

Self-Perception in Adolescents With Childhood traumatic Experiences: A Comparative Analysis With Healthy Peers



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Abstract

Adolescence is a critical period for identity development and self-perception, yet exposure to childhood trauma can severely disrupt this process. This study investigates the self-perception of adolescents with documented childhood traumatic experiences compared to healthy peers without such histories. Using a comparative cross-sectional design, 120 adolescents aged 12–19 years (60 with trauma history; 60 controls) completed the Self-Perception Scale (SPS), the Childhood Trauma Scale–Short Form (CTS-SF), and additional psychosocial measures. Results indicated that adolescents with trauma histories reported significantly lower scores across all self-perception domains—social acceptance, competence, and self-worth—than their healthy counterparts. Regression analyses showed childhood trauma as a significant predictor of negative self-perception, even after controlling for socio-economic status and perceived social support. These findings underscore the importance of trauma-informed screening and interventions to improve self-concept and resilience in Indian adolescents.

Keywords: Adolescents, Self-perception, Childhood traumatic experience, Psychosocial profile, Traumatic experience-informed care

1. Introduction

Self-perception—the manner in which individuals evaluate their own worth, competence, and social acceptability—forms a cornerstone of adolescent psychological development. It represents more than just self-esteem; it reflects a multidimensional appraisal of one's abilities, relationships, and social identity, serving as the psychological bridge between early caregiving experiences and later social functioning (Asthana, 2020). Adolescence is a period of profound biological, cognitive, and socio-emotional transformation. During this time, individuals consolidate their identity, refine emotional regulation strategies, and develop self-efficacy, all of which are intimately linked to how they perceive themselves (Crone & Dahl, 2012). Positive self-perception has been associated with resilience, academic engagement, and adaptive social behaviours, whereas negative self-perception can predispose adolescents to emotional dysregulation, social withdrawal, and risk-taking behaviours.

Childhood traumatic experience—including physical, emotional, or neglect, and chronic exposure to adversity—has emerged as one of the most potent disruptors of self-concept. Early adverse experiences can impair the development of secure attachment patterns, hinder affect regulation, and undermine the internalization of a positive self-image (Teicher & Samson, 2016).

These disruptions may persist into adolescence, a developmental stage in which self-perception is highly malleable yet increasingly influential in shaping life trajectories. In the Indian context, these challenges are further compounded by sociocultural factors such as stigma surrounding mental health, rigid gender norms, and limited access to professional psychological services (Mumford, 1993). Despite a growing body of literature linking childhood traumatic experience to a range of psychosomatic, behavioural, and psychiatric conditions, empirical research specifically exploring self-perception as a central outcome of traumatic experience in Indian adolescents remains scarce.

Insights from studies on Psychogenic Non-Epileptic Seizures (PNES) highlight the relevance of this line of inquiry. PNES, which frequently co-occurs with histories of childhood traumatic experience, dissociative tendencies, and fragile self-concepts, underscores the complex interplay between traumatic experience and self-perception (Kozłowska et al., 2018; Myers et al., 2019). While the psychosocial and clinical profiles of adolescents with PNES have been extensively studied, self-perception itself is rarely examined as a distinct construct. Understanding how early adverse experiences shape adolescents' self-appraisal is not merely an academic concern—it is crucial for designing traumatic experience-informed

interventions, fostering resilience, and mitigating the long-term psychological burden of traumatic experience. By investigating the nuanced relationship between childhood traumatic experience and self-perception, particularly within the Indian sociocultural landscape, this study aims to illuminate how early adversities manifest in the adolescent self-concept. Such insights can inform preventive strategies, guide therapeutic interventions, and contribute to a more holistic understanding of adolescent mental health.

Objectives:

This study aims to (a) examine differences in self-perception between traumatic experience-exposed adolescents and healthy peers; (b) explore associations between specific traumatic experience domains and self-perception scales; and (c) identify psychosocial predictors of negative self-concept in Indian adolescents.

Hypotheses:

1. Adolescents with documented childhood traumatic experience will report significantly lower self-perception scores across all domains compared to healthy peers.
2. Higher traumatic experience scores (emotional, physical, , neglect) will predict poorer self-perception.
3. Perceived social support and emotional intelligence will moderate the impact of traumatic experience on self-concept.

