

## Research Paper

## Mediating Role of Self-esteem and Trust in the Relationship Between Childhood Trauma and Romantic Attachment in Indian Adults

Shiromi Chaturvedi<sup>1</sup>, Bhavana Arya<sup>1\*</sup>*1. Department of Psychology, Faculty of Arts & Humanities, Manipal University Jaipur, Rajasthan, India.*

**Citation** Chaturvedi S, Arya B. Mediating Role of Self-esteem and Trust in the Relationship Between Childhood Trauma and Romantic Attachment in Indian Adults. *Journal of Research & Health*. 2023; 13(5):313-324. <http://dx.doi.org/10.32598/JRH.13.5.2296.1>

**doi**: <http://dx.doi.org/10.32598/JRH.13.5.2296.1>

**ABSTRACT**

**Background:** Childhood trauma encompasses neglect, abuse, abandonment, witnessing abuse, and having mentally ill and/or parent(s) engaged in substance abuse. Survivors of trauma are more likely to report insecure attachment styles. Thus, the current study aimed to investigate the indirect pathways underlying the relationship between childhood trauma and romantic attachment among adults in India.

**Methods:** This study used a correlational research design and a cross-sectional, survey method for data collection. The data were collected through an online survey in Tier 1 cities in India. A total of 397 responses were collected using purposive sampling, from which 104 respondents were selected after data cleaning. The research tools included the childhood trauma questionnaire–short-form, the experience in close relationship scale, Rosenberg’s self-esteem scale, and trust in close relationships scale. Descriptive and inferential analysis was done using SPSS software, version 25. Pearson correlation coefficient, regression analysis, and mediation analysis were done to analyze data.

**Results:** The results indicated a high level of trauma in the participants, and consequently, insecure romantic attachment styles, and also low levels of trust at a 0.05 significance level. Self-esteem had a significant negative correlation with romantic attachment ( $r=-0.225$ ,  $P=0.001$ ), but did not mediate the relationship between childhood trauma and romantic attachment. Trust also had a significant negative correlation with romantic attachment ( $r=-0.312$ ,  $P=0.001$ ) and also mediated the relationship between childhood trauma and romantic attachment ( $\beta=0.102$ ,  $P=0.041$ ).

**Conclusion:** This study provides evidence that childhood trauma affects romantic attachment, self-esteem, and trust. In light of these findings, therapists should adopt an integrated approach that addresses these interconnected variables through trauma-focused, attachment-focused, and evidence-based therapies to help trauma survivors. Since trust was identified as a mediating factor in the relationship between childhood trauma and romantic attachment, it provides a novel insight for therapists to prioritize interventions that focus on building trust.

**Keywords:** Childhood trauma, Romantic attachment, Self-esteem, Trust, Adult

**Article info:**

Received: 18 Apr 2023

Accepted: 28 May 2023

Publish: 01 Sep 2023

**\* Corresponding Author:**

Bhavana Arya, Associate Professor.

Address: Department of Psychology, Faculty of Arts &amp; Humanities, Manipal University Jaipur, Rajasthan, India.

Phone: +91 (70) 149 31833

E-mail: [bhavana.jaipur@gmail.com](mailto:bhavana.jaipur@gmail.com)

## 1. Introduction

**T**raumatic childhood experiences are defined as stressful events that are experienced by an individual as physically or emotionally harmful and/or threatening, that exhaust the strength of the person to cope with such events and affect their functioning as well as overall well-being [1]. Almost all forms of childhood adversities have been associated with an increased likelihood of developing a mental illness or disorder, especially anxiety disorders and/or a higher risk for post-traumatic stress disorder [2], a notable rise in attempts to take one's own life, high-risk sexual behavior, antisocial or criminal behavior, and obesity issues [3].

Survivors of abuse develop an inability to control or anticipate violence, thereby developing a generalized fear response, and this makes them inept at participating emotionally and meaningfully in interpersonal relationships as they feel unworthy and think that others see them disapprovingly [4]. Individuals who report any form of abuse or neglect in childhood have significantly lower mean self-esteem than their counterparts who did not experience such adversities [5]. A natural assumption that commonly occurs in survivors of trauma is that trauma could have been avoided and they blame themselves for their abuse, impacting their self-worth and self-perception [6]. These ideas lead to a sense of "inner badness" [7] and create additional harm by leading to the mistaken conclusion that because the trauma occurred, the survivor must have earned or caused it—justifying their self-blame [8].

Attachment is defined as a strong and long-lasting emotional bond between two people, in which one desires intimacy and feels better and at ease while being with the attachment figure [9, 10]. Childhood trauma has been reported to contribute to the survivor developing an insecure style of attachment along with an ineffective internal functioning model of attachment that lasts until adolescence and adulthood [11]. Bowlby also emphasized that attachment motivations influence how people think, feel, and behave in close relationships "from the cradle to the grave" [12]. Past studies have also indicated that insecure adult attachment is negatively associated with relationship satisfaction [13]. Thus, childhood adversity not only affects the adult attachment style of a person (i.e. attachment to their primary caregiver) but also his/her romantic attachment style (i.e. attachment with an intimate partner) [14].

