

Complex Developmental Trauma in Children and Adolescents

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THE SOCIAL BRAIN

What is the meaning of infancy? What is the meaning of the fact that man is born into the world more helpless than any other creature, and needs for a much longer season than any other living thing the tender care and wise counsel of his elders?

(John Fiske, 1883, as quoted by William Greenough in his 1987 article on experience dependent development)

Simple versus Complex Trauma

- **Simple trauma** = Type I trauma = single incident/ exposure to a traumatic event
- **Complex trauma** = Type II trauma = multiple, chronic and prolonged, developmentally adverse traumatic events that are most often interpersonal in nature and early in life
 - Also referred to as “Developmental Trauma Disorder”

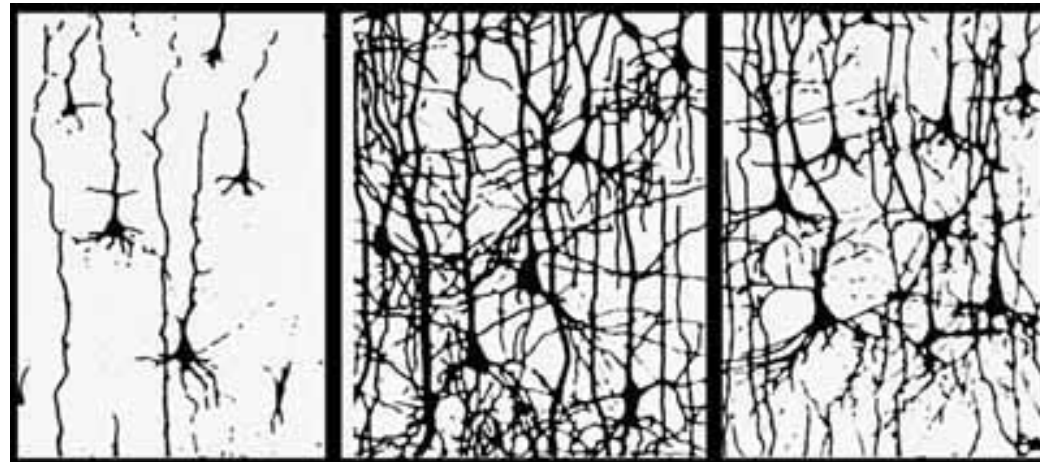
EARLY BRAIN GROWTH AND DEVELOPMENT

- **EARLY BRAIN GROWTH**

- From the last trimester to the 2nd year the size of the brain doubles
- 10% AT BIRTH
- 75% BY 24 MONTHS
- 90% BY FIVE YEARS
- HEAD CIRCUMFERENCE

EARLY BRAIN DEVELOPMENT

- *Synaptic pruning*—begins to sculpt the synapses between neurons depending upon which connections are reinforced by experience. Synapses that are not used are eliminated, and by this means use-dependent development proceeds.



At Birth

6 Years Old

14 Years Old

Synaptic Density in the Human Brain

THE SOCIAL BRAIN

- THE RIGHT HEMISPHERE

- Dominant for Social and Emotional Functioning
- Growth Spurt during the 1st eighteen months
- Motor Development—Eye hand coordination, crawling and walking
- Safety and Danger
- Regulation of Emotion
- Densely Connected to Subcortical and Brainstem Structures—Physical and Autonomic Functions (**Shapiro, Jamner & Spence, 1997**)

THE SOCIAL BRAIN

- THE RIGHT HEMISPHERE

- Primitive and unconscious
- Non-linear and pre-logical processing
- Guided by sensory and emotional inputs
- Early attachment patterns
- “Unconscious emotional processing based upon past experiences invisibly guides our moment to moment thoughts, feelings and behaviors.” (Kimura et al, 2004)

NEUROLOGICAL DEVELOPMENT IN INFANCY

• **DEVELOPMENTAL PLASTICITY** (Greenough and Black, 1987)

- *EXPERIENCE EXPECTANT*
 - “evolved as a neural preparation for incorporating specific information that is common to the species”
- *EXPERIENCE DEPENDENT*
 - “incorporating information idiosyncratic to the individual”
- *DIRECTED PLASTICITY AND ATTACHMENT*

NEUROLOGICAL DEVELOPMENT IN INFANCY

Critical periods and sensitive periods:

A critical or sensitive period is a time during an organism's life span when it is more sensitive to environmental influences or stimulation than at other times during its life.

