

Complex Trauma Exposure and Symptoms in Urban Traumatized Children: A Preliminary Test of Proposed Criteria for Developmental Trauma Disorder

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Recently, a new diagnostic construct, developmental trauma disorder (DTD), was proposed to describe the effects of chronic exposure to violence in combination with disruptions in caregiving systems. This study uses archival data to field test the consensus proposed diagnostic criteria for DTD in a sample of urban children ($N = 214$). Children with complex trauma histories as defined in the proposed DTD Criterion A were much more likely to meet the proposed DTD symptom criteria than children who did not meet the exposure criterion. This field trial of the proposed DTD criteria suggests that the proposed construct of DTD is useful for describing the symptoms induced by ongoing traumatic stressors and disrupted caregiving and that the proposed symptom criteria can differentiate children with histories of exposure to developmental trauma from other trauma-exposed children.

The vast majority of trauma exposure in the United States is ongoing and includes multiple, co-occurring types of trauma (Anda et al., 2006; Dong et al., 2004; Pynoos et al., 2009). Additionally, much of this trauma exposure takes place in the context of compromised caregiving (van der Kolk, 2005). Clinicians and researchers have suggested that ongoing trauma, coupled with compromised caregiving, may result in a distinct constellation of symptoms. In 2009, a group of experts on the developmental effects of trauma proposed a set of criteria for a diagnostic category that represents these symptoms (van der Kolk et al., 2009). This proposal asserts that chronic and co-occurring stressors, when coupled with compromised care, can lead to a discrete syndrome: developmental trauma disorder (DTD). The current study utilizes archival data collected from a highly trauma-exposed population to investigate whether the proposed diagnostic criteria of DTD adequately reflect both the experiences and the symptoms of traumatized urban youth.

We view this as a field trial of the proposed DTD symptom criteria, as well as a first step towards evaluating the DTD construct.

The Adverse Childhood Experiences Study established significant rates at which child maltreatment and household dysfunction exist and co-occur, finding that 64% of an adult health maintenance organization sample ($N = 17,337$) experienced at least one form of childhood abuse or indicator of household dysfunction during childhood (Anda et al., 2006). Individuals who experience a single trauma in childhood are likely to have experienced several types of adversity, with studies suggesting that 81%–98% of adults who report one adverse childhood experience report at least one additional experience (Dong et al., 2004; Kessler, 2000). Consistent with findings based on adult retrospective reports, Finkelhor, Ormrod, and Turner (2007) found in a nationally representative sample that 86% of children who had experienced any type of sexual victimization and 77% of children who had experienced physical abuse by a caregiver had experienced four or more types of victimization during the preceding year.

Childhood maltreatment is a significant public health concern the effects of which are not adequately captured by the current diagnostic classification system. Although a trauma-relevant diagnosis, posttraumatic stress disorder (PTSD), does

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exist, studies suggest that the symptom clusters of PTSD may not accurately describe the sequelae of ongoing, chronic maltreatment coupled with compromised caregiving systems. For example, fewer than 25% of children receiving services through National Child Traumatic Stress Network centers meet criteria for PTSD (Pynoos et al., 2008). Trauma survivors are frequently diagnosed with multiple comorbid diagnoses to adequately describe their symptoms (Putnam, Perry, Putnam, & Harris, 2008). Kessler, Sonnega, Bromet, Hughes, and Nelson (1995) found that individuals diagnosed with PTSD were 8 times more likely to have three or more additional diagnoses than individuals with other psychiatric illness.

Chronicity and co-occurrence as they relate to trauma appear to be particularly salient, as evidence indicates that they may have a direct, dose-dependent impact on emotional and behavioral difficulties. Cloitre and colleagues (2009) found that cumulative childhood trauma was strongly associated with symptom complexity in clinical samples of adults and children receiving trauma-related services (including a subset of the sample described in the current study). Chronic and co-occurring adverse experiences have been shown to be related to panic, anxiety, and depression, and to the leading causes of death in the United States (Anda et al., 2006). Because many child survivors of maltreatment-related trauma present with diverse and wide-ranging symptoms, the current diagnostic system may be in danger of misdiagnosing or overlooking the impact of developmental trauma, potentially contributing to over- or undertreatment, or treatment that fails to address complex trauma (D'Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012).

