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RESEARCH PAPER

Impact of Childhood Trauma on Self-Esteem Among Young Adults: The Role of Emotional Regulation as a Mediator

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ABSTRACT

The present study aimed to examine the relationship between childhood trauma and self-esteem, with emotional regulation as a mediator in the cultural context of Pakistan. The study employed a cross-sectional correlational design and a non-probability purposive sampling technique to collect data from Pakistani young adults between the aged 18 to 30 with at least an intermediate qualification. Three instruments were administered: the *Childhood Trauma Questionnaire-Short Form (CTQ-SF), the Emotional Regulation Questionnaire (ERQ),* and *the Rosenberg Self-Esteem Scale (RSES)*. The findings demonstrated that childhood trauma was significantly negatively correlated with emotional regulation and self-esteem. Moreover, emotional regulation was significantly positively correlated with self-esteem. Furthermore, mediation analysis revealed that emotional regulation significantly mediated the negative relationship between childhood trauma and self-esteem. The findings advance understanding of the relationship between childhood trauma and self-esteem by highlighting the mediating role of emotional regulation and provide support for trauma-focused interventions.

KEYWORDS Childhood Trauma, Emotional Regulation, Self-Esteem, Young Adults

Introduction

Childhood trauma can be defined as the adverse experience before the age of 18 years, comprising physical, emotional, sexual abuse, and physical or emotional neglect. These are crucial public health concerns because they possess effects on emotional, psychological and social development (Ford, 2025; Grasso et al., 2016; Irshad & Lone, 2025; Shahid et al., 2025). Traumatic experiences in children may interfere with normal developmental phases, alter emotional and cognitive functioning, and enhances susceptibility to mental health problems across the lifespan (Alpuğan, 2024; Mastorci et al., 2024; Nelson et al., 2025).

Self-esteem refers to the psychological construct indicating an individual's overall assessment of self-worth, competence, and personal valuations (Hammoud & Kallas, 2025; Ikegbusi & Ogamba, 2026; Jabbarov & Memmedova, 2025). Healthy self-esteem enhances resilience, adaptive mechanisms, positive social skills, and psychological well-being, whereas low self-esteem is associated with psychological distress, poor academic and occupational performance, and increased vulnerability to mental health disorders (Akinyemi, 2025; Fatayati, 2025; Hao & Zhang, 2025; Hertel et al., 2024; Shang et al., 2025). Childhood experiences may play a crucial role in shaping self-esteem, as supportive and nurturing environments foster positive self-evaluation, while traumatic experiences may elevate feelings of worthlessness, shame, guilt, and self-criticism (Butler & Gasson, 2005; Chung et al., 2017; Melamed et al., 2024; Ozdemir & Sahin, 2020). Childhood trauma often contributes to internalizing negative beliefs, resulting in lower level of self-esteem that may

persist into adulthood (Dye, 2018; Koçak & Çağatay, 2024; Mukherjee, 2022; Shahzadi & Rizwan, 2026).

Emotional regulation means the capacity to be aware of, manage, and express emotions in a useful and appropriate pattern (Knowler, 2025; Shahid et al., 2025). It helps people to cope with devastating situations, sustain positive relationships, and make good decisions (Bagheri et al., 2021; Finstad et al., 2021; Komenda-Schned et al., 2025). Effective emotional regulation is linked with higher level of psychological well-being and self-esteem, while poor emotional regulation elevates the probability of anxiety, depression, and emotional distress (Nie et al., 2025; Öztekin et al., 2025; Rmilah & Genç, 2025; Shahid & Yaseen, 2025; Xiao et al., 2025). During adolescence, emotional regulation becomes highly important because individuals face too many academic, personal and social challenges (Haider & von Stumm, 2022; Rianti, 2025; Sapra, 2026). Therefore, it serves as a key psychological factor in promoting healthy psychological functioning and overall adjustment.