NEUROLOGICAL DEVELOPMENT IN INFANCY

- Critical period:
 - begins and ends abruptly
 - period beyond which a phenomenon will not appear
 - Lorenz - imprinting
- Sensitive period:
 - begins and ends gradually
 - period of maximal sensitivity
 - Binocular vision



Attachment

Mirroring: Affect Synchrony

Mirror systems : areas in the premotor cortex and Broca's area that are activated during observation, imagination, empathy and execution of motor movements. The mirror system also extends to insula, amygdala, basal ganglia and cerebellum.

Contingent Communication

- Transaction that involves :
 - Perception of the child's signals
 - Making sense of the signals in terms of what they mean for the child
 - A timely and effective response

Attachment

Reflective dialogue

- Focusing verbally based discussions on the contents of the mind itself
- Parents elaborate on the deeper layer of subjective human experience by focusing on the mental processes (thoughts, feelings, perceptions, beliefs etc.)

Attachment

Repair

- When there is the inevitable rupture in the ideal attuned, contingent communication, repair is an acknowledgement of the disconnection and the attempt to reconnect.

Attachment

Emotional Communication

- Sharing and amplification of positive emotions
- Sharing and soothing of negative emotions

Attachment

Coherent narratives

- Help us to make sense of our own narrative as well as other people

Tronick's Still Face Experiment



Results of chronic neglect and abuse

Research old and new

- Bowlby, Harlow, Spitz, Ainsworth, , Descriptive studies - Goldfarb, 1945; Levy, 1947; Spitz, 1945; Provence and Lipton, 1962; Wolkind, 1974. Studies of the social behavior maltreated children- (Gaensbauer & Sands, 1979; Gaensbauer& Harmon, 1982; George & Main, 1979). Tizard 1977
- More Recently: Zeanah, Perry, Schore, van der Kolk, Pynoos, Dante Cicchetti, PhD Marylene Cloitre, PhD Wendy D'Andrea, PhD Julian D. Ford, PhD Alicia F. Lieberman, PhD Frank W. Putnam, MD Glenn Saxe, MD Joseph Spinazzola, PhD Bradley C. Stolbach, PhD Martin Teicher, MD, PhD

Abnormal Brain Growth and Development in Maltreated children

Results of chronic neglect and abuse

Emotional and physiologic dysregulation

Difficulty recognizing emotions

Lack of empathy

Behavioral and Attentional dysregulation

Difficulties with interpersonal relationships

Indiscriminant contact seeking

Proposed DSM-V Criteria for Reactive Attachment Disorder of Infancy or Early Childhood

- A. A pattern of markedly disturbed and developmentally inappropriate attachment behaviors, evident before 5 years of age, in which the child rarely or minimally turns preferentially to a discriminated attachment figure for comfort, support, protection and nurturance. The disorder appears as a consistent pattern of inhibited, emotionally withdrawn behavior in which the child rarely or minimally directs attachment behaviors towards any adult caregivers, as manifest by both of the following:
- 1) Rarely or minimally seeks comfort when distressed.
 - 2) Rarely or minimally responds to comfort offered when distressed.

Proposed DSM-V Criteria for Reactive Attachment Disorder of Infancy or Early Childhood

- B. A persistent social and emotional disturbance characterized by at least 2 of the following:
 - 1) Relative lack of social and emotional responsiveness to others.
 - 2) Limited positive affect.
 - 3) Episodes of unexplained irritability, sadness, or fearfulness which are evident during nonthreatening interactions with adult caregivers.
- C. Does not meet the criteria for Autistic Spectrum Disorder.