In order to maintain a successful, satisfying relationship, there are factors besides attachment style that are also important. Evidence suggests that one of the factors that is beneficial in enhancing the quality of romantic relationships is high self-esteem [15]. Research has shown that a greater degree of own marital satisfaction as well as the marital satisfaction of the partner was predicted by one's high self-esteem [16-18]. In attachment theory, which conceptualizes trust as the expectations of reliability and confidence of partners in the future of their relationship, the value of trust has also been highlighted [19]. In the book, *trust after trauma*, the role of trust in recovering from trauma and establishing secure bonds with significant others in our lives was emphasized [20]. Being in a gratifying romantic relationship is an important factor in an individual's psychological well-being, overall life satisfaction, as well as physical health [21]. Therefore, recognizing factors and mechanisms that affect romantic attachment is pertinent. Thus, the current study aimed to study factors affecting romantic attachment, as a necessary first step in order to understand how they affect relationships in adulthood. There are studies on childhood trauma with adult attachment and romantic attachment styles, but mostly limited to American and European countries. Thus, the current research explored childhood trauma and romantic attachment in the Indian context. Such research will lay the foundation for the development and implementation of trauma-informed policies and practices across various sectors in India, including mental health, education, healthcare, and social services. Research has shown that divorce rates in India have been on the rise in the past decade [22], which makes this research important in understanding the need to increase access to mental health services, particularly those specialized in trauma-focused interventions, and facilitate the initiation of community-based awareness campaigns and educational programs aimed at reducing stigma, increasing the understanding of trauma, and promoting healthy relationships in the Indian context. Further, it will help implement policies that protect and support survivors of trauma, particularly in the context of romantic relationships and cases where divorce occurs. This can include policies addressing domestic violence, sexual assault, and relationship abuse in order to ensure that legal frameworks and support services are in place to assist survivors in seeking justice, safety, and healing. Additionally, there is a need to understand underlying mechanisms and factors influencing these direct relationships between childhood trauma and romantic attachment in the Indian population. Therefore, the current research also aimed to identify if the relationship between childhood trauma and romantic attachment

is mediated by self-esteem and trust. This will make it easier for mental health professionals to concentrate on stressing a safe, supportive, and trusting therapy environment, offering dependable and consistent assistance, and supporting people in developing healthy boundaries and communication skills in order to improve clients' trust in the face of trauma. Through methods, like cognitive restructuring, self-compassion exercises, and fostering self-care practices, therapists can also focus on boosting the self-esteem of trauma survivors. Keeping the above rationale and implications in mind, the current study tested the following hypotheses: 1) There is no relationship between childhood trauma and insecure romantic attachment styles; 2) There is no relationship between childhood trauma and self-esteem; 3) There is no relationship between self-esteem and secure romantic attachment; 4) There is no relationship between childhood trauma and trust; 5) There is no relationship between trust and secure romantic attachment; 6) Self-esteem does not mediate the relationship between childhood trauma and romantic attachment; and 7) Trust does not mediate the relationship between childhood trauma and romantic attachment. The hypotheses are conceptually shown in [Figure 1](#).

## 2. Methods

### Study design and sample

The present study used a correlational research design. Purposive sampling was used for data collection. The inclusion criteria included the participation of young adults, 18-35 years of age, being unmarried, currently being in a romantic relationship for six months or longer, belonging to Tier 1 cities in India with an understanding of English, and having access to the Internet. The exclusion criteria were those with any psychiatric diagnosis

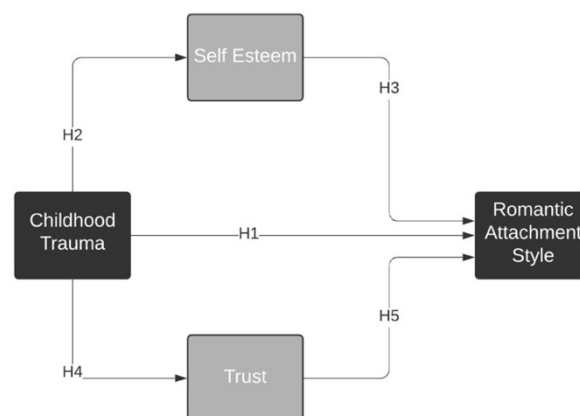
and/or a history of substance abuse. The sample size was determined by the “rules of thumb”. Although it is standard practice to estimate a sample size large enough to predict the minimum impact size, in some circumstances, a minimum effect size may not be discernible. As a result, while estimating sample sizes, researchers frequently rely on “rules of thumb”. For instance, one of the accepted guidelines specifies ten observations per variable [23]. Through the survey, a total of 397 responses (F=217, M=117, non-binary=3) were collected. A total of 104 responses were retained for data analysis of the study. Out of the 293 responses not selected, 170 did not meet the inclusion criteria, while the remaining 123 had missing/invalid data.

### Study measures

An online questionnaire was made available on the Internet to collect data, containing four Likert-type questionnaires, as well as sociodemographic questions (age, sex, and occupation) in addition to the screening tool. In the current study, four types of questionnaires were applied:

#### Childhood trauma questionnaire short form (CTQ-SF)

Childhood trauma was measured using the CTQ-SF (short-form CTQ-SF), which is a 28-item self-report inventory, using a 5-point Likert scale, specifically designed to measure five types of childhood adversity developed by Bernstein and Fink in 1997. It includes questions, like “I felt that I was valued by my family” and “people in my family were mean or hurtful to each other” to test emotional abuse and emotional neglect respectively. The test was available for use in the college library. The CTQ-SF has demonstrated good internal consistency



**Figure 1.** The conceptual model

and the Cronbach's  $\alpha$  coefficients for the CTQ-SF subscales typically range from acceptable to excellent, with values ranging from 0.70 to 0.95 for different subscales and it demonstrated satisfactory concurrent validity [24].

#### Experience in close relationship scale (ECR-S)

The experience in close relationship scale (ECR-S) is a 12-item self-report adult attachment style questionnaire using a 7-point Likert type scale, which focuses on one's experience in close relationships. It has items, like "I often worry that my partner will not want to stay with me" from the anxiety sub-scale and "I prefer not to show my partner how I feel deep down" from the avoidance sub-scale. ECR-S is the shorter version of the 36-item experiences in close relationship scale (ECR) developed by Brennan et al. in 1998. The test has been made available for free by the authors for research purposes. The scale has good internal consistency with Cronbach's  $\alpha$  coefficients for the anxiety subscale typically ranging from 0.80 to 0.90, while those for the avoidance subscale range from 0.70 to 0.80, and also has good construct and convergent validity [25].

