

A growing body of research is leading many psychologists to call for the inclusion of complex childhood trauma in various classification systems.

CE

# CONTINUING EDUCATION IMPROVED TREATMENT FOR DEVELOPMENTAL TRAUMA

BY ZARA ABRAMS

James* was born to a mother who suffered from chronic depression and a substance use disorder. She never physically abused him, but she could not provide consistent care. As a result, he faced poverty, homelessness, and severe neglect throughout his childhood. At one point, James was temporarily removed from his mother's care and placed in a foster home, where he witnessed family violence and experienced emotional abuse.

When James entered preschool, he faced significant mental and behavioral health problems, including aggressive behavior, difficulty regulating his emotions, and trouble forming healthy relationships with peers. Despite all these difficulties, he did not meet the diagnostic criteria for post-traumatic stress disorder (PTSD) when he was assessed by clinicians at ages 5, 9, and 16. (More than 70% of children treated by the National Child Traumatic Stress Network [NCTSN] do not meet the criteria [Purbeck, C. A., et al., NCTSN Core Data Set Report, 2021].) By the time James started high school, he had been diagnosed with oppositional defiant disorder (ODD), bipolar disorder, borderline personality disorder, and generalized anxiety disorder. He takes a cocktail of medications, but neither his diagnoses nor his treatments address the effects of his tumultuous early years.

"So many of these kids are misdiagnosed, and as a result, they're not getting the right treatment," said Mandy Habib, PsyD, codirector of the Institute for Adolescent Trauma Treatment and Training at Adelphi University in New York. "Their trauma history just gets completely missed, and it's such a disservice to them."

To better serve children like James, a growing group of psychologists and psychiatrists is studying complex trauma—which can refer to exposure to multiple adverse events and the impacts of that exposure—and advocating for its inclusion in various classification systems. These experts argue that formalizing disorders such as complex PTSD (cPTSD) and developmental trauma disorder (DTD) enables better treatment for children like James, because those diagnoses account for the detrimental effects of chronic stressors such as neglect, emotional abuse, and family or community violence—and ensure that children receive trauma-informed care. Now, they can point to a growing research base to support that claim.

"These kids are often seen as a problem to their schools, caregivers, and society," said psychologist Joseph Spinazzola, PhD, executive director of the Foundation Trust, a philanthropic organization that supports underserved groups, and co–principal investigator of two field studies of DTD. "In the absence of a trauma diagnosis, kids are getting left out. We're working to manage and contain their behaviors, but we're not addressing the underlying factors driving those behaviors."

## THE NEED FOR ACCURATE DIAGNOSES

The addition of PTSD to the Diagnostic and Statistical Manual of Mental Disorders (3rd Ed.) in 1980 sent a clear message that a harrowing experience, such as participating in violent combat or being sexually assaulted, can profoundly affect human health and behavior. Since then, the field's concept of trauma has evolved, and many say it is well past time for the DSM to catch up.

To receive a PTSD diagnosis, patients must face a "Criterion A" stressor—witnessing or experiencing actual or threatened death, serious injury, or sexual violence—and exhibit a series of resulting symptoms, such as flashbacks, hypervigilance, and emotional

* Name changed to protect patient privacy.

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**Learning objectives:** After reading this article, CE candidates will be able to:

**1.** Describe developmental trauma disorder (DTD) and complex post-traumatic stress disorder (cPTSD) and understand how they differ from PTSD.

**2.** Explain how adverse experiences in childhood can impact development.

**3.** Describe several interventions used to treat children and adolescents with a history of complex trauma.

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distress. Patients with cPTSD, on the other hand, may have faced either multiple Criterion A stressors or chronic adverse experiences that may not meet the Criterion A threshold, such as impaired caregiving, emotional abuse, or prolonged separation from a caregiver. Some have faced a combination of Criterion A stressors and other adverse events—for example, a child who was neglected by a parent with a substance use disorder, then sexually abused after entering foster care. cPTSD has gained traction in clinical settings for both children and adults since the World Health Organization added it to the International Statistical Classification of Diseases and Related Health Problems (ICD-11) in 2019.

DTD is a more multifaceted diagnosis specific to children, encompassing 15 possible symptoms across several domains, including emotion, cognition, behavior, and relationships. Symptoms include behaviors such as habitual self-harm, extreme distrust, and verbal or physical aggression toward others. DTD covers adversity not described by PTSD, and it also accounts for the disruptions in development that result from sustained trauma during childhood, which typically occurs in the context of relationships.