The DTD construct was first proposed by Bessel van der Kolk (2005) as a remedy for this problem. In 2009, van der Kolk, Pynoos, and a group of childhood trauma experts introduced a proposal describing the criteria for a diagnostic category intended to capture the symptomatology exhibited by child survivors of complex trauma. These criteria take chronicity of exposure, as well as the caregiving environment, into consideration. Moreover, they reflect the key symptoms that appear to co-occur in individuals exposed to chronic maltreatment and compromised caregiving systems: pervasive dysregulation of (a) affective and physiological systems, (b) attentional and behavioral systems, and (c) self and relational systems (see Appendix A). For a thorough discussion of the rationale for the proposed criteria, see van der Kolk et al. (2009). To date, one study has attempted to apply the proposed DTD criteria. Klasen, Gehrke, Metzner, Blotvogel, and Okello (in press) found that 33% of Ugandan former child soldiers met criteria for PTSD whereas 78.2% met criteria for DTD, suggesting that the DTD diagnosis was describing the symptom constellations of these highly traumatized children with a high degree of accuracy. Moreover, only 1% met criteria for PTSD alone, suggesting the PTSD criteria did not adequately capture their diverse symptoms. The current study represents the first attempt to apply the proposed DTD criteria to a sample of children in the United States.

Because the proposed DTD criteria represent a new diagnostic entity, screening mechanisms and standardized measures for DTD have not yet been developed. This study utilizes archival data from a highly trauma-exposed sample of urban youth to explore the validity of the DTD construct and the applicability of the proposed criteria to this population.

Method

Participants and Procedure

Participants were 214 children who received services at an urban child trauma treatment center after experiencing one or more Criterion A stressors according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000). Exclusion criteria for this study were having reached legal adulthood and/or never having experienced at least one PTSD Criterion A stressor. Neither the participants nor their caregivers received monetary compensation. All activities were approved by the internal review board of a major university medical center.

Data used in the current study were collected for a variety of purposes (e.g., assessment and treatment planning, program evaluation, and research). All children and families receiving services at the center were invited to participate in a research study investigating the effects of trauma and their treatment. Participants' parents or guardians provided written informed consent and participants provided oral informed assent. Data from all children and families who assented and consented to participate were used for the current study. All children had experienced at least one PTSD Criterion A traumatic stressor. Extensive efforts were made to gather accurate information about trauma exposure over the course of participants' lives. In addition to self-report and caregiver-report, much of this information was obtained through objective medical, legal, and child welfare documentation. Caregiver reports were obtained for all participants. Participants ages 8 and older completed self-report measures administered by clinicians face-to-face. After completing trauma-focused assessments, clinicians also completed symptom checklists for all children.

Measures

Caregiver report. The Child Behavior Checklist (CBCL; Achenbach, 1991) is a widely used parent or caregiver checklist that is used to assess internalizing and externalizing behaviors ($\alpha = .80$). There are two versions of the checklist, one intended for children 6–18 years old, and one for children 1.5–5 years old. Responses are given on a 3-point Likert scale, ranging from 0 = *not true* to 2 = *very true*.

The Child Dissociative Checklist (CDC; Putnam, Helmers, & Trickett, 1993) is a 20-question measure intended to screen for dissociation and dissociative behaviors in children ($\alpha = .86$). Answers are recorded on a 4-point Likert scale ranging from 0 = *never true* to 3 = *often true*.

The Child Sexual Behavior Inventory (CSBI; Friedrich et al., 1992) is a measure of sexual behavior intended for children 2–12 years old. This 38-item measure ($\alpha = .82-.93$) is rated on a 4-point Likert scale, and has been shown to distinguish sexually abused from nonsexually abused children with sensitivity ranging from .70 to .92.

