

Intergenerational Transmission Mechanisms of Developmental Trauma: An Analysis Based on Attachment, Emotion Regulation and Mentalization

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Abstract. Developmental trauma is harm to children caused by living in an unstable, neglected or dangerous environment for a long time in their early years. The experience will also have some long-term effects on emotion regulation, social skills and personality development; it may be passed down through the family over time in interactions with parents and children. Research abroad has been conducted from the aspects of attachment, parenting behavior and emotional functioning, but an integrated explanation of the inner psychological mechanisms of intergenerational transmission is still relatively weak. According to the attachment theory and mentalization theory, this paper will carry out a review of the literature and theoretical integration to study the psychological mechanisms of intergenerational transmission of developmental trauma, with an emphasis on how attachment functioning, emotion regulation and mentalization are related. Based on the results, unresolved early traumatic experiences can cause insecure attachment and problems with emotion regulation; when there is strong emotional arousal, these may be worse and hinder a person's ability to mindfully observe and respond to the emotions and mental states of young children, thus increasing the risk of passing on the trauma to the next generation.

Keywords: Developmental Trauma, Attachment, Emotion Regulation, Mentalization, Intergenerational Transmission

1. Introduction

In the early years of one's life, the emotions experienced in close contact with family members will also affect how people think about themselves and the world. In particular, the inner working model formed in the early stages of attachment is believed to be one of the reasons for later attachment patterns, emotion regulation, and relationships with others.

Most studies on the effect of early adverse experiences on people's development are based on attachment theory and trauma. Many studies have shown that developmental trauma, such as emotional neglect, abuse and relational trauma caused by attachment problems, can damage a child's ability to regulate their emotions and change in attachment behavior to some extent.

Most of the present research has concentrated on how trauma and complex trauma directly affect individuals, but it has not systematically explored the inner working mechanisms of

intergenerational transmission. Among parents who have not resolved their trauma, how specific internalization processes affect mentalization as a result of traumatic experience, and how this is transmitted across generations, are still unknown.

Therefore, from the perspective of developmental trauma, based on attachment theory and mentalization theory, this paper will explore the inner psychological mechanisms of trauma in intergenerational transmission, investigate the chain process of "impaired emotion regulation caused by trauma, decline in mentalization, disrupted parent-child interactions, impaired internalization, completion of intergenerational transmission", and clarify how developmental trauma is transmitted across generations through attachment, emotion regulation, and mentalization.

2. Developmental trauma and its intergenerational transmission

2.1. Definition and characteristics of developmental trauma

Developmental trauma refers to multiple and chronic traumatic experiences that occur during early developmental stages in unstable, threatening environments. Unlike isolated traumatic events, developmental trauma is characterized by repetitive, continuous, relational, and developmentally embedded. Its impact is not only reflected in acute emotional responses but also profoundly impacts emotion regulation ability, cognitive functioning, and interpersonal relationship patterns [1].

Although developmental trauma overlaps somewhat with the traditional diagnostic framework of Post-Traumatic Stress Disorder (PTSD) and Complex Post-Traumatic Stress Disorder (C-PTSD) in terms of symptoms, developmental trauma places greater emphasis on broader functional impairments such as emotion regulation, impaired self-awareness, and interpersonal relationship disorders occurring in early attachment relationships [1]. Although developmental trauma has not been formally included in DSM-5 or ICD-11 as an independent diagnosis, it serves as a theoretical framework that clearly indicates that such trauma occurs in relational environments. An empirical study also shows that developmental trauma is closely related to impaired attachment functioning and early relational trauma [2].

