



Child Mind
Institute

2022 Children's Mental Health Report

Treating Symptoms of Trauma in Children and Teenagers

The Child Mind Institute is dedicated to transforming the lives of children and families struggling with mental health and learning disorders by giving them the help they need to thrive. We've become the leading independent nonprofit in children's mental health by providing gold-standard, evidence-based care, delivering educational resources to millions of families each year, training educators in underserved communities, and developing tomorrow's breakthrough treatments. Together, we truly can transform children's lives.

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SPONSORING PARTNER

The Child Mind Institute and Blue Shield of California are collaborating to share the latest research on youth mental health as part of Blue Shield of California's BlueSky initiative. Blue Shield of California is an independent member of the Blue Shield Association.

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RECOMMENDED CITATION

Sheldon-Dean, H. (2022). *2022 Children's mental health report: Treating symptoms of trauma in children and teenagers*. Child Mind Institute.

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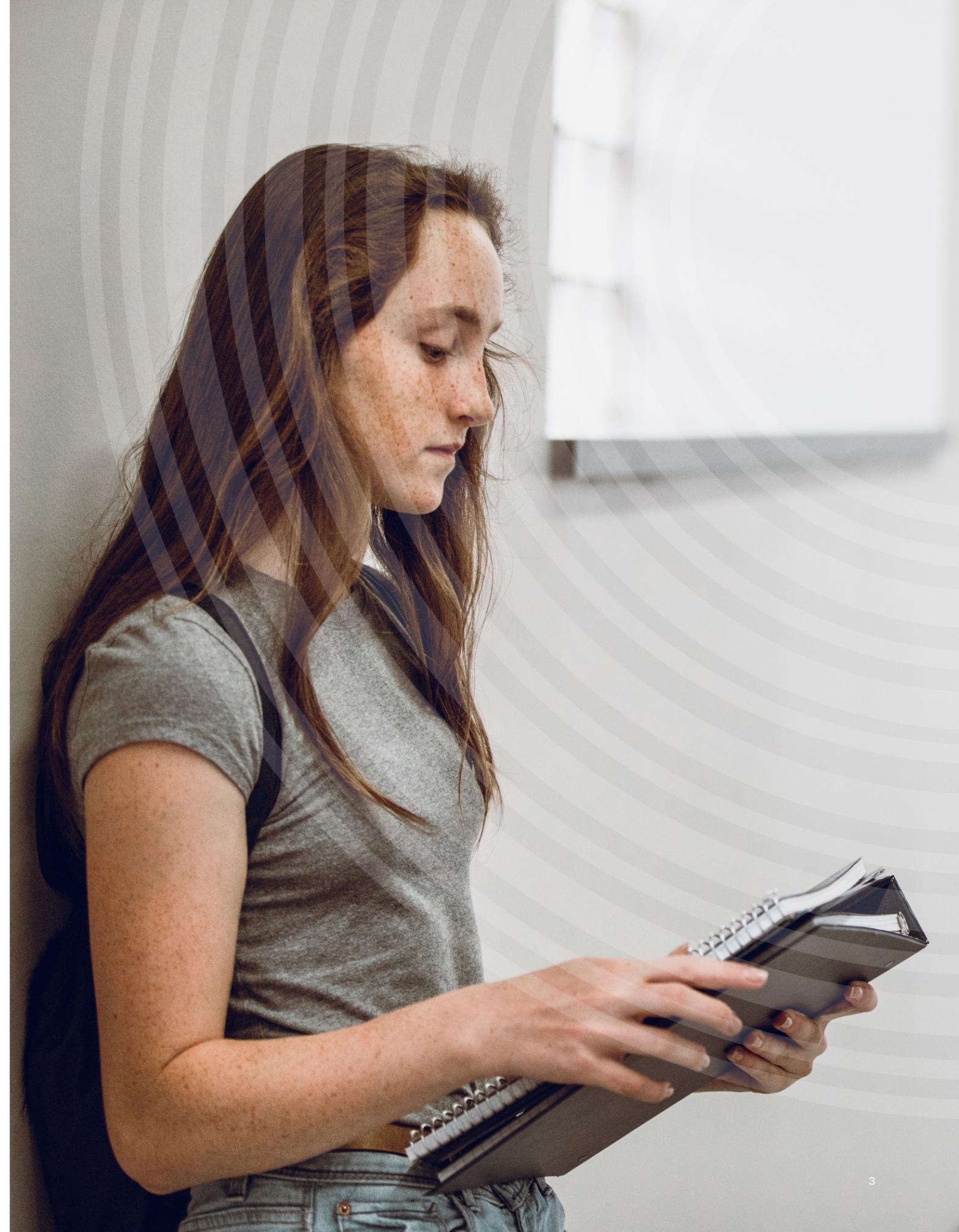
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Treating Symptoms of Trauma in Children and Teenagers

Psychological trauma is a frequent topic of discussion these days, and for good reason. From the ongoing devastations of the COVID-19 pandemic to the harrowing realities of school shootings and war in Ukraine, the news and even our own lives are filled with potentially traumatic experiences.

But what exactly is trauma, and how does it affect children and teenagers in particular? And what can we do to lessen the impact of trauma on their mental health? In the 2022 Children's Mental Health Report, we seek to answer those questions and review the evidence base for treatments aimed at mitigating the impacts of trauma in young people.

Traumatic experiences can upend kids' lives, but trauma doesn't have to be a life sentence. By increasing awareness of the effects of trauma and the most promising ways to treat it, we can foster young people's innate resilience and get them — and their families and communities — the support they need to thrive.



What Is Trauma?

Traumatic experiences are common and can have profound impacts on kids' lives, but it's not always clear exactly what trauma is. This chapter will examine contemporary definitions of psychological trauma and how they apply to children and teenagers.

An experience and a response

One of the challenges of discussing trauma is that the same term is often used to describe both an individual's experience and their emotional and behavioral response to that experience. As trauma expert Bessel van der Kolk puts it: "Trauma is not just an event that took place sometime in the past; it is also the imprint left by that experience on mind, brain, and body."¹

In this report, we'll primarily use the term *trauma* to describe the set of symptoms that a person might develop after going through a very frightening or upsetting experience. For the experience itself, we'll use the term *traumatic event*—although, as we'll see, the experience may not always be one distinct event.

Post-traumatic stress disorder and the DSM-5

The most prevalent definition of trauma today comes from the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*, commonly called the DSM-5.²

The DSM-5 is the manual used by psychiatrists and other mental health professionals to diagnose psychiatric disorders, and it includes a detailed breakdown of the symptoms of post-traumatic stress disorder (PTSD) and other stressor-related disorders.

PTSD was first introduced as a diagnosis to describe the symptoms of Vietnam War veterans, and it is still common among military veterans who have been through combat.³ But today, PTSD is also recognized as a response to a wide range of disturbing and/or life-threatening events, including interpersonal or sexual violence, abuse, war, natural disasters, and serious accidents. People who develop PTSD may have experienced these events themselves or witnessed or heard about them happening to someone close to them.

PTSD occurs throughout the general population, including in children. The U.S. Department of Veterans Affairs notes that about 15% to 43% of girls and 14% to 43% of boys go through at least one traumatic event, and "of those children and teens who have had a trauma, 3% to 15% of girls and 1% to 6% of boys develop PTSD."⁴

“Trauma is not just an event that took place sometime in the past; it is also the imprint left by that experience on mind, brain, and body.”

The Body Keeps the Score, Bessel van der Kolk

Research indicates that **between 14% and 43% of kids** will go through at least one traumatic event.

Kids with PTSD show a range of behavioral and emotional changes after going through a traumatic event, from flashbacks and nightmares to fear, anger, or detachment. As defined by the DSM-5, PTSD includes symptoms from the following three categories:

- Frequently thinking about, dreaming about, or acting out the traumatic event
- Feeling numb, having trouble focusing, and struggling to connect with other people
- Getting annoyed easily, acting constantly fearful or hypervigilant, or having trouble sleeping

PTSD symptoms can begin right after an extremely upsetting event, or they can start months or even years later. To be diagnosed as PTSD, the symptoms must continue for at least a few months after the event, since it's normal to be upset immediately after a very frightening or life-threatening experience.