The UCLA Reaction Index for PTSD-Parent (PTSD-RI-Parent; Rodriguez, Steinberg, & Pynoos, 1998) is a widely used measure for assessing trauma in children and adolescents. It consists of three parts: (a) a brief, lifetime trauma screen, in which exposure to various traumatic events is coded as present or absent, (b) an evaluation of the objective and subjective exposure criteria of PTSD, which are also coded as “present” or “absent,” and (c) questions about the frequency of PTSD symptoms in the last month, evaluated on a 5-point Likert scale ranging from 0 = *none of the time* to 4 = *all of the time*. It has good-to-excellent convergent validity, internal consistency, and test-retest reliability ($\alpha = .84$; for a review, see Steinberg, Brymer, Decker, & Pynoos, 2004).

Child report. The Children’s Depression Inventory (Kovacs, 1992) is a 27-item scale, developed to screen for depressive symptoms in children ($\alpha = .84$ to $.87$). For each item, the participant is asked to endorse one of three statements as most reflective of his or her feelings. The inventory is widely used as a screening measure, and is considered valid for differentiating children with depressive symptoms from nondepressed populations.

The Children’s Dissociative Experiences Scale and Posttraumatic Symptom Inventory (CDES/PTSI; Stolbach, 1997) is a self-report measure that includes 21 items adapted from the Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986), as well as 13 items reflecting *DSM-IV* PTSD criteria. It is rated on a 4-point Likert scale and is considered internally reliable ($\alpha = .89$). The child version has been validated against PTSD diagnostic status.

The Diagnostic Interview for Children and Adolescents (DICA; Welner, Reich, Herjanic, Jung, & Amado, 1987) is a structured interview intended for school-aged children. It contains questions intended for diagnosis as well as questions about psychosocial stressors. The DICA modules included for the purposes of this study were Attention Deficit/Hyperactivity Disorder, Oppositional Defiant Disorder, Conduct Disorder, Depression, Dysthymia, Separation Anxiety Disorder, Posttraumatic Stress Disorder, Somatization, and Psychosocial Stressors. The DICA is considered a valid diagnostic measure, with DICA diagnoses concurring with hospital-discharge diagnoses in 81.5% of cases.

The Trauma Symptom Checklist for Children (TSCC; Briere, 1996) is a 54-item questionnaire, with responses given on a 4-point Likert scale. Responses range from 0 = *never happens* to 3 = *happens almost all the time*. It is considered valid and reliable for children aged 8–16 ($\alpha = .77$ to $.89$). It consists of six clinical scales: Anxiety, Depression, Posttraumatic Stress, Dissociation, Anger, and Sexual Concerns.

Table 1
Types of Trauma Experienced by Participants

Type of trauma	<i>N</i>	%
Sexual abuse	117	55
Witnessed domestic violence	83	39
Physical abuse	58	27
Traumatic loss	56	26
Witnessed physical or sexual abuse	56	26
Witnessed community violence	41	19
Motor vehicle accident	27	13
Medical trauma (other than burns)	25	12
Victim of extrafamilial violent crime	14	7
Burns	14	7
Fire	14	7
Witnessed homicide	10	5

Note. $N = 214$.

The UCLA Reaction Index for PTSD-Child (PTSD-RI-Child; Rodriguez et al., 1998) is the self-report version of the PTSD-RI-Parent (see above).

Clinician report. The Child Complex Trauma Symptom Checklist (SCL; currently undergoing field testing, $\alpha = .96$) is a set of 74 items, which includes all *DSM-IV* PTSD symptoms, as well as 57 items reflecting a range of other emotional and behavioral symptoms.

At the conclusion of the trauma-focused assessment, a checklist of traumatic incidents and adverse exposure was completed. This checklist includes number of episodes and chronicity, as established by the measures described above, the clinical interview, and existing documentation. Trauma types assessed included physical abuse, sexual abuse, witnessing domestic violence, traumatic loss, witnessing abuse, witnessing community violence, motor vehicle accident, medical trauma, abduction, torture, and other forms of trauma (see Table 1). Adverse experiences assessed included impaired caregiver, neglect, placement in foster care, death of a significant other, emotional abuse, homelessness, and other adverse experiences (see Table 2).

