The Relationship Between Childhood Trauma, Adolescent Depression, and Well-Being

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Abstract. With severe repercussions that go well beyond infancy, childhood trauma is a major risk factor for teenage mental health. Adolescents are more susceptible to a variety of psychological issues as a result of these early negative experiences, which can interfere with appropriate emotional, cognitive, and social development. Furthermore, the effects of childhood trauma frequently last into adulthood, impacting general quality of life and long-term wellness. This study systematically explores childhood trauma, including abuse, neglect, and family dysfunction, and examines their pathways and underlying mechanisms influencing adolescent depression and well-being. It further analyzes how trauma contributes to distorted cognition, impaired emotional regulation, disrupted interpersonal relationships, and alterations in the biological stress response system. Additionally, the critical roles of protective factors, such as secure attachment, psychological resilience, and social support, are highlighted. Finally, trauma-informed, multi-level intervention strategies are proposed to provide a theoretical foundation for promoting adolescent mental health and to identify practical directions for implementation.

Keywords: Childhood Trauma, Adolescent, Depression, Subjective Well-being

1. Introduction

For some adolescents, childhood is marked by indelible traumatic experiences. A large-scale metaanalysis published in JAMA Pediatrics synthesized data from 490,423 children across 18 countries and revealed that approximately 6 out of every 10 children (57.7%) had experienced at least one Adverse Childhood Experience (ACE) before the age of 18. Furthermore, 14.8% of children had endured four or more severe childhood traumas. The study also revealed the heightened vulnerability of specific groups: children living in residential care settings, individuals with a history of juvenile delinquency, and Indigenous populations exhibited a significantly higher proportion of experiencing more than four ACEs compared to the general population. Adolescence itself is a period filled with challenges and transitions, and the lingering effects of early trauma often manifest in more complex ways during this developmental stage.

Adolescence represents a critical crossroads for physical and psychological development. The brain undergoes significant restructuring, identity formation emerges through exploration, and social networks expand rapidly. Adolescence is thus regarded as a "highly sensitive period" for the manifestation of the long-term effects of childhood trauma. A deeper understanding of the complex

relationship between childhood trauma, adolescent depression, and well-being can help identify risk mechanisms and ultimately break the chain of intergenerational trauma transmission, illuminating pathways toward psychological recovery and thriving for countless adolescents [1].

2. Definition of core concepts

2.1. Childhood trauma

Childhood trauma refers to single or chronic events experienced or witnessed before the age of 18 that pose an actual or potential threat to physical or psychological health. Its core characteristics evoke intense fear, helplessness, or a sense of loss of control in children. Examples include abuse in the form of physical abuse, emotional abuse, and sexual abuse. Neglect may manifest as physical neglect or emotional neglect. Severe family dysfunction can include witnessing domestic violence, parental substance abuse or severe mental illness, parental divorce or intense conflict, and criminal behavior or incarceration of family members. Other forms of trauma may involve serious accidents, natural disasters, major illnesses or medical trauma, war or community violence, and the loss (through death or abandonment) of a primary caregiver [2]. The severity of trauma is determined not only by the event itself but also by factors such as frequency, duration, the age at which it occurred, the relationship with the perpetrator, and the level of support received afterward.

2.2. Adolescent depression

In adolescents, depression is far more than "mere sadness." Adolescent depression typically presents as persistent and intense sadness, emptiness, or irritability lasting for at least two weeks, accompanied by a marked loss of interest or pleasure in all or nearly all activities. Additional symptoms may include significant weight changes or alterations in appetite, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive and inappropriate guilt, diminished ability to think or concentrate, and recurrent thoughts of death or suicidal ideation. The manifestations of adolescent depression may be more covert, often presenting as irritability, aggression, somatic complaints, sudden declines in academic performance, social withdrawal, or engagement in high-risk behaviors.

