childhood Trauma Subscales and Personality Traits*

Table 2: *Pearson's Correlations between Childhood Trauma Subtypes and Personality Traits*

Trauma Type	POA	DETACH	ANTAG	DISTING	PSYCH
PA	0.143	0.341**	0.370**	0.233*	0.314**
EA	0.277**	0.471**	0.300**	0.427**	0.461**
SA	0.003	0.123	0.173*	-0.062	0.068
PN	-0.175*	-0.116	-0.005	-0.242**	-0.174*
EN	-0.073	-0.043	0.024	0.137	-0.044

* p < .05, ** p < .01, *** p < .001

(Note. N = 135. PA = Physical Abuse, EA = Emotional Abuse, SA = Sexual Abuse, PN = Physical Neglect, EN = Emotional Neglect, POA = Negative Affectivity, DETACH = Detachment, ANTAG = Antagonism, DISTING = Disinhibition, PSYCH = Psychoticism.)

Pearson's correlation analysis revealed several significant relationships between childhood trauma subtypes and personality traits. Emotional abuse (EA) showed strong positive correlations with all five personality traits, including psychoticism ($r = .461$, $p < .01$), suggesting that individuals with a history of emotional abuse are more likely to exhibit personality dysfunctions. Physical abuse (PA) was also positively correlated with detachment ($r = .341$, $p < .01$), antagonism ($r = .370$, $p < .01$), disinhibition ($r = .233$, $p < .05$), and psychoticism ($r = .314$, $p < .01$), indicating its broad influence on personality development.

H2 Higher Levels of Childhood Trauma Will Result in Higher Levels of Perceived Stress

Table 3 *Independent Samples T-Test*

		Statistic	df	p	Mean difference	SE difference	Effect Size
CTT	Student's t	15.5*	133	< .001	20.0	1.29	Cohen's d 2.68
	Welch's t	16.1	116	< .001	20.0	1.25	Cohen's d 2.72

Note. $H_0: \mu_1 = \mu_2$

* Levene's test is significant ($p < .05$), suggesting a violation of the assumption of equal variances

An independent sample t-test was conducted to compare the mean scores between two groups based on their levels of childhood trauma as assessed by the Childhood Trauma Questionnaire (CTQ). Group 1 (CTT 1), comprising individuals with higher levels of childhood trauma, scored significantly higher ($M = 70.1$) than Group 2 (CTT 2), which included individuals with lower or no reported trauma ($M = 50.0$). Levene's test indicated a violation of the assumption of equal variances ($p < .05$), so Welch's t-test results were interpreted. The difference between the groups was statistically significant, $t(116) = 16.1$, $p < .001$, with a mean difference of 20.0 and a standard error of 1.25. The effect size was exceptionally large (Cohen's $d = 2.72$), indicating that the difference between the high and low trauma groups is not only statistically significant but also highly meaningful in practical terms.

H3 Stress as a Mediator Between Childhood Trauma and Personality Traits

Table 4: *Mediation Analysis*

Mediation Estimates

Effect	Label	Estimate	SE	95% Confidence Interval		Z	p	% Mediation
				Lower	Upper			
Indirect	a × b	0.0959	0.0462	0.00529	0.182	2.08	0.038	44.7
Direct	c	0.1187	0.0971	-0.08026	0.334	1.22	0.221	55.3
Total	c + a × b	0.2146	0.0971	0.01181	0.414	2.21	0.027	100.0

Path Estimates

						95% Confidence Interval			
			Label	Estimate	SE	Lower	Upper	Z	p
CTT	→	STRESS	a	0.110	0.0475	0.0100	0.202	2.32	0.020
STRESS	→	PTOTAL	b	0.869	0.1928	0.3626	1.245	4.51	< .001
CTT	→	PTOTAL	c	0.119	0.0971	-0.0803	0.334	1.22	0.221

A mediation analysis was conducted to examine whether stress mediates the relationship between childhood trauma (CTT) and a personality outcome (PTOTAL). The indirect effect ($a \times b = 0.0959$, $p = .038$) was statistically significant, as the 95% confidence interval [0.00529, 0.182] did not include zero, suggesting that stress significantly mediates the relationship between childhood trauma and personality traits. The direct effect of CTT on PTOTAL ($c = 0.1187$, $p = .221$) was not significant, indicating that when stress is accounted for, the direct relationship is weakened. The total effect ($c + a \times b = 0.2146$, $p = .027$) was significant, showing that the overall association between childhood trauma and PTOTAL exists primarily through the mediator. Approximately 44.7% of the total effect was explained by the mediation through stress, highlighting stress as a meaningful intermediary mechanism in the link between childhood trauma and personality traits.

