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The Psychological Sequelae of Childhood Trauma: Investigating Its Impact on Dissociative Experiences and Psychosomatic Symptoms in Emerging Adulthood

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ABSTRACT

Childhood trauma is known to have lasting psychological repercussions that often manifest as dissociative tendencies and physical distress symptoms in adulthood. Dissociative experiences—marked by disruptions in memory, identity, or perception—are commonly observed as maladaptive coping strategies following traumatic events. Similarly, psychosomatic symptoms—physical complaints without medical explanation—can reflect unresolved emotional conflicts. These outcomes are especially significant during emerging adulthood, a transitional period characterized by emotional sensitivity, identity exploration, and vulnerability to psychological distress. The present study aimed to investigate the psychological impact of childhood trauma by examining its relationship with dissociative experiences and psychosomatic symptoms among emerging adults. A cross-sectional design was utilized, through convenience sampling, 400 university students (200 males and 200 females), aged 18 to 24 years, were recruited. After the consent demographic information sheet was filled followed by standardized measures, i.e., the Adverse Childhood Experiences Questionnaire (ACE), the Dissociative Experiences Scale (DES), and the Somatic Symptom Scale for Adults (APA, 2013). Pearson correlation coefficient and linear regression analyses were employed for statistical analysis. Results revealed small but statistically significant positive correlation between childhood trauma and dissociative experiences ($r = .25$, $p < .01$), and between dissociative experiences and psychosomatic symptoms ($r = .14$, $p < .01$). However, the correlation between childhood trauma and psychosomatic symptoms was not significant ($r = .08$, $p = .101$). Regression analysis indicated that childhood trauma significantly predicted dissociative experiences ($R^2 = .06$, $p < .001$), but not psychosomatic symptoms ($R^2 = .007$, $p = .101$). These findings emphasize the role of early adverse experiences in shaping dissociative responses during emerging adulthood. This study is novel in its exploration of these dynamics within a South Asian non-clinical student population, contributing culturally relevant evidence to the global discourse on trauma psychology.

Keywords: *Childhood Trauma, Dissociative Experiences, Psychosomatic Symptoms, Emerging Adulthood, ACE*

INTRODUCTION

Childhood trauma refers to harmful experiences during early developmental stages—such as abuse, neglect, or family dysfunction—that impact emotional, physical, and psychological well-being (Felitti et al., 1998). These adverse childhood experiences (ACEs) disrupt neurobiological development and can impair stress regulation systems, making individuals more vulnerable to mental health issues in adulthood (Anda et al., 2006). The long-term psychological effects of childhood trauma often remain

unacknowledged, especially in non-clinical populations such as university students, where distress is internalized and rarely verbalized. The transition to adulthood frequently acts as a triggering period, bringing these unresolved experiences to the forefront. Among the most common outcomes of early trauma is dissociation, a psychological mechanism used to detach from overwhelming emotional experiences.

Dissociation is defined as a disruption in the normal integration of consciousness, memory, identity, or perception, often seen in individuals with a history of trauma (Lyssenko et al., 2018). These experiences may include memory gaps, depersonalization, or feelings of unreality. Dissociation serves as a short-term coping mechanism but becomes maladaptive when it interferes with daily functioning. In emerging adulthood—an emotionally intense life phase—these dissociative tendencies often intensify. Moreover, dissociation may not exist in isolation but can link to other forms of distress, such as somatic symptoms, where the body expresses unresolved emotional pain.

Psychosomatic symptoms refer to physical complaints—such as headaches, stomach pain, or fatigue—that have no identifiable medical origin but are caused or worsened by psychological factors (Riedl et al., 2019). In individuals with a history of childhood trauma or dissociation, these symptoms often serve as a non-verbal expression of emotional suffering. Particularly in cultural contexts where emotional openness is discouraged, such as South Asian societies, distress may manifest physically rather than being verbally expressed. Emerging adults facing academic, social, and personal pressures are at increased risk of developing psychosomatic complaints if their emotional issues remain unaddressed.

Despite growing research on the long-term effects of childhood trauma, there is a lack of studies examining its psychological outcomes in non-clinical, South Asian emerging adults. Most available data are Western and clinical, which may not be generalizable to university-going populations in culturally conservative societies like Pakistan. The emotional burden carried by many students due to childhood adversity remains invisible in academic settings, leading to undiagnosed mental health issues such as dissociation or psychosomatic distress. This gap in local literature highlights the need to explore how adverse childhood experiences influence the psychological functioning of emerging adults in Pakistani universities.

So this study aims to investigate the impact of childhood trauma on dissociative experiences and psychosomatic symptoms in emerging adulthood.