#### Rosenberg's self-esteem scale (RES)

Self-esteem was assessed using Rosenberg's self-esteem scale (RES), a 10-item, one-dimensional scale that assesses both positive statements, like "I feel that I am a person of worth, at least on an equal plane with others" and negative sentiments about oneself, such as "I certainly feel useless at times" scored on a 4-point Likert scale developed by Rosenberg in 1965. The test is available in the public domain without charge and can be used for academic reasons. The RES has consistently shown strong internal consistency across multiple studies. The Cronbach's  $\alpha$  coefficients for the scale typically fall within the range of 0.80 to 0.90, indicating a high level of reliability. It also has good predictive validity [26].

#### Trust in close relationships (TCR)

Trust was measured through the trust in close relationships (TCR) questionnaire, a 17-item measure, based on a 7-point Likert-type scale, which assesses levels of trust in one's romantic partner, developed by Rempel et al. in 1985 with statements, such as "I completely trust my partner." and "my partner would never betray my confidence." The test is available in the public domain to be used for research purposes. Its internal consistency is high with Cronbach's  $\alpha$  coefficients typically ranging from 0.80 to 0.95. It also demonstrates good construct and convergent validity across studies [27].

#### Data collection

Invitations for data collection along with screening and informed consent forms were shared with prospective participants through social networks, which highlighted the purpose of the study, possible risks, and rewards, assurance of confidentiality and anonymity, as well as voluntary participation and withdrawal, to recruit participants. Those who consented to participate were then invited to fill in a socio-demographic form through a [Google Form](#) link shared with them. Further, respondents who met the inclusion criteria in the socio-demographic form were then selected for the current study and proceeded to respond to the CTQ-SF, ECR-S, RES, and TCR questionnaires. No personal details (name, contact number, email address, etc.), which could be used to identify the participant, were obtained from any participant as part of the online survey ensuring confidentiality. Moreover, only the two authors had access to the raw data, which were all encoded before further scoring and analysis to maintain anonymity.

#### Data analysis

The sample size in the current study was not suitable for structural equation modeling analysis as complex models tested with small sample sizes do not yield a good model fit [28]. SPSS software, version 25 was used to conduct data analysis. Outliers were identified and removed from the data set before further analyses. The data set was also checked for normalcy through skewness and kurtosis. Mean $\pm$ SD, and correlation coefficient were calculated for all the variables. Mediation analyses were done according to the procedure detailed in a study by Baron and Kenny [29]. According to their study, the following steps must be followed: Firstly, there must be a significant correlation between the predictor variable and the outcome variable. Secondly, the predictor variable must be significantly associated with the mediating variable. Thirdly, the mediating variable must predict the outcome variable after controlling for the predictor variable. Lastly, the correlation between the predictor and the outcome variable must become insignificant or reduced when the mediating variable is controlled for. For the current study, childhood trauma was the predictor variable, self-esteem, and trust were the mediating variables, and romantic attachment was the outcome variable. The Sobel test was also used to check the significance of the mediating effect.

### 3. Results

The current study included 104 adults who were never married and were currently in a romantic relationship for six months or longer. These participants understood English and had access to the Internet. The mean age of the participants was  $21.4 \pm 1.97$  years (Table 1).

Table 2 depicts the Means $\pm$ SD of the participants on the different variables of the study. The kurtosis and skewness coefficients for each scale are also shown in Table 2, which shows no evidence of a data normality breach.

Table 3 shows the correlation and Cronbach  $\alpha$  values for all the variables. All the scales used had Cronbach  $\alpha$  values greater than 0.7 and hence were reliable. The significance level for hypothesis testing was kept at 0.05. The matrix correlation results depicted in Table 3 show that childhood trauma had a negative relationship with self-esteem, but this relationship was not significant ( $r = -0.072$ ,  $P = 0.083$ ), which means that as childhood trauma severity increases, an individual's self-esteem is influenced nega-

tively. Additionally, childhood trauma had a significant and negative relationship with trust ( $r = -0.175$ ,  $P = 0.001$ ). As the childhood traumas faced by an individual increase, their ability to trust people in close relationships decreases significantly. Further, childhood trauma has a significant and positive relationship with romantic attachment ( $r = 0.487$ ,  $P \leq 0.001$ ). This means that as the trauma experienced by a person in his/her childhood increases, he/she experiences more insecurity in their romantic attachment in adulthood. Self-esteem had a negative and significant relationship with romantic attachment ( $r = -0.225$ ,  $P = 0.001$ ). Thus, as the self-esteem of an individual increases, the insecurity in their romantic attachment decreases. Additionally, self-esteem has a positive and significant relationship with trust ( $r = 0.221$ ,  $P = 0.005$ ). This elucidates that as the self-esteem of an individual increases, his/her ability to trust others also increases. Lastly, the trust had a negative significant relationship with insecure romantic attachment ( $r = -0.312$ ,  $P = 0.001$ ). This finding highlights that as the ability of a person to trust others decreases, their tendency to experience insecurity in his/her romantic attachment increases (Table 3).