Proposed DSM-V Criteria for Reactive Attachment Disorder of Infancy or Early Childhood

- C. Pathogenic care as evidenced by at least one of the following:
- 1) Persistent failure to meet the child's basic emotional needs for comfort, stimulation, and affection (i.e., neglect)
 - 2) Persistent failure to provide for the child's physical **and psychological safety**.
 - 3) **Persistent harsh punishment or other types of grossly inept parenting.**
 - 4) Repeated changes of primary caregiver that limit opportunities to form stable attachments (e.g., frequent changes in foster care).
 - 5) **Rearing in unusual settings that limit opportunities to form selective attachments (e.g., institutions with high child to caregiver ratios).**

Proposed DSM-V Criteria for Reactive Attachment Disorder of Infancy or Early Childhood

- D. There is a presumption that the care in Criterion C is responsible for the disturbed behavior in Criterion A (e.g., the disturbances in Criterion A began following the pathogenic care in Criterion C).
- E. The child has a developmental age of at least 9 months.

Proposed Criteria for Disinhibited Social Engagement Disorder

- A. A pattern of behavior in which the child actively approaches and interacts with unfamiliar adults by exhibiting at least 2 of the following:
 - 1) Reduced or absent reticence to approach and interact with unfamiliar adults.
 - 2) Overly familiar behavior (verbal or physical violation of culturally sanctioned social boundaries).
 - 3) Diminished or absent checking back with adult caregiver after venturing away, even in unfamiliar settings.
 - 4) Willingness to go off with an unfamiliar adult with minimal or no hesitation.
- B. The behavior in A. is not limited to impulsivity as in ADHD but includes socially disinhibited behavior.
- C. Pathogenic care
- D. There is a presumption that the care in Criterion C is responsible for the disturbed behavior in Criterion A (e.g., the disturbances in Criterion A began following the pathogenic care in Criterion C).
- E. The child has a developmental age of at least 9 months.

Proposed Criteria for Posttraumatic Stress Disorder in Preschool Children

- A. In children (less than age 6 years), exposure to one or more of the following events: death or threatened death, actual or threatened serious injury, or actual or threatened sexual violation, in one or more of the following ways:
1. directly experiencing the event(s)
 2. witnessing, in person, the event(s) as they occurred to others, especially primary caregivers (Note: Witnessing does not include events that are witnessed only in electronic media, television, movies or pictures.)
 3. learning that the traumatic event(s) occurred to a parent or caregiving figure;

Proposed Criteria for Posttraumatic Stress Disorder in DSM V

3. learning that the traumatic event(s) occurred to a close family member or close friend; cases of actual or threatened death must have been violent or accidental
4. experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse); this does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work-related.

Proposed Criteria for Posttraumatic Stress Disorder in Preschool Children

- B. Presence of one or more intrusion symptoms associated with the traumatic event(s) , beginning after the traumatic event(s) occurred:
1. spontaneous or cued recurrent, involuntary, and intrusive distressing memories of the traumatic event(s) (Note: spontaneous and intrusive memories may not necessarily appear distressing and may be expressed as play reenactment)
 2. recurrent distressing dreams in which the content and/or affect of the dream is related to the traumatic event(s) (Note: it may not be possible to ascertain that the frightening content is related to the traumatic event.)
 3. dissociative reactions in which the child feels or acts as if the traumatic event(s) were recurring, (such reactions may occur on a continuum with the most extreme expression being a complete loss of awareness of present surroundings). Such trauma-specific re-enactment may occur in play.
 4. intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s)
 5. marked physiological reactions to reminders of the traumatic event(s)

Proposed Criteria for Posttraumatic Stress Disorder in Preschool Children

One item from criterion C or D below:

C. Persistent avoidance of stimuli associated with the traumatic event, beginning after the traumatic event occurred, as evidenced by avoidance or efforts to avoid:

1. activities, places, or physical reminders that arouse recollections of the traumatic event
2. people, conversations, or interpersonal situations that arouse recollections of the traumatic event.