Reactions to trauma can also depend in large part on the child's age and developmental stage. For instance, young children may not be able to describe their feelings but will simply avoid concrete reminders of the traumatic event, while older ones may experience more abstract fears about what happened. And very young children (ages zero to five) who experience intense trauma may develop a set of symptoms called reactive attachment disorder (RAD), which is characterized by struggling to form supportive bonds with caregivers.⁵ This kind of trauma response looks different from the symptoms of PTSD that children who experience trauma at a later age might develop.

In the United States, professional and governmental guidance on trauma generally follows the criteria laid out in the DSM-5, in particular its focus on a specific extreme event as the cause. For example, the Centers for Disease Control notes that "traumatic events are marked by a sense of horror, helplessness, serious injury, or the threat of serious injury or death."⁶





There is a broad and growing evidence base that illuminates the negative impacts that traumatic experiences can have on children’s development and well-being. Experiencing trauma as a child is linked to a heightened risk for developing mental health disorders (such as anxiety and depression) later in life.⁷ Research also indicates that childhood trauma is associated with impairments in cognitive functioning.⁸ There is even a growing area of inquiry into how the impacts of trauma may be passed down across generations, perhaps through behavior patterns or changes to the genetic expression of those who experience it.⁹

The effects of going through a traumatic experience can be profound. However, some researchers contend that the DSM-5 definitions of trauma and PTSD don’t capture the whole picture of the way that many people — especially children — experience traumatic events and their impacts.

Complex trauma

Beyond the DSM-5 definition, there is also an increasingly popular understanding of trauma that takes into account chronic, ongoing negative experiences as opposed to single, extreme events. This kind of trauma is often known as “complex trauma.”

After the introduction of the PTSD diagnosis, clinicians working with people who had experienced ongoing traumatic events (such as survivors of child abuse) noticed that individuals’ reactions to such events were often more varied than those listed in the DSM criteria for PTSD.¹⁰ This distinct set of symptoms became known as “complex PTSD” (CPTSD) and later evolved into a proposed diagnosis termed “developmental trauma disorder” (DTD).

The ideas of complex trauma and DTD have been developed in large part through the work of the clinician and author Bessel van der Kolk.¹¹ DTD is not included in the DSM-5 as a distinct diagnosis, but some of the PTSD symptoms listed there were influenced by the research of van der Kolk and his colleagues.

There is also an increasingly popular understanding of trauma that takes into account chronic, ongoing negative experiences as opposed to single, extreme events. This kind of trauma is often known as “complex trauma.”

Complex trauma is closely tied to the idea of Adverse Childhood Experiences (ACEs), which are defined as potentially traumatic experiences during childhood.¹² The CDC reports that ACEs are fairly common in the U.S., with 61% of adults reporting that they experienced at least one ACE during childhood and 16% reporting four or more kinds of ACEs.¹³

There is no single definition of complex trauma, but there is some broad agreement among experts about the kinds of events and symptoms associated with it.

The events underlying complex trauma are usually characterized as:

- Severe and chronic, such as abuse and neglect
- Taking place over an extended period of time
- Affecting a child’s ability to relate to others and build trusting relationships with caregivers and other authority figures¹⁴

And the distinct set of symptoms that comes with complex trauma generally looks like the following:

- Challenges with attachment and relationships
- Difficulty regulating emotions and behavior
- Changes in attention span and other cognitive abilities
- Dissociation from reality
- Low self-esteem
- Overall negative outlook on the world¹⁵

Experts often note that children who have experienced complex trauma may meet the criteria for a range of different DSM-5 disorders, including PTSD, oppositional defiant disorder (ODD), and reactive attachment disorder (RAD), but that there is no one diagnosis that captures their typical symptom profile.

The evidence base for these definitions of complex trauma is growing, with research indicating that children who have been through trauma that is ongoing and interpersonal in nature tend to have more intense symptoms and behavioral challenges than those who have experienced other forms of trauma.¹⁶

Researchers are also learning more about the complications of preventing, identifying, and treating complex trauma. It can be challenging to treat because, unlike the kind of traumatic event that is typical of PTSD, chronic traumatic experiences (like abuse at home, poverty, or stress due to experiencing racism) may be ongoing even as the child is getting treatment.¹⁷ And though the evidence isn’t conclusive, complex trauma may affect children of color more often than their white peers.¹⁸

The concept of complex trauma reminds us that traumatic experiences and kids’ reactions to them are closely linked to their communities and social contexts. Though this report focuses on understanding and treating trauma at an individual level, reducing the prevalence of childhood trauma in the long run will also require a large-scale commitment to improving the conditions (like poverty and discrimination) that contribute to it.



The available research shows that variations on CBT consistently help reduce children's trauma symptoms, often more quickly or more thoroughly than other psychotherapies.

Chapter Two

Treating Trauma in Children and Adolescents

Despite the ongoing challenges of defining trauma and its impacts, there is a substantial and growing body of evidence underlying clinical treatments for kids who have experienced trauma.

As far back as 2010, the American Academy of Child and Adolescent Psychiatry noted that psychotherapies specifically focused on children's traumatic experiences tended to show stronger outcomes than more general forms of therapy.¹⁹ The evidence continues to bear out that trend, with a number of trauma-focused treatments becoming more prevalent and better understood.²⁰

Overall, the treatments with the strongest evidence bases to date are trauma-focused treatments based on cognitive behavioral therapy (CBT). The available research shows that variations on CBT consistently help reduce children's trauma symptoms, often more quickly or more thoroughly than other psychotherapies.^{21, 22} There are also additional treatments with promising evidence in their favor.

In this chapter, we look at some of the leading treatments for symptoms of trauma in children and adolescents: how they work, what the evidence for them is, and how they can help kids and families.

IN THIS CHAPTER

Trauma-focused treatments developed for children

Treatments originally developed for adults

School-based group interventions

Group treatments for adolescents

Medication for trauma symptoms

Trauma-focused treatments developed for children

A number of the foremost treatments for trauma symptoms in kids were developed specifically for this population, rather than being adapted from treatment for adults. They frequently involve parents, caregivers, and other family members participating in treatment alongside kids, and many are variations on CBT.

TRAUMA-FOCUSED COGNITIVE BEHAVIORAL THERAPY (TF-CBT)

The leading trauma treatment for kids

Highly structured, with sessions involving both children and caregivers

Combines the core skills of cognitive behavioral therapy with exposure therapy via the trauma narrative technique

Trauma-focused cognitive behavioral therapy (TF-CBT) is broadly recognized as the first-line treatment for children and adolescents dealing with the effects of trauma. It has been studied in more depth than any other trauma-focused treatment for kids, and its effectiveness in reducing symptoms of trauma and improving kids' day-to-day functioning has been validated in numerous randomized controlled trials.²³ Recent meta-analyses have confirmed that there is stronger evidence for TF-CBT's effectiveness than for that of any other trauma-focused intervention for children and teenagers.^{24, 25}

There is also evidence that it is effective when applied in many different settings, including schools and residential treatment centers, and for young people with a wide range of racial and ethnic identities.^{26, 27} TF-CBT is often used as an individual treatment but can also be used in a group format.²⁸

TF-CBT takes place over the course of 12–16 weeks and involves both the child and, when possible, one of their caregivers. It is highly structured, with sessions falling into distinct treatment phases. Early phases focus on

educating children and caregivers about the impacts of trauma and helping them develop effective coping and relaxation skills. TF-CBT also includes practice in the basic skills of cognitive behavioral therapy: distinguishing between thoughts, feelings, and actions, and learning how to manage the interactions between them. Later in the treatment process, children create what's known as a trauma narrative (see sidebar for more), which is an account of their traumatic experience that helps them make meaning out of their experience and practice managing the upsetting emotions that memories of it bring up.²⁹

Research indicates that TF-CBT is likely effective in reducing depression symptoms as well as PTSD symptoms³⁰ and that it may even help kids develop stronger executive functioning skills.³¹ Although it is usually used with school-aged children and adolescents, there is some evidence that, with modifications, TF-CBT can help preschool-aged children with post-traumatic stress as well.³²

The Trauma Narrative³³



One of the hallmarks of TF-CBT is the trauma narrative. This is a form of therapeutic exposure in which the child, with a clinician's guidance, develops a gradually more detailed account of their traumatic experience and the thoughts and feelings they experienced during and after it. The narrative often takes the form of a story or book that the child creates gradually during treatment. The trauma narrative is developed after the child has already learned about the impacts of trauma, formed a trusting bond with the clinician, and worked on coping skills to manage the painful emotions that can emerge during the process.