OBJECTIVE OF THE STUDY

1. To examine the relationship between childhood trauma and dissociative experiences among emerging adults.
2. To examine the relationship between childhood trauma and psychosomatic symptoms among emerging adults.
3. To examine the predictive role of childhood trauma on dissociative experiences in emerging adults.
4. To examine the predictive role of childhood trauma on psychosomatic symptoms in emerging adults.

RESEARCH QUESTIONS

1. What is the relationship between childhood trauma and dissociative experiences among emerging adults?
2. What is the relationship between childhood trauma and psychosomatic symptoms among emerging adults?
3. To what extent does childhood trauma predict dissociative experiences in emerging adults?
4. To what extent does childhood trauma predict psychosomatic symptoms in emerging adults?

LITERATURE REVIEW

Childhood trauma has been widely studied as a foundational risk factor for psychological dysfunction across the lifespan. A growing body of empirical research highlights its significant associations with dissociative tendencies and psychosomatic complaints, particularly among young adults. Adverse Childhood Experiences (ACEs) have been linked to a wide range of psychological problems, including anxiety, depression, PTSD, and emotional dysregulation (Crouch et al., 2019). ACEs are cumulative, and their long-term effects are evident across both clinical and non-clinical populations. Individuals with higher ACE scores are more likely to develop psychological conditions later in life due to maladaptive stress regulation and altered brain development (Hughes et al., 2017). These effects are often latent during childhood but emerge more strongly during the emotionally challenging phase of emerging adulthood (Liu et al., 2022). Dissociation is a common psychological response to overwhelming stress and trauma. It includes symptoms such as depersonalization, derealization, memory lapses, and emotional numbness.

According to Lyssenko et al. (2018), childhood trauma is one of the strongest predictors of dissociative symptoms in adulthood. Longitudinal studies show that individuals exposed to emotional and physical abuse during childhood demonstrate higher levels of dissociation in later developmental stages, particularly when faced with new stressors (Farina et al., 2019). These patterns are often observed in young adults, where the psychological mechanisms formed in childhood continue to influence coping responses. A substantial body of literature links childhood adversity to the development of somatic symptoms—physical ailments without a clear medical basis. In a meta-analysis by Riedl et al. (2019), childhood trauma was found to significantly increase the risk of developing psychosomatic disorders in adulthood. Emotional repression and the inability to verbalize psychological distress may lead to the somatization of trauma-related emotions. Emerging adults, who are navigating identity, relationships, and responsibilities, may express unresolved trauma through chronic fatigue, pain, gastrointestinal issues, or headaches (Kugler et al., 2020). Recent studies have also emphasized the mediating and co-occurring nature of dissociation and somatic symptoms. When emotional pain is not cognitively processed, dissociation may serve as a buffer, while somatic symptoms become the physical outlet (van Dijke et al., 2021). Both are indicative of unresolved internal conflict and are strongly linked to early trauma histories.

Despite the growing global recognition of the psychological aftermath of childhood trauma, research on its long-term effects in non-clinical populations, particularly in South Asian contexts, remains limited. Much of the existing literature focuses on Western, clinical, or psychiatric samples, with minimal exploration of culturally diverse, community-based populations such as university students in Pakistan. Furthermore, most trauma research tends to isolate outcomes like dissociation or somatic symptoms rather than examining them together as interconnected psychological sequelae of early adversity. Emerging adulthood is a critical life stage wherein unresolved childhood experiences may resurface, particularly in high-stress academic and social environments. In culturally conservative societies where emotional expression is often suppressed, trauma may manifest as internalized psychological symptoms, including

dissociation or physical complaints that lack medical explanations. However, limited empirical evidence exists linking adverse childhood experiences to both dissociative and psychosomatic outcomes among emerging adults in Pakistan.

This study addresses this research gap by examining how childhood trauma impacts dissociative experiences and psychosomatic symptoms within a non-clinical, South Asian i.e. Pakistan university sample.

HYPOTHESIS

Based on the reviewed literature, the following hypothesis were formulated:

- H**1:** Childhood trauma will be significantly positively associated with dissociative experiences in emerging adults.
- H**2:** Childhood trauma will be significantly positively associated with psychosomatic symptoms in emerging adults.
- H**3:** Childhood trauma will significantly predict dissociative experiences among emerging adults.
- H**4:** Childhood trauma will significantly predict psychosomatic symptoms among emerging adults.

METHODOLOGY

Study Design

A **cross-sectional survey design** was employed for this study. This design is commonly used to measure variables and their relationships at a single point in time and is suitable for capturing prevalence, psychological characteristics, and correlations within a defined population (Mukherjee & Roy, 2023).