Childhood trauma can negatively influence the emotional regulation development skills and make it difficult for certain people to manage their emotions effectively (Dye et al., 2018; Jaseline et aal., 2025; Sharma et al., 2026). Children who experience abuse or neglect often demonstrate poorer emotional regulation and do not cope with the environmental stressors efficiently (Gruhn & Compas, 2020). As a result, they may struggle to control negative emotions, express their feelings, or cope with stressful situations in adulthood (Lawlor et al., 2026; Mariya Sabu et al., 2026).

Childhood trauma may negatively affect emotional regulation, which subsequently influence individuals' views of self-worth. Since emotional regulation is highly associated with both childhood trauma and self-esteem, it may serve as an important psychological mechanism through which early negative experiences affect later self-esteem. However, limited studies have investigated this mediating relationship among Pakistani young adults. Therefore, the present study assessed emotional regulation as a mediator between childhood trauma and self-esteem.

Literature Review

Childhood Trauma and Self-Esteem

Research has demonstrated an inverse association between childhood trauma and self-esteem. For instance, a meta-analysis of 254 studies revealed that childhood maltreatment was negatively associated with self-esteem. Emotional abuse and neglect demonstrated the strongest negative association, while physical abuse and sexual abuse were reported to have smaller effects (Zhang et al., 2023). Studies have shown that childhood trauma is highly prevalent across the world, with millions of children at least once facing some form of abuse or neglect (Daley et al., 2025; Grummitt et al., 2024; Yildiz et al., 2024). The devastating consequences often extend from adolescence to adulthood, leading to psychological distress, impaired interpersonal skills, and causing impairment in routine activities (Fan & Kang, 2025; Marcotulli et al., 2025; Mewara & Yadav, 2025; Vivrette et al., 2018).

Childhood Trauma and Emotional Regulation

Literature has also reported significant negative association between childhood trauma and emotional regulation. In a previous quantitative cross-sectional study, Kim et al. (2019) revealed that childhood trauma was associated with higher depression and anxiety through maladaptive emotion regulation strategies, emphasizing emotion regulation as an essential psychological factor. Research conducted in Pakistan found that being exposed to trauma in childhood was linked with higher rate of developing an anxiety disorder and lower level of self-esteem was found to be a predictor of these symptoms (Taelah et al.,

2025). These findings suggest that emotional regulation may help in understanding how childhood trauma translates into later psychological outcomes.

Emotional Regulation and Self-Esteem

Emotional regulation has been found as an important psychological predictor of self-esteem i.e.; higher emotional regulation leads to greater self-esteem and vice versa. A cross-sectional study conducted among young adults in Australia indicated that greater emotion regulation was positively associated with higher self-esteem. The findings emphasize that higher emotion regulation contributes to higher self-evaluations, thus plays a vital role in the development and sustainability of self-esteem (Barrett et al., 2022). Similarly, research has shown that childhood trauma leads to lower self-esteem when the emotional dysregulation is high (Koçak, & Çağatay, 2024). Other studies have reported that higher emotional regulation is associated with greater self-esteem among young adults (Nie et al., 2025; Sanchez-Sanchez et al., 2025; Slatinská, 2025). Individuals who are efficiently expressive are more likely to possess positive self-worth and confidence (Hermann & Betz, 2006; Mouatsou & Koutra, 2023; Nand, 2025; Taruscio et al., 2024). Whereas, difficulties in emotional regulation may contribute to self-criticism, feelings of emptiness, hopelessness and lower level of self-esteem (Al Ghraibeh, 2026; He et al., 2024; Stinus & Berjot, 2026; Zaccari et al., 2024). Poor emotional regulation also increases susceptibility to stress and negative emotional outcomes, which further reduce an individual's self-evaluation (Ghzzawi et al., 2026; Konstantopoulou, 2026; Xudoyorova et al., 2026). Thus, emotional regulation may serve as an important psychological factor that supports the development and sustainability of healthy self-esteem.