For the current study, because none of the measures could be used to assess for all proposed DTD criteria or to make a diagnosis of DTD, items were selected from each of the measures that corresponded to the proposed DTD symptom criteria.

Measurement of proposed DTD criteria. The study team reviewed the items from each measure in detail and identified items that corresponded to the DTD criteria. This was a field test of the applicability of proposed DTD criteria, intended to test the specific hypothesis that individuals who met the exposure criteria for DTD would exhibit greater DTD symptomatology than trauma-exposed individuals whose experiences did not meet the DTD exposure criteria. Thus, solely items related to

Table 2
Types of Adverse Experiences Among Participants

Type of adverse experience	<i>N</i>	%
Impaired caregiver	115	54
Neglect	79	37
Placement in foster care	64	30
Death of a significant other (not traumatic loss)	56	26
Unresolved history of trauma in caregiver	52	24
Exposure to drug use or criminal activity in the home	49	23
Emotional abuse	47	22
Exposure to developmentally inappropriate sexual behavior in the home	39	18
Substitute care (not foster care)	37	17
Incarcerated family member	34	16
Homelessness	14	7

Note. *N* = 214.

identified DTD criteria were utilized in these analyses. Because all of the measures were designed prior to the creation of the proposed DTD criteria, an unequal number of items were judged salient to each subcriterion, with some having only one or two corresponding items. For the current study, if any of the items corresponding to a DTD subcriterion were endorsed, then that subcriterion was considered to be present. Items scored on a Likert scale were considered to be present only when endorsed at the highest level. For a list of items and their corresponding subcriteria, see Appendix B.

Results

The 214 participants enrolled in the study ranged in age from 3 to 17 years old ($M = 9.75$ years, $SD = 3.42$ years), and 118 (55.1%) were female whereas 96 (44.9%) were male. The sample was primarily African American (79.4% Black/African American, 10.9% White/European American, 8.4% Hispanic/Latino, 4.2% biracial/multiracial), and 34.6% of participants were under the age of 8, and thus did not complete self-report measures.

The DTD criteria. Due to the nature of the sample, all 214 (100%) had experienced at least one traumatic event that met the exposure criteria for PTSD (see Table 1 for a description of the traumatic stressors). The majority (58%) had experienced exposure to at least one chronic traumatic stressor. The mean exposure to types of traumatic stressors was 2.59, whereas mean exposure to other adverse childhood experiences was 2.66 (see Table 2 for a description of the adverse childhood experiences), for a cumulative mean of 5.26 ($SD = 3.27$). Of the sample, 9% had experienced only a single episode of traumatic stress without any adverse childhood experiences, 32% had histories of exposure to more than a single episode or type of trauma that did

not reach the threshold or chronicity for either DTD Criterion A1 (repeated and severe episodes of interpersonal violence) or A2 (significant disruptions of protective caregiving). Moreover, 21% had histories consistent with DTD Criterion A1 and not Criterion A2, and 4% had histories of DTD Criterion A2 and not Criterion A1. Finally, 32% ($n = 70$) had histories that met the proposed DTD exposure criteria, whereas 68% ($n = 144$) did not.

The children in this sample who met the exposure criterion for developmental trauma disorder (DTD-Criterion A-exposed), were significantly more likely than the other children (non-DDT-Criterion A), to exhibit/endorse at least two of the B subcriteria, meeting the proposed diagnostic threshold for Cluster B, $t(144.2) = -3.77, p < .001$. Regarding Subcriterion B1 (inability to tolerate extreme affective states), there was a significant difference between groups, $t(151.1) = -2.75, p = .009$, with the DTD-Criterion A-exposed group endorsing the subcriterion significantly more than non-DDT-Criterion A children. Subcriterion B2 (disturbances in regulation of bodily function) did not show a significant difference between the groups, $t(212) = -.89, p = .371$. Subcriterion B3 (diminished awareness) did show a significant difference, $t(140.8) = -2.79, p = .006$, with the DTD-Criterion A-exposed group endorsing the subcriterion significantly more than non-DDT-Criterion A children. Results for Subcriterion B4 (impaired capacity to describe bodily states) were similar, $t(126.8) = -4.50, p < .001$.