Participants and Sampling Technique

A total of 400 participants were selected using Cohen's criteria for determining effect size, ensuring adequate statistical power. A convenience sampling technique was employed, in which participants were selected based on their accessibility and willingness to participate. The sample consisted of 200 male and 200 female university students, aged between 18 and 24 years (M = 21.35, SD = 1.96), recruited from various universities in Islamabad, Pakistan.

Inclusion Criteria

1. Individuals aged 18 to 24 years
2. Participants who had completed at least 12 years of education (Intermediate level)

Exclusion Criteria

1. Individuals with severe cognitive impairment or psychiatric conditions that could affect informed consent or questionnaire completion
2. Individuals undergoing intensive psychiatric treatment (e.g., inpatient care)

INSTRUMENTS

Demographic Sheet

A structured demographic form collected participant background information, including age, gender, birth order, residence (urban/rural), family structure, and socioeconomic status.

Adverse Childhood Experiences (ACE) Scale

Developed by Felitti and Anda (1998), the ACE scale assesses exposure to 10 categories of childhood trauma, including abuse, neglect, and household dysfunction. Items are rated dichotomously (yes/no), with higher scores indicating greater trauma exposure. A score of 4 or more is associated with significantly elevated risk for adult psychological and physical health problems. The ACE scale has demonstrated strong internal consistency (Cronbach's $\alpha \approx 0.80$).

Dissociative Experiences Scale (DES)

The DES (Putnam, 1986) is a 28-item instrument measuring the frequency of dissociative experiences, rated from 0% (never) to 100% (always). Scores below 30 reflect low dissociation; 30–60 indicate moderate dissociation (often trauma-related); scores above 60 suggest severe dissociative disorders. The DES has shown excellent reliability ($\alpha = 0.80–0.90$) and test-retest validity.

Somatic Symptoms Scale – Adult (APA, 2013)

The APA Level 2 Somatic Symptom Scale (PHQ-15) evaluates the severity of physical symptoms such as pain, fatigue, and digestive issues. Items are scored on a 3-point scale (0 = not bothered at all to 2 = bothered a lot), with higher total scores indicating greater symptom severity. Scores: 0–4 (minimal), 5–9 (low), 10–14 (moderate), 15–30 (severe somatic distress). The scale demonstrates strong reliability ($\alpha = 0.85–0.90$).

OPERATIONAL DEFINITIONS

Adverse Childhood Experiences

Stressful or traumatic events before age 18, including abuse, neglect, and household dysfunction (Felitti et al., 1998).

Dissociative Experiences

Interruptions in memory, identity, perception, and awareness, ranging from mild detachment to severe dissociation (Bernstein & Putnam, 1986).

Psychosomatic Symptoms

Physical symptoms with no fully explained medical cause, affecting daily functioning and often linked to psychological distress (Kroenke et al., 2002).

PROCEDURE

After obtaining ethical approval from the Institutional Review Board (IRB) of the National University of Medical Sciences (NUMS)**,** permission was sought from the higher authorities of different universities in Islamabad. After consent, participants filled out the demographic form and three standardized questionnaires: Adverse childhood experiences, Dissociative experiences scale, and the APA Somatic Symptom Scale. They were briefed about the study's purpose, voluntary participation, confidentiality, and right to withdraw at any time without consequence.

Statistical Analysis

Data were analyzed using IBM SPSS version 21. Descriptive statistics (mean, standard deviation, frequencies, percentages) and inferential statistical methods (i.e., Pearson correlation coefficient analysis and Simple linear regression) were used.

Ethical Considerations

Written informed consent was obtained from all participants. Anonymity and confidentiality were guaranteed, and data were used solely for academic and research purposes. Participants were informed of their right to withdraw at any point without penalty. The study avoided all forms of harm or deception and involved no clinical intervention.

RESULTS

All statistical analyses were performed using IBM SPSS version 21. To examine the relationships among the study variables, childhood trauma, dissociative experiences, and psychosomatic symptoms, Pearson product-moment correlation coefficients were calculated. To assess the predictive role of childhood trauma in explaining dissociative experiences and psychosomatic symptoms, simple linear regression analyses were conducted.

Tables 1 and 2 show descriptive statistics for participants' demographic variables and measures used in the study

Table 1

Main Demographic Variables of the Participants (N=400)

Variables	*F*	*%*
Birth Order		
1st Born	63	15.8
2nd Born	84	21.0
3rd Born	86	21.5
4th Born	59	14.8
5th Born	54	13.5
6th Born	54	13.5
Gender		
Male	200	50
Female	200	50

Socioeconomic Status		
Lower	177	44.3
Middle	123	30.7
Upper	100	25

Note: f = Frequency, % = Percentage.