2.2. Intergenerational transmission

The intergenerational transmission of developmental trauma does not only remain focused on the trauma event itself, but is more represented in the attachment relationship by the early unconsolidated trauma experiences through its internal psychological structure and interpersonal interaction patterns, continuously influencing the development of subsequent generations [3]. Therefore, in the intergenerational process of developmental trauma, the core framework of attachment relationships is essentially the transmission of traumatic experiences in early caregiving relationships, and its roots can also be traced back to insecure attachment relationships [1]. The intergenerational transmission of developmental trauma is mediated by attachment relationships. Numerous empirical studies have shown significant consistency between parental attachment status and child attachment patterns [4]. Parents with early traumatic experiences are more likely to have children who exhibit broader functional impairments [5]. However, outcomes alone are not sufficient to explain the underlying mechanisms of this complex process. It is necessary to further explore the dynamic process of multiple psychological mechanisms from the perspectives of attachment relationships, emotion regulation, and mentalization.

3. Intergenerational transmission and its underlying mechanisms of developmental trauma

3.1. The role of attachment and inner working model

Attachment theory proposes that an individual's early interactions with caregivers directly influence the formation of their attachment patterns and internalize them into a stable internal working model. In this process, individuals gradually form core psychological representations about whether they deserve love and whether others are reliable, which are repeatedly activated and operated in subsequent interpersonal relationships [6]. Developmental trauma is generally caused by long-term dysfunctional early relationships due to a lack of care, abuse, etc. If a person has been living in an abnormal situation for a long time, they will form negative self-concepts and views of others; thus, insecure attachment issues arise and are carried into adulthood [7].

In the process of intergenerational transmission of developmental trauma, parents themselves often have unresolved early trauma experiences and show different degrees of impaired attachment functioning. Traumatic experiences in one's childhood can alter the model of attachment; as a result, one is more likely to develop anxious or avoidant attachment styles [5]. Insecurity in attachment can also alter a person's sense of self and make it difficult for them to perceive and meet their children's emotional needs properly during close contact; therefore, various forms of irregular parenting may arise [8]. For instance, parents with anxious attachment may be overly intrusive or overprotective in their care of their children and thus hinder the development of the children's self-regulatory abilities. Parents with avoidant attachment are unable to meet their children's emotional needs fully and thus limiting the development of children's good cognitive-emotion regulation abilities [5, 9]. If the children are in such an interactive environment for a long time, their emotional needs may not be met regularly, and they are likely to develop insecure attachment. A negative relational experience will be added to a person's inner model of the world, and as a result, it may be transmitted across generations in the form of developmental trauma [10]. Therefore, the developmental trauma is not directly experienced by the child but is manifested in certain parent-child interaction processes. Based on empirical research and structural equation models, it has been shown that there are many links in the inheritance path of developmental trauma; that is to say, a lack of secure attachment can lead to trauma exposure, and this trauma may interfere with emotion regulation and be passed down among different generations [5].

3.2. Emotion regulation and mentalization

Emotion regulation ability refers to the ability of individuals to perceive, understand and modulate their emotional responses. Impairments in parents' emotion regulation abilities will affect their parenting behaviors and contribute to an inappropriate parenting environment, which may limit the learning and development of children's emotion regulation abilities [9]. When parents struggle to effectively regulate their own emotions, they may display hostility, neglect, excessive control, or inconsistent emotional responses, which in turn prevents children from receiving stable emotional support. Moreover, the development of mentalization also occurs in early attachment relationships. Mentalization refers to the capacity to understand and interpret the mental states behind one's own and others' behavior [11]. On this basis, the reflective functioning is regarded as a concrete manifestation of mentalization in the parent-child interaction context within early attachment relationships, especially reflected in parents' ability to understand and respond to their children's internal mental states [12]. If children's emotions are appropriately understood and responded to by parents, they will develop effective emotion regulation abilities [13]. Conversely, if parents

persistently invalidate or dismiss their children's emotions, children will suppress both positive and negative emotions to avoid perceiving alienations or rejections [14].