A primary goal of the trauma narrative, as outlined in the treatment manual for TF-CBT, is “to unlink thoughts, reminders, or discussions of the traumatic event from overwhelming negative emotions such as

terror, horror, extreme helplessness, avoidance, anger, anxiety, shame, or rage.”³⁴ Through processing increasingly in-depth memories of the event with a clinician's support, the child gradually becomes able to encounter thoughts or reminders of the trauma without being overwhelmed by those negative emotions.

THE ATTACHMENT, SELF-REGULATION, AND COMPETENCY (ARC) MODEL

A flexible intervention framework rather than a single structured treatment

Designed for children and families dealing with complex trauma

Focuses on building skills and relationships across three main areas: attachment, self-regulation, and competency

Unlike many treatments for trauma, the attachment, self-regulation, and competency (ARC) model is not a specific set of steps. Rather, it is an intervention framework for approaching both individual clinical treatment and organization-level trauma-informed care. It is designed for children and families who are coping with complex trauma.³⁵

ARC focuses on building coping skills, helping children handle emotions related to their trauma, and strengthening the children's caregiving systems and other supports. ARC is designed to be flexibly applied across a wide range of populations and service settings. The three “primary domains of intervention” in the ARC framework are:

Attachment: Fostering strong connections between kids and their caregivers and creating a safe, supportive environment in which the family can recover from trauma.

Self-regulation: Helping kids learn to identify, express, and manage their emotions.

Competency: Supporting kids' self-esteem and sense of competence, as well as key developmental tasks like executive functions and social skills.³⁶

In part because it doesn't take the form of one specific intervention, research on the ARC framework is less robust than for some other trauma treatments. However, preliminary data indicates that it is likely an effective model for treating PTSD and related challenges in children and adolescents. One study of ARC-based treatment in residential treatment programs found that participants saw reductions in PTSD symptoms and behavior issues,³⁷ and another found that ARC treatment decreased kids' symptoms and caregiver stress in families of adoptive children who had experienced complex trauma.³⁸ There is also evidence that ARC can be successfully applied to support culturally diverse groups of preschool- and school-aged children.³⁹

CHILD-PARENT PSYCHOTHERAPY (CPP)

For children ages zero to six

Child and caregiver both participate in treatment

Focuses on the bond between child and caregiver

Child-parent psychotherapy (CPP) is unique in that it was specifically developed for use with children between the ages of zero and six. It focuses on strengthening the relationship between child and caregiver and is often used with children who have been exposed to violence and with parents who have themselves experienced trauma. In CPP, the child and the caregiver participate in treatment together and the clinician adapts various treatment components to the family's specific needs.⁴⁰ As in other forms of trauma treatment that involve caregivers, the parent participating in treatment must be what's called a “nonoffending caregiver” — that is, not someone who is the source of the child's trauma or a perpetrator of abuse or neglect against them. It tends to be implemented over a longer period of time than many other types of treatment, sometimes up to a full year.

Several of the trauma treatments gaining popularity for use in kids were originally developed for use with adults with PTSD. These treatments generally have strong evidence bases for use with adults, but less evidence of effectiveness with kids.

A number of studies have found that CPP can improve outcomes for both children and caregivers, and much of the available data includes participants from ethnically diverse groups. One randomized controlled trial of preschool-aged children who had experienced multiple traumatic events found that CPP led to improvements in PTSD symptoms in both the children and their mothers.⁴¹ CPP may even be helpful for fostering strong attachment between parents and very young infants under stress. One small study found that using elements of CPP with parents whose infants were hospitalized in neonatal intensive care units seemed to help parents learn coping strategies, reduce stress, and bond with their infants.⁴²

CHILD AND FAMILY TRAUMATIC STRESS INTERVENTION

Short-term treatment used in a variety of settings

Used right after a traumatic event to prevent complex trauma symptoms from developing

Prioritizes strengthening family communication and building coping skills

The child and family traumatic stress intervention (CFTSI) is a short-term treatment designed to prevent the development of complex trauma symptoms. It is implemented soon after a child experiences a traumatic event or discloses physical or sexual abuse. It focuses on helping kids and caregivers communicate effectively with each other so that the family can better support the child. It also involves both children and caregivers building coping skills that they can use to understand and manage their reactions to the trauma.⁴³

CFTSI is designed to be used in a variety of settings as an immediate way to prevent negative outcomes for kids who have gone through something traumatic, and it can also be an intermediate step before the family moves on to longer-term treatment. It was originally developed for children aged seven or older, but it has also been adapted for use with younger children.⁴⁴

Several studies indicate that CFTSI is effective at reducing symptoms of traumatic stress and preventing the development of PTSD. A randomized pilot study found that children who participated in CFTSI had reduced symptoms of anxiety and PTSD and were significantly less likely to meet the criteria for a PTSD diagnosis three months later.⁴⁵ A later review of children and caregivers treated with CFTSI after the child's disclosure of sexual abuse found similar results, with both children and caregivers showing decreased trauma symptoms.⁴⁶

The same study found that while children and caregivers often gave very different reports of the child's symptoms before the intervention, they tended to agree much more afterward, which indicates that CFTSI seems to succeed in its goal of helping families communicate more effectively and be more attuned to kids' emotions and needs. A large meta-analysis also found that caregivers who participated in CFTSI showed significant reductions in their own traumatic stress, which likely has the secondary effect of making them more able to support their children.⁴⁷

Treatments originally developed for adults

Several of the trauma treatments gaining popularity for use in kids were originally developed for use with adults with PTSD. These treatments generally have strong evidence bases for use with adults, but less evidence of effectiveness with kids. They are more often used with teenagers than with younger children.

EYE MOVEMENT DESENSITIZATION AND REPROCESSING (EMDR)

Short-term intervention designed to help participants process memories of trauma

Caregivers do not need to participate in treatment

Extensive evidence of efficacy in adults, with growing evidence for use with kids

EMDR is based on the idea that memories of traumatic events are sometimes stored in the brain as isolated incidents that disrupt the brain's information processing systems. The treatment is designed to help individuals integrate memories of traumatic events into their broader memory systems and process the negative emotions, sensations, and beliefs associated with them.

The therapy itself involves stimulating the individual's brain through eye movements, physical taps, or sounds, which are thought to help the brain connect the isolated memory of the trauma with broader, more adaptive neural networks.⁴⁸ With children, EMDR generally takes place over eight sessions. The therapist guides the child through discussing the feelings and physical sensations associated with their trauma while simultaneously guiding their eye movements, often by asking the child to follow the movement of their hands.

So far, there have been eight randomized controlled trials of EMDR as a treatment for children with trauma symptoms. A recent systematic review of this evidence notes that, overall, EMDR does seem to reduce trauma symptoms in kids, though further research into its efficacy is still needed.⁴⁹ The same review finds that EMDR tends to require fewer sessions than comparable treatments, and it also seems to reduce symptoms of depression and anxiety.

Research directly comparing EMDR with other trauma treatments is minimal so far. The authors of one meta-analysis of various treatments conclude that the overall evidence indicates that CBT is a more promising trauma treatment for kids and that more research into EMDR is needed.⁵⁰ A more recent meta-analysis of studies looking at the efficacy of EMDR and TF-CBT finds that TF-CBT may be slightly more effective than EMDR.⁵¹ The authors posit that the added effectiveness of TF-CBT over EMDR may be due to TF-CBT's relatively flexible model and emphasis on including caregivers in treatment, but more research is needed to understand the difference.

Despite the need for more evidence, EMDR is growing more prevalent in trauma treatment for a number of reasons. Unlike many treatments for trauma in children, EMDR does not involve homework or detailed descriptions of the traumatic event. It can be completed relatively quickly, which makes it especially valuable as a crisis intervention. It doesn't require parental involvement, which can make it a good option in cases where parents are unable to participate or an older child prefers a more independent treatment.