Table 2

Descriptive Statistics and Univariate Normality of Variables (N=400)

	N	*A*	*M*	*SD*	Skew	Kur
ACE	10	0.77	4.83	2.85	-0.39	-.958
DES	28	0.83	45.55	13.76	-1.614	2.326
L2SSAP	16	0.83	11.99	5.80	-.358	-.637

Note: n = number of items; *α* = Cronbach's reliability; *M* = mean; *SD* = Standard Deviation; skew = skewness; kur = kurtosis; ACE = Adverse Childhood Experiences; DES = Dissociative Experiences Scale; L2SSAP = Level 2 somatic System patient scale adult; BRS = Brief Resilience Scale.

Table 2 indicate that all study variables demonstrated acceptable levels of internal consistency, with Cronbach's alpha values ranging from 0.77 to 0.83. Skewness and kurtosis values for all variables fell within acceptable ranges for univariate normality (±2), indicating no substantial deviations from normal distribution.

Table 3

Correlation between ACE, DES, and psychosomatic symptoms (N=400)

Variable	ACE	DES	L2SSAP
ACE	-	-	-
DES	.25**	-	-
L2SSAP	.08	.14**	-

Note. ACE = Adverse Childhood Experiences; DES = Dissociative Experiences Scale; L2SSAP = Somatic Symptoms Scale

Note. N = 400; $p < .01$ (two-tailed).

Table 3 indicates that there was a significant but small positive correlation between dissociative experiences scores and adverse childhood experiences scores ($r=.25$, $p < .01$), which indicates that higher adverse childhood experiences scores in individuals are associated with reporting more dissociative experiences. There was also a small but significant positive correlation found for scores on dissociative

experiences and psychosomatic symptoms (*r = .14, p < .01*), suggesting that greater dissociative experiences were linked to greater psychosomatic scores. But the relationship between scores for adverse childhood experiences and psychosomatic symptoms was not significant (r=*.08, p=.101*), implying no apparent relationship between the two variables.

Table 4

Linear Regression Analysis Predicting Dissociative Experiences from Adverse Childhood Experiences (N=400)

Predictor	***B***	***SE***	***B***	***T***	***P***
(Constant)	39.79	1.32	—	30.24	< .001
ACESUM	1.19	0.23	.25	5.08	< .001

Note. The predictor effect on the dependent variables is DV = (DES = dissociative experiences, IV = adverse childhood experiences. R = .25, R^2 = .06, Adjusted R^2 = .059, F(1, 398) = 25.83, p < .001. DV = Dissociative Experiences (DESDIVIDE); IV = Adverse Childhood Experiences (ACESUM).

Table 4 shows that child trauma greatly predicts dissociative experiences (*R^2 = .061*), F(*1, 398*) = *25.83*, *p < .001*, which implies that 6.1% of the variance in dissociative experiences is explained by child trauma. The regression value for child trauma (*B = 1.19, p < .001*) implies that with a one-unit increase in child trauma, dissociative experiences rise by 1.19 points, which implies a small but statistically significant effect.

Table 5

Linear Regression Analysis Predicting Psychosomatic Symptoms from Adverse Childhood Experiences (N=400)

Predictor	*B*	*SE*	*B*	*T*	*p*
(Constant)	11.18	0.57	—	19.60	< .001
ACESUM	0.17	0.10	.08	1.64	.101

Note: The predictor effect on the dependent variables is DV = (L2SSAP = Psychosomatic Symptoms, IV = adverse childhood experiences. R = .08, R^2 = .007, Adjusted R^2 = .004, F(1, 398) = 2.70, p = .101. DV = Psychosomatic Symptoms (L2SSAP); IV = Adverse Childhood Experiences (ACESUM).

Table 5 suggests that the predictive association between adverse childhood experiences and psychosomatic symptoms (L2SSAP) was not statistically significant (*R^2 = .007*, *F* (*1, 398*) = *2.70, p = .101*), i.e., Childhood experiences do not significantly predict psychosomatic symptoms in emerging adults.

DISCUSSION

The current research sought to investigate the psychological aftermath of childhood trauma in emerging adults through its link with dissociative symptoms and psychosomatic complaints. The findings provide partial support for the hypotheses and add to the emerging pool of trauma-related studies in non-clinical, South Asian populations.

