# The Relationship Between Childhood Trauma, Depression and PTSD, Etiology and Treatment Methods

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**Abstract:** This paper will explore the relationship between childhood trauma and its impact on mental health, feelings of helplessness, and negative cognitive perceptions that lead to these conditions. Moreover, it highlights the important role of parental influence in shaping emotional well-being, with a specific focus on depression and post-traumatic stress disorder (PTSD). Childhood trauma, encompassing experiences such as abuse, neglect, and violence, can significantly elevate the risk of severe mental health issues. Research understates childhood trauma as a predictor of depression and PTSD, both psychosocially and neurobiologically, as trust issues. The paper provides the underlying mechanisms of this relationship, exploring psychosocial perspectives concerning attachment issues, negative beliefs, and emotion dysregulation. Cognitive emotion regulation strategies are emphasized when taking steps for the recovery of childhood trauma and preventing the development of mental disorders; other interventions and treatments, including psychotherapy and medication, offer avenues for healing and recovery. By recognizing the profound impact of childhood trauma on mental health and implementing effective interventions, individuals affected by trauma can embark on a journey toward healing, resilience, and improved wellbeing.

*Keywords:* Childhood trauma, depression, PTSD, treatment interventions.

### 1. Introduction

Childhood trauma, by the definition of The National Institute of Mental Health (USA), is "The experience of an event by a child that is emotionally painful or distressful, which often results in lasting mental and physical effects." Childhood trauma can take on various forms, and common ones are neglect, domestic violence, physical abuse, sexual abuse, and emotional abuse [1].

Childhood trauma can result in serious mental health issues, which is an important etiology factor. Adult children of childhood trauma can have difficulties in developing healthy relationships, forming attachments and regulating emotions. Childhood trauma is even linked with increased risks of engaging in self-harm and suicidal behaviors along with substance abuse. The Adverse Childhood Experiences—International Questionnaire (ACE-IQ) developed by the World Health Organization [2] shows that childhood trauma is very common among people; in fact, a study shows that almost half of all children in the United States were exposed to some form of traumatic experience. Childhood

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trauma is strongly associated with the development and exacerbation of mental disorders, including depression, post-traumatic stress disorder (PTSD), and anxiety disorders.

The many negative mental health outcomes of childhood trauma make it hard to tell if trauma is the main cause of a specific mental disorder or problem. Even though childhood trauma is associated with various mental illnesses, no outcome has been shown to be a specific indicator of early maltreatment [3].

It is important to study the relationship between childhood trauma and mental disorders in order to help individuals who face a higher risk of developing mental disorders due to childhood trauma. By recognizing the relationship between the two, we can come up with more effective treatment and adaptive intervention methods. This paper will discuss how childhood trauma is related to the development of depression and PTSD, and how cognitive regulation methods along with child-parent relationships can play a part in this relationship. Lastly, this paper will explore treatment methods for childhood trauma induced mental illnesses.

# 2. Childhood Trauma and Depression

Depression is a long-term feeling of emptiness, sadness, or incapacity to feel pleasure that seems to have no clear cause [2]. It is distinct from sadness and other emotions. Depression is also a very common mental disorder; in fact, globally, it is estimated that 3.8% of the world population suffer from the disorder [2]. Depression needs to be taken seriously because it can lead to low self-esteem, efficacy, confidence and can also cause severe physiological and psychological health problems that could potentially lead to suicide and self-harm. According to the DSM-5, symptoms of depression are characterized by a persistent and pervasive low mood. Common symptoms include feelings of sadness, emptiness, or hopelessness, along with a loss of interest or pleasure in previously enjoyed activities. Individuals may experience significant changes in appetite and weight, sleep disturbances, fatigue, and diminished concentration and decision-making abilities. Feelings of worthlessness or excessive guilt, recurrent thoughts of death or suicide. Depression is a serious mental disorder, if an individual has 3 or more of the symptoms described above, it is crucial for them to seek professional care, remember that seeking assistance is a courageous act of self-care.