PROLONGED EXPOSURE THERAPY

Reduces trauma symptoms by gradually exposing kids to memories and situations that cause anxiety

Also involves building coping skills to handle challenging feelings

Strong evidence of efficacy with adults, with some studies showing efficacy with kids

Prolonged exposure therapy (PE) is a treatment that gradually exposes participants to situations that cause them anxiety. The idea is that by experiencing challenging emotions in a safe, supportive setting and processing those feelings with a therapist, people with PTSD can confront their trauma-related fears rather than avoiding them. Over time, their fears and PTSD symptoms lessen. Exposure in PE involves both recounting memories of the traumatic experience and dealing with real-world anxiety-provoking experiences. Participants also learn about common trauma reactions and build coping skills to handle future challenges.⁵²

There are clinical guidelines for using PE with adolescents specifically,⁵³ but most of the research on this treatment has been conducted with adults with PTSD. One meta-analysis of PE found that it is highly effective and had similar effect sizes compared to other treatments, including EMDR and cognitive processing therapy (see below).⁵⁴ The studies analyzed included both adult and adolescent participants, and the authors did not report any differences in those results for adolescents.

More recently, a handful of randomized controlled trials have found promising results for using PE for teenagers with PTSD. One trial found that teenage girls who were treated with PE saw greater reductions in symptoms of PTSD and depression than participants treated with supportive counseling did.⁵⁵ Another found similar results even when the treatment was delivered by medical nurses who had no previous experience using psychotherapy,⁵⁶ and the participants who received PE showed greater symptom reduction even two full years after their treatment ended.⁵⁷ Another trial found that PE was also effective in treating suicidal ideation among teenagers with PTSD.⁵⁸

There isn't yet much evidence to support the use of PE with younger children. Nonetheless, the evidence so far is promising, especially in that PE appears to work well in a variety of service settings and can be delivered effectively by practitioners without extensive experience.

COGNITIVE PROCESSING THERAPY

Highly structured treatment based on correcting inaccurate beliefs

Can include elements of exposure therapy

More evidence for use with adults than with kids

Cognitive processing therapy (CPT) is a highly structured PTSD treatment that focuses on identifying and working through inaccurate or dysfunctional beliefs about the traumatic event. It can include a written exposure component in which participants recount their traumatic experiences with a therapist's support, and it also includes education about PTSD and common trauma responses.⁵⁹

CPT is a well-established treatment for PTSD in adults but it has not been widely studied for use with children or adolescents. One feasibility trial using a slightly modified version of CPT for teenagers with PTSD found that their symptoms of post-traumatic stress improved significantly and that the improvement persisted after six months.⁶⁰ And a larger randomized controlled trial with teenagers who were experiencing PTSD due to childhood physical or sexual abuse found similarly promising results.⁶¹ The authors report that the results of the larger trial "are comparable to effect sizes reported for CPT in adults and to overall effect sizes reported in meta-analyses on PTSD treatment for children and adolescents."

Comparable results in reducing symptoms were also found in one recent program evaluation study that compared outcomes for teenagers versus adults who received CPT for PTSD.⁶² Additionally, teenagers were more likely than adults to complete the treatment. The authors interpret these findings as indicating that CPT is likely a helpful treatment especially for teenagers who might not have the supportive caregiver necessary for other evidence-based treatments like TF-CBT.

School-based group interventions

In addition to broader initiatives for trauma-informed school communities, there are also treatments for kids dealing with trauma that are specifically designed to be delivered in schools. These interventions are usually in a group format and meet during the regular school day, which means that they may be especially helpful for children and teenagers who lack access to reliable, affordable mental health care.

COGNITIVE-BEHAVIORAL INTERVENTION FOR TRAUMA IN SCHOOLS (CBITS)

A leading school-based trauma intervention

Group treatment format

Focuses on skills drawn from cognitive behavioral therapy

One of the foremost school-based group interventions for kids who have experienced trauma is called CBITS (cognitive-behavioral intervention for trauma in schools). CBITS is used with middle and high school students who have experienced trauma and who are dealing with symptoms of PTSD. Over the course of ten group sessions, students learn skills drawn from cognitive behavioral therapy to strengthen coping mechanisms, process memories of their trauma, and handle challenging emotions more easily.⁶³

Research on the effectiveness of CBITS is still somewhat limited, but there are a number of studies indicating that it can help kids recover from trauma. The first randomized controlled trial evaluating CBITS found that students who had been exposed to violence and participated in CBITS saw significant reductions in symptoms of PTSD and depression, and that those gains persisted six months later.⁶⁴ Another randomized controlled trial of a diverse group of middle school students found similar reductions in emotional and behavioral challenges, as well as evidence that these symptom reductions may be connected to improved academic outcomes.⁶⁵ Additional research has found evidence that CBITS remains similarly effective when scaled up and implemented across multiple schools⁶⁶ and that the model can be adapted for kids from ethnically diverse communities around the country.⁶⁷

In addition to CBITS, promising school-based trauma interventions include Trauma Treatment Groups for Students (which was developed by the Child Mind Institute), RAP Club,⁶⁸ Bounce Back for elementary school students,⁶⁹ and Support for Students Exposed to Trauma (SSET) for middle school students.⁷⁰

These interventions are usually in a group format and meet during the regular school day, which means that they may be especially helpful for children and teenagers who lack access to reliable, affordable mental health care.



Group treatments for adolescents

Trauma treatment groups for adolescents also take more flexible forms that can be implemented in a variety of settings. These interventions are often used in short-term settings such as inpatient treatment centers, residential programs, or detention facilities, though they may also be used in schools or outpatient treatment settings.

There is relatively little data from randomized controlled trials to support these treatments, but the available research shows promising results. These programs' potential for broad applications may make them a valuable way to expand access to treatment for trauma. We examine a few of the most prominent ones here.

SKILLS TRAINING IN AFFECT AND INTERPERSONAL REGULATION (STAIR)

STAIR is a group intervention originally developed to support adult survivors of childhood abuse. In a modified form, it is designed to help teenagers who have experienced trauma build emotional and social skills. In settings that allow for longer-term treatment it can also include additional sessions focused on processing of the traumatic event and the creation of a trauma narrative similar to those used in TF-CBT. STAIR can also be delivered as an individual treatment.^{71, 72, 73}

STRUCTURED PSYCHOTHERAPY FOR ADOLESCENTS RESPONDING TO CHRONIC STRESS (SPARCS)

SPARCS is a group intervention specifically developed to respond to the needs of young people who have experienced complex trauma. It combines techniques from a number of evidence-based treatments. It can be used both with adolescents who have been diagnosed with PTSD and with those who have experienced trauma but do not meet the full criteria for PTSD.⁷⁴

Over the course of 16 sessions, participants in SPARCS learn and practice coping skills, self-regulation, and effective communication with others. Unlike many other trauma treatments, there is no trauma narrative component in SPARCS, but participants do discuss their traumatic experiences in the context of understanding how those experiences affect their thoughts, feelings, and behaviors in the present.^{75, 76}

TRAUMA AFFECT REGULATION: GUIDE FOR EDUCATION AND THERAPY (TARGET)

TARGET is a group intervention originally developed for adults that focuses extensively on building emotional regulation skills as a way to cope with trauma symptoms. Through a sequence of 10 sessions, it teaches skills that can help kids learn to manage challenging emotions and process memories of their traumatic experiences.⁷⁷ It can also be delivered as an individual treatment.^{78, 79}

There are small studies to support each of these group interventions, but more research is needed to better understand their effectiveness and how they might support kids in various settings.

Medication treatment for trauma symptoms

While trauma-focused psychotherapies are the evidence-based choice for treatment of PTSD in children, medications also play a role, in combination with therapy. In most cases, the recommendation is that therapy be started first, and medication added later if the child isn't responding to therapy and symptoms are severe.

But in some cases, medication is needed from the start, when a child is too distressed to participate in therapy without it. And medication may be needed when a child has a co-occurring disorder, such as depression or anxiety.

While several forms of medication have been shown to be effective for reducing trauma-related symptoms in adults, there is very little research on the effectiveness of these medications for children. And what little research there is suggests that effectiveness in adults is often not replicated in children.^{80, 81}

Here's a look at the evidence for medications most commonly used to treat trauma symptoms in kids:

Anti-adrenergic medications: These medications block receptors in the adrenergic system, which modulates the body's fight-or-flight response. Also called adrenergic agonists, they are primarily used to lower blood pressure. But they are also used to reduce some types of anxiety.