2. Literature Review

2.1 Self-Perception and Adolescence

Self-perception in adolescence is increasingly recognized as a dynamic and multidimensional construct rather than a fixed personality trait. It develops through ongoing interactions with parents, peers, and social institutions and reflects the adolescent's internalized beliefs about competence, attractiveness, social acceptance, and self-worth (Asthana, 2020).

The Self-Perception Scale (SPS) and similar measures provide a multidomain assessment of these components, highlighting the way young people evaluate not only their academic or physical abilities but also their interpersonal effectiveness and sense of global self-esteem. Poor or unstable self-concept during adolescence is strongly associated with internalizing disorders such as depression and anxiety, higher rates of school disengagement, psychosomatic complaints, and increased risk-taking behaviours (Cohen & Wills, 1985; Orth & Robins, 2014). Importantly, adolescence is a period of heightened neuroplasticity, making self-perception especially sensitive to both positive and negative life

experiences.

2.2 Childhood traumatic experience and Self-Concept

Childhood traumatic experience can have profound and enduring effects on self-concept. Neurodevelopmental research shows that chronic exposure to threat or deprivation alters the structure and function of key self-referential regions of the brain, including the amygdala, hippocampus, and medial prefrontal cortex (Powers & Casey, 2015). These changes interfere with the ability to regulate emotions, integrate autobiographical memories, and develop a coherent sense of self. Emotional neglect and chronic invalidation appear to be particularly damaging, eroding self-worth and fostering persistent feelings of powerlessness and shame (Belcher, 2023). Ford et al. (2015) recommend a broad conceptualization of traumatic experience that includes not only overt abuse but also subtle relational adversities such as parental unavailability, chronic criticism, or exposure to interparental conflict. This broader definition captures the "hidden injuries" of childhood that can profoundly influence later psychosocial functioning.

2.3 PNES as a Model of traumatic experience-Linked Somatization

Psychogenic Non-Epileptic Seizures (PNES) provide a valuable model for understanding how unresolved traumatic experience manifests somatically. PNES is characterized by seizure-like episodes without the abnormal electrical activity seen in epilepsy and is often understood as an expression of psychological distress (Lillo, 2024; Kozłowska et al., 2018). Adolescents with PNES commonly present with fragile self-concepts, maladaptive coping strategies, dissociative tendencies, and high rates of childhood adversity. Although PNES itself is not the focus of the present study, its psychosocial framework—linking traumatic experience, dissociation, and self-concept disturbance—parallels the experiences of many traumatic experience-exposed but neurologically healthy adolescents. Understanding PNES thus offers an indirect but useful lens for exploring how traumatic experience reshapes self-perception in broader adolescent populations.

2.4 Theoretical Frameworks

Several theoretical perspectives inform the study of traumatic experience and adolescent self-perception:

- traumatic experience Theory posits that unintegrated traumatic memories are often stored somatically rather than verbally, undermining identity formation and the integration of self-states (Van der Kolk, 2014; Herman, 2015).

- Attachment Theory emphasizes the role of early caregiving relationships in shaping internal working models of self and others. Secure attachment fosters positive self-perception and emotional regulation, while insecure or disorganized attachment contributes to shame and low self-worth (Bowlby, 1969; Liotti, 2004).
- Emotion Regulation

3. Methods

3.1 Design and Participants

This study adopted a comparative, cross-sectional design to examine differences in self-perception between adolescents with and without documented childhood traumatic experience. A total of 120 adolescents aged 12–19 years were recruited from urban and semi-urban schools, community centres, paediatric clinics, and non-governmental organizations (NGOs) working with at-risk youth. Participants were stratified into two groups:

- traumatic experience Group (n = 60):

Adolescents with documented childhood traumatic experience identified through school counsellors, NGO records, paediatric clinics, and self/parental reports. Traumatic experience exposure was verified using the Childhood Traumatic Experience Scale–Short Form (CTS-SF). In this study, the .

- Control Group (n = 60): Age- and gender-matched adolescents with no self-reported or documented histories of abuse, neglect, or chronic adversity. These participants were screened with the CTS-SF to confirm absence of traumatic experience exposure.

Exclusion criteria for both groups included diagnosed neurological disorders (e.g., epilepsy), intellectual disabilities, developmental delays, and severe psychiatric conditions requiring hospitalization. This ensured that the sample represented adolescents able to complete self-report measures reliably. Matching on age and gender reduced potential confounding effects and improved comparability across groups.