Emotional Regulation as a Mediator

Previous research indicates that emotional regulation may serve as an important psychological mechanism associating childhood trauma with self-esteem. Childhood trauma can detrimentally affect the development of adaptive emotional regulation strategies, making it hard for individuals to handle emotional experiences efficiently. Difficulties in emotional regulation subsequently elevate negative self-evaluation, self-criticism, and low levels of self-esteem during young adulthood (Arsandaux et al., 2023; Rouault et al., 2022). Empirical evidence indicates that childhood trauma is associated with poorer emotional regulation, while higher emotional regulation is consistently related to greater self-esteem. The literature provides theoretical support to consider emotional regulation as a mediating variable between childhood trauma and self-esteem.

Although previous studies have assessed the relationship between childhood trauma, emotional regulation, and self-esteem, limited research has simultaneously examined these variables within a mediation framework, specifically among young adults in the cultural context of Pakistan. The existing literature has focused primarily on direct associations, leaving the underlying psychological mechanism through which childhood trauma affects self-esteem overlooked. Therefore, the present study aims to fill this gap by investigating emotional regulation as a mediator between childhood trauma and self-esteem among Pakistani young adults.

Theoretical Framework

The present study is grounded in Emotion Regulation Theory, which demonstrates that the ability to regulate emotions plays an essential role in psychological well-being and adjustment (Gong et al., 2026; Gross, 2015). The theory postulates that adverse childhood experiences can interfere with the development of adaptive emotion regulation skills, making individuals more susceptible to negative emotions as well as adverse psychological outcomes (Cremades et al., 2022; Petrova & Gross, 2023). Childhood trauma may hinder the development of the ability to identify, evaluate, and regulate emotional responses.

Consequently, individuals may experience difficulties in regulating their emotions (Li, et al., 2023). Poor emotional regulation may contribute to individuals' negative beliefs about themselves, leading to lower self-esteem (Antonopoulou & Gkintoni, 2025; Rimes et al., 2023). Thus, Emotion Regulation Theory provides a relevant framework to explain how childhood trauma predicts self-esteem through emotional regulation.

Freud's psychoanalytic theory provides an explanation for how childhood trauma affects the development of self-esteem and emotion regulation skills. The theory suggests that traumatic memories are repressed and become part of the unconscious mind because they are too painful for the conscious mind (Downey & Crummy, 2022). Freud's concept of defense mechanisms explains that the overwhelming anxiety associated with childhood trauma is managed through unconscious psychological processes. The ego protects the child by using unconscious defense mechanisms including denial, repression and splitting to deal with trauma (Downey & Crummy, 2022). These defense mechanisms may contribute to maladaptive patterns of emotional regulation in adulthood such as expressive suppression, which is often used as a default coping mechanism by survivors of trauma to avoid painful emotions (Li et al., 2023; Koçak, & Çağatay, 2024). The defence mechanism of splitting includes dividing self and others into "all-bad" and "all-good" categories to prevent confusion but this does not allow the self-worth to develop in a stable and integrated manner (Xie, et al., 2021).

Together, Emotion Regulation Theory and Freud's Psychoanalytic Theory provide an integrative framework to understand the association between study variables. Psychoanalytic theory demonstrates how negative childhood experiences become internalized and continue to influence emotional functioning throughout the lifespan. Emotion Regulation Theory further suggests that these early adverse experiences impair the development of adaptive emotion regulation strategies, leading individuals to rely on maladaptive emotional responses. Ongoing difficulties in regulating emotions reinforce negative self-evaluations, ultimately diminishing self-esteem. Consequently, emotional regulation may serve as a psychological mechanism on the basis of which childhood trauma affects self-esteem among young adults.