**Table 1.** The distribution of the respondents in terms of basic socio-demographic characteristics

Socio-demographic Characteristics		No. (%)
Gender	Male	37(35.58)
	Female	65(62.5)
	Non-binary	2(1.92)
Occupational status	Student	70(67.32)
	Employed	30(28.84)
	Others	4(3.84)
Age (y)	18-26	72(69.24)
	27-35	32(30.76)



**Table 2.** Mean $\pm$ SD and normality test of variables

Variables	Mean $\pm$ SD	Kurtosis	Skewness
Childhood trauma	41.48 $\pm$ 15.17	1.628	1.292
Self-esteem	16.44 $\pm$ 1.75	2.032	1.314
Trust	20.53 $\pm$ 8.23	1.401	1.017
Romantic attachment	36.79 $\pm$ 10.84	1.729	1.425





**Table 3.** Relationship between childhood trauma, self-esteem, trust, and romantic attachment

Variables	Cronbach $\alpha$	1	2	3	4
Childhood trauma	0.79	-	-0.072	-0.175**	0.487**
Self-esteem	0.82	-	-	0.221**	-0.225**
Trust	0.71	-	-	-	-0.312**
Romantic attachment	0.73	-	-	-	-

\*\*Significant at 0.01.



**Mediation analysis**

We hypothesized that trust and self-esteem mediate the relationship between childhood trauma and insecure romantic attachment. But mediation analysis was not performed on self-esteem as it did not fulfill the criterion laid down by the referred study [29]. All the prerequisites of the mediation were checked. A significant relationship was found between the independent variable and the dependent variables. Additionally, the relationship between childhood trauma and trust and trust and romantic attachment style was found to be significant. A mediation model was run with trust as the mediator and the following steps were followed:

Step 1: Insecure romantic attachment (outcome variable) is regressed upon childhood trauma (predictor variable) (path c in Figure 2).

Step 2: Childhood trauma (predictor variable) is correlated with trust (mediating variable) (path a in Figure 2).

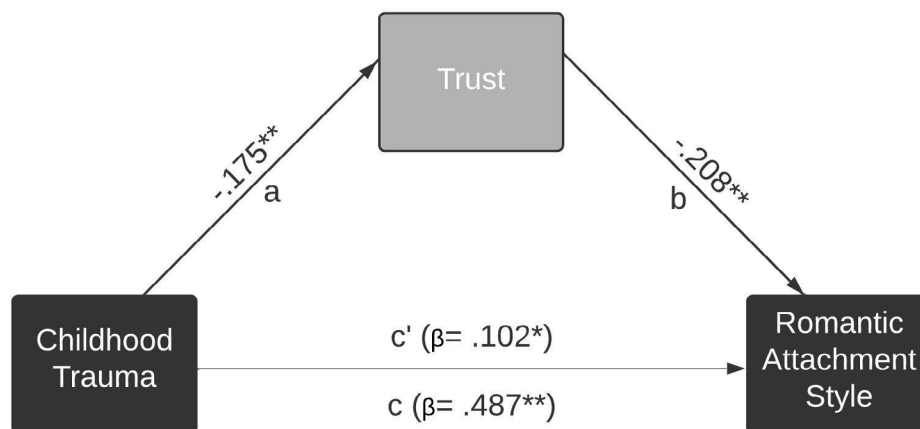
Step 3: Insecure romantic attachment (outcome variable) is regressed upon trust (mediating variable) and childhood trauma (criterion variable) (path b in Figure 2).

Step 4: The relation between childhood trauma (predictor variable) and insecure romantic attachment (outcome variable) after adjustment for trust (mediating variable) is established (path c' in Figure 2).

The results of the mediational model revealed that trust mediated the relationship between childhood trauma and romantic attachment. Figure 2 shows the mediating effect of trust. Path c shows the direct relationship between childhood trauma and romantic attachment ( $\beta=0.487$ ,  $P\leq 0.001$ ). This relationship is considerably weakened as shown by path c' ( $\beta=0.102$ ,  $P=0.041$ ), indicating mediation. When trust is controlled, the strength of the relationship between childhood trauma and romantic attachment is reduced, indicating that childhood trauma predicts romantic attachment via trust.

**4. Discussion**

The present study aimed at studying the relationship between childhood trauma and romantic attachment in Indian adults and identify if the relationship between childhood trauma and romantic attachment is mediated by self-esteem and trust. The findings of this study high-



**Figure 2.** Trust as a mediator between childhood trauma and romantic attachment



light significant relationships among childhood trauma, romantic attachment, self-esteem, and trust in Indian adults. Consistent with existing theoretical frameworks, the study found high levels of trauma to be associated with insecure romantic attachment styles and low levels of trust. Additionally, the study revealed a negative correlation between self-esteem and romantic attachment, indicating that individuals with lower self-esteem are more likely to exhibit insecure attachment styles. Notably, trust emerged as a significant mediator in the relationship between childhood trauma and romantic attachment, suggesting that trust plays a crucial role in shaping attachment patterns among individuals who have experienced childhood trauma. These findings align with previous theoretical and empirical research on the complex interplay between childhood trauma, attachment styles, self-esteem, and trust in intimate relationships.

According to studies on childhood abuse and neglect, researchers have identified traumatic childhood to disrupt normal attachment in children, which affects their romantic attachment in adolescence and adulthood as well [30, 32], especially seen as an extreme lack of trust [33] and low levels of self-esteem in different populations [34]. The results of the current research study add to the existing literature by highlighting the direct and indirect impact of childhood trauma. Hypothesis one was rejected and a positive relationship between childhood trauma and insecure romantic attachment styles was found. Hypothesis two was accepted as a significant negative relationship between childhood trauma and self-esteem was not found in the current study. Hypothesis three was rejected as a positive relationship between self-esteem and secure romantic attachment was established through the findings. Hypothesis four was also rejected because there was a negative relationship between childhood trauma and trust. Hypothesis five was rejected as a positive relationship was observed between trust and secure romantic attachment. Hypothesis six was accepted as even though self-esteem had a significant negative correlation with romantic attachment, it was found that it does not mediate the relationship. Finally, Hypothesis seven was rejected as trust was found to mediate the relationship between childhood trauma and romantic attachment.