Table 1. Summary of Participants, Measures, and Analyses Additionally, adolescents reporting sexual abuse traumatic experience were excluded from the study sample to ensure homogeneity and ethical compliance.

Component	Description
Design	Comparative cross-sectional
Participants	120 adolescents aged 12–19 years (traumatic experience group: n=60; Control group: n=60)
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Recruitment	Schools, NGOs, paediatric clinics; parental consent and adolescent assent obtained
Exclusion Criteria	Neurological disorders, epilepsy, intellectual disabilities, severe psychiatric conditions requiring hospitalization
Measures	CTS-SF – Traumatic SF SPS – Domain Self-Perceptions
Procedure	In-person, supervised Scale administration; confidentiality assured; ethical clearance obtained; referral pathways provided
Analyses	Descriptive statistics; Independent samples t-tests; Pearson correlations; Hierarchical regression controlling for SES, emotional intelligence, and social support

3.2 Measures

Standardized, validated instruments were employed to capture traumatic experience exposure, self-perception, and psychosocial covariates.

- **Childhood Trauma Scale–Short Form (CTS-SF):** A 28-item self-report measure assessing five domains of maltreatment—emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect (Bernstein et al., 2003). The CTS-SF has robust psychometric properties and is widely used in adolescent trauma research.

- **Self-Perception Scale (SPS):** Developed for Indian adolescents, the SPS evaluates three primary factors of self-concept, including perceived competence, social acceptance, and self-worth (Asthana, 2020). Higher scores indicate more positive self-perception.

The selection of these measures reflects the multidimensional nature of self-perception and its

known correlates (social support, emotional intelligence, stress).

3.3 Procedure

Participants were approached through school administrations, NGO staff, and paediatricians who served as gatekeepers. Written informed consent was obtained from parents/guardians, and assent was obtained from adolescents. The study received ethical clearance from the Institutional Review Board (IRB) of the host institution. Scales were administered individually or in small groups in quiet, supervised settings to minimize distractions and ensure confidentiality. Research staff trained in traumatic experience-informed approaches facilitated data collection. A debriefing session followed completion of the Scales, during which participants were provided information about mental health resources. Adolescents exhibiting distress were referred to appropriate counselling or

clinical services. No monetary incentives were provided, but participants received a small token of appreciation to acknowledge their time.

3.4 Data Analysis:

SPS and CTS-SF total scores were computed according to their standardized scoring protocols. Only competence, social acceptance, and self-worth SPS domains and total CTS score were analyzed. The sexual abuse subscale of CTS-SF was not applied in the analysis as per the study's ethical framework. Analyses included descriptive statistics, independent samples t-tests, and Pearson correlations.

Data analysis was conducted using SPSS (version XX). Preliminary analyses included descriptive statistics and reliability checks for all measures. Independent samples t-tests were used to compare self-perception scores between traumatic experience-exposed and control groups. Pearson product-moment correlations examined relationships between traumatic experience domains (CTS-SF subscales) and self-perception scale (SPS subscales). To test the unique contribution of traumatic experience to self-perception while accounting for potential confounders, hierarchical multiple regression analyses were performed. In the first block, socio-demographic variables (age, gender, socio-economic status) were entered. The second block included emotional intelligence, perceived social support, and perceived stress. The final block entered total traumatic experience scores and subscale scores from the CTS-SF. This approach allowed for evaluating whether traumatic experience remained a significant predictor of self-perception above and beyond psychosocial resources. Significance levels were set at $p < .05$.

3.5 Data Quality and Statistical Assumptions

Prior to conducting inferential analyses, the dataset was carefully screened to ensure validity and adherence to statistical assumptions:

- **Missing Data:** All Scales were checked for completeness at the time of data collection. Less than 3% of responses were missing overall. Missing values were handled using mean substitution for scale items where fewer than 10% of responses were missing. Participants with substantial missing data on a scale (>20%) were excluded from analyses for that variable.
- **Outliers:** Univariate outliers were identified through standardized z-scores ($>|3.29|$). Multivariate outliers were examined using Mahala Nobis distance. Outliers were retained if they reflected plausible scores but were removed if clearly due to data entry error.
- **Normality:** The distribution of all continuous

variables was evaluated using skewness, kurtosis, and the Shapiro-Wilk test. Transformations (e.g., log transformation) were considered for variables violating normality assumptions, but not applied unless skewness exceeded ± 2 .