2.3. Adolescent well-being

For adolescents, well-being is a multi-dimensional and dynamically evolving positive psychological state. Regarding subjective well-being, the affective dimension refers to experiencing positive emotions with a frequency significantly greater than that of negative emotions, while the cognitive dimension involves an overall sense of satisfaction with the current life situation and a positive evaluation of future prospects. In terms of psychological and social well-being, autonomy requires a perceived sense of control over one's own behaviors and choices; environmental mastery entails the belief in one's ability to cope with environmental challenges and meet personal needs; personal growth reflects a sense of continuous development and the realization of one's potential; positive relations with others require the possession and perception of high-quality, mutually supportive social connections. A sense of purpose in life involves perceiving life as meaningful and goal-directed. Self-acceptance refers to holding a positive attitude toward oneself and accepting both one's strengths and weaknesses [3].

3. The impact of childhood trauma on adolescent depression

Childhood trauma does not simply "cause" depression; rather, it is complex and interwoven, profoundly reshaping the ways adolescents perceive the world, understand themselves, and regulate their internal states.

3.1. Distorted cognitive patterns and the consolidation of negative schemas

A safe, controllable, and meaningful childhood environment forms the cornerstone of healthy cognitive development, yet trauma ruthlessly shatters these fundamental beliefs. Children who experience abuse or neglect often develop core negative schemas such as "I am unlovable/worthless/defective," "the world is extremely dangerous and unpredictable," and "others are untrustworthy or harmful." Beck's cognitive triad of depression—negative views of the self, the world, and the future—is particularly salient and persistent among adolescents with a history of trauma. They are more likely to interpret neutral or even positive events negatively, engage in overgeneralization, and display catastrophic thinking. Self-blame and internalized attribution are also common, as children often attribute traumatic events to themselves, providing fertile ground for depressive emotions.

3.2. Severe impairment in emotion regulation

Chronic or severe childhood trauma can disrupt the development of key brain regions responsible for emotion regulation. The amygdala (the fear center) may become hyperactive and hypersensitive, while the functioning of the prefrontal cortex may be impaired, leading to more intense, prolonged, and less easily soothed emotional responses in adolescents. Changes in the hippocampus affect contextual memory, making it more likely for past traumatic emotions to be reactivated when encountering similar contexts or stimuli [4].

To survive in traumatic environments, children may develop emotion regulation strategies that are adaptive in the short term but detrimental to psychological health in the long run. Emotional numbing, suppression, avoidance, self-harm, substance abuse, or aggressive outbursts may become factors that sustain and exacerbate depressive symptoms. Additionally, traumatic experiences—particularly emotional neglect or abuse—can impair adolescents' ability to accurately identify and label their own emotions (alexithymia). As a result, adolescents may struggle to understand and express their emotions, further intensifying internal distress and feelings of isolation.

3.3. Profound disruption of interpersonal relationships and social functioning

Childhood trauma, especially when inflicted by primary caregivers, often leads to the development of insecure attachment patterns. Adolescents with anxious attachment may become excessively dependent and fearful of abandonment; those with avoidant attachment tend to have difficulty trusting and connecting with others, exhibiting emotional detachment; and those with disorganized attachment display contradictory and unpredictable interaction patterns. These difficulties undermine adolescents' ability to establish and maintain healthy, close relationships. At the same time, a lack of social support and increased interpersonal conflict serve as key factors that trigger and perpetuate depression [5]. Limiting children's opportunities to learn and develop normal social skills can lead to difficulties in interpreting social cues, a lack of empathy, or heightened vigilance toward potential threats. A deep-seated distrust of others makes it challenging for them to integrate into groups, resulting in feelings of loneliness and alienation. Adolescents who have experienced

specific types of trauma (e.g., sexual abuse) often experience intense shame and a sense of stigma, fearing that disclosure will lead to judgment or rejection by others. This avoidance of social interactions further exacerbates depressive symptoms.