The DTD-A-exposed group was significantly more likely than the non-DDT-A group exhibit/endorse at least three of the Subcriteria C, meeting the proposed diagnostic threshold for Cluster C, $t(95.7) = -3.94, p < .001$. Groups showed a significant difference in Subcriterion C1 (preoccupation with threat) $t(141.4) = -2.39, p = .018$, with the DTD-A-exposed group endorsing this subcriterion more frequently than the non-DDT-A group. There were no significant differences in Subcriterion C2 (impaired self-protection) endorsement, $t(134.6) = -.02, p = .982$. There was a significant between-group difference in endorsement of Subcriterion C3 (maladaptive self-soothing), $t(125.7) = -4.09, p < .001$, with the DTD-A-exposed group endorsing this subcriterion more frequently. There was also a significant difference in the endorsement of Subcriterion C4 (self-harm), $t(94.1) = -2.63, p = .010$, with the DTD-A-exposed group reporting significantly more endorsement. Results for Subcriterion C5 (inability to sustain goal-directed behavior) were similar, $t(113.2) = -2.95, p = .004$.

The DTD-A-exposed group was significantly more likely than the non-DDT-A group to exhibit/endorse at least three of the D subcriteria, meeting the proposed diagnostic threshold for Cluster D, $t(120.3) = -3.55, p = .001$. Subcriterion D1 (preoccupation with safety of caregiver) was the only subcriterion to be exhibited/endorsed more in the non-DDT-A group; this difference was not statistically significant, $t(179.5) = 1.73, p = .086$. The DTD-A-exposed group was significantly more likely to endorse Subcriterion D2 (negative sense of self), $t(212) = -2.74, p = .007$, Subcriterion D3 (persistent distrust), $t(127.9) = -3.22, p = .002$, Subcriterion D4 (reactive

aggression), $t(120.0) = -2.86, p = .005$, and Subcriterion D6 (impaired regulation of empathic arousal) as well, $t(99.7) = -3.48, p = .001$. The between-group difference for Subcriterion D5 (inappropriate attempts at intimacy) was not significant, $t(132.8) = -1.62, p = .106$.

Of the 70 DTD Criterion A-exposed children, 68 (97%) exhibited/endorsed one or more symptoms in at least two of the three PTSD symptom clusters, meeting the proposed diagnostic threshold for DTD Criterion E. There was no significant difference between the DTD-A-exposed group and the non-DTD-A group, $t(183) = -.67, p = .502$.

DTD diagnosis. Of the 144 participants whose histories did not include either DTD exposure Criterion A1 or A2, 10 (6%) met the symptom threshold for DTD based on Criteria B, C, D, and E. All of these had experienced more than a single incident or type of traumatic stress. Of the 70 participants with histories of DTD Criterion A exposure, 22 (31%) met the threshold for the diagnosis based on Criteria B, C, D, and E. This difference was statistically significant, $t(212) = -4.95, p < .001$.