Proposed Criteria for Posttraumatic Stress Disorder in Preschool Children

D. Negative alterations in cognitions and mood associated with the traumatic event, beginning or worsening after the traumatic event occurred, as evidenced by one or more of the following:

1. markedly diminished interest or participation in significant activities, including constriction of play (av)
2. socially withdrawn behavior (av)
3. persistent reduction in expression of positive emotions

Proposed Criteria for Posttraumatic Stress Disorder DSM V

- D. Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred), as evidenced by two or more of the following:
1. inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia that is not due to head injury, alcohol, or drugs) (av)
 2. persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., "I am bad," "No one can be trusted," "The world is completely dangerous"). (Alternatively, this might be expressed as, e.g., "I've lost my soul forever," or "My whole nervous system is permanently ruined").
 3. persistent, distorted blame of self or others about the cause or consequences of the traumatic event(s)
 4. persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame)
 5. markedly diminished interest or participation in significant activities
 6. feelings of detachment or estrangement from others
 7. persistent inability to experience positive emotions (e.g., unable to have loving feelings, psychic numbing)((av)

Proposed Criteria for Posttraumatic Stress Disorder in Preschool Children

- E. Alterations in arousal and reactivity associated with the traumatic event, beginning or worsening after the traumatic event occurred, as evidenced by two or more of the following:
1. irritable, angry, or aggressive behavior, including extreme temper tantrums
 2. hyper-vigilance
 3. exaggerated startle response
 4. problems with concentration
 5. sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep)

Proposed Criteria for Posttraumatic Stress Disorder in Preschool Children

- F. Duration of the disturbance (Criteria B, C, D and E) is more than 1 month.
- G. The disturbance causes clinically significant distress or impairment in relationships with parents, siblings, peers, or other caregivers or with school behavior.
- H. The disturbance is not attributable to another medical condition.

Proposed Criteria for Posttraumatic Stress Disorder

Subtype: Posttraumatic Stress Disorder – With Prominent Dissociative (Depersonalization/Derealization) Symptoms

The individual meets the diagnostic criteria for PTSD and in addition experiences persistent or recurrent symptoms of A1, A2, or both:

- A1. Depersonalization: Experiences of feeling detached from, and as if one is an outside observer of, one's mental processes or body (e.g., feeling as though one is in a dream, sense of unreality of self or body, or time moving slowly).
- A2. Derealization: Experiences of unreality of one's surroundings (e.g., world around the person is experienced as unreal, dreamlike, distant, or distorted)
- B. The disturbance is not due to the direct physiological effects of a substance (e.g., blackouts, or behavior during alcohol intoxication), or another medical condition (e.g., complex partial seizures).

Evidence for Developmental Trauma Disorder

Dataset	Contributors	N	Sample Source
NCTSN Survey	Spinazzola, J., Ford, J.D., Zucker, M., van der Kolk, B.A., Silva, S., Smith, S.F., and Blaustein, M.	1699	Clients at NCTSN sites
NCTSN Core Data Set	Pynoos, R.S., Ostrowski, S., Fairbank, J.A., Briggs-King, E.C., Steinberg, A., Layne, C., and Stolbach, B.	4435	Clients at NCTSN sites
CANS Dataset	McClelland, G., Fehrenbach, T., Griffin, E., Burkman, K., and Kisiel, C.	7668	All Illinois Foster Care system
CCTC Dataset	Stolbach, B.C., Dominguez, R.Z., and Rompala, V.	172	All PTSD Criterion A-exposed; none have risk to self or others
Western Michigan Dataset	Richardson, M., Henry, J., Black-Pond, C., and Sloane, M.	209	Foster care
Ford (In press, Journal of Clinical Psychiatry)	Ford, J.D., O'Connor, D.F., and Hawke, J.	397	Child psychiatry inpatients
NSA re-analysis	Ford, J. D., Elhai, J. D., Connor, D. F., and Frueh, B. C.	4023	National random
Juvenile Justice	Ford, J. D., Hawke, J., and Chapman, J.	1825	Juvenile Detention Centers
Ghosh Ippen and	Ghosh Ippen, C.G., Harris, W.W., Van	89	Preschoolers exposed