Propranolol: Propranolol, which is sometimes prescribed for the treatment of situational anxiety like stage fright, has been shown in one study to reduce PTSD symptoms in children. But other more rigorous studies have had negative results, and randomized clinical trials are needed.⁸²

Prazosin: Prazosin has been shown in several studies to be effective in adults diagnosed with PTSD, and it has shown promise in case reports of kids taking it in the evening to reduce PTSD-related sleep disturbances and nightmares. But there are no large, double-blind, placebo-controlled trials that demonstrate safety or efficacy of prazosin in children.⁸³

Clonidine and guanfacine: Clonidine and guanfacine are regularly used to treat symptoms of ADHD as well as aggression in children. They have been used to reduce hyperarousal and sleep disruptions and nightmares in kids with PTSD, although there is little evidence to support their use.⁸⁴

Antidepressant medications: Several selective serotonin reuptake inhibitors (SSRIs), including sertraline and paroxetine, are FDA-approved for the treatment of adults with PTSD. Results of studies in children with PTSD are mixed:⁸⁵ Two open-label studies of citalopram showed improvement in symptoms, but two randomized controlled trials showed no benefit with sertraline compared to placebo. In some children, SSRIs can lead to irritability, poor sleep, or inattention, making them a poor choice for these children, since their PTSD already causes problematic hyperarousal.⁸⁶

Antipsychotics: Atypical or second-generation antipsychotics like quetiapine and risperidone have been shown in open-label studies and case histories to reduce trauma-related symptoms in young people. They are used for kids who are experiencing aggression, rage, ruminations, and dissociative episodes. But they are not recommended for other children with PTSD because of high rates of problematic side effects, including significant weight gain and troubling hormonal changes.^{87, 88}

While several forms of medication have been shown to be effective for reducing trauma-related symptoms in adults, there is very little research on the effectiveness of these medications for children. And what little research there is suggests that effectiveness in adults is often not replicated in children.



Chapter Three

What Does It Mean to Be Trauma-Informed?

It often seems like “trauma-informed” programs are showing up everywhere. But like “trauma” itself, “trauma-informed” is a term and a concept without a single clear definition or a conclusive evidence base. It can be hard to know what makes a treatment provider, school program, or other setting trauma-informed — and what that designation might mean for the kids involved.

One of the most common working definitions of what it means to be trauma-informed comes from the Substance Abuse and Mental Health Services Administration (SAMHSA) within the U.S. Department of Health and Human Services. In 2014, SAMHSA published trauma guidelines that define “four Rs” of a trauma-informed approach. To qualify as trauma-informed, practitioners or organizations must:⁸⁹

- **Realize** that trauma is prevalent and can have profound impacts
- **Recognize** the signs of trauma
- **Respond** with appropriate supports
- **Resist** retraumatization by avoiding practices that could harm individuals with trauma histories

These same guidelines also include principles for developing trauma-informed practices across an organization, and they are often cited as a guiding framework for specific trauma-informed programs.

The National Child Traumatic Stress Network uses a similar definition to delineate how trauma-informed systems can support children:

“A trauma-informed child and family service system is one in which all parties involved recognize and respond to the impact of traumatic stress on those who have contact with the system, including children, caregivers, and service providers. Programs and agencies within such a system infuse and sustain trauma awareness, knowledge, and skills into their organizational cultures, practices, and policies. They act in collaboration with all those who are involved with the child, using the best available science, to maximize physical and psychological safety, facilitate the recovery of the child and family, and support their ability to thrive.”⁹⁰

The basic idea of definitions like these is that trauma-informed services don't have to look any one way. Rather, any organization, system, or setting can be trauma-informed if it integrates an understanding of and responsiveness to trauma into all of its activities.

Given the lack of agreement on definitions and standards,⁹¹ it's not surprising that there is limited evidence in the literature about how trauma-informed practices work, how effective they are, and how to implement and evaluate them. At present, most of these practices are essentially experiments responding to our growing awareness of trauma's significance, and it will take years before there is a reliable body of evidence about what works and what doesn't.

Trauma-informed systems

MENTAL HEALTH SETTINGS

One of the most obvious settings for trauma-informed services is mental and behavioral health providers. Providing trauma-informed mental health care doesn't necessarily mean treating symptoms of trauma directly or using a specific treatment protocol, but rather following trauma-informed principles like those listed above regardless of what kind of treatment is provided.

Guidelines for providing trauma-informed mental health care vary, but they often include taking steps like the following, which come from a SAMHSA guide for clinicians:

- Conducting routine trauma screenings with all patients
- Training all staff on the impacts and signs of trauma
- Considering how a patient's cultural background and life experience might shape their understanding of trauma
- Aligning treatment goals with the patient's trauma symptoms, if any
- Prioritizing safety planning as an initial goal (for patients who are experiencing ongoing trauma)
- Emphasizing autonomy, resilience, and collaboration to rebuild the senses of personal competence and interpersonal connectedness that trauma often interrupts
- Avoiding use of techniques that could retraumatize patients (such as restraints, isolation, or confrontation)
- Providing support to help staff cope with secondary trauma (trauma-related symptoms that happen as a result of exposure to someone else's trauma)⁹²

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MEDICAL SETTINGS

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In practice, this can mean screening children for trauma during medical appointments and, when screening and assessment aren't feasible (as during emergency care), defaulting to treating children as if they may have experienced trauma in the past.⁹³ Additionally, some approaches to trauma-informed care recommend an emphasis on ensuring continuity of care across providers, involving the whole family in pediatric medical care, promoting self-care practices among medical staff, and providing the family with emotional support and connections to mental health care when appropriate.⁹⁴

Such practices may be especially helpful in medical settings that treat children who have experienced physical trauma, which puts them at risk of developing PTSD.⁹⁵

SCHOOLS

The movement for trauma-informed schools has grown in recent years. Sometimes this can involve delivering trauma treatments at school, but it can also refer to broader administrative and curricular practices. For example, trauma-informed school programs can involve screening students for trauma, training staff to recognize signs of trauma and make appropriate referrals, offering parent workshops on the effects of trauma, and implementing disciplinary policies that consider trauma as a possible cause of behavior and avoid retraumatizing students through punishments.

Again, there isn't yet a clear standard of what makes a school or school program "trauma-informed" and there's not a robust body of evidence about how trauma-informed practices might impact student outcomes. The available evidence is promising, but it's still a relatively new field of study. A systematic review conducted in 2020 found documentation of several school-wide programs that meet the 2014 SAMHSA criteria for trauma-informed practice and notes that these programs generally report positive outcomes.⁹⁶ However, the authors of the review conclude that the evidence base for programs like these is weak overall, with few studies available and issues of bias and other limitations present in the studies that do exist.



Looking Ahead

As clear as it is that trauma is a prevalent challenge for children and families, it's equally clear that its effects are treatable. The available research across the field is encouraging, with multiple interventions showing promise for reducing the impacts of traumatic experiences and helping children and adolescents thrive through adversity.

At the same time, there is still so much that we don't know. As the analysis above makes clear, more work is needed to identify workable strategies for preventing and treating trauma. And more randomized controlled trials are necessary to test promising approaches and understand whether they work for different populations of children, including those of different racial and ethnic backgrounds, socioeconomic groups, geographic groups, and age groups. There is also limited data on how specific service delivery settings and other logistical factors might impact treatment.

Additionally, it is crucial to continue researching how complex and chronic trauma differs from trauma that stems from a single experience. Some researchers have noted that TF-CBT, the leading treatment for trauma in children, may not fully meet the needs of kids who have experienced complex trauma, especially when it isn't feasible for their caregivers to participate in treatment.⁹⁷ And a recent meta-review found that there is not, as yet, any comprehensive analysis of the suitability of existing interventions when it comes to treating the impacts of complex trauma.⁹⁸

Finally, as we continue to develop guiding principles and practices for trauma treatments and trauma-informed care, it's also essential to work toward reducing the incidence of traumatic events themselves. Violence, abuse, neglect, and other experiences that lead to trauma don't happen in a vacuum. As the last few years have brought into especially stark focus, traumatic experiences are intertwined with the public policies and broader sociocultural systems that so often fail to meet families' material and psychological needs. Minimizing the impacts of trauma on children requires not just prevention and intervention on an individual level, but also a commitment to making sure that all families and communities have the resources and support they need to raise healthy, thriving children.