3.4. Long-term dysregulation of the stress response system

Childhood trauma is a significant risk factor for the long-term dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis, the core stress response system. This dysregulation may manifest as abnormal baseline cortisol levels (either excessively high or low) or as a blunted or hypersensitive cortisol response to everyday stressors, resulting in chronic fatigue and a reduced capacity to cope with new challenges. Traumatic experiences also heighten the sensitivity of an individual's threat detection system, leading to pronounced hypervigilance and stress responses even in objectively safe environments. During adolescence, non-threatening situations such as speaking in class or being teased by peers may trigger excessive irritability, aggression, flight behaviors, emotional numbing, or dissociation [6].

3.5. Stagnation and distortion in the development of self-identity

Trauma, particularly interpersonal trauma involving betrayal (e.g., abuse or neglect), profoundly disrupts the core developmental task of forming a coherent and positive self-identity in adolescence. Affected individuals often experience extremely low self-worth and struggle to integrate traumatic experiences into their self-narratives. Maladaptive self-schemas, such as "I am a victim" or "I am unworthy of love," limit their ability to explore and perceive alternative possibilities. Consequently, many find it difficult to move beyond their traumatic experiences, and their outlook on life is overshadowed by pervasive negative emotions and feelings of helplessness [7]. Moreover, trauma often triggers profound doubts about the meaning of life and the fairness of the world, such as "Why me?" or "How can the world be so unjust?" Individuals may struggle to find meaning in their traumatic experiences or to envision hope for the future.

4. The impact of childhood trauma on adolescent well-being

4.1. Deprivation and suppression of positive emotional experiences

When individuals are chronically exposed to survival pressures or remain in a state of heightened vigilance, the nervous system struggles to relax, making it difficult to truly experience inner joy and satisfaction. During leisure activities, they may appear distracted or unable to engage fully, reflecting how trauma undermines a fundamental sense of internal safety. Even in objectively safe environments, those with traumatic experiences may feel as though they are walking on thin ice, finding it hard to genuinely relax or feel secure. Yet, a sense of safety is a prerequisite for experiencing profound joy and contentment. Additionally, their heightened focus on negative stimuli—an adaptive survival mechanism—can diminish the psychological space available to perceive and amplify positive stimuli. As a result, they may fail to notice and savor small but beautiful aspects of daily life, such as sunlight or a friend's smile [8].

4.2. A clouded outlook on life satisfaction and future prospects

As noted earlier, negative core beliefs and maladaptive schemas lead adolescents to view various aspects of life through a lens of dissatisfaction and negativity. Even when they achieve success,

adolescents may fail to recognize it or internalize it, often attributing it to luck rather than their own abilities. Particularly, events involving loss of control and feelings of helplessness profoundly affect adolescents' beliefs in their own sense of agency, leading them to perceive themselves as passive recipients of fate rather than active creators of their lives. This directly undermines life satisfaction and fosters deeply ingrained pessimistic expectations about the future, with the belief that misfortune will persist and positive outcomes will not occur for them. The absence of hope makes it exceptionally difficult to pursue goals and envision a brighter future [9].

4.3. Widespread impairment in the dimensions of psychological and social well-being

When autonomy is undermined, trauma often stems from harsh discipline, abuse, or other experiences involving control or deprivation of self-determination. Adolescents may experience intense anxiety when required to make independent decisions, and some may swing to the opposite extreme, exhibiting reckless behaviors or a generalized tendency to resist all forms of authority. As a result of the diminished sense of self-efficacy and the negative expectations learned from these experiences, adolescents often doubt their ability to cope with everyday challenges in academics, social interactions, and other domains. Confronted with difficulties, they are more likely to give up. The cognitive and emotional resources of adolescents are frequently consumed by anxiety, fear, and other negative emotions associated with trauma, leaving insufficient capacity to explore interests, develop skills, and realize their potential. This severely restricts opportunities for self-improvement and personal growth. Yet, high-quality social connections are a core pillar of subjective well-being. When adolescents struggle to identify meaningful personal goals worth striving for, or feel deeply frustrated by internal obstacles during the pursuit of such goals, their sense of happiness and life satisfaction is profoundly compromised.