Proposed criteria for Developmental Trauma Disorder

A. Exposure. The child or adolescent has experienced or witnessed multiple or prolonged adverse events over a period of at least one year beginning in childhood or early adolescence, including:

- A. 1. Direct experience or witnessing of repeated and severe episodes of interpersonal violence; and
- A. 2. Significant disruptions of protective care giving as the result of repeated changes in primary caregiver; repeated separation from the primary caregiver; or exposure to severe and persistent emotional abuse

Proposed criteria for Developmental Trauma Disorder

B. Affective and Physiological Dysregulation.

The child exhibits impaired normative developmental competencies related to arousal regulation, including at least two of the following:

- B. 1. Inability to modulate, tolerate, or recover from extreme affect states (e.g., fear, anger, shame), including prolonged and extreme tantrums, or immobilization

Consequences of Complex Developmental Trauma

- *Inability to modulate, tolerate, or recover from extreme affect states.*
- NCTSN Core Data Set – DTD+ children had more **pervasive depressed mood than others, even when statistically controlling for PTSD symptom severity.**
- In the CANS study - DTD+ children had more **affect dysregulation problems and depressed mood more often than other foster children.**
- The CCTC found that DTD+ children were reported by clinicians to have **extreme affective shifts, depressed mood, inability to self-soothe, problems managing anger, and internalized negative affect more often than other trauma-exposed children.** CCTC DTD+ children also reported more symptoms of **dysthymia.** these findings held true even when controlling for PTSD severity
- **In children observed in the Bucharest Early Intervention Project: a child with a history of institutional rearing displays less positive emotion and less attention to the amusing spectacles and efforts to engage.**

Proposed criteria for Developmental Trauma Disorder

B. 2. Disturbances in regulation in bodily functions (e.g. persistent disturbances in sleeping, eating, and elimination; over-reactivity or under-reactivity to touch and sounds; disorganization during routine transitions)

Consequences of Complex Developmental Trauma

- *Sleep and physiologic dysregulation*
- The NCTSN clinician survey showed that a third of DTD+children have significant **physiological manifestations of stress**. The NCTSN Core Data Set showed that DTD+ children had more **sleep disturbances and physical manifestations of stress than others, even when statistically controlling for PTSD** symptom severity.
- The CCTC data show that 73% of DTD+ children had **sleep difficulties**.
- **Richardson et al. (2008) reported that DTD+ children were characterized by oversensitivity to touch and sounds, and that over half had delays in numerous developmental domains, including fine motor development.**
- The published literature on chronic abuse consistently documents significant disturbances of physiological self-regulation in the areas of **sleep (Egger, Costello, Erkanli, & Angold, 1999; Glod, Teicher, Hartman, & Harakal, 1997; Noll, Trickett, Susman, & Putnam, 2006) oversensitivity to touch and sounds (Wells, McCann, Adams, & Voris, 1995), and disorganization during transitions (Alessandri, 1991)**

Proposed criteria for Developmental Trauma Disorder

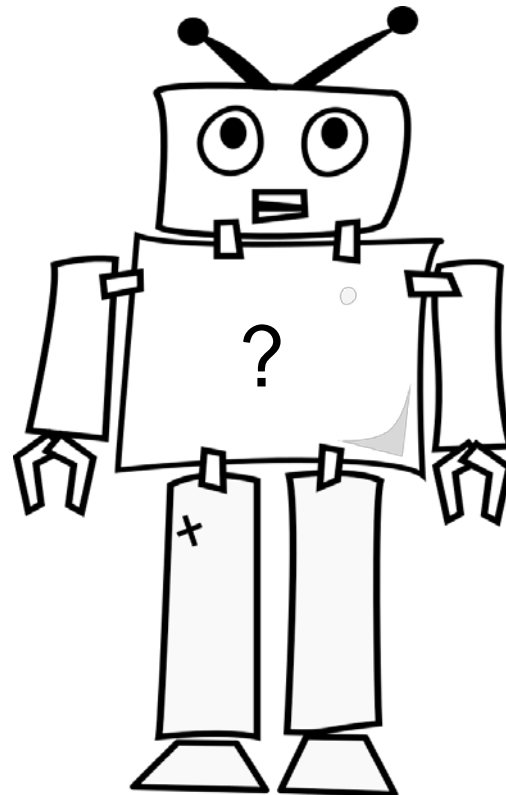
B. 3. Diminished awareness/dissociation of sensations, emotions and bodily states