5. Discussion

The present study aimed to investigate the association between childhood trauma and the development of personality traits, to assess perceived stress in individuals with childhood trauma, and to explore whether stress mediates the relationship between childhood trauma and maladaptive personality development. Data was collected from a sample of 135 participants aged between 18 and 35 years, representative of the Indian context. While there is extensive global research on trauma, personality, and stress, very few studies have explored these variables together within a South Asian framework, particularly using a mediation model. Thus, the current study offers meaningful insights into the complex psychological mechanisms

that may operate uniquely in the Indian socio-cultural environment.

The first hypothesis proposed that there would be a significant relationship between different types of childhood trauma and the development of personality traits. This hypothesis was supported by the correlation results, which revealed significant associations between trauma subtypes and several maladaptive personality traits. Notably, emotional abuse (EA) emerged as the most influential form of trauma, showing strong positive correlations with all five personality domains measured: negative affectivity ($r = .277, p < .01$), detachment ($r = .471, p < .01$), antagonism ($r = .300, p < .01$), disinhibition ($r = .427, p < .01$), and psychoticism ($r = .461, p < .01$). This suggests that individuals with a history of emotional abuse are more likely to develop a range of maladaptive personality features, including emotional instability, social withdrawal, manipulativeness, impulsivity, and distorted thinking.

Similarly, physical abuse (PA) was significantly associated with detachment ($r = .341, p < .01$), antagonism ($r = .370, p < .01$), disinhibition ($r = .233, p < .05$), and psychoticism ($r = .314, p < .01$). These associations imply that exposure to physical harm during formative years can lead to emotional numbing, difficulties in interpersonal relationships, aggressive behaviors, and susceptibility to unconventional beliefs or perceptions. Sexual abuse (SA), on the other hand, showed a weaker but significant correlation only with antagonism ($r = .173, p < .05$), suggesting that the emotional residue of such experiences may manifest in oppositional or hostile attitudes toward others. Interestingly, physical neglect (PN) was negatively correlated with disinhibition ($r = -.242, p < .01$) and psychoticism ($r = -.174, p < .05$), indicating that the absence of care and stimulation may contribute to more withdrawn or inhibited traits. Emotional neglect (EN), however, did not demonstrate any significant correlations with the personality domains, possibly due to its subtler psychological effects or limitations in measurement.

These results emphasize the heterogeneous nature of childhood trauma and its differential impact on adult personality. They also suggest that not all forms of trauma are equally predictive of maladaptive traits. Importantly, these findings resonate with the work of Carvalho et al. (2021), who found that emotional abuse and neglect were more strongly related to harm avoidance and reduced self-directedness. In the Indian context, where emotional expression is often constrained and emotional abuse may be normalized within certain parenting practices, the pervasive impact of emotional abuse on adult personality merits greater attention in clinical and community interventions.

The second hypothesis posited that individuals with a history of childhood trauma would report higher levels of perceived stress. This was robustly supported by the results of the

independent samples t-test. Participants were divided into two groups based on their CTQ scores: Group 1 (CTT 1) included individuals with high trauma scores, and Group 2 (CTT 2) comprised individuals with low or no trauma. The analysis revealed a statistically significant difference between the groups, with CTT 1 showing a mean stress score of 70.1 (SD = 9.02) and CTT 2 showing a mean score of 50.0 (SD = 5.18). The Welch's t-test, which was used due to unequal variances, yielded a t-value of 16.1, degrees of freedom = 116, $p < .001$. The mean difference of 20 points, along with a standard error of 1.25, reflects not only statistical but also clinical significance.

The magnitude of this difference was further emphasized by an exceptionally large effect size (Cohen's $d = 2.72$), suggesting that individuals with higher childhood trauma experience markedly elevated levels of stress in their daily lives. This finding is consistent with earlier research, such as that by Kim et al. (2016), which found a strong association between early trauma, neuroticism, and stress reactivity. From a psychological perspective, early trauma may prime individuals to perceive threats more readily and respond to everyday stressors with heightened sensitivity, thereby increasing their baseline stress levels.

In the Indian context, this finding is particularly important, as individuals from trauma-exposed backgrounds may lack access to psychological resources, social support, or stress-management training. Furthermore, cultural stigmas surrounding trauma disclosure may contribute to internalized stress and unexpressed emotional turmoil. Hence, the elevated stress observed in this group is not only an individual issue but also a systemic concern requiring broader awareness and structural interventions.