The current study supported the findings of past literature indicating that childhood trauma has a significant positive relationship with insecurity in romantic attachment. Literature also states that inadequately parented children who face trauma in childhood build a negative working model, which forms the foundation of an insecure attachment style, and leads to greater interpersonal problems as adolescents and young adults [35] and em-

ploys more insults and physical aggression in their romantic relationships than non-abused individuals [36, 37]. The significant association between childhood trauma and insecurity in romantic attachment by the current research has important implications for various domains. Understanding this link can guide interventions and therapeutic approaches aimed at addressing attachment-related difficulties in individuals with a history of childhood trauma. Specifically, for Indian adults, culturally sensitive interventions should be developed to account for unique cultural contexts and beliefs regarding attachment and trauma. By providing targeted support and interventions, professionals can help individuals navigate the effects of childhood trauma on their romantic relationships, foster secure attachments, and promote healing and well-being in the Indian adult population.

The current study also found that childhood trauma has a non-significant, negative relationship with self-esteem in adolescents. International studies using the same scales have supported the negative direction of this relationship and additionally, have found this association to be significant. Researchers in Turkey [38] and Germany [39] found that an increase in experiencing childhood trauma results in decreased self-esteem in the student population. Another research in this field [40], provides empirical evidence that childhood trauma, including experiences, such as sexual abuse, has a negative relationship with self-esteem in adulthood. Thus, individuals who have undergone childhood trauma often face challenges with self-esteem, affecting diverse domains, such as interpersonal relationships, academic functioning, and overall psychological well-being [41]. Recognizing this correlation is imperative for developing targeted interventions and support systems aimed at fostering resilience, healing, and the cultivation of positive self-esteem in individuals with a history of childhood trauma.

Childhood trauma was also found to have a significant and negative relationship with trust. This finding supports the study that found that early experiences of trauma or violations, at the hands of family members, may interfere with the development of social abilities, particularly the capacity to make good trust judgments [42]. This lack of trust affects the insecure adolescent's ability to explore and experience new things, which is especially important in romantic and intimate relationships [43]. Thus, it can be understood how repeated experiences of violence erode children's trust in others [44], leading to difficulties in forming trusting relationships later in life. The current research provides empirical support for the negative relationship between childhood trauma and trust in Indian adults. All studies have

underscored the adverse impact of childhood trauma on trust development, highlighting the importance of addressing trust-related issues in therapeutic interventions for individuals who have experienced childhood trauma.

We also found a significant negative relationship between self-esteem and insecurity in romantic attachment. This is in line with previous studies that highlight that a person with low self-esteem has increased insecurity in his/her romantic attachment, whereas a person with high self-esteem exudes more security in his/her romantic attachment [45-47]. Another important finding was the significant positive relationship between self-esteem and trust, which elucidated that if an individual exhibits high self-esteem then he/she also finds it easier to trust others in close relationships. This supports the previous findings that a person with high self-esteem is more likely to trust others and be trusted by them [48, 49]. Higher self-esteem increases people's willingness to trust others, because the intensity of disappointment, if this trust is violated, can be controlled by a person with high self-esteem [50]. Trust was also found to have a negative relationship with attachment insecurity. This establishes previous findings that in order to make meaningful connections with others and relate to partners in an open and honest manner, which are hallmarks of attachment security, it is important for an individual to be able to trust them.

Self-esteem did not show a significant correlation with childhood trauma and could thus not be tested as a mediator of the relationship between childhood trauma and romantic attachment, which is in line with a previous study that investigated the mediating role of self-esteem between traumatic experiences and depressive symptoms and found that while traumatic events predict depressive symptoms, this relationship is not mediated by self-esteem [51]. It is not ruled out that a more detailed analysis of different types of traumatic experiences might have been more useful than the lifetime trauma incidence score employed, as suggested in a study on trauma and post-traumatic stress disorder in the community [52].

Notably, trust was found to mediate the relationship between childhood trauma and romantic attachment in adolescence and adulthood. This means that when childhood trauma occurs, the mechanisms of trust are impaired, which in turn affects the survivor's attachment styles [53]. Previous research has also shown that in romantic relationships, secure attachment patterns are linked to higher levels of trust, whereas anxiously attached people have lower levels of trust [55-56]. The

conceptual model, which was proposed is thus accepted in light of the findings of the current study, according to which the relationship between childhood trauma and attachment insecurity is mediated by trust. Individuals who have experienced childhood trauma may struggle with developing trust in relationships, leading to difficulties in forming secure and meaningful connections with others [57]. This can affect their social support networks, hinder their ability to seek help, and impede their overall well-being [58]. Therefore, if trauma occurs in childhood, but the survivor is unable to enhance their ability to trust others (through positive correctional experiences, romantic support, seeking trauma-informed therapy, among others), they will not develop secure romantic attachment.

This indirect effect established through mediation of trust on the relationship between childhood trauma and romantic attachment is an important finding for practice and policy. Mental health practitioners and therapists can incorporate evidence-based techniques, such as eye movement desensitization and reprocessing (EMDR) or trauma-focused cognitive behavioural therapy (TF-CBT) [59] to address trust-related issues and promote secure attachment in survivors of trauma. Further, offering training programs for relationship skills that focus on building trust, effective communication, and emotional regulation can be beneficial. These programs can provide survivors with practical tools to develop healthier relationship patterns and enhance their ability to form secure romantic attachments. Incorporating mindfulness techniques into therapy or educational programs can also help survivors develop a greater sense of trust and cultivate secure romantic attachments [60]. The implications of these evidence-based interventions include promoting healing from childhood trauma, fostering secure romantic attachments, improving overall well-being, and supporting survivors in developing healthy and fulfilling relationships based on their ability to trust.