Discussion

Although much remains to be discovered about DTD, the results of this study strongly support the DTD construct as a diagnostic category. In short, children who had experienced chronic exposure to violence, maltreatment, and disruptions of protective caregiving, as defined in the proposed DTD Criterion A, were much more likely to meet the proposed DTD symptom criteria than other children. Despite the fact that none of the measures employed in the study were designed to assess for the proposed DTD criteria, there were significant differences between the DTD Criterion A-exposed and the non-DTD Criterion A-exposed groups in all DTD symptom clusters as measured by this study, and in 11 of the 15 subcriteria. The DTD construct differs from other approaches to diagnosis in that it directs clinical attention to both discrete traumatic stressors and individuals' attachment histories. The results of this study suggest that there are substantial clinical differences between groups of trauma-exposed children, depending on the type of trauma(s) they have experienced and their developmental contexts, and that the proposed DTD criteria reflect these differences. Many of the symptoms that differentiate the groups of children in this study are not accounted for by PTSD or other diagnostic formulations, and to fully capture them would require multiple, competing diagnoses. Scientific parsimony suggests that a single diagnosis that accurately captures the clinical differences between groups of trauma-exposed children is preferable to a multidagnostic formulation. Moreover, a diagnosis that can help children, caregivers, and clinicians understand children's emotional and behavioral difficulties in the context of their trauma histories, has the potential to improve treatment and services for traumatized children.

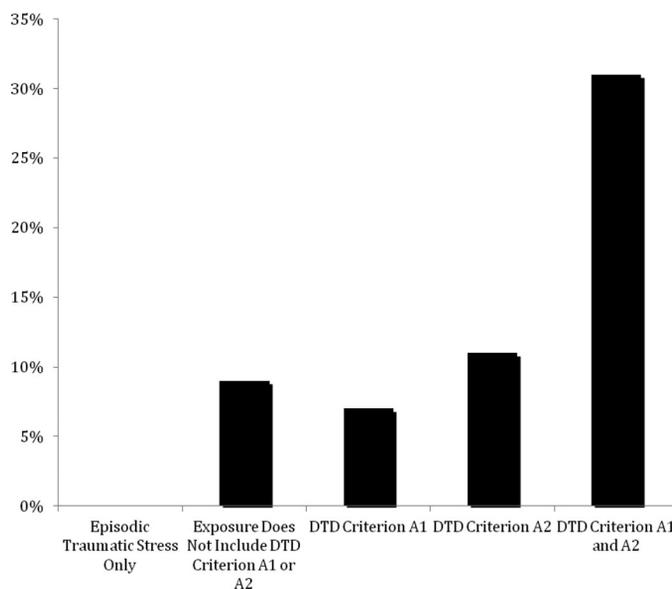


Figure 1. Percentage of participants meeting developmental trauma disorder (DTD) diagnostic criteria by DTD exposure criteria.

This study is limited in several ways. It utilized diagnostic tools and psychometrics that were never intended to diagnose DTD; in fact, they were developed before the DTD criteria had been formulated. Thus, the range of questions pertinent to DTD was restricted. Some of the DTD subcriteria were measured by a single item, while some were accounted for by eight items, or even entire measures. This made it difficult to accurately assess the presence of some of the symptoms under investigation, and as a result, artificially limited the number of children who could meet the proposed DTD criteria. In addition, the sample for this study was relatively homogeneous in terms of ethnicity, race, level of trauma exposure, and reasons for seeking clinical services.

This study provides preliminary evidence to support the diagnostic construct of DTD. Creating tools that will allow clinicians and researchers to prospectively study the effects of complex trauma in children is a vital next step. The exposure groups did not differ on four of the proposed subcriteria for DTD (problems with regulation of bodily functions, impaired capacity for self-protection, preoccupation with safety of caregiver, and inappropriate attempts for intimate contact). This may be due to measurement limitations specific to this study, to a need for more clarity in the proposed criteria, or to the possibility that they are not useful for differentiating between different diagnostic groups of children. More research is needed to answer these questions to further refine and validate the DTD construct. The results of this study provide a basis for such research. Finally, there may be considerable variance in the manifestation of DTD and the salience of some of the proposed criteria for different children. Future studies emphasizing factors such as age, gender, and cultural background will be important next steps in the validation of DTD and the study of developmental trauma.