Traumatized parents exhibit more negative emotional expressions during interactions with their children, making it difficult for them to properly recognize and respond to their children's emotional needs [14]. In a state of high emotional arousal, parents' capacity for mentalization may be disrupted, thereby constraining the development of reflective functioning [11]. If parents struggle to accurately understand and respond to their children's emotional needs and inner mental states in a timely manner, it will affect their parenting behaviors and the quality of parent-child interactions, reducing their sensitivity to children's emotional needs and their capacity to respond appropriately. Moreover, parents' mentalization capacity further influences the shaping of children's emotion regulation abilities [12]. Under such conditions, abused children's emotional expressions may be difficult for parents to recognize and respond appropriately, leaving children easily overwhelmed by negative emotions and developing maladaptive coping strategies through the internalization process, further leading to the development of trauma in offspring [14].

4. Discussion

Developmental trauma is a problem of an individual's mind that can also be traced back to early attachment, family environment and so on. Research shows that attachment relationships are one of the necessary conditions for the inheritance of developmental trauma from parents to children. Different from the traditional study of trauma and clinical diagnosis, developmental trauma has paid more attention to the impact of the early relational environment and is based on the idea that it is a type of relational trauma. Developmental trauma can create a negative inner world for a long time after instability and insecurity in the threatening interactions of the attachment relationship; it may damage the development of emotion regulation and mentalization, and thus lead to the intergenerational inheritance of problems in parent-child relationships. Thus, the inheritance of developmental trauma among families is actually a relation among them that develops and changes over time.

The study suggests that early identification and support of high-risk families should be strengthened in clinical intervention and psychological therapy. In the process of treatment, attention should be paid not only to the individual trauma symptoms themselves but also to the identification and evaluation of trauma experience within the early attachment relationships. Furthermore, interventions should emphasize the repair of the attachment relationship and the development of the emotion regulation capacities. Meanwhile, attention should also be paid to parents' own traumatic experiences, the repair of emotion regulation abilities and mentalization functioning, as well as the reconstruction of parent-child interaction patterns in attachment relationships, enhancing parenting behaviors through parenting education, family counseling and psychological support programs to reduce intergenerational transmission risks.

5. Conclusion

The inheritance of developmental trauma in one's family can be regarded as a comprehensive system of psychological influence that is based on the attachment system. Trauma in early life can alter a person's attachment style; therefore, they may be more prone to an insecure attachment pattern and internalize this pattern to form a stable internal working model that affects all aspects of life and basic cognition. Based on the above, insecure attachment may further impair a person's mentalization and emotion regulation abilities. Traumatized individuals are in the process of

becoming parents, and due to their own functional deficits, they display less responsiveness to their children's emotional cues and are inconsistent in their parenting. Without a stable relationship and sensitive responsiveness, children gradually develop an insecure attachment style, learn to regulate their emotions and manage interpersonal relationships in a different way, and thus pass on the developmental trauma of their parents to the next generation. Developmental trauma is not passed down from one generation to the next due to a single reason; rather, it is transmitted through a continuous chain of links involving attachment representations, mentalization ability, parenting behavior, the internalization of negative internal working models, and changes in a child's attachment and emotions. This review suggests that developmental trauma is transmitted by later generations is that there has been a repetition of bad relational experiences, and the attachment system is involved in both the mediation and organization of this process.

This paper is not perfect. Based on the Western attachment theory and mentalization theory, this paper was written. There may be different styles of communication and expression of emotions among parents and children in various cultures. Therefore, in the future, more research can be carried out on the expressions and transmission paths of developmental trauma in different cultures. This paper is a study of the psychological reasons for stress, and it does not cover neurobiology, the stress-response system, or genetic susceptibility. In the future, the formation and persistence mechanisms of developmental trauma will be discussed in light of the multi-level developmental psychopathology framework more thoroughly. In the future, more research will be carried out to determine the specific mechanisms of intergenerational transmission of developmental trauma and to study how different social environments and neurobiological factors affect this process; thus, a more comprehensive understanding of the pathways leading to the formation and persistence of developmental trauma can be achieved.

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