Parent Perspectives on Trauma

Trauma means something different for everyone who experiences it. That's why we initiated a new Child Mind Institute survey with data collection by Ipsos that complements the available research on treatment and provides more personal insights into the ways that trauma affects the lived experiences of American families. We asked parents how their children have fared during the pandemic, how trauma has impacted their families, and whether they have been able to get support when they need it.

To learn more about the survey and see its findings, visit childmind.org/2022report.

Learn More

Visit childmind.org/2022report to download this report, learn how the Child Mind Institute is helping kids who have experienced trauma, and find practical resources for parents and educators.

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Endnotes

- van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Viking.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders, fifth edition*. American Psychiatric Association, Arlington, VA.
- U.S. Department of Veterans Affairs. (n.d.) *How common is PTSD in veterans?* https://www.ptsd.va.gov/understand/common/common_veterans.asp
- U.S. Department of Veterans Affairs. (n.d.) *How common is PTSD in children and teens?* https://www.ptsd.va.gov/understand/common/common_children_teens.asp
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders, fifth edition*. American Psychiatric Association, Arlington, VA.
- Centers for Disease Control. (n.d.) *Coping with a traumatic event*. <https://www.cdc.gov/masstrauma/factsheets/public/coping.pdf>
- McLaughlin, K. A., & Lambert, H. K. (2017). Child trauma exposure and psychopathology: Mechanisms of risk and resilience. *Current Opinion in Psychology*, 14, 29–34. <https://doi.org/10.1016/j.copsyc.2016.10.004>
- Malarbi, S., Abu-Rayya, H. M., Muscara, F., & Stargatt, R. (2017). Neuro-psychological functioning of childhood trauma and post-traumatic stress disorder: A meta-analysis. *Neuroscience & Biobehavioral Reviews*, 72, 68–86. <https://doi.org/10.1016/j.neubiorev.2016.11.004>
- DeAngelis, T. (2019). The legacy of trauma. *Monitor on Psychology*, 50(2), 36. <https://www.apa.org/monitor/2019/02/legacy-trauma>
- Courtois, C. A. (2004). Complex trauma, complex reactions: Assessment and treatment. *Psychotherapy: Theory, Research, Practice, Training*, 41(4), 412–425. <https://doi.org/10.1037/0033-3204.41.4.412>
- van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Viking.
- Centers for Disease Control. (2019). *Adverse childhood experiences (ACEs): Preventing early trauma to improve adult health*. <https://www.cdc.gov/vitalsigns/aces/index.html>
- Ibid.
- Kliethermes, M., Schacht, M., & Drewry, K. (2014). Complex trauma. *Child and Adolescent Psychiatric Clinics of North America*, 23(2), 339–361. <https://doi.org/10.1016/j.chc.2013.12.009>
- Ibid.
- Wamser-Nanney, R., & Vandenberg, B. R. (2013). Empirical support for the definition of a complex trauma event in children and adolescents. *Journal of Traumatic Stress*, 26(6), 671–678. <https://doi.org/10.1002/jts.21857>
- Briere, J. N., & Lanktree, C. (2011). *Treating complex trauma in adolescence and young adulthood*. SAGE Publications.
- Wamser-Nanney, R., Cherry, K. E., Campbell, C., & Trombetta, E. (2021). Racial differences in children's trauma symptoms following complex trauma exposure. *Journal of Interpersonal Violence*, 36(5–6), 2498–2520. <https://doi.org/10.1177/0886260518760019>
- Cohen, J. A. (2010). Practice parameter for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(4), 414–430. <https://doi.org/10.1016/j.jaac.2009.12.020>
- Smith, P., Dalgleish, T. T., & Meiser-Stedman, R. R. (2018). Practitioner review: Post-traumatic stress disorder and its treatment in children and adolescents. *Journal of Child Psychology and Psychiatry*, 60(5), 500–515. <https://doi.org/10.1111/jcpp.12983>
- Ibid.
- Gutermann, J., Schreiber, F., Matulis, S., Schwartzkopff, L., Deppe, J., & Steil, R. (2016). Psychological treatments for symptoms of post-traumatic stress disorder in children, adolescents, and young adults: A meta-analysis. *Clinical Child and Family Psychology Review*, 19(2), 77–93. <https://doi.org/10.1007/s10567-016-0202-5>
- Bastien, J., Jongasma, H. E., Kabadayi, M., & Billings, J. (2020). The effectiveness of psychological interventions for post-traumatic stress disorder in children, adolescents and young adults: a systematic review and meta-analysis. *Psychological Medicine*, 50(10), 1598–1612. <https://doi.org/10.1017/S0033291720002007>
- Ibid.
- Hoogsteder, L. M., ten Thijs, L., Schippers, E. E., & Stams, G. J. J. (2021). A meta-analysis of the effectiveness of EMDR and TF-CBT in reducing trauma symptoms and externalizing behavior problems in adolescents. *International Journal of Offender Therapy and Comparative Criminology*, 66(6–7), 735–757. <https://doi.org/10.1177/0306624X211010290>
- The National Child Traumatic Stress Network. (2012, October). *TF-CBT: Trauma-Focused Cognitive Behavioral Therapy*. https://www.nctsn.org/sites/default/files/interventions/tfcbt_fact_sheet.pdf
- Weiner, D., Schneider, S., & Lyons, J. S. (2009). Evidence-based treatments for trauma among culturally diverse foster care youth: Treatment retention and outcomes. *Children and Youth Services Review*, 31, 1199–1205. <https://doi.org/10.1016/j.chilyouth.2009.08.013>
- The National Child Traumatic Stress Network. (2012, October). *TF-CBT: Trauma-Focused Cognitive Behavioral Therapy*. https://www.nctsn.org/sites/default/files/interventions/tfcbt_fact_sheet.pdf
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2017). *Treating Trauma and Traumatic Grief in Children and Adolescents, Second Edition*. The Guilford Press.
- Lenz, A. S., & Hollenbaugh, K. M. (2015). Meta-analysis of trauma-focused cognitive behavioral therapy for treating PTSD and co-occurring depression among children and adolescents. *Counseling Outcome Research and Evaluation*, 6(1), 18–32. <https://doi.org/10.1177/2150137815573790>
- Lee, A. H. & Brown, E. (2022). Examining the effectiveness of trauma-focused cognitive behavioral therapy on children and adolescents' executive function. *Child Abuse & Neglect*, 126, 105516. <https://doi.org/10.1016/j.chiabu.2022.105516>
- McGuire, A., Steele, R. G., & Singh, M. N. (2021). Systematic review on the application of trauma-focused cognitive behavioral therapy (TF-CBT) for preschool-aged children. *Clinical Child and Family Psychology Review*, 24(1), 20–37. <https://doi.org/10.1007/s10567-020-00334-0>
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2017). *Treating Trauma and Traumatic Grief in Children and Adolescents, Second Edition*. The Guilford Press.
- Ibid.
- arcframework.org. (n.d.) *What is ARC?* <https://arcframework.org/what-is-arc/>
- Kinniburgh, K. J., Blaustein, M., Spinazzola, J., & van der Kolk, B. A. (2005). Attachment, self-regulation, and competency. *Psychiatric Annals*, 35(5), 424–430. <https://doi.org/10.3928/00485713-20050501-08>
- Hodgdon, H. B., Kinniburgh, K., Gabowitz, D., Blaustein, M. E., & Spinazzola, J. (2013). Development and implementation of trauma-informed programming in youth residential treatment centers using the ARC framework. *Journal of Family Violence*, 28(7), 679–692. <https://doi.org/10.1007/s10896-013-9531-z>
- Hodgdon, H. B., Blaustein, M., Kinniburgh, K., Peterson, M. L., & Spinazzola, J. (2015). Application of the ARC model with adopted children: Supporting resiliency and family well being. *Journal of Child & Adolescent Trauma*, 9(1), 43–53. <https://doi.org/10.1007/s40653-015-0050-3>
- Arvidson, J., Kinniburgh, K., Howard, K., Spinazzola, J., Strothers, H., Evans, M., Andres, B., Cohen, C., & Blaustein, M. E. (2014). Treatment of trauma in young children: Developmental and cultural considerations in application of the ARC intervention model. *Journal of Child & Adolescent Trauma*, 4(1), 34–51. <https://doi.org/10.1080/19361521.2011.545046>
- The National Child Traumatic Stress Network. (2012, April). *CPP: Child-Parent Psychotherapy*. https://www.nctsn.org/sites/default/files/interventions/cpp_fact_sheet.pdf