- **Reliability:** Internal consistency of all multi-item scales (CTS-SF & SPS) was examined using Cronbach's α . Acceptable reliability was defined as $\alpha \geq 0.70$.
- **Homogeneity of Variance:** Levene's test for equality of variances was performed before conducting independent samples t-tests. In cases where variance was unequal, Welch's t-test was used.

4 Multicollinearity:

For regression models, variance inflation factor (VIF) and tolerance statistics were examined to ensure multicollinearity was not problematic.

4.1 Group Differences in Self-Perception

Self-Perception Scale (SPS): Developed for Indian adolescents, the SPS evaluates three primary scale of self-concept, including perceived competence, social acceptance, and self-worth (Asthana, 2020). Higher scores indicate more positive self-perception.

- **Competence:** Adolescents with traumatic experience histories reported markedly lower perceived competence ($M = 32.1$, $SD = 6.4$) compared to controls ($M = 39.7$, $SD = 5.9$), $t(118) = 7.11$, $p < .001$, Cohen's $d \approx 1.29$ (large effect).
- **Social Acceptance:** traumatic experience-exposed adolescents also perceived significantly less social acceptance ($M = 28.4$, $SD = 5.1$) than controls ($M = 36.2$, $SD = 4.8$), $t(118) = 8.04$, $p < .001$, $d \approx 1.47$ (large effect).
- **Self-Worth:** A similar pattern emerged for self-worth, with traumatic experience participants scoring lower ($M = 30.7$, $SD = 5.8$) than controls ($M = 38.5$, $SD = 5.5$), $t(118) = 7.88$, $p < .001$, $d \approx 1.44$ (large effect).

These large effect sizes underscore the pronounced differences in self-perception between traumatic experience-exposed and non-exposed adolescents.

4.2 Correlations Between traumatic experience and Self-Perception

Pearson correlation analyses showed significant negative associations between total childhood traumatic experience (CTS total score) and all SPS domains (range $r = -.41$ to $-.56$, all $p < .001$), indicating that greater traumatic experience exposure corresponded to lower self-perception.

When examining traumatic experience subscales separately:

- **Emotional Neglect:** This domain showed the strongest association with self-worth (r

$= -.56, p < .001$), suggesting that a lack of emotional validation during childhood is particularly detrimental to an adolescent's sense of self-worth.

- **Physical Abuse:** Most strongly linked with perceived competence ($r = -.43, p < .001$), indicating that direct harm undermines adolescents' belief in their capabilities.

- **Other Subscales:** Emotional abuse, , and physical neglect also correlated significantly but slightly less strongly with self-perception scale.

These findings suggest that while all forms of traumatic experience negatively impact self-concept, emotional neglect exerts a uniquely powerful effect on self-worth.

4.3 Predictors of Self-Perception

A hierarchical multiple regression model was used to test whether childhood traumatic experience predicted self-perception after accounting for socio-demographic and psychosocial factors.

- **Step 1 (Covariates):** Socioeconomic status (SES), emotional intelligence, and perceived social support collectively explained a significant proportion of variance in self-perception ($R^2 = .32, p < .001$).

- **Step 2 (Childhood traumatic experience):** Adding total CTS scores produced a significant increase in explained variance ($\Delta R^2 = .18, p < .001$). Childhood traumatic experience emerged as a robust independent predictor of lower self-perception ($\beta = -.47, p < .001$).

- **Interaction Effect:** Social support partially moderated the traumatic experience-self-perception relationship (interaction $\beta = .19, p = .02$). Adolescents reporting higher perceived social support demonstrated less severe self-perception deficits, even at comparable levels of traumatic experience exposure.

Overall, the regression analysis highlights that while emotional intelligence and social support are important protective factors, childhood traumatic experience remains a key determinant of adolescents' self-concept.

5. Discussion:-

This study provides compelling evidence that adolescents with documented childhood traumatic experience histories exhibit significantly lower self-perception across competence, social acceptance, and self-worth compared to their non-traumatic experience-exposed peers. These findings extend existing research on adverse childhood experiences (ACEs), reinforcing the link between early adversity, impaired self-concept, and heightened psychosomatic vulnerability (Myers et al., 2019; Kozłowska et al., 2018). By focusing specifically on self-perception as a multidimensional construct, this study contributes novel insight to the literature on adolescent traumatic experience in India, a

context where such research remains limited.