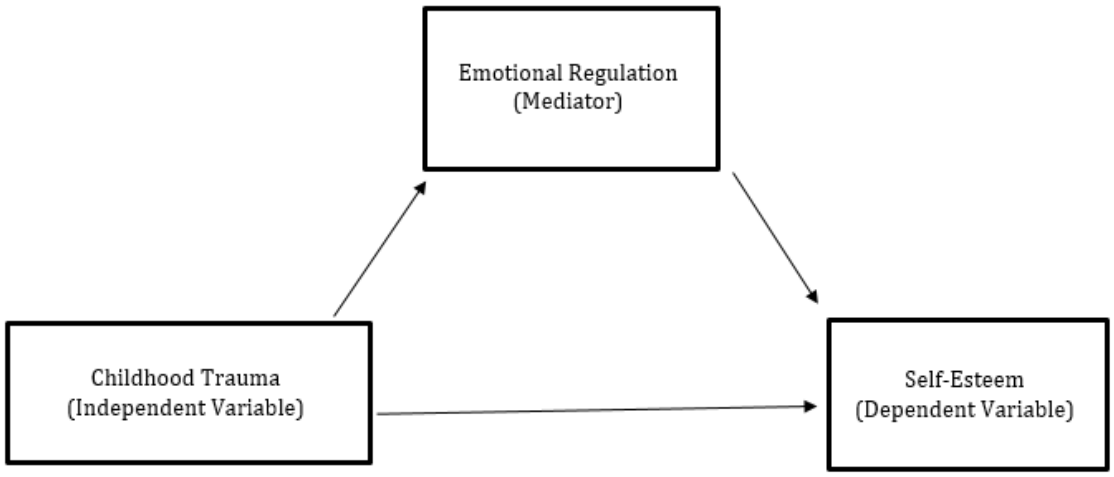


Figure 1: Conceptual Framework

Figure 1 represents the conceptual framework of the present study. The framework demonstrates the proposed relationships among the study variables based on Emotion Regulation Theory and Freud's Psychoanalytic Theory. Childhood trauma is conceptualized as the independent variable, self-esteem as the dependent variable, and emotional regulation as the mediating variable. The framework proposes that childhood trauma negatively affects emotional regulation, which subsequently affects self-esteem among

young adults. Thus, emotional regulation is expected to serve as the psychological mechanism through which childhood trauma influences self-esteem.

Although previous literature has evaluated the relationship between childhood trauma, emotional regulation and self-esteem, limited studies have investigated these variables within the same study particularly among young adults in the cultural context of Pakistan. Existing research has focused on direct association while the psychological mechanism through which childhood trauma affects self-esteem remained overlooked. Therefore, assessing this mediating role of emotional regulation may provide a better explanation of the relationship between childhood trauma and its influence on self-esteem. The findings may provide useful implications for mental health professionals, educators and the policy makers to come up with strategies to improve emotional regulation and self-esteem of young adults with the prior experience of childhood trauma.

Hypothesis

H1: Emotional regulation will negatively mediate the relationship between childhood trauma and self-esteem, such that higher levels of childhood trauma will predict poorer emotional regulation, which in turn will predict lower self-esteem.

Method and Materials

Research Design

The study utilized a quantitative, cross-sectional correlational research design to assess the relationship between childhood trauma and self-esteem among young adults in Pakistan. The study also examined the mediating role of emotional regulation in the relationship between childhood trauma and self-esteem. A cross-sectional design was considered suitable as it enabled the examination of associations among the study variables at a single point in time.

Sampling Technique and Sample

The study utilized a non-probability purposive sampling technique to collect the data from 300 young adults residing in Lahore and Karachi, Pakistan. This technique was appropriate because it enabled the selection of participants who met the predefined inclusion criteria, particularly young adults, to examine the emotional and psychological effects of childhood trauma within this developmental stage. Initially, 300 participants were approached. However, after screening for incomplete responses, missing data, and eligibility criteria, 257 questionnaires were retained in the study, yielding a response rate of 85.66%.

Inclusion Criteria

- Pakistani young adults.
- Aged between 18 and 30 years.
- Minimum education of Intermediate (12 years of education).
- Able to read and understand English.

Exclusion Criteria

- Individuals younger than 18 years or older than 30 years.
- Questionnaires with incomplete responses or substantial missing data.