The first hypothesis, i.e., Childhood trauma, will be significantly positively associated with dissociative experiences in emerging adults, as indicated by Table 3. This indicates that individuals with increased exposure to trauma during early life are more likely to endorse dissociative tendencies, including disturbances in memory, identity, or perception. This finding is consistent with the literature, whereby dissociation is often characterized as a defensive reaction to excess stress or trauma, especially if such trauma is experienced during early developmental periods (Lyssenko et al., 2018). The findings support the theoretical premise that dissociation acts as a psychological escape, enabling the ability to remove oneself from unbearable emotional experience based upon childhood hardship, particularly when direct emotional processing is developmentally inaccessible or psychologically overwhelming (Putnam, 1997).

The second hypothesis, i.e., Childhood trauma, will be significantly positively associated with psychosomatic symptoms in emerging adults, as indicated by Table 3 an expectation of a strong relationship between trauma in childhood and psychosomatic symptoms. This hypothesis was not verified. Correlation between adverse childhood experiences and psychosomatic symptoms was low and statistically non-significant. This finding differs from previous research (e.g., Riedl et al., 2019), which expressed strong relationships between trauma and somatic distress. One explanation that may be thought to fit is the non-clinical status of the current sample; university students might not make this kind of emotional distress known through somatic symptoms to the same extent as clinical populations. Furthermore, cultural and social influences might determine the way that people experience and report distress, potentially through an under-reporting of somatic symptoms.

The third hypothesis, i.e., Childhood trauma will significantly predict dissociative experiences among emerging adults, as indicated by Table 4, suggests that childhood trauma would predict dissociative experiences significantly. The model accounted for a small but statistically significant amount of variance ($R^2 = .06$), suggesting that individual exposure to even moderate levels of early adversity has long-term psychological consequences, i.e., dissociative symptoms. This finding also lends further support to trauma theory, which highlights how early emotional trauma impairs normal psychological integration and leads to maladaptive patterns of coping in later life.

Conversely, the fourth hypothesis, i.e., Childhood trauma will significantly predict psychosomatic symptoms among emerging adults, as indicated by Table 5, that childhood trauma would predict psychosomatic symptoms significantly, was not verified. While childhood trauma had a weak positive trend in predicting somatic complaints, the finding was not statistically significant. This result once more highlights the heterogeneity of response to trauma and speculates that factors like emotional regulation, support systems, and personal coping styles could mediate or buffer the somatic expression of trauma in this sample.

Another unexpected finding was the strong association between dissociative symptoms and psychosomatic complaints. This confirms the notion that unconscious emotional distress is often channeled both psychologically and physically, especially in subjects with histories of trauma. Somatic symptoms and dissociation may not exist apart from each other but instead concurrently as parallel ways of experiencing underlying emotional pain.

Overall, the results emphasize that childhood trauma persists in influencing psychological functioning through the latter half of emerging adulthood, virtually exclusively through heightened susceptibility to dissociation. The lack of significant association with psychosomatic symptoms can imply that emotional aftereffects are more pervasive in this age range or take different forms in cultures in which somatization of distress is less readily expressed. These findings highlight the value of early screening and trauma-

informed mental health treatment, particularly for young adults who are experiencing emotionally precarious developmental transitions.

CONCLUSION

This research provides valuable understanding of the impact of childhood trauma on subsequent psychological outcomes among young adults within a non-clinical, South Asian sample. The findings illustrate that dissociative symptoms, rather than psychosomatic complaints, are the most salient psychological legacy of early adversity. Although trauma was found to have a statistically significant relationship with dissociation, it was weak and non-significant for psychosomatic symptoms. These results indicate that emotional fragmentation might occur more easily than physical manifestations of distress among young adults grappling with educational and social stress. The dissociation–somatization association observed also emphasizes the complexity of trauma reactions and the necessity for early detection and culturally responsive mental health interventions.

LIMITATION & RECOMMENDATIONS

- The sample consisted only of urban university students in Islamabad, leaving out rural or disadvantaged institution students, who might have varying exposures to trauma and psychological outcomes. Having a more socioeconomically and culturally representative sample in future research might provide a more holistic perspective on psychological reactions to trauma.
- Since the research was based solely on self-report questionnaires, there is a risk of recall bias in reporting childhood traumatic experiences and response bias in sensitive topics such as dissociation. Qualitative methods can therefore also be used in further studies to capture in-depth, subjective information and confirm self-reported information.
- The study used a cross-sectional research design, which prevents the observation of changes over time and causal links between trauma and its psychological consequences. Longitudinal research is recommended to examine how trauma-related symptoms develop and persist across different stages of emerging adulthood.

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