The third hypothesis examined whether stress mediates the relationship between childhood trauma and the development of maladaptive personality traits. Mediation analysis revealed a significant indirect effect ($a \times b = 0.0959$, $SE = 0.0462$, 95% CI [0.00529, 0.182], $Z = 2.08$, $p = .038$), indicating that stress plays a mediating role in this relationship. This means that individuals with higher childhood trauma are more likely to experience elevated stress levels, which in turn contribute to the development of maladaptive personality traits. The total effect ($c + a \times b = 0.2146$, $SE = 0.0971$, $p = .027$) was significant, whereas the direct effect of childhood trauma on personality traits ($c = 0.1187$, $SE = 0.0971$, $p = .221$) was not. These findings suggest full mediation, where the influence of trauma on personality traits operates primarily through perceived stress.

To put it simply, stress acts as a psychological bridge that connects early adversity to long-term personality outcomes. The more stress an individual experiences as a result of childhood trauma, the more likely they are to develop traits characterized by emotional instability,

impulsivity, or social withdrawal. This pathway has been supported by Philippe et al. (2011), who demonstrated that ego-resiliency and stress responses mediate the effects of trauma on psychological symptoms. The current study expands on that by specifically identifying personality traits as the outcome and applying this model to an Indian sample.

From a cultural standpoint, this mediation finding is highly relevant. In Indian society, where emotional restraint and endurance are often valorized, individuals may internalize trauma without openly acknowledging or processing it. This internalization can lead to chronic stress, which over time becomes embedded in their personality structure. By identifying stress as a key mediator, the study provides a tangible target for intervention. Psychological therapies that focus on stress management, emotional regulation, and trauma processing can potentially disrupt this harmful trajectory and promote healthier personality development.

Moreover, this mediation model offers a nuanced understanding of why not all individuals exposed to childhood trauma develop maladaptive personality traits. It highlights stress as a modifiable factor that could either exacerbate or buffer the psychological consequences of trauma. This opens avenues for preventive mental health strategies, particularly in educational or community settings, where early identification and intervention could make a substantial difference.

6. Conclusion

This study aimed to explore the complex relationship between childhood trauma, stress, and the development of maladaptive personality traits within a non-clinical Indian sample aged 18 to 35 years. By investigating the mediating role of stress, the research sought to understand how early trauma might influence personality traits in adulthood, with particular focus on the Indian socio-cultural context. The study's primary objectives included examining the association between childhood trauma and personality traits, assessing perceived stress levels in individuals with a history of childhood trauma, and exploring the mediating role of stress in this relationship. The study hypothesized that childhood trauma would correlate with maladaptive personality traits, individuals with trauma histories would report higher stress levels, and stress would mediate the relationship between childhood trauma and personality traits.

The findings of this research supported the hypotheses. Emotional and physical abuse were strongly associated with maladaptive personality traits, including detachment, antagonism, disinhibition, and psychoticism. Moreover, individuals with a history of childhood trauma reported significantly higher perceived stress levels, and mediation analysis confirmed that

stress significantly mediated the relationship between trauma and the development of personality traits. These results underscore the role of stress as a key psychological mechanism linking early trauma to adult personality outcomes.

However, the study does have several limitations. Its cross-sectional design limits causal inferences, and the reliance on self-report instruments introduces potential biases, such as underreporting of trauma in a culturally sensitive context like India. The sample, while adequate, may not be fully representative of the broader Indian population, which limits the generalizability of the results. Additionally, the composite score used for personality traits may obscure the differential effects of stress on specific traits. The study also did not account for other potential mediators or moderators, such as resilience or social support, which future research could explore to provide a more comprehensive understanding of the trauma–personality relationship.

Based on the findings and limitations, several recommendations for future research and practice are made. Longitudinal studies are needed to better establish causal relationships, and future research should aim for more diverse and representative samples to enhance generalizability. Incorporating objective measures of stress and considering additional psychological factors such as coping styles and attachment could offer deeper insights into the trauma–personality interaction. On the practical side, interventions focusing on trauma-informed care and stress-reduction strategies are crucial for individuals with a history of childhood trauma. Public health campaigns should also raise awareness of the long-term effects of childhood trauma and promote early intervention to mitigate its impact.

In conclusion, this study contributes to the growing body of knowledge on the influence of childhood trauma on adult psychological functioning, emphasizing stress as a central mediating factor. The findings offer valuable implications for both clinical practice and future research, particularly in the Indian socio-cultural context, where such studies are still emerging. Addressing the interplay between trauma, stress, and personality traits could help improve interventions and preventive measures for individuals affected by early adverse experiences

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