### Limitations

It is important to discuss certain limitations of the study. Firstly, the study did not carry out a more detailed analysis of different types of traumatic experiences. Furthermore, the length of time since the traumatic event, the age of the victim at the time of the trauma, and the repeated or nonrepetitive character of the traumatic experience can all influence posttraumatic outcomes – none of which were investigated in this study. This research may have benefited from a more specific definition of self-esteem and consideration of periodic changes in state self-esteem compared to global trait self-esteem [61],



thereby selecting a measure to assess state self-esteem or fragile self-esteem as opposed to global self-esteem. Additionally, this research did not conduct a longitudinal study or use an intervention model (e.g. intervention by counselors or therapists) that could be tested. Therefore, it could not measure the predicted changes in individuals in terms of their trust levels, over a long period of time and its subsequent impact on their romantic attachment styles, relationship satisfaction, and overall well-being. Thus, it is suggested that future research with a detailed analysis of different types of trauma may be more useful in determining the function of certain traumatic event types and their specific influence on romantic attachment, self-esteem, and trust. Additionally, researchers may conduct longitudinal studies to further explore the temporal relationships between childhood trauma, trust, self-esteem, and romantic attachment. Since trust has been identified as a mediator, further research can focus on conducting interventional studies to assess the effectiveness of therapeutic interventions aimed at enhancing trust-building and fostering secure romantic attachment. This research can contribute to the development of evidence-based practices that mental health professionals can utilize in individual, couple, and group therapy settings to enhance attachment security and improve relationship outcomes among trauma survivors.

## 5. Conclusion

To conclude, the current study has made valuable contributions to understanding the associations between childhood trauma and romantic attachment while exploring the role of self-esteem and trust. Trust was identified as a mediator of the relationship between childhood trauma and romantic attachment therefore becoming a vital psychological variable for mental health professionals to focus on in individual, couple, and group therapy, in order to enhance attachment security and thus relationship satisfaction and overall wellbeing, especially for high-risk individuals, such as trauma survivors. The results also highlight the need to identify other psychological variables mediating the direct relationship between childhood trauma and romantic attachment.

## Ethical Considerations

### Compliance with ethical guidelines

The procedures of the research were in accordance with the Helsinki guidelines for ethical research and the preparation of the manuscript followed International Standards for Authors of the Committee on Publication Ethics. The study was approved by the Institutional Re-

view Committee for research degrees on September 15, 2020 (Code: MUJ/PhD/2020-08/71).

### Funding

The authors declare that this research study received no specific grant or funding from any funding agency in the public, commercial, or not-for-profit sectors.

### Authors' contributions

Both authors contributed equally to the preparation and submission of this article.

### Conflict of interest

The authors declared no conflict of interest.

### Acknowledgments

The authors would like to acknowledge the contribution of Deoraj Chaturvedi and Shubham Choudhary for their help and support.

## References

- [1] SAMHSA's Trauma and Justice Strategic Initiative. SAMHSA's concept of trauma and guidance for a trauma-informed approach. HHS Publication: Rockville; 2014. [\[Link\]](#)
- [2] Green JG, McLaughlin KA, Berglund PA, Gruber MJ, Sampson NA, Zaslavsky AM, et al. Childhood adversities and adult psychiatric disorders in the National Comorbidity Survey Replication I: Associations with first onset of DSM-IV disorders. *Archives of General Psychiatry*. 2010; 67(2):113-23. [\[DOI:10.1001/archgenpsychiatry.2009.186\]](#) [\[PMID\]](#) [\[PMCID\]](#)
- [3] Gilbert R, Widom CS, Browne K, Fergusson D, Webb E, Janson S. Burden and consequences of child maltreatment in high-income countries. *The Lancet*. 2009; 373(9657):68-81. [\[DOI:10.1016/S0140-6736\(08\)61706-7\]](#) [\[PMID\]](#)
- [4] Schumm JA, Briggs-Phillips M, Hobfoll SE. Cumulative interpersonal traumas and social support as risk and resiliency factors in predicting PTSD and depression among inner-city women. *Journal of Traumatic Stress*. 2006; 19(6):825-36. [\[DOI:10.1002/jts.20159\]](#) [\[PMID\]](#)
- [5] Reiland S, Lauterbach D. Effects of trauma and religiosity on self-esteem. *Psychological Reports*. 2008; 102(3):779-90. [\[DOI:10.2466/pr0.102.3.779-790\]](#) [\[PMID\]](#)
- [6] Finkelhor D, Browne A. The traumatic impact of child sexual abuse: A conceptualization. *The American Journal of Orthopsychiatry*. 1985; 55(4):530-41. [\[DOI:10.1111/j.1939-0025.1985.tb02703.x\]](#) [\[PMID\]](#)