4.4. Somatization and the negative impact on health behaviors

Chronic stress responses, particularly dysregulation of the HPA axis, are not only closely associated with depressive symptoms but may also trigger a variety of somatic discomforts. As a means of coping with emotional distress, some adolescents resort to behaviors such as smoking, excessive alcohol consumption, unhealthy eating habits, physical inactivity, or self-injury. Over time, these maladaptive coping strategies severely compromise physical health and overall well-being.

5. Protective factors and the role of psychological resilience

Childhood trauma poses significant risks; however, not all adolescents who experience trauma inevitably fall into profound depression or completely lose their sense of well-being. There is substantial interindividual variability, and psychological resilience plays a crucial role in this process.

5.1. Internal protective factors

The first internal factor is a positive cognitive style and adaptive emotion regulation strategies. Adolescents who are able to view events with relative flexibility and maintain a certain level of optimism are more likely to employ healthier coping strategies, such as seeking social support, engaging in positive reappraisal, and expressing emotions appropriately rather than suppressing or explosively releasing them. The second factor is a higher sense of self-efficacy—that is, the general belief in one's ability to cope with challenges and influence outcomes. This belief is essential in

overcoming adversity [10]. The third factor is a positive self-concept and self-esteem. Even after experiencing trauma, adolescents who are able to retain certain positive beliefs about their self-worth are less likely to be completely overwhelmed by negative cognitive schemas. The fourth factor is a sense of purpose and the capacity to seek meaning. This involves identifying life goals—even small ones—or finding meaning within adverse experiences, such as thinking, "This experience has made me stronger" or "I want to help others who have gone through similar experiences." By doing so, individuals are able to ascribe a sense of value to their suffering.

5.2. External protective factors

First, secure and supportive attachment relationships, particularly following trauma, represent the most critical protective factor. After experiencing trauma, establishing a secure relationship with at least one stable, reliable, and caring adult who can provide emotional support, validate feelings, offer practical assistance, and deliver unconditional positive regard can greatly facilitate recovery. Second, a broad and high-quality social support network plays a significant role. Beyond core supporters, having a circle of friends who understand and accept the individual, as well as engaging in meaningful community activities that foster a sense of belonging, purpose, and practical assistance, serves as an important source of subjective well-being.

Third, living in a safe, stable, and predictable environment is essential. This includes distancing from the source of trauma or improving the traumatic environment, and residing in conditions that feel physically and psychologically safe, with clear and predictable rules. Fourth, access to professional mental health services, including evidence-based trauma interventions such as Cognitive Behavioral Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR), is crucial. Timely receipt of these services can help process traumatic memories, alleviate symptoms, and enhance coping skills and emotional regulation abilities.

Fifth, positive school experiences constitute another crucial protective factor. Having teachers who care about students, experiencing a sense of accomplishment and competence in academic or extracurricular activities, and perceiving an inclusive and supportive school climate are all key elements. In other words, the school environment represents the most important life context for adolescents apart from the family.

Sixth, exposure to resilience-promoting cultural or spiritual beliefs can provide strength and comfort under certain circumstances. Cultural values or religious faith may serve as significant sources of support and consolation.

Seventh, the essence of psychological resilience lies not in the absence of trauma or suffering, but in the ability to mobilize internal and external resources to achieve relatively good adaptation and functional recovery in the aftermath of severe adversity. Psychological resilience is a dynamic process rather than a fixed trait. Possessing protective factors does not erase traumatic memories; instead, it empowers individuals to grow, build connections, and discover opportunities to experience the positive aspects of life despite the shadows of trauma.

5.3. Trauma-informed approaches

A trauma-informed approach seeks to break the chain reaction of childhood trauma and promote the enhancement of adolescents' mental health and well-being. This concept must be grounded in systemic and multi-level trauma-informed principles, emphasizing the understanding of the prevalence of trauma, recognizing its impact, identifying symptoms, and reforming policies and practices to prevent re-traumatization. It aims to create safe, empowering, and healing environments.