Depression is also shown to be strongly linked with childhood trauma. Studies show that more than <sup>3</sup>/<sub>4</sub> people with depression report having childhood trauma [4]. To better understand such a relation ship, researchers Negele and colleagues [5], did a study on childhood trauma and its relation to chronic depression in adulthood. From 349 chronically depressed patients in the German LAC Depression Study, researchers found that those with multiple traumas develop more severe depression. It is concluded that those with multiple traumas develop more severe depression, and that childhood trauma is a strong predictor of depression.

#### 3. Underlying Mechanisms- Childhood Trauma and Depression

What are the underlying mechanisms of this relationship? From a psychosocial perspective, a child with childhood trauma might develop attachment issues, negative beliefs about oneself, and emotion dysregulation (attachment issues and emotion dysregulation will be discussed later on in the article); they might feel more depressed, anxious, or detached from reality [6]. Childhood trauma can result in negative core beliefs about oneself, others, and the world. For instance, a child who experiences consistent emotional abuse may develop a belief that they are worthless and unworthy of love; they are also less likely to trust others enough to seek support when dealing with depression, leading to further social isolation, which is only going to worsen their illness. These negative beliefs can persist into adulthood and influence self-esteem and perception of others, leading to more depressive thoughts and feelings.

From a neurobiological perspective, the child who suffers from childhood trauma endures an overwhelming amount of stress during childhood, a crucial period of physiological and psychological development; this could then lead to increased production of stress hormones like cortisol, which causes damage to brain regions like the hippocampus, prefrontal cortex, and the amygdala, resulting in impaired cognitive reasoning, emotional regulation skills and increased impulsivity [7], making children with childhood trauma likelier to develop depression.

#### 4. Childhood Trauma and PTSD

Post-traumatic stress disorder (PTSD) is a mental illness that can occur in people who have experienced or observed traumatic events or situations. (American Psychiatric Association) It may be perceived as emotionally or physically damaging and can impact one's mental, physical, social, and spiritual well-being. Childhood trauma has been shown to have a positive relationship with the development of PTSD in adulthood.

In a study about African-American females from an urban hospital who experienced moderate-to-severe childhood abuse. The researchers found impaired implicit emotion regulation and that high levels of PTSD symptoms were linked with lower accuracy of tasks in those who experienced a history of childhood abuse [8]. Moreover, a study that interviewed a representative sample of 2,181 individuals in southeast Michigan shows that individuals who had any trauma are significantly more likely to experience PTSD. For childhood trauma, individuals who experienced trauma after age 15 have a higher possibility of experiencing PTSD [9].

# 5. Underlying Mechanisms- Childhood Trauma and PTSD

What are some explanations of such a relationship? From a psychosocial perspective, adult children of childhood trauma can develop all kinds of attachment issues, constantly feeling insecure psychologically, not being able to form healthy relationships or feel comfortable seeking support and trusting others [10]. They might develop a sense of helplessness due to the traumatic experiences that they had to endure during children, not able to protect or standup for themselves. The feeling that they are out of control can cause them to develop harmful ways of thinking and strong emotional reactions that can last into adulthood. Someone who had a traumatic childhood experience might start thinking negatively about themselves, feeling like they're worthless and to be blamed for what happened to the as a child. They might also start to see the world as a dangerous and unpredictable perspective which makes them feel very scared and on edge, contributing to the development of PTSD.

From a neurobiological perspective, childhood trauma can cause structural and functional changes in multiple parts of the brain. This is because a child's brain has high neuroplasticity, meaning that it develops quickly and is vulnerable to disruption. When exposed to a high amount of stress, the HPA axis becomes activated, leading to the release of stress hormones, such as cortisol. Long-term severe activation of the stress response system can cause lasting changes in the brain, including areas like the amygdala, hippocampus, and medial prefrontal cortex [11]. The amygdala is involved in regulating emotions, particularly fear responses; changes in the amygdala can result in it being more sensitive and hyperactive, leading to more heightened fear responses and paranoia. The hippocampus is involved in memory formation, and childhood trauma might cause hippocampus shrinkage and damaged functioning in individuals, resulting in memory loss or fragmented, intrusive memories. Childhood trauma can also cause functional changes to the medial prefrontal cortex, which plays a role in decision-making, reasoning, and emotion regulation; such functional changes can cause difficulties in emotion regulation and increased vulnerability to stress-related disorders.