- Ghosh Ippen, C., Harris, W. W., Van Horn, P., & Lieberman, A.F. (2011). Traumatic and stressful events in early childhood: Can treatment help those at highest risk? *Child Abuse & Neglect*, 35(7), 504–513. <https://doi.org/10.1016/j.chiabu.2011.03.009>
- Lakatos, P. P., Matic, T., Carson, M., & Williams, M. E. (2019). Child-parent psychotherapy with infants hospitalized in the neonatal intensive care unit. *Journal of Clinical Psychology in Medical Settings*, 26(4), 584–596. <https://doi.org/10.1007/s10880-019-09614-6>
- Epstein, C., Hahn, H., Berkowitz, S., & Marans, S. (2017). The Child and Family Traumatic Stress Intervention. In *Evidence-Based Treatments for Trauma Related Disorders in Children and Adolescents* (pp. 145–166). Springer International Publishing. https://doi.org/10.1007/978-3-319-46138-0_7
- Ibid.
- Berkowitz, S. J., Stover, C. S., & Marans, S. R. (2011). The Child and Family Traumatic Stress Intervention: Secondary prevention for youth at risk of developing PTSD. *Journal of Child Psychology and Psychiatry*, 52(6), 676–685. <https://doi.org/10.1111/j.1469-7610.2010.02321.x>
- Hahn, H., Oransky, M., Epstein, C., Smith Stover, C., & Marans, S. (2015). Findings of an early intervention to address children's traumatic stress implemented in the Child Advocacy Center setting following sexual abuse. *Journal of Child & Adolescent Trauma*, 9(1), 55–66. <https://doi.org/10.1007/s40653-015-0059-7>
- Hahn, H., Putnam, K., Epstein, C., Marans, S., & Putnam, F. (2019). Child and family traumatic stress intervention (CFTSI) reduces parental posttraumatic stress symptoms: A multi-site meta-analysis (MSMA). *Child Abuse & Neglect*, 92, 106–115. <https://doi.org/10.1016/j.chiabu.2019.03.010>
- Shapiro, F., Wesselmann, D., & Mevissen, L. (2017). Eye movement desensitization and reprocessing therapy (EMDR). In *Evidence-Based Treatments for Trauma Related Disorders in Children and Adolescents* (273–297). Springer International Publishing. https://doi.org/10.1007/978-3-319-46138-0_13
- Manzoni, M., Fernandez, I., Bertella, S., Tizzoni, F., Gazzola, E., Molteni, M., & Nobile, M. (2021). Eye movement desensitization and reprocessing: The state of the art of efficacy in children and adolescents with post traumatic stress disorder. *Journal of Affective Disorders*, 282, 340–347. <https://doi.org/10.1016/j.jad.2020.12.088>
- Gutermann, J., Schreiber, F., Matulis, S., Schwartzkopff, L., Deppe, J., & Steil, R. (2016). Psychological treatments for symptoms of posttraumatic stress disorder in children, adolescents, and young adults: A meta-analysis. *Clinical Child and Family Psychology Review*, 19(2), 77–93. <https://doi.org/10.1007/s10567-016-0202-5>
- Lewey, J. H., Smith, C. L., Burcham, B., Saunders, N. L., Elfallal, D., & O'Toole, S. K. (2018). Comparing the effectiveness of EMDR and TF-CBT for children and adolescents: A meta-analysis. *Journal of Child & Adolescent Trauma*, 11(4), 457–472. <https://doi.org/10.1007/s40653-018-0212-1>
- Foa, E. B., Chrestman, K. R., & Gilboa-Schechtman, E. (2009). *Prolonged exposure therapy for adolescents with PTSD emotional processing of traumatic experiences: Therapist guide*. Oxford University Press.
- Ibid.
- Powers, M. B., Halpern, J. M., Ferenschak, M. P., Gillihan, S. J., & Foa, E. B. (2010). A meta-analytic review of prolonged exposure for posttraumatic stress disorder. *Clinical Psychology Review*, 30(6), 635–641. <https://doi.org/10.1016/j.cpr.2010.04.007>
- Foa, E. B., McLean, C. P., Capaldi, S., & Rosenfield, D. (2013). Prolonged exposure vs supportive counseling for sexual abuse-related PTSD in adolescent girls: A randomized clinical trial. *JAMA: The Journal of the American Medical Association*, 310(24), 2650–2657. <https://doi.org/10.1001/jama.2013.282829>
- Rossouw, J., Yadin, E., Alexander, D., & Seedat, S. (2018). Prolonged exposure therapy and supportive counselling for post-traumatic stress disorder in adolescents: Task-shifting randomised controlled trial. *British Journal of Psychiatry*, 213(4), 587–594. <https://doi.org/10.1192/bjp.2018.130>
- Rossouw, Yadin, E., Alexander, D., & Seedat, S. (2020). Long-term follow-up of a randomised controlled trial of prolonged exposure therapy and supportive counselling for post-traumatic stress disorder in adolescents: A task-shifted intervention. *Psychological Medicine*, 52, 1022–1030. <https://doi.org/10.1017/S0033291720002731>
- Brown, L. A., Belli, G., Suzuki, N., Capaldi, S., & Foa, E. B. (2020). Reduction in suicidal ideation from prolonged exposure therapy for adolescents. *Journal of Clinical Child and Adolescent Psychology*, 49(5), 651–659. <https://doi.org/10.1080/15374416.2019.1614003>
- Rosner, R., Rimane, E., Frick, U., Gutermann, J., Hagl, M., Renneberg, B., Schreiber, F., Vogel, A., & Steil, R. (2019). Effect of developmentally adapted cognitive processing therapy for youth with symptoms of posttraumatic stress disorder after childhood sexual and physical abuse. *JAMA Psychiatry*, 76(5), 484–49. [doi:10.1001/jamapsychiatry.2018.4349](https://doi.org/10.1001/jamapsychiatry.2018.4349)
- Vogel, A., & Rosner, R. (2019). Lost in transition? Evidence-based treatments for adolescents and young adults with posttraumatic stress disorder and results of an uncontrolled feasibility trial evaluating cognitive processing therapy. *Clinical Child and Family Psychology Review*, 23(1), 122–152. <https://doi.org/10.1007/s10567-019-00305-0>
- Rosner, R., Rimane, E., Frick, U., Gutermann, J., Hagl, M., Renneberg, B., Schreiber, F., Vogel, A., & Steil, R. (2019). Effect of developmentally adapted cognitive processing therapy for youth with symptoms of posttraumatic stress disorder after childhood sexual and physical abuse. *JAMA Psychiatry*, 76(5), 484–49. [doi:10.1001/jamapsychiatry.2018.4349](https://doi.org/10.1001/jamapsychiatry.2018.4349)
- LoSavio, S. T., Murphy, R. A., & Resick, P. A. (2021). Treatment outcomes for adolescents versus adults receiving cognitive processing therapy for posttraumatic stress disorder during community training. *Journal of Traumatic Stress*, 34(4):757-763. [doi: 10.1002/jts.22668](https://doi.org/10.1002/jts.22668)
- Stein, B. D., Jaycox, L. H., Kataoka, S. H., Wong, M., Langley, A. K., Avila, J. L., Bonilla, A., Castillo-Campos, P., Cohen, J. B., Dean, K. L., DuClos, J. L., Elliott, M. N., Escudero, P., Fink, A., Fuentes, S., Gegenheimer, K. L., Halsey, K., Mannarino, A. P., Nadeem, E., ... Zaragoza, C. (2011). *Helping children cope with violence and trauma: A school-based program that works*. Santa Monica, CA: RAND Corporation. https://www.rand.org/pubs/research_briefs/RB4557-2.html
- Ibid.
- Sumi, W. C., Woodbridge, M. W., Wei, X., Thornton, P. S., & Roundfield, K. D. (2021). Measuring the impact of trauma-focused, cognitive behavioral group therapy with middle school students. *School Mental Health*, 13, 680–694. <https://doi-org.proxy.wexler.hunter.cuny.edu/10.1007/s12310-021-09452-8>
- Hoover, S.A., Sapere, H., Lang, J. M., Nadeem, E., Dean, K. L., & Vona, P. (2018). Statewide implementation of an evidence-based trauma intervention in schools. *School Psychology Quarterly*, 33(1), 44–53. <https://doi.org/10.1037/spq0000248>
- Ngo, V., Langley, A., Kataoka, S. H., Nadeem, E., Escudero, P., & Stein, B. D. (2008). Providing evidence-based practice to ethnically diverse youths: Examples from the Cognitive Behavioral Intervention for Trauma in Schools (CBITS) program. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47(8), 858–862. [doi:10.1097/CHI.0b013e3181799f19](https://doi.org/10.1097/CHI.0b013e3181799f19)
- Mendelson, T., Clary, L. K., Sibinga, E., Tandon, D., Musci, R., Mmari, K., Salkever, D., Stuart, E. A., & Ialongo, N. (2020). A randomized controlled trial of a trauma-informed school prevention program for urban youth: Rationale, design, and methods. *Contemporary Clinical Trials*, 90, 105895. <https://doi.org/10.1016/j.cct.2019.105895>
- Langley, A. K., Gonzalez, A., Sugar, C. A., Solis, D., & Jaycox, L. (2015). Bounce Back: Effectiveness of an elementary school-based intervention for multicultural children exposed to traumatic events. *Journal of Consulting and Clinical Psychology*, 83(5), 853–865. <https://doi.org/10.1037/ccp0000051>