Measures

Childhood Trauma

Childhood trauma was measured using the *Childhood Trauma Questionnaire-Short Form (CTQ-SF)* developed by Bernstein et al. (2003). The scale consists of 28 items rated on a 5-point Likert scale ranging from 1 (Never True) to 5 (Very Often True). The *CTQ-SF* has demonstrated excellent internal consistency, with Cronbach's alpha coefficients ranging from 0.79 to 0.94. In this study the internal consistency remained excellent, with Cronbach's alpha coefficient of 0.84.

Emotional Regulation

Emotional regulation was measured using the *Emotion Regulation Questionnaire (ERQ)* developed by Gross and John (2003). The questionnaire consists of 10 items rated on a 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Higher scores indicate greater use of emotion regulation strategies. The scale has demonstrated good internal consistency (Cronbach's α = .79–.82). In this study the internal consistency remained excellent, , with Cronbach's alpha coefficient of .97.

Self-Esteem

Self-esteem was assessed using the *Rosenberg Self-Esteem Scale (RSES)* developed by Rosenberg (1965). The scale consists of 10 items rated on a 4-point Likert scale ranging from 0 (Strongly Disagree) to 3 (Strongly Agree). Items 2, 5, 6, 8, and 9 are reverse-scored. Higher scores indicate higher levels of self-esteem. The scale has demonstrated good internal consistency (Cronbach's α = 0.88). In this study the internal consistency remained excellent with Cronbach's alpha coefficient of 0.87.

Ethical Considerations and Procedure

The study followed the APA 7th edition ethical code of conduct throughout its procedure. For instance, permission to use the instruments in the study was obtained from the authors via email. The participants were approached in Lahore and Karachi using a consent form, demographic questionnaire, and study instruments. Initially, the consent form was provided to the participants, which clearly stated the voluntary nature of participation, confidentiality, and the right to withdraw at any stage of the study without any sort of penalty. Upon written signature on the consent form, demographic and study instruments were given for data collection purpose.

Statistical Analysis

The collected data were entered into IBM SPSS Statistics Version 27 for analysis. Descriptive statistics, Cronbach's alpha reliability coefficients, and Pearson product-moment correlations were computed. The mediating role of emotional regulation in the relationship between childhood trauma and self-esteem was examined using Hayes' PROCESS Macro (Version 4.2), Model 4 (Hayes, 2022).

Results and Discussion

Table 1
Characterostics of the Participants (257)

	Frequency (%)	Mean (SD)
Age		22.13 (3.58)
Gender		
Men	141 (54.9)	
Women	116 (44.4)	

Qualification	
Intermediate	174 (67.7)
Bachelor	62 (24.1)
Master	21 (8.2)
Family System	
Joint	90 (35)
Nuclear	167 (65)
Residency	
Lahore	143 (55.6)
Karachi	114 (44.4)

Note. % = Percentage, SD = Standard Deviation

Table 1 presents the demographic characteristics of the 257 participants. The mean age of the participants was 22.13 years (SD = 3.58). Regarding gender, 141 (54.9%) were men and 116 (44.4%) were women. In terms of educational qualification, the majority had an Intermediate education (174, 67.7%), followed by Bachelor's (62, 24.1%) and Master's (21, 8.2%) degrees. Most participants belonged to a nuclear family system (167, 65%), while 90 (35%) were from joint families. With respect to residency, 143 (55.6%) participants were from Lahore, whereas 114 (44.4%) were from Karachi.

Table 2
Correlational Analysis (N = 257)

Variables	1	2	3
1.Childhood Trauma	-	-.18**	-.16**
2.Emotional Regulation		-	.51***
3.Self-Esteem			-

Note. ***p < .01, *** p <.001*

Table 2 shows that childhood trauma was significantly negatively associated with emotional regulation (r = −.18, $\boldsymbol{p} < .01$) and self-esteem (r = −.16, $\boldsymbol{p} < .001$). Furthermore, emotional regulation was significantly positively associated with self-esteem (r = .51, $\boldsymbol{p} < .001$).