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Appendix A

The Developmental Trauma Disorder (DTD) Criteria

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

- A1. Direct experience or witnessing of repeated and severe episodes of interpersonal violence
- A2. Significant disruptions of protective caregiving as the result of repeated changes in primary caregiver, repeated separation from the primary caregiver, or exposure to severe and persistent emotional abuse

B. Affective and Physiological Dysregulation. The child exhibits impaired normative developmental competencies related to arousal regulation, including at least two of the following:

- B1. Inability to modulate, tolerate, or recover from extreme affect states (e.g., fear, anger, shame), including prolonged and extreme tantrums or immobilization

- B2. Disturbances in regulation in bodily functions (e.g., persistent disturbances in sleeping, eating, and elimination; overreactivity or underreactivity to touch and sounds; disorganization during routine transitions)
- B3. Diminished awareness/dissociation of sensations, emotions, and bodily states
- B4. Impaired capacity to describe emotions or bodily states

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:

- C1. Preoccupation with threat, or impaired capacity to perceive threat, including misreading of safety and danger cues
- C2. Impaired capacity for self-protection, including extreme risk taking or thrill seeking
- C3. Maladaptive attempts at self-soothing (e.g., rocking and other rhythmical movements, compulsive masturbation)
- C4. Habitual (intentional or automatic) or reactive self-harm
- C5. Inability to initiate or sustain goal-directed behavior

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:

- D1. Intense preoccupation with safety of the caregiver or other loved ones (including precocious caregiving) or difficulty tolerating reunion with them after separation
- D2. Persistent negative sense of self, including self-loathing, helplessness, worthlessness, ineffectiveness, or defectiveness
- D3. Extreme and persistent distrust, defiance, or lack of reciprocal behavior in close relationships with adults or peers
- D4. Reactive physical or verbal aggression toward peers, caregivers, or other adults
- D5. 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
- D6. Impaired capacity to regulated empathic arousal as evidenced by lack of empathy for, or intolerance of, expres-

sions of distress in others, or excessive responsiveness to the distress of others

E. Posttraumatic spectrum symptoms. The child exhibits at least one symptom in at least two of the three post-traumatic stress disorder (PTSD) symptom Clusters B, C, and D.

F. Duration of disturbance. Symptoms in DTD Criteria B, C, D, and E last at least 6 months.

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

- Scholastic: Underperformance, nonattendance, disciplinary problems, dropout, failure to complete degree/credential(s), conflict with school personnel, learning disabilities or intellectual impairment that cannot be accounted for by neurological or other factors
- Familial: Conflict, avoidance/passivity, running away, detachment and surrogate replacements, attempts to physically or emotionally hurt family members, nonfulfillment of responsibilities within the family
- Peer group: Isolation, deviant affiliations, persistent physical or emotional conflict, avoidance/passivity, involvement in violence or unsafe acts, age-inappropriate affiliations or style of interaction
- Legal: Arrests/recidivism, detention, convictions, incarceration, violation of probation or other court orders, increasingly severe offenses, crimes against other persons, disregard or contempt for the law or for conventional moral standards
- Health: Physical illness or problems that cannot be fully accounted for; physical injury or degeneration, involving the digestive, neurological (including conversion symptoms and analgesia), sexual, immune, cardiopulmonary, proprioceptive, or sensory systems; severe headaches (including migraine); or chronic pain or fatigue
- Vocational (for youth involved in seeking or referred for employment, volunteer work, or job training): Disinterest in work/vocation, inability to get or keep jobs, persistent conflict with coworkers or supervisors, underemployment in relation to abilities, failure to achieve expected advancements