## 6. Child Parent Relationship and the Development of Depression and PTSD

Children need love and support from parents in order to develop adaptive emotional regulation methods and social skills. Children with childhood trauma lack such care or are overly protected and controlled. A lot of children with trauma develop attachment and trust issues that led to the development of unhealthy personality and psychopathology. A study investigating the correlation between parental bonding and depression found that experiences of parental bonding, such as abuse, neglect, and overprotection, are linked with problematic personality development and psychopathology [12]. The research involved 181 participants aged 15 to 49 years old who completed the Parental Bonding instrument (BDI), and the 16 Personality Bonding Instrument (PBI). They found that lack of parental care and over-protection are closely associated with the development of depression syndromes as well as personality traits such as low self-esteem, introversion, distress and emotional instability. On the contrary, healthy levels of care and protection are associated with increased self-confidence, reduced stress, and fewer depressive symptoms. Unfortunately, those with childhood trauma fall in the premier case.

The mental wellbeing of a parent or caretaker is crucial in assuring a child's healthy psychological development. Growing up with mentally unstable parents or caretakers with mental disorders can be extremely challenging. In fact, it is shown that if parents undergo mental health difficulties during pregnancy or within the first year after the baby's birth, it can influence children's ability to form a strong emotional connection with and provide sufficient care for their child. Consequently, this can negatively affect for the child's cognitive, emotional, social, and psychological development [13]. For child with mentally unstable parents, they might feel confused and emotionally unstable when their parent experiences mood swings. The child's confusion can be heightened if their parent frequently requires hospitalization due to the severity of their mental health condition.

In the case of PTSD, researcher Rachael Yehuda and colleges did a study that showed that adult children of Holocaust survivors reported higher levels of childhood trauma, primarily due to parental PTSD. Childhood trauma was associated with PTSD severity, and emotional abuse correlated with cortisol levels. Concluding that parental influence can significantly impact a child's well-being and the transmission of PTSD.

## 7. The Mediating Role of Cognitive Emotion Regulation Strategies

Cognitive emotion regulation strategies (CERS) are essential in dealing with childhood trauma and the development of mental disorders like depression and PTSD. CERS can allow individuals to change distorted and negative thought patterns and beliefs, by doing so, individuals can better cope with emotional stress, triggers and flashbacks. In the case of PTSD, by learning self-soothing strategies and thought-stopping methods, those with childhood trauma can learn to better interrupt and cope with intrusive memories or reminders of the trauma. On the contrary, maladaptive CERS can cause harm; a study done by Karyn Doba, 2022 revealed that childhood trauma had an indirect effect on PTSD symptoms through its association with maladaptive cognitive strategies (e.g., self-blame, rumination, catastrophizing), and maladaptive interpersonal strategies (e.g., emotional reactivity, avoidance of emotional connection). These complex pathways contribute to severe PTSD in adolescence and young adulthood.

In the case of depression, Huh, H. J. and colleges [14] developed a model that shows childhood trauma directly contributes to current depression and anxiety symptoms, and these symptoms are further influenced by how people regulate their emotions and thoughts. It is shown that individuals with childhood trauma with adaptive regulation methods develop less severe symptoms compared with those who use maladaptive regulation methods [14]. Hence, it is important for us to recognize the significance of CERS on our mental wellbeing.