Consequences of Complex Developmental Trauma

- *Dissociative symptoms*
- The CANS Dataset showed that DTD+ children had problems with **dissociation five times as often as other foster children.**
- **The NCTSN Survey found that** a quarter of DTD+ children have **dissociative affect. In the NCTSN Core Data Set DTD+ children had more problems with dissociation others, even when statistically controlling for PTSD symptom severity.**
- The CCTC data demonstrated that a significant proportion of DTD+ children were characterized by **dissociation of painful/negative affect. CCTC DTD+ children significantly differed from other trauma-exposed children** with respect to **affective shifts, difficulty knowing/describing emotions, depersonalization, and shifts in awareness of the environment. Significant group differences** were also found in the CCTC sample in scores on the **Child Dissociative Checklist (Putnam, 1993)** and in the **frequency of clinical dissociation.**

Proposed criteria for Developmental Trauma Disorder

- B. 4. Impaired capacity to describe emotions or bodily states



Consequences of Complex Developmental Trauma

Impaired capacity to describe emotions or bodily states

- DTD+ children in the CCTC Study were reported to have **difficulty labeling and expressing emotions, and difficulty communicating wishes and desires, and difficulty knowing and describing internal states more often than other trauma-exposed children. These findings are** consistent with those previously reported in the literature (Sayar, Kose, Grabe, & Topbas, 2005; Zhu, Li, & Liang, 2006).

Proposed criteria for Developmental Trauma Disorder

C. Attentional and Behavioral Dysregulation: The child exhibits impaired normative developmental competencies related to sustained attention, learning, or coping with stress, including at least three of the following:

C. 1. Preoccupation with threat, or impaired capacity to perceive threat, including misreading of safety and danger cues

Consequences of Complex Developmental Trauma

- *Preoccupation with threat, or impaired capacity to perceive threat, including misreading of safety and danger cues*
- Data from the NCTSN clinician survey demonstrate that a fifth of DTD+ children have **persistent social fears**. DTD+ children from the CCTC Dataset were more frequently reported to have difficulties with **misperception of social context, narrowed focus of attention (e.g., increased focus on threat), and shifts in awareness of the environment (e.g., in response to threat)** than other trauma-exposed children.

These findings are consistent with published data (Pine et al., 2005; Pollak & Tolley-Schell, 2003).

Proposed criteria for Developmental Trauma Disorder

- C. 2. Impaired capacity for self-protection, including extreme risk-taking or thrill-seeking
- C. 3. Maladaptive attempts at self-soothing (e.g., rocking and other rhythmical movements, compulsive masturbation)

Consequences of Complex Developmental Trauma

- *Impaired capacity for self-protection, including extreme risk-taking or thrill seeking.*
- Data from the CANS dataset demonstrated that DTD+ children had **impulse control problems, problems with judgment, and firesetting twice as often as other foster children.**
- **The NCTSN Survey** found that a majority of DTD+ children had **difficulties with regulating impulses to maintain safety and difficulties with risk-taking.**
- **The CCTC data** documented that DTD+ children were reported to have **difficulty understanding rules, difficulties with anticipating consequences, difficulties with abilities to plan and anticipate, sexualized behavior, and over- or under-estimation of risk more often** than other trauma-exposed children.
- These findings are consistent with published data (Bergen, Martin, Richardson, Allison, & Roeger, 2003; Brown et al., 2005).

