

*Note: Unless otherwise attributed, all quoted information is from the NCTSN White Paper on Complex Trauma in Children and Adolescents, by the Complex Trauma Taskforce, 2003, Eds: Alexandra Cook, PhD, Margaret Blaustein, PhD, Joseph Spinazzola, PhD, and Bessel Van der Kolk, MD.*

“The connection between parent and child is broken when a parent denies the child’s experiences. In such cases, the child is forced to act ‘as if’ the trauma did not occur. In this context, the child learns he/she cannot trust the primary caregiver and cannot utilize language and communication to overcome adversity.”

#### I. Trauma and Development

A. At which age(s), for how long, and from what source(s) the trauma(s) occur are all directly related to its impact

1. the effects of trauma interfere with the necessary developmental stages of children’s growth
2. the effects of this interference are cumulative
3. the closer to the child is, relationally, to the source of the trauma, the stronger its impact, with parental source(s) the most severe.

B. The negative effects of traumatic stress are modulated by many factors that provide resiliency

1. Individual characteristics, including
  - a. Easygoing temperament
  - b. Intelligence
  - c. “Likeability”
2. Caregiver characteristics, including
  - a. Responsiveness to the child’s needs from infancy onward
  - b. Presence, consistency and predictability
  - c. Protectiveness
  - d. Tenderness and clear demonstrations of love
3. The availability and involvement of other caring and trustworthy adults in the child’s life.

II “Complex trauma” – trauma resulting from early and chronic traumatic stress – is understood to affect multiple developmental areas, including attachment, biology, affect regulation, awareness regulation/dissociation, behavioral self-regulation, cognition, self-concept/identity.

A. Attachment: begins at birth and develops from the caregiving relationship. Secure attachment results from consistent, receptive, responsive and sensitive caregiving. Disrupted attachment negatively affects:

1. the child’s first models of self, others, and self in relation to others (it’s safe/not safe to trust myself and others; my needs will/might/won’t be met)

2. the neural structures and capacities needed for emotional self-regulation (my feelings do/don't overwhelm my capacity to handle them)
3. the safety that allows the child to explore her/his environment, learn about it, and practice using the new knowledge
4. the development of a sense of agency in the world (I can/cannot affect the people and the world around me)
5. the development of a foundation for empathic, effective receptive and expressive communication.
6. Additionally, for the very young child, harm is done to the caregiver is as traumatizing, if not more so, than harm to self. This because the child relies on the caregiver for the child's own continuing survival: a threat to mother is a threat to self.

B. Biology: New understandings in neuroscience help illuminate the relationships between early abuse and neglect and resultant neural and physiological delays and deficits.

1. Age 0 – 1: “Only the brainstem and midbrain are sufficiently developed to sustain and alter basic bodily functions and alertness. These primitive structures regulate the autonomic nervous system (ANS), mobilizing arousal through the sympathetic branch of the ANS and modulating arousal through the parasympathetic branch. Deprivation of responsive caregiving...can lead to lifelong [over-]reactivity to stress. Following a history of early deprivation, even *mild* stress later in life can elicit severe reactivity and dysfunction.”

2. Ages 2 - 8: “...the brain actively develops areas responsible for: (1) filtering sensory input to identify useful information... (2) learning to detect and respond defensively to potential threats... (3) recognizing information or environmental stimuli that comprise meaningful contexts...and (4) coordinating rapid goal-directed responses.” The child begins to develop left brain competencies and to integrate the two hemispheres' different functions and abilities. Trauma interferes with this learning. “Under stress, [abused and neglected children's] analytical capacities (left brain based) disintegrate, and their emotional (right brain based) schemas of the world take over, causing them to react with uncontrolled helplessness and rage.”

Clinical disorders of these neurobiological deficits can include:

- a. reality orientation
  - b. learning
  - c. cognitive and behavioral self-management
  - d. anxieties that interfere with forming interdependent relationships
  - e. global difficulties in the ability to modulate emotion when stressed
3. Ages 9 - 18: This is the period during which the brain develops the “three core features of ‘executive functioning’ ...”
- a. “conscious self-awareness and genuine involvement with other persons...”