#### 8. Interventions and Treatments

What are some interventions and treatments for individuals with depression and a history of childhood trauma? Some common ones are psychotherapy, supportive counseling, group therapy and medication. Psychotherapy like CBT (cognitive behavioral therapy) can help individuals with childhood trauma to build positive thought patterns and change negative ones; individuals will then be able to explore and understand their emotions, memories, and beliefs [15]. This can allow the development of more adaptive emotion regulation strategies and help with one's recovery. Supportive counseling and group therapy can also help individuals by creating a safe and supportive environment for them to talk about what has been troubling them and receive trust and acceptance, finding those with similar trauma and illness. Moreover, group therapy can help build a support network by sharing their childhood trauma and experience with other people; it can significantly reduce feelings of isolation, shame, and low self-esteem and efficacy. It will allow individuals to realize that they are not alone in their struggles and be empowered to fight their trauma and illness instead of giving up and engaging in self-harm. In fact, it is said that for individuals with trauma, having group therapy may be the very first step toward feeling better [16].

In the case of PTSD, exposure therapy and Eye movement desensitization and reprocessing (EMDR) can also be helpful. Exposure therapy, a proven effective and safe treatment for PTSD, involves the patient actively engaging with and describing the specifics of a traumatic event, gradually facing anxiety-inducing but ultimately safe situations until the anxiety diminishes [17], by exposing patients to childhood memories and unresolved fixations, patients can slowly learn to gain a better understanding of their traumas and develop better coping methods. Exposure therapy can also be used to treat phobia, OCD and many other disorders. Similar to exposure therapy, EDMR aims to alleviate the emotional distress associated with traumatic memories and promote healing. "Eye Movement Desensitization and Reprocessing (EMDR) is a psychotherapy—or talk therapy—for PTSD. EMDR can help you process upsetting memories, thoughts, and feelings related to the trauma. By processing these experiences, you can get relief from PTSD symptoms." [18], through back-and-forth movements or sounds, while recalling the distressing childhood event, it releases distress and anxiety and promotes healing by shifting how the memory is experienced and helps patients learn how to cope.

Medication can also be helpful. Common antidepressants, such as selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) can increase the levels of certain neurotransmitters in the brain, such as serotonin and norepinephrine. This can help improve mood, boost energy, and reduce symptoms of depression [19]. Antidepressants have been proven to be helpful in treating depression, contributing to the worldwide reduction in suicidal rates. Antidepressants are also effective in treating PTSD; in fact, the SSRIs sertraline and paroxetine are the only medications approved by the FDA for PTSD [20].

It is important to note that relying solely on medication is not sufficient. While medication can have positive effects on depression symptoms, it needs to be combined with other treatment methods like psychotherapy for optimal effectiveness.

Thus, in order to minimize childhood trauma and its subsequent psychological impact on children, parents and teachers and other adults should take responsibility for paying more attention to children's emotional state and behavior to provide timely detection and guidance. If some people, unfortunately, have childhood trauma, it is better to use a Cognitive emotion regulation strategy with a little medication. The core of recovery is to teach them how to regulate their emotions since medication cannot be used for long times.

#### 9. Conclusion

In conclusion, experiencing trauma during childhood can have a big impact on mental health, especially causing depression and post-traumatic stress disorder (PTSD). Many studies have shown that childhood trauma is strongly connected to these disorders. Trauma affects how we think about ourselves, how we form relationships with others, and how we handle our emotions. It also affects our brains in ways that make us more likely to develop depression and PTSD. Understanding this connection is important for finding effective treatments. Cognitive emotion regulation strategies are an important part of treating the effects of childhood trauma on mental health. Using strategies that help us cope with our emotions and thoughts in a healthy way can make a big difference in managing symptoms of depression and PTSD. Other treatments like talking therapy, group therapy, exposure therapy, eye movement desensitization and reprocessing (EMDR), and medication can also be helpful. It's often best to use a combination of different approaches for the best results. By recognizing the importance of cognitive emotion regulation strategies and getting the right help, people who have experienced childhood trauma can find healing, learn healthier ways to deal with their emotions and improve their overall well-being.

# Acknowledgement

Xu Han and Yuehan Sun contributed equally to this work and should be considered co-first authors.

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