"This is a disorder where kids are fundamentally feeling insecure and that there is something wrong with them because they are either in emotional turmoil or emotionally shut down," said clinical psychologist Julian Ford, PhD, ABPP, a professor of psychiatry and law and director of the Center for Treatment of Developmental Trauma Disorders at the University of Connecticut, who is also the co–principal investigator of the DTD field studies with Spinazzola and trauma psychiatrist Bessel van der Kolk, MD. "This emotion dysregulation occurs because they have essentially organized their development around survival."

By school age, these kids may experience impulsivity, aggression, separation anxiety, and intense mood shifts. They are likely to face problems with sleep, learning, classroom behavior, and relationships with peers. By adolescence, they may turn to addictive behaviors such as self-injury or substance use to cope with their emotional turmoil or to feel something when they are emotionally shut down. They are often diagnosed with ODD, attention-deficit/hyperactivity disorder (ADHD), bipolar disorder, and major depression, as well as various attachment, adjustment, anxiety, and personality disorders—diagnoses that cPTSD researchers say do not accurately capture these kids' experiences.

"Diagnosis matters, because it drives what treatments are approved and covered by insurance, as well as what researchers are discussing and studying," said clinical psychologist Margaret Blaustein, PhD, founder and director of the Center for Trauma Training in Needham, Massachusetts.

Children given behavioral diagnoses such as ODD and ADHD, rather than trauma-related diagnoses, are often treated with behavioral therapy and medications rather than trauma-informed approaches, Blaustein said, which fails to address the disrupted attachment and development many of these children face.

Ford, Spinazzola, van der Kolk, and others advocated unsuccessfully for the inclusion of DTD in the DSM-V. The 2011 rejection cited "no known evidence" that trauma causes developmental disruptions. Ten years later, the team has amassed substantial evidence of that link from two field trials assessing more than 500 children for DTD, PTSD, and other psychiatric disorders.

## DIFFERENTIATING BETWEEN DIAGNOSES

One key finding of the first DTD field trial is that the disorder is distinct from PTSD, suggesting that it exerts different effects and requires a unique approach. Van der Kolk, Spinazzola, and Ford showed that compared with children with PTSD, children who meet the criteria for DTD are more likely to experience panic disorder, separation anxiety disorder, ADHD, and disruptive behavior disorders such as ODD (*European Journal of Psychotraumatology*, Vol. 10, No. 1, 2019). They also found that exposure to interpersonal trauma, such as family and community violence, or attachment adversity, such as from an impaired caregiver or emotional abuse, were more closely associated with DTD symptoms than PTSD symptoms (*Journal of Traumatic Stress*, Vol. 31, No. 5, 2018). Ford said this indicates that DTD likely results from a combination of one or more forms of traumatic victimization—challenges to a child's sense of safety or personal and bodily integrity—as well as a disruption in attachment bonding with a primary caregiver.

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In a separate study led by Spinazzola, youth who faced psychological maltreatment—emotional abuse or neglect that would not qualify as a PTSD Criterion A stressor—had at least as many behavioral problems and mental health disorders as children who were physically or sexually abused, but their pattern of symptoms was different (*Psychological Trauma: Theory, Research, Practice, and Policy*, Vol. 6, Suppl. 1, 2014).

"What we've found is that the symptoms we've identified as part of DTD hold together very well and are distinct from symptoms of PTSD and other psychiatric disorders," said Ford.

Another factor that distinguishes DTD from PTSD: Symptoms tend to vary based on the developmental period when trauma occurred. Child development can be seen as a progression through a series of stages, each with its own developmental tasks and opportunities. Examples include forming healthy attachments with caregivers in infancy and early childhood, establishing healthy interpersonal relationships with friends in middle and late childhood, and developing a sense of personal identity and purpose in adolescence, said Christopher Layne, PhD, a clinical psychologist and the director of education in evidence-based practice at the UCLA–Duke University National Center for Child Traumatic Stress. The successful completion of each developmental task lays the groundwork to take on and subsequently achieve others.

"We can think about complex trauma exposure as the disruption of key developmental tasks that can have a cascading forward effect," Layne said.