- b. “ability to assess the valence and meaning of complex emotional experiences...”
- c. ability to determine a course of action based on learning from past experiences... [based on] an inner frame of reference informed by accurate understanding of other persons’ different perspectives.”

During this period, areas affected by traumatic stress and/or earlier trauma-related deficits include:

- a. “disruptions in self-regulation (e.g. eating disorders)”
- b. disruptions “in interpersonal mutuality (e.g. conduct disorders)”
- c. problems with “reality orientation (e.g. thought disorders)”
- d. .”...or a combination of these critical competencies...”.

C. Affect regulation: “Impairment of neurobiological systems involved in emotion regulation leaves many traumatized children at risk for multiple manifestations of dysregulated affect.” These manifestations have, at their core, three deficits:

1. The ability to label one’s own emotional experiences in increasingly differentiated degrees of linguistic precision, thereby strengthening and reinforcing the brain structures responsible for integrating right and left brain functions.
2. The ability to express emotions in a regulated and therefore safe manner
3. The ability to modulate emotions, to affect one’s own emotional experiences by utilizing both right-brain (i.e. relaxation) and left-brain (i.e. positive self-talk, active self-soothing) skills.

D. Dissociation and regulation of awareness: In this context, the definition of dissociation is broadened to mean a disruption in the brain’s ability to process and store information in an integrated fashion which involves both the sensory/affective and cognitive/narrative aspects of experience. “Thus, cognition can be experienced without affect, affect can be experienced without cognition, somatic sensations occur in a void of awareness, or behavioral repetitions take place without conscious awareness.”

1. Dissociation serves three functions “in the face of psychologically overwhelming circumstances:”

- f. “the compartmentalization of painful memories and feelings
  - g. “the automatization of behavior
  - h. “detachment from one’s self” to preserve it.
2. More frequent trauma = more frequent use of dissociation, which leads to difficulties in the areas of
- a. behavioral self-management
  - b. affect regulation
  - c. self concept.

E. Behavioral self-regulation: The combination of neurological, psychological, cognitive, and relational stressors that make up complex trauma situations makes behavioral dysregulation comprehensible from several perspectives.

1. Behavioral dysregulation as a function of control needs
  - a. Over-controlled children are often highly attuned to the expectations of the adults around them, and may comply “compulsively” with adult requests and demands. They are typically very rigid in their behavior patterns and very resistant to changes.
  - b. Under-controlled children exhibit difficulty with managing impulses. This “may be due to deficits in executive functions: the cognitive capacities responsible for planning, organizing, delaying response, and exerting control over [one’s] behavior ... [These] deficits have been well-documented in traumatized children.”
2. Other interpretations
  - a. Problematic behaviors may also be seen as learned and purposive adaptations to the circumstances surrounding the chronic stresses
  - b. Another view of these behaviors is that they are triggered, automatic, dissociated reenactments of some aspect of the trauma; or that the reenactments serve the purpose of attempts to redo the bad event until it comes out right – to master or control that which made them feel so helpless.

F. Cognition: Cognitive functions are understood to be based in the development of infants’ sense of self, and of self in relation, as they experience interactions with those around them. This in turn allows for the development of a working model of cause and effect, and of growing agency within this model. During the pre-verbal period, learning takes place through sensory, kinesthetic, and emotional channels; as experiences multiply and the brain develops towards language acquisition and usage, the foundations of increasingly complex cognitive functions are built.

1. Neglect appears to be more harmful to early development than trauma, per se; the infant brain needs stimulus for its developmental potential to be actualized.
2. Abused and neglected preschool- and early-school-aged children
  - a. are more likely to perform poorly academically and socially due to difficulties with self-regulation of internal experience and of affect
  - b. are more likely be hampered by
    - 1) lower frustration tolerance
    - 2) anger and non-compliance
    - 3) avoidance of challenging tasks

- 4) less flexibility and creativity in problem solving
3. “Maltreated children...have three times the dropout rate of the general school population...[these findings] cannot be accounted for by the effects of other psychosocial stressors such as poverty.”

G. Self-Concept: a cohesive sense of identity. “[R]epetitive experiences of harm and/or rejection by [caregivers in early life], and the associated failure to develop age-appropriate competencies, are likely to lead to a sense of self as ineffective, helpless, deficient and unlovable.”