Table 3
Predicting Self-Esteem from Childhood Trauma through a Mediator Emotional Regulation (N = 257)

		Consequences						
		Emotional Regulation (M)				Self-Esteem (Y)		
Antecedents		**B**	**SE**	**p**		**B**	**SE**	**P**
Childhood Trauma (X)	a	-.16**	.05	.002	c'	-.02	.01	.20
Emotional Regulation (M)	-				b	.19***	.01	.000
Constant	*I*	58.62**	.05	.002	*I*	4.05*	1.94	.03
		R^2= .05, F = 9.37				*R^2= .27, F = 47.61*		
		****p = .002*				****p = .000*		

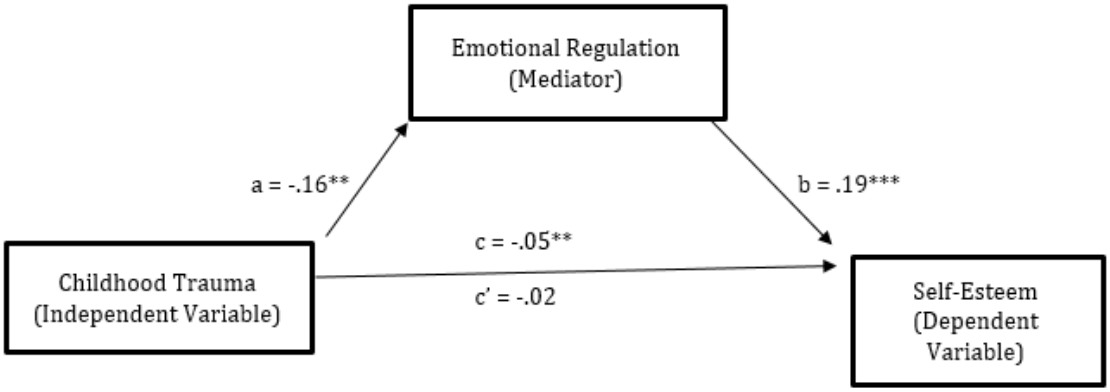
*Note. *p<.05, **p*<.01, ****p*<.001,

Table 3 shows that childhood trauma significantly and negatively predicted emotional regulation (B = -0.16, SE = 0.05, p = .002), whereas emotional regulation significantly and positively predicted self-esteem (B = 0.19, SE = 0.01, $p < .001$). The direct effect of childhood trauma on self-esteem was not significant after controlling for emotional regulation (B = -0.02, SE = 0.01, p = .20). The model explained 5% of the variance in emotional regulation (R^2 = .05, F = 9.37, p = .002) and 27% of the variance in self-esteem (R^2 = .27, F = 47.61, $p < .001$).

Table 4
Indirect Effect (N = 257)

	B	β	SE	95% Confidence Interval (LLCI -ULCI)
Emotional Regulation	-.03	-.09	.03	-.16 - -.02

The bootstrapped indirect effect of childhood trauma on self-esteem through emotional regulation was significant (B = -0.03, β = -0.09, SE = 0.03, 95% CI [-0.16, -0.02]), as the confidence interval did not include zero.



*Note. N = 257, **p < .01, ***p < .001*

Figure 2: Statistical Model

Figure 2 presents the statistical mediation model. Childhood trauma significantly and negatively predicted emotional regulation (path a = −.16, p < .01), while emotional regulation significantly and positively predicted self-esteem (path b = .19, p < .001). The total effect of childhood trauma on self-esteem was significant and negative (path c = −.05, p < .01). However, after including emotional regulation in the model, the direct effect became non-significant (path c′ = −.02), indicating that emotional regulation fully mediated the relationship between childhood trauma and self-esteem.

