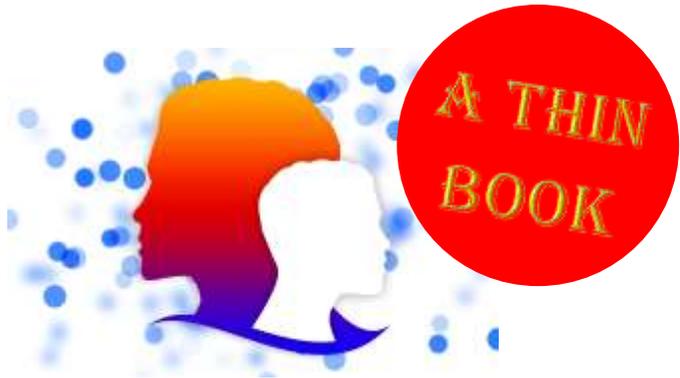


# Attachment & Trauma

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**How Trauma-Related Neuroscience and  
Psychology Translate to Real Classroom and  
Early Childhood Practice**



A Publication of PNE Institute, LLC

(also known as Psychoneuroeducational Institute, LLC)

in partnership with Orchard Human Services, Inc.

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# **A Thin Book On Attachment & Trauma**



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## Introduction to Trauma

A discussion of trauma-informed care and education rests upon a clear framework of the various forms of trauma. Yet, the educational, psychological, and mental health fields are only now recognizing and identifying the distinct and separate forms of trauma that exist. As cutting edge research and practice-based evidence emerge, professionals are able to take reasonable action along lines that are likely to mitigate harm to the trauma survivor while promoting healthy growth and development across those domains that were affected by the trauma experience.

A synthesis and review of the trauma-related literature informs practical and effective protocols for educators, parents, and other professionals who

care for children who are survivors of one or more forms of trauma. Trauma-informed responsiveness is especially required of schools, as student populations around the nation include a growing number of trauma-impacted children (Overstreet & Chafouleas, 2016).

## Post-Traumatic Stress Disorder

SAMHSA (2019) defines the phenomenon of individual trauma as being caused by “an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental physical, social, emotional, or spiritual well-being (para. 2). A well-recognized disorder instigated by trauma is PTSD, or Post Traumatic Stress Disorder, as experienced by many service members who return from military combat. The types of events and experiences that are traumatic to individuals range dramatically.

Examples of traumatic experiences include domestic or intimate partner violence, sexual or

physical abuse, natural disaster, accident or injury, act or war or aggression, starvation, and assault. Individuals can even experience trauma by observing a traumatic event or hearing about a traumatic experience of another person or persons, such as in the case of secondary and vicarious trauma.

## Complex Trauma

Complex trauma is a distinct form of trauma, that is distinct from the previously discussed types of trauma, and therefore requires a differentiated response. Complex trauma is associated with some form of harm, abuse, neglect, family violence, or pathological care by a parent or other caregiver who is close to the child over a prolonged period of time (Lawson & Quinn, 2013).

Many cases of complex trauma occur in environments that are frenetic or chaotic and involve extreme exposure to stress, interfering with multiple developmental domains of the child over the lifespan. The affected domains include attachment, socioemotional, self-regulatory, cognitive, and behavioral (Cook, Spinazzola, Ford,

Lanktree, Blaustein, & Cloitre, 2005; Lawson & Quinn, 2013). Because the affected domains affect most all aspects of the child's life, trauma has the ability to interfere with most all activities of daily living and general life experience.

## Specialized Care for Trauma

Children who suffer from all types of trauma require specialized care and services across all settings. Overstreet and Chafouleas (2016) discussed the importance of educating school personnel in the appropriate identification and response to cases of childhood trauma within student populations (Overstreet & Chafouleas, 2016). The growing number of trauma-affected children calls for universal screenings, which would inform individual and small group trauma response and intervention efforts (Overstreet & Chafouleas, 2016). In the case of school- or community-wide trauma exposure, as in the case of a school shooting, entire student populations may require

trauma support and intervention (Overstreet & Chafouleas, 2016).