70. Jaycox, L. H., Kataoka, S. H., Stein, B. D., Wong, M., & Langley, A. (2005). Responding to the needs of the community: A stepped care approach to implementing trauma-focused interventions in schools. *Report on Emotional and Behavioral Disorders in Youth*, 5(4):85–88, 100–03. https://www.rand.org/pubs/external_publications/EP20050931.html
71. Gudiño, O. G., Leonard, S., Stiles, A. A., Havens, J. F., & Cloitre, M. (2017). STAIR narrative therapy for adolescents. In *Evidence-Based Treatments for Trauma Related Disorders in Children and Adolescents* (pp. 251–271). Springer International Publishing. https://doi.org/10.1007/978-3-319-46138-0_12
72. Gudiño, O. G., Leonard, S., & Cloitre, M. (2015). STAIR-A for girls: A pilot study of a skills-based group for traumatized youth in an urban school setting. *Journal of Child & Adolescent Trauma*, 9(1), 67–79. <https://doi.org/10.1007/s40653-015-0061-0>
73. Gudiño, O. G., Weis, J. R., Havens, J. F., Biggs, E. A., Diamond, U. N., Marr, M., Jackson, C., & Cloitre, M. (2014). Group trauma-informed treatment for adolescent psychiatric inpatients: A preliminary uncontrolled trial. *Journal of Traumatic Stress*, 27(4), 496–500. <https://doi.org/10.1002/jts.21928>
74. Habib, M., Labruna, V., & Newman, J. (2013). Complex histories and complex presentations: Implementation of a manually-guided group treatment for traumatized adolescents. *Journal of Family Violence*, 28(7), 717–728. <https://doi.org/10.1007/s10896-013-9532-y>
75. Ibid.
76. Weiner, D. A., Schneider, A., & Lyons, J. S. (2009). Evidence-based treatments for trauma among culturally diverse foster care youth: Treatment retention and outcomes. *Children and Youth Services Review*, 31(11), 1199–1205. <https://doi.org/10.1016/j.childyouth.2009.08.013>
77. The National Child Traumatic Stress Network. (2012, October). *TARGET: Trauma Affect Regulation: Guide for Education and Therapy*. https://www.nctsn.org/sites/default/files/interventions/target_fact_sheet.pdf
78. Marrow, M. T., Knudsen, K. J., Olafson, E., & Bucher, S. E. (2014). The value of implementing TARGET within a trauma-informed juvenile justice setting. *Journal of Child & Adolescent Trauma*, 5(3), 257–270. <https://doi.org/10.1080/19361521.2012.697105>
79. Ford, J. D., Steinberg, K. L., Hawke, J., Levine, J., & Zhang, W. (2012). Randomized trial comparison of emotion regulation and relational psychotherapies for PTSD with girls involved in delinquency. *Journal of Clinical Child and Adolescent Psychology*, 41(1), 27–37. <https://doi.org/10.1080/15374416.2012.632343>
80. Smith, P., Dalgleish, T. T., & Meiser-Stedman, R. R. (2018). Practitioner review: Post-traumatic stress disorder and its treatment in children and adolescents. *Journal of Child Psychology and Psychiatry*, 60(5), 500–515. <https://doi.org/10.1111/jcpp.12983>
81. Robb, A. S., Cueva, J. E., Sporn, J., Yang, R., & Vanderburg, D. G. (2010). Sertraline treatment of children and adolescents with posttraumatic stress disorder: A double-blind, placebo-controlled trial. *Journal of Child and Adolescent Psychopharmacology*, 20(6), 463–471. <https://doi.org/10.1089/cap.2009.0115>
82. Strawn, J., & Keeshin, B. (2022). *Pharmacotherapy for posttraumatic stress disorder in children and adolescents*. UpToDate. <https://www.uptodate.com/contents/pharmacotherapy-for-posttraumatic-stress-disorder-in-children-and-adolescents>
83. Ibid.
84. Ibid.
85. Cohen, J. A. (2010). Practice parameter for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(4), 414–430. <https://doi.org/10.1016/j.jaac.2009.12.020>
86. Ibid.
87. Strawn, J. & Keeshin, B. (2022). *Pharmacotherapy for posttraumatic stress disorder in children and adolescents*. UpToDate. <https://www.uptodate.com/contents/pharmacotherapy-for-posttraumatic-stress-disorder-in-children-and-adolescents>
88. Smith, P., Dalgleish, T. T., & Meiser-Stedman, R. R. (2018). Practitioner review: Post-traumatic stress disorder and its treatment in children and adolescents. *Journal of Child Psychology and Psychiatry*, 60(5), 500–515. <https://doi.org/10.1111/jcpp.12983>
89. U.S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA_Trauma.pdf
90. National Child Traumatic Stress Network (n.d.) *Creating trauma-informed systems*. <https://www.nctsn.org/trauma-informed-care/creating-trauma-informed-systems>
91. Champine, R. B., Lang, J. M., Nelson, A. M., Hanson, R. F. and Tebes, J. K. (2019). Systems measures of a trauma-informed approach: A systematic review. *American Journal of Community Psychology*, 64(3–4), 418–437. <https://doi.org/10.1002/ajcp.12388>
92. U.S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. (2015). *Trauma-informed care in behavioral health services: Quick guide for clinicians*. <https://store.samhsa.gov/sites/default/files/d7/priv/smat15-4912.pdf>
93. Marsac, M. L., Kassam-Adams, N., Hildenbrand, A. K., Nicholls, E., Winston, F. K., Leff, S. S., & Fein, J. (2015). Implementing a trauma-informed approach in pediatric health care networks. *JAMA Pediatrics*, 170(1), 70–11. <https://doi.org/10.1001/jamapediatrics.2015.2206>
94. Ibid.
95. Meneses, E., Kinslow, K., McKenney, M., & Elkbuli, A. (2021). Post-traumatic stress disorder in adult and pediatric trauma populations: A literature review. *The Journal of Surgical Research*, 259, 357–362. <https://doi.org/10.1016/j.jss.2020.09.023>
96. Avery, J. C., Morris, H., Galvin, E., Misso, M., Savaglio, M., & Skouteris, H. (2020). Systematic review of school-wide trauma-informed approaches. *Journal of Child & Adolescent Trauma*, 14(3), 381–397. <https://doi.org/10.1007/s40653-020-00321-1>
97. Mahoney, D. & Markel, B. (2016). An integrative approach to conceptualizing and treating complex trauma. *Psychoanalytic Social Work*, 23(1), 1–22. <https://doi.org/10.1080/15228878.2015.1104640>
98. Niemeyer, H., Lorbeer, N., Mohr, J., Baer, E., & Knaevelsrud, C. (2022). Evidence-based individual psychotherapy for complex posttraumatic stress disorder and at-risk groups for complex traumatization: A meta-review. *Journal of Affective Disorders*, 299, 610–619. <https://doi.org/10.1016/j.jad.2021.12.056>