5.1 traumatic experience's Impact on Self-Perception

Our results underscore that emotional neglect and invalidation—often less visible than overt abuse—exert particularly strong effects on self-worth. This aligns with Teicher and Samson's (2016) neurodevelopmental model, which emphasizes how repeated relational adversity disrupts the prefrontal-limbic circuitry critical for self-referential processing and emotion regulation. Adolescents deprived of consistent emotional atonement may internalize a view of themselves as unworthy, incompetent, or socially unacceptable, perpetuating a cycle of low self-esteem and heightened psychosocial risk. The large effect sizes observed in our study highlight the depth of these deficits and underscore the urgency of early detection.

5.2 Moderating Role of Social Support

Consistent with Cohen and Wills' (1985) buffering hypothesis, our findings demonstrate that perceived social support significantly mitigates the negative impact of traumatic experience on self-perception. Adolescents with stronger support networks—whether from parents, peers, or mentors—showed relatively better self-perception scores despite similar traumatic experience exposure levels. This protective effect likely reflects both emotional validation and the provision of alternative role models, which can help counteract internalized negative beliefs formed during childhood adversity. These findings support interventions aimed at enhancing family cohesion, peer support, and school-based mentorship as cost-effective strategies for promoting resilience among traumatic experience-exposed youth.

5.3 Cultural Considerations

The Indian sociocultural context adds important layers to interpreting these findings. Emotional disclosure remains stigmatized in many communities, which may encourage somatic expression of psychological distress rather than open acknowledgment of emotional pain (Grover & Naskar, 2024). Gendered patterns of silencing, including restrictive norms around adolescent girls' autonomy and expression, may further intensify self-worth deficits and internalized shame (Abraham & Sher, 2019). These cultural factors mean that traumatic experience-related self-perception deficits are likely underreported and undertreated in clinical and school settings. Addressing these barriers requires culturally sensitive screening tools, psychoeducation campaigns, and interventions that respect but gently challenge prevailing norms about emotional

expression.

5.4 Implications for traumatic experience-Informed Care

Our findings reinforce the need for routine screening of self-perception and traumatic experience histories in adolescent health and educational settings. Early detection of low self-worth, poor perceived competence, or limited social acceptance may flag adolescents at elevated risk for emotional, behavioural, or psychosomatic problems. traumatic experience-informed interventions such as narrative therapy, mindfulness-based emotion regulation programs, and parental sensitivity training hold promise for restoring positive self-concept and fostering resilience (Herman, 2015). In school settings, structured peer support programs, life skills training, and safe spaces for emotional expression could complement clinical approaches. Ultimately, addressing self-perception deficits is not merely remedial but preventive, with potential to improve long-term mental health and academic outcomes.

5.5 Limitations and Future Directions

Despite its strengths, this study has several limitations. First, the cross-sectional design precludes causal inference; it is unclear whether traumatic experience leads to poor self-perception or whether pre-existing vulnerabilities exacerbate traumatic experience's impact. Second, reliance on self-report measures raises the possibility of recall bias and social desirability effects, especially in cultures where traumatic experience disclosure is sensitive. Third, the sample was urban and recruited through schools, NGOs, and clinics, potentially limiting generalizability to rural or out-of-school adolescents. Future research should prioritize longitudinal and mixed-method designs to track how self-perception evolves over time following traumatic experience exposure, integrating qualitative narratives to capture cultural nuances. Incorporating neuroimaging and psychophysiological measures could map the neural correlates of self-referential processing in traumatic experience-exposed adolescents. Finally, rigorous testing of culturally adapted interventions—for example, mindfulness-based programs tailored to Indian adolescents or family-based approaches incorporating local parenting practices—will be essential to translate these findings into sustainable public health strategies.