- [7] Harter S, Leahy RL. The construction of the self: A developmental perspective. *Journal of Cognitive Psychotherapy*. 2001; 15(4). [DOI:10.1891/0889-8391.15.4.383]
- [8] Harvey SM, Dorahy MJ, Vertue FM, Duthie S. Childhood psychological maltreatment and perception of self, others, and relationships: A phenomenological exploration. *Journal of Aggression, Maltreatment & Trauma*. 2012; 21(3):237-55. [DOI:10.1080/10926771.2012.665428]
- [9] Schaffer HR, Emerson PE. The development of social attachments in infancy. *Monographs of The Society for Research in Child Development*. 1964; 29:1-77. [DOI:10.2307/1165727] [PMID]
- [10] Seay B, Harlow HF. Maternal separation in the rhesus monkey. *The Journal of Nervous and Mental Disease*. 1965; 140(6):434-41. [DOI:10.1097/00005053-196506000-00006] [PMID]
- [11] Bowlby J. Childhood mourning and its implications for psychiatry. *The American Journal of Psychiatry*. 1961; 118:481-98. [DOI:10.1176/ajp.118.6.481] [PMID]
- [12] Bowlby J. Attachment: Attachment and loss. New York: Basic Books; 1969. [Link]
- [13] Candel OS, Turliuc MN. Insecure attachment and relationship satisfaction: A meta-analysis of actor and partner associations. *Personality and Individual Differences*. 2019; 147:190-9. [DOI:10.1016/j.paid.2019.04.037]
- [14] Huang YL, Fonagy P, Feigenbaum J, Montague PR, Nolte T, London Personality and Mood Disorder Research Consortium. Multidirectional pathways between attachment, mentalizing, and posttraumatic stress symptomatology in the context of childhood trauma. *Psychopathology*. 2020; 53(1):48-58. [DOI:10.1159/000506406] [PMID] [PMCID]
- [15] Erol RY, Orth U. Self-esteem and the quality of romantic relationships. *European Psychologist*. 2017; 21(4):277-91. [DOI:10.1027/1016-9040/a000259]
- [16] Chen LH, Li TS. Role balance and marital satisfaction in Taiwanese couples: An actor-partner interdependence model approach. *Social Indicators Research*. 2012; 107:187-99. [Link]
- [17] Hassani F, Koraei A, Yaghoobi R, Zarea K. An evaluating of the relationship between body image, body satisfaction, depression, marital quality, and self-esteem in patients with psoriasis. *Psychology, Health & Medicine*. 2021; 26(4):467-77. [DOI:10.1080/13548506.2020.1766093] [PMID]
- [18] Dye H. The impact and long-term effects of childhood trauma. *Journal of Human Behavior in the Social Environment*. 2018; 28(3):381-92. [DOI:10.1080/10911359.2018.1435328]
- [19] Campbell L, Stanton SC. Adult attachment and trust in romantic relationships. *Current Opinion in Psychology*. 2019; 25:148-51. [DOI:10.1016/j.copsy.2018.08.004] [PMID]
- [20] Matsakis A. Trust after trauma: A guide to relationships for survivors and those who love them. California: New Harbinger Publications, Inc.; 1998. [Link]
- [21] Proulx CM, Helms HM, Buehler C. Marital quality and personal well-being: A meta-analysis. *Journal of Marriage and Family*. 2007; 69(3):576-93. [DOI:10.1111/j.1741-3737.2007.00393.x]
- [22] Vincent P, D'Mello L. Changing trends of divorce in India: Issues & concerns. *International Journal of Management, Technology, and Social*. 2018; 3(2):151-7. [DOI:10.47992/IJMTS.2581.6012.0053]
- [23] Riley RD, Ensor J, Snell KIE, Harrell FE Jr, Martin GP, Reitsma JB, et al. Calculating the sample size required for developing a clinical prediction model. *BMJ*. 2020; 368:m441. [DOI:10.1136/bmj.m441] [PMID]
- [24] Aloba O, Opakunle T, Ogunrinu O. Childhood Trauma Questionnaire-Short Form (CTQ-SF): Dimensionality, validity, reliability and gender invariance among Nigerian adolescents. *Child Abuse & Neglect*. 2020; 101:104357. [DOI:10.1016/j.chiabu.2020.104357] [PMID]
- [25] Wei M, Russell DW, Mallinckrodt B, Vogel DL. The experiences in Close Relationship Scale (ECR)-Short Form: Reliability, validity, and factor structure. *Journal of Personality Assessment*. 2007; 88(2):187-204. [DOI:10.1080/00223890701268041] [PMID]
- [26] Schmitt DP, Allik J. Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology*. 2005; 89(4):623. [DOI:10.1037/0022-3514.89.4.623] [PMID]
- [27] Rempel JK, Holmes JG, Zanna MP. Trust in close relationships. *Journal of Personality and Social Psychology*. 1985; 49(1):95-112. [DOI:10.1037/0022-3514.49.1.95]
- [28] Iacobucci D. Structural equations modeling: Fit indices, sample size, and advanced topics. *Journal of Consumer Psychology*. 2010; 20(1):90-8. [DOI:10.1016/j.jcps.2009.09.003]
- [29] Baron RM, Kenny DA. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*. 1986; 51(6):1173-82. [DOI:10.1037/0022-3514.51.6.1173] [PMID]
- [30] Prather W, Golden JA. A behavioral perspective of childhood trauma and attachment issues: Toward alternative treatment approaches for children with a history of abuse. *International Journal of Behavioral Consultation and Therapy*. 2009; 5(1):56-74. [DOI:10.1037/h0100872]
- [31] Hazan C, Shaver P. Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*. 1987; 52(3):511-24. [DOI:10.1037/0022-3514.52.3.511] [PMID]
- [32] Chris Fraley R. Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*. 2002; 6(2):123-51. [DOI:10.1207/S15327957PSPR0602\_03]
- [33] Schofield G, Beek M. Risk and resilience in long-term foster-care. *The British Journal of Social Work*. 2005; 35(8):1283-301. [DOI:10.1093/bjsw/bch213]
- [34] Howe D. Patterns of adoption: Nature, nurture and psychosocial development. Hoboken: Wiley; 1997. [Link]
- [35] Swanson B, Mallinckrodt B. Family environment, love withdrawal, childhood sexual abuse, and adult attachment. *Psychotherapy Research*. 2001; 11(4):455-472. [DOI:10.1080/713664062]