Appendix B

Developmental Trauma Disorder (DTD) Subcriteria and Corresponding Items

Subcriterion	Items
B1: Inability to modulate, tolerate, or recover from extreme affect states	SCL 33/34: Problems managing/tolerating angry affect TSCC 14: Getting mad and cannot calm down TSCC 16: Child has intense outbursts of anger, often without apparent cause, and may display unusual physical strength during these outbursts CBCL 85/95: Temper tantrums or hot temper
B2: Disturbances in regulation of bodily functions	SCL 18: Physical problems CBCL 49: Overeating CBCL 6: Bowel movements outside of the toilet CBCL 76: Sleeps less than most kids CBCL 77: Sleeps more than most kids CBCL 100: Trouble sleeping CBCL 107: Wets self during the day CBCL 108: Wets the bed
B3: Diminished awareness of sensations, emotions, and bodily states	SCL 30: Difficulty knowing or describing internal states SCL 32: Avoidance or dissociation of negative/painful affect SCL 36: Emotional unresponsiveness CDES/PTSI 29: Feelings
B4: Impaired capacity to describe emotions or bodily states	SCL 31: Difficulty labeling and expressing feelings and internal experiences SCL 53: Difficulty expressing wishes and desires
C1: Preoccupation with threat, or impaired capacity to perceive threat	SCL 3: Acting or feeling as if the traumatic event were recurring SCL 76: Over- or underestimation of risk TSCC 2: Feeling afraid something bad might happen DICA 70: Worried about something bad happening to the self CDI 6: I am sure terrible things will happen to me CBCL 34: Feels others are out to get him or her CBCL 72: Shows too little fear of getting hurt Entire score of CSBI
C2: Impaired capacity for self-protection	SCL 29: Inability to self-soothe
C3: Maladaptive attempts at self-soothing	CBCL 55/60: Plays with own sex parts too much CBCL 63: Repeatedly rocks head or body CBCL 98: Thumb-sucking
C4: Habitual or reactive self-harm	SCL 22: Self-injurious behavior DICA 61E: Tried to kill self CDC 13: Child suffers from unexplained injuries or may even deliberately injure self at times CBCL 18: Deliberately harms self or attempts suicide
C5: Inability to initiate or sustain goal-directed behavior	SCL 71: Problems with age-appropriate capacity to plan and anticipate SCL 72: Problems with age-appropriate capacity to focus on and complete tasks
D1: Intense preoccupation with safety of the caregiver or other loved ones	DICA 69a: Worried a lot that something bad might happen to parent DICA 69b: Worried about losing parent CBCL 37: Gets too upset when separated from parents

(Continued)

Appendix B

Continued

Subcriterion	Items
D2: Persistent negative sense of self	CDI 7: I hate myself CDI 25: Nobody really loves me SCL40: Feelings of being damaged or defective CDI 42: Low feelings of self-esteem, self-confidence, or self-worth TSCC 22: Feeling stupid or bad CBCL 33: Feels or complains that non one loves him/her CBCL 35: Feels inferior or worthless
D3: Extreme and persistent distrust, defiance or lack of reciprocal behavior in close relationships with adults or peers	SCL 46: Distrust of others CDI 26: I never do what I am told CBCL 20: I feel alone all the time CBCL 22: Disobedient at home CBCL 89: Suspicious
D4: Reactive physical or verbal aggression toward peers, caregivers, or other adults	SCL 45: Volatile interpersonal relationships CDI 27: I get into fights all the time CBCL 40: Hits others CBCL 53/57: Physically attacks people CBCL 37: Gets in many fights CBCL 97: Threatens people
D5: Inappropriate attempts to get intimate contact	SCL 50: Interpersonal boundary issues DICA 72a: Afraid to be left alone DICA 72b: Won't leave grown-up's side if away from home CDC 12: Child is unusually sexually precocious and may attempt age-inappropriate sexual behavior with other children or adults CBCL 10: Clings to adults or too dependent
D6: Impaired capacity to regulate empathic arousal	SCL 38: Difficulty attuning to other people's emotional states SCL 51: Difficulty with perspective taking

Note. CBCL, Child Behavior Checklist; CDC, Child Dissociative Checklist; CDES/PTSI, Children's Dissociative Experiences Scale and Posttraumatic Symptom Inventory; CDI, Children's Depression Inventory; CSBI, Child Sexual Behavior Inventory; DICA, Diagnostic Interview for Children and Adolescents; SCL, Child Complex Trauma Symptom Checklist; TSCC, Trauma Symptom Checklist for Children.

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