6. Conclusion

This study underscores that adolescents with a history of childhood traumatic experience profound deficits in self-perception, encompassing competence, social acceptance, and self-worth, compared to their non-traumatic experience-exposed peers. Among the traumatic

experience domains, emotional neglect emerged as the most powerful predictor of diminished self-worth, suggesting that the absence of emotional atonement may be even more detrimental than overt abuse. At the same time, perceived social support served as a partial protective factor, buffering some of traumatic experience's adverse effects and highlighting the importance of strong family, peer, and community networks in promoting resilience. These findings emphasize the need for systematic screening of self-perception and traumatic experience histories within schools, paediatric clinics, and community health settings. Identifying at-risk adolescents early allows for targeted, traumatic experience-informed interventions—including counselling, social skills programs, peer mentoring, and family-based approaches—that can help rebuild positive self-concept and emotional competence. In the broader public health context, integrating psychoeducation about traumatic experience and self-esteem, strengthening school mental health services, and training teachers and counsellors in traumatic experience-sensitive practices could help disrupt the cycle of adversity and negative self-concept during adolescence. Such approaches may not only reduce immediate psychological distress but also improve long-term outcomes in education, mental health, and social functioning.

References

1. Abraham, J., & Sher, L. (2019). Gender differences in adolescent trauma outcomes in South Asia. *Asian Journal of Psychiatry*, 41, 56–63.
2. Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, 30(2), 217–237.
3. Asthana, R. (2020). *Self-Perception Scale for adolescents*. New Delhi: Indian Psychological Association.
4. Belcher, J. (2023). Emotional neglect and self-worth in adolescents: A review. *Child and Adolescent Psychiatry Quarterly*, 12(3), 145–158.
5. Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluwalia, T., ... Zule, W. (2003). Development and validation of a brief screening version of the Childhood traumatic experience Scale. *Child Abuse & Neglect*, 27(2), 169–190.
7. Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
8. Brown, R. J., & Reuber, M. (2016). Towards an integrative theory of psychogenic non-epileptic seizures. *Clinical Psychology Review*, 47, 55–70.
9. Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis.

- Psychological Bulletin, 98(2), 310–357.
10. Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience*, 13(9), 636–650.
 11. Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129–136.
 12. Ford, J. D., & Courtois, C. A. (2013). Complex PTSD and borderline personality disorder.
 13. *Borderline Personality Disorder and Emotion Dysregulation*, 1(1), 9.
 14. Ford, J. D., Grasso, D. J., Greene, C. A., Levine, J., Spinazzola, J., & van der Kolk, B. A. (2015). Clinical significance of a proposed developmental traumatic experience disorder diagnosis. *Journal of Clinical Psychiatry*, 76(2), 146–158.
 15. Grover, S., & Naskar, C. (2024). Somatization and adolescent mental health in India. *Indian Journal of Social Psychiatry*, 40(1), 21–33.
 16. Herman, J. L. (2015). *traumatic experience and recovery: The aftermath of violence—from domestic abuse to political terror* (2nd ed.). New York: Basic Books.
 17. Kozłowska, K., Chudleigh, C., Cruz, C., Lim, M., McClure, G., Savage, B., & Williams, L. M. (2018). Psychogenic non-epileptic seizures in children and adolescents: A model of emotional and physiological dysregulation. *Clinical Child Psychology and Psychiatry*, 23(4), 620–639.
 18. Lillo, S. (2024). Psychogenic seizures in adolescents: A neurobehavioral perspective. *Journal of Pediatric Neuropsychiatry*, 12(1), 34–48.
 19. Liotti, G. (2004). traumatic experience, dissociation, and disorganized attachment: Three strands of a single braid. *Psychotherapy: Theory, Research, Practice, Training*, 41(4), 472–486.
 20. Mumford, D. (1993). Emotional suppression and somatization in South Asia. *Transcultural Psychiatry*, 30(2), 123–140.
 21. Myers, L., Lancman, M., Laban-Grant, O., & Lancman, M. (2019). Psychogenic nonepileptic seizures: Prevalence, etiology, and treatment. *Epilepsy & Behavior*, 98, 39–44.
 22. Nehra, R., Kaur, H., Sharma, V., & Nehra, S. (1998). PGI Social Support Scale: Development and validation. *Indian Journal of Psychiatry*, 40(3), 215–222.
 23. Powers, A., & Casey, B. J. (2015). The adolescent brain and the emergence of vulnerable mental health states. *Trends in Cognitive Sciences*, 19(9), 429–440.
 24. Singh, M., & Narain, P. (2014). *Childhood Trauma Scale–Short Form (CTS-SF) for adolescents*. Lucknow: National Psychological Corporation.
 25. Teicher, M. H., & Samson, J. A. (2016). Annual research review: Enduring neurobiological effects of childhood abuse and neglect. *Journal of Child Psychology and Psychiatry*, 57(3), 241–266.
 26. Van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of traumatic experience*. New York: Viking.