Meanwhile, investigation of the unique traits and attributes of trauma survivors as compared to the non-traumatized population has revealed meaningful data. Trauma survivors may suffer from maladaptation of dissociative tendencies as well as immunological and biochemical dysregulation (Alameda et al., 2018; Cook et al., 2005; Lawson & Quinn, 2013). Meanwhile, emotional neglect, which can also be characterized as callous or insensitive parenting, is associated with biochemical changes in serotonin processing and development of the behavioral inhibition system (Jin, Jung, Hyun, & Lee, 2018). Jin et al. (2018) identified an association between some cases of emotional neglect during early childhood and behavioral

inhibition system dysfunction in adulthood. Functional magnetic resonance imaging of individuals with trauma history has revealed a number of anomalies ranging from changes in volume of olfactory bulb (Nwulia et al., 2017) to electrical activity of the amygdala (Nicholson et al., 2017).

PTSD has been associated with changes in the size and electrical activity of the amygdala (Nicholson, et al., 2017). Nicholson et al. (2017) reported that some individuals are able to intentionally downregulate the amygdala when it is activated by way of a PTSD-related response, leading to calming and emotional self-regulation. The ability to down-regulate a hyperactive amygdala is associated with an activation of certain areas of the pre-frontal cortex (Nicholson et al.,

2017). These phenomena call for the intentional developmental intervention of trauma-affected individuals for the purpose of evoking a neuroplastic response that leads to greater regulation and more normalized electrical activity of the corresponding brain centers.

## Therapeutic Trauma Strategies

The literature suggests a variety of therapeutic and supportive responses to the needs of children with trauma history. Mindfulness, metacognition, and self-awareness are capacities that promote self-regulation, and may promote self-regulation of children with a trauma background (Lou, Changeux, & Rosenstand, 2017). To this end, children with traumatic histories can be supported in developing capacities for self-regulation through instruction in the practices of self-awareness, mindfulness, and metacognition.

Therapeutic and calming forms of play have been implicated in positive findings for some children who are exposed to trauma. In one study, playing the computer game Tetris led to a reduction

in the experience of flash-back phenomena following traumatic exposure in some individuals (Holmes, James, Coode-Bate, & Deeprouse, 2009). Research has identified yoga as a potential supportive strategy to help children gain self-calming and self-regulatory capacities after trauma exposure (Culver, Whetten, Boyd, & O'Donnell, 2015).

Flexibility is critical in the learning, intervention, and treatment environments that serve children with trauma history (Kinniburgh, Blaustein, & Spinazzola, 2005). In the early learning and education setting, flexibility is seen in the environment, through limitations on the child's physical placement, access to preferred resources, and ability to take breaks or engage in self-soothing or self-calming activities. Play and art are activities

associated with a therapeutic response to trauma in children (Lantz, & Raiz, 2003). Other effective interventions may incorporate flexibility in the physical setting by allowing the child to sit on a ball or sensory cushion rather than a classroom chair. The student may be allowed to seek comfort from adults or utilize self-comforting or self-soothing aids such as stress relief toys, weighted blanket or vest, and headphones with white noise or calming music.

Additional flexibility can be incorporated into the classroom as part of a larger socioemotional, attachment, and self-regulatory developmental intervention. Children with trauma histories require flexible support across social, emotional, attachment, self-regulatory, behavioral, and cognitive domains. These interventions are

fluid and interrelated, requiring teachers to respond to the child's cues in the moment. What appears to be a social development issue, for example, may involve the child's experience of fear or anxiety, which then requires attention to self-regulation and self-calming. Thus, the developmental interventions are created in a fluid model that allows educators and therapists, such as Occupational Therapists and Speech Language Pathologists, to move from one developmental focus point to another as the child moves through the day. Over time, the diverse and fluid intervention plan will have a cumulative effect on the child's global development, and individual gains will be perceptible.

Effective treatment models for complex trauma include elements from treatment and intervention strategies for other forms of trauma,

including PTSD; and include these additional complex trauma-related features of prolonged intervention duration as well as parent-child dyadic work (Lawson & Quinn, 2013). As a result, behavioral and developmental interventions for children with a complex trauma history must be of a longer duration as compared to non-complex trauma exposures. In addition, schools must work closely with parents to include them in any behavioral and developmental intervention to allow the child to complete the necessary parent-child work as it impacts the child's educational experience. This takes the already important parent-child dynamic and raises it to critical importance when addressing the trauma-related needs of children within educational and early childhood settings.

## Conclusion

A synthesis and review of the literature reveals the critical importance of identifying and responding to the needs of children with trauma history. The body of knowledge pertaining to unique neurodevelopmental and behavioral attributes of children and youth with trauma backgrounds points to logical strategies for educational settings. Meanwhile, deeper school-classroom-parent interactions are likely to support children in healing through the negative effects of exposure to all forms of trauma, including individual traumatic experiences, complex trauma, and school-wide traumatic exposures.

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