Consequences of Complex Developmental Trauma

- *Maladaptive attempts at self-soothing*
- NCTSN Core Data Set -demonstrate that DTD+ children and adolescents had more **substance abuse** problems than others, even when statistically controlling for PTSD symptom severity.
- Other studies have documented that substance abuse often occurs as a maladaptive self-soothing behavior (Dorard, Berthoz, Phan, Corcos, & Bungener, 2008).
- CCTC data provide some indication to the extent of maladaptive self-soothing behaviors. DTD+children were reported by clinicians to exhibit **sexualized behaviors and inability to self-soothe more than other trauma-exposed children. children also had** significantly higher scores on the **Child Sexual Behavior Inventory (Friedrich, 1997)** than other trauma-exposed children even though there were no differences in the frequency of exposure to sexual abuse between DTD+ and DTD- children.
- Ford et al. demonstrated that children exposed to abuse were more likely than children exposed to other traumas to have difficulties with **substance use. In a Juvenile Justice sample, Ford et al. also demonstrated that DTD+ children were more likely to have substance use problems and suicide risk even when controlling for symptoms of PTSD, depression, and anxiety.**

Proposed criteria for Developmental Trauma Disorder

C. 4. Habitual (intentional or automatic) or reactive self-harm

C. 5. Inability to initiate or sustain goal-directed behavior

Consequences of Complex Developmental Trauma

- *Habitual or reactive self-harm.*
- The CANS Study found that children exposed to DTD Criterion A Traumatic stressors had **self mutilation** problems three times as often as other trauma-exposed foster children, and eight times as often as foster children with no trauma exposure. Although self-injury was not highly prevalent in the CCTC sample (which does not include children who are a danger to self or others), DTD+ children were nearly four times more likely than other trauma-exposed children to exhibit **self-injurious behavior**.
- **Ford et al. reported that in** a Juvenile Justice sample, DTD+ children and adolescents had higher levels of **suicide risk than others**.
- Numerous published articles have described self-harm in chronically traumatized children and adolescents (van der Kolk, Perry & Herman 1993, Bergen et al, 2003, Brown et al, 2005, Glassman et al, 2007, Deliberto & Nock, 2008, Forman et al, 2008).

Consequences of Complex Developmental Trauma

- *Inability to initiate or sustain goal-directed behavior*
- Nearly half of CCTC DTD+children were exhibited problems with age-appropriate **capacity to focus on and complete tasks and 40% were reported to have problems with age-appropriate**
- **capacity to plan and anticipate. CCTC DTD+ children were more than twice as likely** as other trauma-exposed children to have impairments in their **ability to organize behavior to achieve rewards in the environment.**
- **Other studies report similar findings**(Ayoub et al., 2006; Nolin & Ethier, 2007;Smith & Walden, 1999)

Proposed criteria for Developmental Trauma Disorder

D. Self and Relational Dysregulation. The child exhibits impaired normative developmental competencies in their sense of personal identity and involvement in relationships, including at least three of the following:

D. 1. Intense preoccupation with safety of the caregiver or other loved ones (including precocious caregiving) or difficulty tolerating reunion with them after separation

Consequences of complex developmental trauma

- *Intense preoccupation with safety of the caregiver or loved ones, or difficulty tolerating reunion with them after separation*
- The NCTSN Survey found that a quarter of DTD+ children had difficulties with **intense preoccupation with caregivers, difficulties separating from caregivers, or other attachment problems. Data from the NCTSN Core Data Set demonstrate that DTD+ children had more difficulties with separation anxiety and more attachment problems than others, even when statistically controlling for PTSD symptom severity.**
- CANS Study, DTD+ children had **attachment problems twice as often as other foster children. Similar findings are reported in the literature on attachment and maltreatment (Baer & Martinez, 2006; Finzi, Cohen, Sapir, & Weizman, 2000; Finzi, Ram, Har-Even, Shnit, & Weizman, 2001).**

Proposed criteria for Developmental Trauma Disorder

- D. 2. Persistent negative sense of self, including self-loathing, helplessness, worthlessness, ineffectiveness, or defectiveness
- D. 3. Extreme and persistent distrust, defiance or lack of reciprocal behavior in close relationships with adults or peers