- [36] Styron T, Janoff-Bulman R. Childhood attachment and abuse: Long-term effects on adult attachment, depression, and conflict resolution. *Child Abuse & Neglect*. 1997; 21(10):1015-23. [DOI:10.1016/S0145-2134(97)00062-8] [PMID]
- [37] Chaturvedi S. Traces of the past: Adverse childhood experiences, resilience and romantic attachments in unmarried young adults [Msc dissertation]. Mumbai: Tata Institute of Social Sciences; 2018. [Link]
- [38] Baydemir C, Acikgoz A, Derince D, Kaya Y, Ongun E, Kok H. The effect of childhood trauma life on self-esteem in school of health students in a province of Western Turkey. *Life Science Journal*. 2014; 11(11):749-57. [Link]
- [39] Durmuşoğlu N, Doğru SSY. Investigation of the effects of childhood experiences on the individual in close relationships in adolescence. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*. 2006; 15:237-46. [Link]
- [40] Banyard VL, Williams LM, Siegel JA. Childhood sexual abuse: A gender perspective on context and consequences. *Child Maltreatment*. 2004; 9(3):223-38. [DOI:10.1177/107755904266914] [PMID]
- [41] Paolucci EO, Genius ML, Violato C. A meta-analysis of the published research on the effects of child sexual abuse. *The Journal of Psychology*. 2001; 135(1):17-36. [DOI:10.1080/00223980109603677] [PMID]
- [42] Gobin RL, Freyd JJ. The impact of betrayal trauma on the tendency to trust. *Psychological Trauma: Theory, Research, Practice, and Policy*. 2014; 6(5):505-11. [DOI:10.1037/a0032452]
- [43] Yaghoubipoor M, Seyed Bagheri SH, Khoshab H. The mediating role of difficulties in emotion regulation on attachment styles of adolescents with conduct disorders. *International Journal of Adolescent Medicine and Health*. 2019; 33(5). [DOI:10.1515/ijamh-2018-0260] [PMID]
- [44] Margolin G, Gordis EB. The effects of family and community violence on children. *Annual Review of Psychology*. 2000; 51:445-79. [DOI:10.1146/annurev.psych.51.1.445] [PMID]
- [45] Collins NL, Read SJ. Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*. 1990; 58(4):644-63. [DOI:10.1037/0022-3514.58.4.644] [PMID]
- [46] Foster JD, Kernis MH, Goldman BM. Linking adult attachment to self-esteem stability. *Self and Identity*. 2007; 6(1):64-73. [DOI:10.1080/15298860600832139]
- [47] Suzuki H, Tomoda A. Roles of attachment and self-esteem: Impact of early life stress on depressive symptoms among Japanese institutionalized children. *BMC Psychiatry*. 2015; 15:8. [DOI:10.1186/s12888-015-0385-1] [PMID] [PMCID]
- [48] Frost T, Stimpson DV, Maughan MR. Some correlates of trust. *The Journal of Psychology*. 1978; 99(1st Half):103-8. [DOI:10.1080/00223980.1978.9921447] [PMID]
- [49] McWhirter BT. Loneliness, learned resourcefulness, and self-esteem in college students. *Journal of Counseling & Development*. 1997; 75(6):460-9. [DOI:10.1002/j.1556-6676.1997.tb02362.x]
- [50] Weining AN, Smith EL. Self-esteem and trust: Correlation between self-esteem and willingness to trust in undergraduate students. *Inquiries Journal*. 2012; 4(8):1-2. [Link]
- [51] David M, Ceschi G, Billieux J, Van der Linden M. Depressive symptoms after trauma: Is self-esteem a mediating factor? *The Journal of Nervous and Mental Disease*. 2008; 196(10):735-42. [DOI:10.1097/NMD.0b013e3181879dd8] [PMID]
- [52] Breslau N, Kessler RC, Chilcoat HD, Schultz LR, Davis GC, Andreski P. Trauma and posttraumatic stress disorder in the community: The 1996 Detroit Area Survey of Trauma. *Archives of General Psychiatry*. 1998; 55(7):626-32. [DOI:10.1001/archpsyc.55.7.626] [PMID]
- [53] Huang S. Attachment styles and their role in adult relationships. Michigan: Simply Psychology; 2020. [Link]
- [54] Fitzpatrick J, Lafontaine MF. Attachment, trust, and satisfaction in relationships: Investigating actor, partner, and mediating effects. *Personal Relationships*. 2017; 24(3):640-62. [DOI:10.1111/per.12203]
- [55] Brennan KA, Shaver PR. Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin*. 1995; 21(3):267-83. [DOI:10.1177/0146167295213008]
- [56] Simpson JA. Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology*. 1990; 59(5):971-80. [DOI:10.1037/0022-3514.59.5.971]
- [57] Fortier MA, DiLillo D, Messman-Moore TL, Peugh J, DeNardi KA, Gaffey KJ. Severity of child sexual abuse and revictimization: The mediating role of coping and trauma symptoms. *Psychology of Women Quarterly*. 2009; 33(3):308-20. [DOI:10.1111/j.1471-6402.2009.01503.x]
- [58] Lyons-Ruth K, Yellin C, Melnick S, Atwood G. Childhood experiences of trauma and loss have different relations to maternal unresolved and hostile-helpless states of mind on the AAI. *Attachment & Human Development*. 2003; 5(4):330-52. [DOI:10.1080/14616730310001633410] [PMID] [PMCID]
- [59] Bradley R, Greene J, Russ E, Dutra L, Westen D. A multidimensional meta-analysis of psychotherapy for PTSD. *The American Journal of Psychiatry*. 2005; 162(2):214-27. [DOI:10.1176/appi.ajp.162.2.214] [PMID]
- [60] Wachs K, Cordova JV. Mindful relating: Exploring mindfulness and emotion repertoires in intimate relationships. *Journal of Marital and Family Therapy*. 2007; 33(4):464-81. [DOI:10.1111/j.1752-0606.2007.00032.x] [PMID]
- [61] Heatherton TF, Polivy J. Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*. 1991; 60(6):895-910. [DOI:10.1037/0022-3514.60.6.895]

This Page Intentionally Left Blank