**Formalizing complex PTSD and developmental trauma disorder in children would enable psychologists to treat disrupted attachment and development.**

For example, a child who did not learn to self-soothe may exhibit adaptations such as head-banging, compulsive masturbation, or substance misuse, depending on the child's developmental stage, said Spinazzola. Those reactions can in turn make it harder to complete future developmental tasks, such as forming healthy relationships with peers (Hawes, D. J., et al., *American Psychologist*, Vol. 76, No. 2, 2021).

The source of harm also matters. Children who face complex trauma are often abused or neglected in the context of caregiver relationships, which Layne said can be more detrimental than harm done by a stranger because it challenges a child's basic understanding of healthy attachments and the benign nature of others—and violates the expectation that caregivers will reliably love, nurture, and protect their children.

"It changes your core beliefs about people, about the world, about safety, about the future—in a way that straightforward PTSD doesn't," Habib said.

While proponents say that adding DTD and cPTSD to classification systems will improve treatment, enhance research, and help better explain comorbidities, not all trauma practitioners support the change. Critics argue that the DSM and ICD are intended to define disorders based on symptoms rather than etiology, and that there is not yet a clear causal link between traumatic experiences and the symptoms of DTD (Schmid, M., et al., *BMC Psychiatry*, Vol. 13, No. 3, 2013).

Some researchers who study trauma say that adding diagnoses for disorders such as cPTSD and DTD is not necessary because there are ways to study PTSD that provide enough nuance to identify a spectrum of reactions to traumatic events.

"By focusing on the frequency and severity of a child's experiences, we can capture meaningful neurobiological, psychological, and behavioral consequences of trauma within the existing classification system," said Katie McLaughlin, PhD, a professor in Harvard University's Department of Psychology who studies the neurobiological effects of childhood trauma.

McLaughlin's team has found that as the severity and chronicity of trauma increase, so do changes in the brain. Kids exposed to more frequent or intense trauma—for example, a child sexually abused by a parent for years versus a child sexually abused one time by a stranger—have a stronger amygdala response to facial expressions of anger and fear, indicating increased sensitivity to threat (*Journal of the American Academy of Child & Adolescent Psychiatry*, Vol. 54, No. 9, 2015).

Neurobiological responses also appear to differ by developmental stage. Children who are maltreated before age 12 have lower hippocampal volumes than those exposed to trauma during adolescence or not at all (Riem, M. M. E., et al., *Development and Psychopathology*, Vol. 27, No. 2, 2015). McLaughlin said this may help explain problems with learning and academic performance, because kids exposed to trauma tend to do worse on simple memory tasks, such as word recall (*Developmental Cognitive Neuroscience*, Vol. 38, 2019).

But Ford cautions that this approach may leave out children like James who do not meet the criteria for PTSD, because without a diagnosis that links their symptoms to trauma, their health care providers are unlikely to deliver trauma-informed treatment.

## EFFECTIVE TRAUMA-INFORMED TREATMENTS

The number one reason child psychologists want recognition for cPTSD and DTD is to design and deliver effective trauma-informed treatments to children and adolescents in need.

Blaustein, Spinazzola, and Ford helped craft a series of best practices for treating complex trauma among youth. These include establishing a sense of safety, teaching the patient to self-regulate and self-reflect, and supporting healthy relationships. Practitioners should also help children and teens process traumatic memories and integrate them into their life story (Cook, A., et al., *Psychiatric Annals*, Vol. 35, No. 5, 2005).

NCTSN recommends eight evidence-based interventions for children with complex trauma at the individual, family, group, and systems levels. Trauma Affect Regulation: Guide for Education and Therapy (TARGET), which Ford developed, teaches trauma survivors how the brain adapts to survive trauma and how this leads to DTD symptoms. It also provides a set of skills for shifting from a state of reactivity to one of focus and control, and it has proven effective for DTD (*Treating Complex Traumatic Stress Disorder in Adults*, Guilford Publications, 2020).

"Being able to focus and think clearly when under stress is more complicated than it seems and is especially difficult—but also especially valuable—for kids who are experiencing DTD," said Ford.

Blaustein and Kristine Kinniburgh, a licensed clinical social worker, developed Attachment, Self-Regulation, and Competence: A Comprehensive Framework (ARC), which delivers some of the same strategies used in individual therapy—teaching emotional regulation and attunement skills—in a range of settings, such as within a residential treatment or child welfare program. ARC also works with caregivers to stabilize primary attachment relationships.