Consequences of complex developmental trauma

- *Persistent negative sense of self, including self-loathing, helplessness, worthlessness, ineffectiveness, or defectiveness*
- The NCTSN clinician survey found that a majority of DTD+ children have **negative self-image**.
- **CCTC data document in DTD+children. Low feelings of self-esteem, self-confidence or self-worth was the third** most frequently reported symptom among DTD+ children as compared to the 20th ranked symptom in DTD- children. DTD+ children were also reported more often than other trauma-exposed children to exhibit **distorted cognitions of self, including negative self-image and appraisal and feelings of guilt or shame, and feeling damaged or defective**.
- **Other published data report similar findings (Finzi, Ram, Shnit et al., 2001; Toth, Cicchetti, & Kim, 2002).**

Consequences of complex developmental trauma

- *Extreme and persistent distrust, defiance or lack of reciprocal behavior in close relationships with adults or peers.*
- The NCTSN Survey found that **behavior problems at home were significantly elevated in DTD+ children** as compared to others, even when controlling for PTSD symptoms.
- DTD+ children in the CCTC Dataset are characterized by **distrust of others and DTD+ children experience this symptom twice as frequently as** other trauma-exposed children. CCTC DTD+ children were also more likely than others to have **difficulty understanding and complying with rules, and had higher Child Behavior Checklist Externalizing scores.**

Proposed criteria for Developmental Trauma Disorder

- D. 4. Reactive physical or verbal aggression toward peers, caregivers, or other adults
- D. 5. Inappropriate (excessive or promiscuous) attempts to get intimate contact (including but not limited to sexual or physical intimacy) or excessive reliance on peers or adults for safety and reassurance

Consequences of complex developmental trauma

- *Reactive physical or verbal aggression toward peers, caregivers or other adults*
- The NCTSN Survey found that almost half of DTD+ children have **aggressive behavior problems**.
- Data from the CANS dataset demonstrated that DTD+ children had **aggressive behavior problems three times as often as their peers. In the CCTC study, DTD+ children had higher CBCL Externalizing scores and were reported to have volatile interpersonal relationships significantly more than other trauma-exposed children.** In a sample of repeat juvenile offenders, Silvern et al. (2008) found that DTD+ adolescents had more reactive versus instrumental aggression than other juvenile offenders.

Proposed criteria for Developmental Trauma Disorder

- D. 6. Impaired capacity to regulate empathic arousal as evidenced by lack of empathy for, or intolerance of, expressions of distress of others, or excessive responsiveness to the distress of others

Consequences of complex developmental trauma

- *Impaired capacity to regulate empathic arousal as evidenced by lack of empathy for, or intolerance of, expressions of distress of others, or excessive responsiveness to the distress of others.*
- DTD+ children in the CCTC study had significantly greater feelings of **detachment or estrangement from others, difficulties with perspective taking, and difficulty attuning to others' emotional states than other trauma-exposed children.** Published data are consistent with these findings (Pears & Fisher, 2005; Pollak & Tolley-Schell, 2003)

Proposed criteria for Developmental Trauma Disorder

- E. Posttraumatic Spectrum Symptoms. The child exhibits at least one symptom in at least two of the three PTSD symptom clusters B, C, & D.**
- F. Duration of disturbance (symptoms in DTD Criteria B, C, D, and E) at least 6 months.**

Proposed criteria for Developmental Trauma Disorder

G. Functional Impairment. The disturbance causes clinically significant distress or impairment in at two of the following areas of functioning:

- Scholastic
- Familial
- Peer Group
- Legal
- Health
- Vocational

Consequences of Developmental Trauma

- Substance abuse : increases risk 4-12 times (ACE study)
- Other high risk behaviors: promiscuity, cigarette smoking etc. (ACE Study)
- Delinquency: Abused and neglected children were 11 times more likely to be arrested for criminal behavior (English, Widom & Brandford, 2004)
- Personality disorders
- Chronic unremitting medical conditions (ACE study)
- Other Psychiatric disorders