Discussion

The findings of the study depicted that childhood trauma negatively and significantly associated with emotional regulation and self-esteem. This means as the abuse and neglect individuals faced during childhood impact their emotional regulation and self-esteem adversely. Furthermore, emotional regulation possessed significant positive relationship with self-esteem. These findings are congruent with Freud's psychoanalytic theory, which posits that unresolved childhood conflicts and neglect become part of the unconscious mind, that structure the personality development, emotional functioning, and self-worth throughout the life (Freud, 1995; Middleton, & Dorahy, 2024). Traumatic childhood experiences are likely to weaken the ego's ability to regulate emotions effectively, resulting in lower levels of self-esteem. The findings are also supported by indigenous study by Shahzadi and Rizwan (2026), who revealed that childhood trauma significantly predicted emotional dysregulation and lower self-esteem. In the cultural context of Pakistan, where harsh parenting, authoritarian parenting style, and limited emotional expression are relatively common, the psychological outcomes of childhood trauma may be exacerbated, making emotional regulation and self-esteem particularly susceptible among young adults.

The hypothesis of the study was supported as the mediation analysis using Hayes Macro 4.2 Process Model 4 revealed that emotional regulation emotion regulation significantly mediated the relationship between childhood trauma and self-esteem as the direct effect was non-significant but indirect remain significant. These findings are consistent with Gross's Process Model of Emotion Regulation (Gross, 1998, 2015), which postulates that adoptive emotion regulation is important for effective psychological functioning and the growth of a healthy self-concept. Childhood trauma may interfere emotion regulation processes, leading to persistent emotional distress and lower level of self-esteem. The result is supported by Burns et al. (2010), who demonstrated that emotion

dysregulation mediated the association between childhood maltreatment and later psychological maladjustment. In the cultural context of Pakistan, authoritarian parenting, victim blaming, and stigma surrounding mental health often demotivate open emotional expression and help-seeking behaviour. The unresolved childhood trauma may contribute to impair emotional regulation, leading to diminished self-esteem among young adults as reported by a prior study (Shahid et al., 2025).

Conclusion

The present quantitative cross-sectional study, using a purposive sampling technique, aimed to examine the relationship between childhood trauma and self-esteem through the mediating role of emotional regulation among young adults in Pakistan, thereby addressing a gap in the existing literature. The findings indicated that childhood trauma was negatively associated with emotional regulation and self-esteem, while emotional regulation was positively associated with self-esteem. Furthermore, emotional regulation mediated the relationship between childhood trauma and self-esteem, suggesting that childhood trauma may reduce self-esteem by impairing individuals' ability to regulate their emotions.

Implications

The findings support the Emotion Regulation Theory and Psychodynamic Theory by revealing that emotional regulation serves as an important psychological mechanism associating childhood trauma with self-esteem among young adults. Thus, the present study extends these theoretical perspectives by emphasizing that the adverse effects of childhood trauma on self-esteem operate through difficulties in emotional regulation. Additionally, the findings fill the gap in the cultural context of Pakistan by supporting the validity of these theories within a non-Western cultural context.

Practically, the results emphasize the importance of identifying symptoms associated with childhood trauma among young adults. Mental health professionals should raise awareness about childhood trauma to protect the children from abuse and neglect. Positive steps also need to be taken to include emotion regulation training in trauma-focused interventions to improve self-esteem. Educational institutions need to start the campaign regarding emotion well-being and coping skills program for pupils. The findings can also guide policymakers in developing mental health prevention and intervention programs in Pakistan.

Recommendations

The first shortcoming of the study is that the data was only collected from Lahore and Karachi, which limits its generalizability, furthermore, the non-probability purposive sampling technique further limits the generalizability. These limitations must be addressed in the future studies. Secondly, the use of a questionnaire in the English language although on educated cohort of at least intermediate-qualified but Urdu is the national language of Pakistan not every intermediate-qualified in Pakistan is proficient in English to fill the data correctly. Lastly, socio-demographic characteristics are too limited, future studies need to include socioeconomic status, marital and employment status.

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