Individual-Level: Evidence-based Psychotherapeutic Interventions. At the individual level, the core focus is to help adolescents process and integrate traumatic memories safely, identify and modify trauma-related distorted cognitions, and learn effective emotion regulation and stress management skills. Techniques such as exposure therapy and emotion regulation training are used to gradually reduce trauma-related avoidance behaviors. These interventions typically include supportive involvement from parents or caregivers. Additionally, adolescents can benefit from bilateral stimulation techniques to help the brain reprocess unresolved traumatic memories, thereby reducing their emotional burden and integrating these memories into more adaptive cognitive frameworks. Furthermore, Dialectical Behavior Therapy (DBT) is particularly suitable for traumaexposed adolescents who exhibit extreme emotional dysregulation, self-harm or suicidal behaviors, or interpersonal difficulties. The core components of DBT include mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness. In attachment-based family therapy, treatment becomes crucial when trauma occurs within the family system or severely disrupts the parent-child relationship. The therapeutic goal is to repair or strengthen the secure connection between parents and children, improve communication, and help parents understand how trauma shapes their child's emotions, behaviors, and identity. Parents are guided to respond to their child's needs in a supportive manner that avoids blame.

Family Level: Empowering Caregivers and Establishing a Secure Base. At the family level, interventions can assist parents or primary caregivers in understanding the impact of childhood trauma on the brain, behavior, and emotions, as well as in recognizing children's trauma responses. Caregivers are encouraged to respond with patience, empathy, consistency, and predictability. They should also learn to manage their own emotions and stress to prevent transmitting their own trauma responses to their children. Such support can further help caregivers become more attuned to children's emotional cues and needs, providing timely and appropriate warmth and supportive responses to rebuild or strengthen secure attachment. For example, family members may improve communication patterns and foster emotional expression and understanding through methods such as family meetings and emotion journals, resolve conflicts in non-violent ways, and create a family atmosphere characterized by respect, understanding, and support.

School Level: Building Trauma-Informed Campuses. Schools should provide all faculty and staff with foundational trauma-informed training, disseminating knowledge about trauma, its effects, and response principles. Clear school rules and regulations, consistent enforcement, warm and inclusive teacher–student relationships, and safe physical environments are essential components of a trauma-informed school culture. Schools should recognize that the behaviors of trauma-affected students may serve as coping mechanisms rather than intentional provocation. It is essential to adapt academic expectations based on students' emotional needs, prioritize emotional connection and psychological support for students, and integrate emotion regulation skills into daily routines.

Community and Societal Level: Building a Supportive Ecosystem. At the community and societal level, it is crucial to promote information sharing and collaboration among child welfare agencies, mental health systems, healthcare systems, judicial systems, schools, and community organizations. This ensures that adolescents affected by trauma and their families can gain coordinated access to a broad range of necessary services, thereby avoiding secondary harm or retraumatization caused by service gaps. Communities and society should also raise public awareness and understanding of childhood trauma and mental health issues, reduce discrimination and stigma, and encourage help-seeking behaviors. Policymakers should facilitate the development of policies aimed at preventing childhood trauma, promoting early identification and intervention for trauma-related impacts, and implementing widely accessible and well-enforced mental health service policies to enhance both

accessibility and professional quality. Governments should increase financial investment in school-based mental health services as well as community-based mental health programs for children and adolescents.

6. Conclusion

The scars left by childhood trauma on the hearts and minds of adolescents are profound and complex; however, despair is not the only possible outcome. Internal protective factors, such as positive cognitive styles, emotional regulation skills, and self-efficacy, together with external supports, including secure attachment relationships, robust social support networks, stable environments, professional assistance, and positive school communities, collectively form a robust and multidimensional protective system.

Breaking the intergenerational cycle of childhood trauma and illuminating a brighter path for adolescents requires concerted action from society as a whole, grounded in trauma-informed principles. Efforts to safeguard adolescent mental health and subjective well-being must focus on cultivating the soil in which well-being can flourish, thereby laying the foundation for a more empathetic and resilient adolescent generation and society.

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