"It's not enough just to build a child's skills, because it's hard to make use of those skills if they remain in a threatening, overly stressed environment," Blaustein said.

Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS) is a 16-session group treatment program for adolescents that emphasizes problem-solving, mindfulness, communication, and self-regulatory skills, while simultaneously helping youth develop a sense of meaning and purpose in life. Habib, who cocreated SPARCS, trains psychologists, social workers, and other counselors to deliver the program in juvenile justice settings, public schools, residential care facilities, and outpatient communities.

In addition to interventions designed specifically for children and teens facing complex trauma,

### FURTHER READING

**The body keeps the score: Brain, mind, and body in the healing of trauma**
Van der Kolk, B. Penguin Random House, 2015

**Treating complex traumatic stress disorders in children and adolescents**
Ford, J. D., & Courtois, C. A. (Eds.) Guilford Press, 2015

**Psychological interventions for ICD-11 complex PTSD symptoms: Systematic review and meta-analysis**
Karatzias, T., et al. *Psychological Medicine*, 2019

practitioners also apply modified versions of treatments developed for PTSD.

Teresa Celada-Dalton, PhD, is a trauma psychologist at Children's Hospital Los Angeles, where she works with children exposed to an array of traumatic events, many of whom have recently migrated to the United States from Central America. Most have faced some combination of poverty, discrimination, community or family violence, and the stress of migration, she said, but very few meet the diagnostic criteria for PTSD.

For school-age children, she uses trauma-focused cognitive behavioral therapy, which focuses on exploring trauma-related cognitive distortions that cause affect dysregulation and maladaptive behaviors. She guides children and their caregivers through a series of modules to help them integrate their personal "trauma narrative"—which may take the form of a journal, comic strip, or song—into their life story. With infants and toddlers, she uses child-parent psychotherapy (CPP), which provides a safe and nurturing space for the child to bond with their caregiver and process trauma through play. For example, a 4-year-old girl who had witnessed domestic violence reenacted what she saw by playing with dolls in Celada-Dalton's office. CPP may also involve directly addressing issues such as neglect and emotional abuse to strengthen the parent-child relationship.

Celada-Dalton also modifies treatments to meet the cultural and linguistic needs of her patients. She adapts coping resources—fables or stories, knowledge from ancestors, and culturally diverse dolls—so that they feel natural and comfortable for patients.



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**Child-parent psychotherapy helps younger children process trauma through play while bonding with their parents in a safe and nurturing environment.**

Evidence is also mounting for using nontraditional interventions to treat complex trauma. Neurofeedback training, which uses a brain-computer interface to teach patients to modulate their brain activity, can improve PTSD symptoms in children with developmental trauma, according to a study by Spinazzola, van der Kolk, and their colleagues (Rogel, A., et al., *Psychological Trauma: Theory, Research, Practice, and Policy*, Vol. 12, No. 8, 2020). For a select few, equine-facilitated psychotherapy, which pairs children with horses to develop relational and emotional regulation skills, also shows promise for treating complex trauma (Naste, T. M., et al., *Journal of Child & Adolescent Trauma*, Vol. 11, 2018).

## OPPORTUNITIES TO FURTHER IMPROVE OUTCOMES

Ford, Spinazzola, van der Kolk, and their colleagues are still analyzing data from the DTD field trials to further explore each disorder's symptoms and how they are related to—or distinct from—PTSD and other disorders. Layne and Ford are also examining children's exposure histories to 19 different types of trauma—including an impaired caregiver, sexual abuse, and neglect—to understand how adverse life events tend to co-occur and impact development. Their work involves developing an expanded vocabulary of terms to describe differences in exposure histories that may help explain why some children develop PTSD, cPTSD, or DTD.

Over the long term, Ford said the field needs much more treatment outcome research, such as whether emerging and evidence-based therapies actually improve outcomes in DTD for children of various ages. Longitudinal studies that track how DTD and cPTSD symptoms develop over time, including their impacts on adult life, are also a key piece of the puzzle.

"The goal is not to throw out PTSD, because it was such a landmark change to include in the DSM a diagnosis that acknowledges the impact of trauma," Blaustein said. "But the diagnosis leaves out a lot of kids. It's important not to limit our understanding of trauma to what is currently in the DSM." ■