

responded to external stimuli, the brains of those with trauma showed more erratic patterns of attention, with regions failing to coordinate properly. Specifically, the traumatized subjects struggled with filtering out irrelevant information, a phenomenon that explained why so many individuals with trauma, like those with PTSD, find it difficult to focus or learn from their experiences. This discovery illuminated how trauma could alter the brain's wiring, preventing it from fully processing daily information, making ordinary life a challenge for many survivors.



Building on these insights, I was introduced to neurofeedback, a treatment approach designed to retrain the brain's electrical activity. Neurofeedback is rooted in the concept that the brain can be trained to regulate itself by providing real-time feedback on its own activity. This was further exemplified when I met Sebern Fisher, a clinical director using neurofeedback to help children with emotional and developmental challenges. Fisher demonstrated how neurofeedback could produce remarkable changes, such as in a young boy whose behavior and drawing abilities improved significantly after undergoing neurofeedback treatment. Witnessing such transformations in a relatively short time was a turning point in my understanding of the potential for neurofeedback to address deep-seated brain dysfunctions, especially in trauma survivors.

The core principle behind neurofeedback is simple yet powerful: by offering the brain feedback on its electrical patterns, it can learn to adjust and self-regulate. This is akin to observing someone's reactions in a conversation; if they smile or nod, you continue speaking, but if they seem bored, you adjust your approach. Neurofeedback uses a similar reward-and-punishment system to train the brain to enhance certain frequencies and suppress others, ultimately improving focus, emotional regulation, and overall mental function. By altering these patterns, neurofeedback can aid in the treatment of a wide range of conditions, including PTSD, ADHD, anxiety, and more.

Furthermore, neurofeedback has proven beneficial in addressing the complex neural imbalances that often accompany trauma. Through targeted training, individuals with PTSD can learn to regulate their emotional responses, reduce hyperarousal, and

improve their ability to focus on the present moment. For example, studies have shown that veterans dealing with PTSD have benefited from neurofeedback by learning to calm overactive brain regions associated with fear, leading to improvements in mental clarity and emotional stability. This process of rewiring the brain isn't just about diminishing symptoms; it's about enabling individuals to regain control over their mental and emotional states, empowering them to respond to life's challenges with greater resilience and awareness.



In conclusion, neurofeedback offers a revolutionary approach to understanding and treating psychiatric disorders. By directly engaging with the brain's electrical patterns, this treatment helps individuals build healthier neural pathways, leading to lasting changes in their emotional and cognitive functioning. As research in this field continues to grow, neurofeedback stands as a promising tool for not just treating trauma and mental health conditions, but for enhancing cognitive performance in a variety of domains, from sports to artistic endeavors. Its applications are vast, and its potential continues to unfold as we better understand how the brain's electrical rhythms influence our thoughts, behaviors, and experiences.

This chapter has explored how the brain's electrical patterns influence mental and emotional functioning and highlighted the potential of neurofeedback to retrain the brain. With continued research, this innovative therapy could become an essential tool in the treatment of various psychological conditions, helping individuals rewire their brains for greater emotional stability and cognitive health.

Chapter 20: Finding Your Voice: Communal Rhythms and Theater

Chapter 20: In the world of acting, it's often said that the true essence of a character isn't something you simply put on but rather discover within yourself. The actor doesn't fabricate a persona but instead taps into an expanded version of their own identity, bringing out qualities they might not have fully realized were there. This process of self-discovery is crucial in both professional and therapeutic theater, where acting becomes more than just a performance; it becomes a method of healing and self-expression.

For many, the therapeutic potential of theater is most evident in how it can help individuals recover from deep personal trauma. One example of this is seen through the story of Nick, the author's son, who suffered from chronic fatigue syndrome and became withdrawn and isolated due to his health struggles. When his mother recognized that Nick found some energy in the evenings, they enrolled him in an improvisational theater class. Initially, it was a way to get him engaged with others, but over time, Nick's participation in theater provided him with something much deeper: a chance to embody a different version of himself. The more he performed, the more he rediscovered his confidence and sense of self-worth. The acting exercises, such as playing tough, authoritative roles like Action in *West Side Story* and the Fonz in *Happy Days*, gave him a new sense of agency and physicality, allowing him to imagine himself as someone powerful, respected, and in control. This transformation in Nick's self-perception, thanks to theater, was instrumental in his emotional and psychological recovery, ultimately helping him embrace his creative and confident adulthood.

The therapeutic effects of theater extend beyond individual stories like Nick's, reaching entire communities and groups, especially those dealing with trauma or emotional distress. The author draws a parallel with veterans, noting how their participation in a theatrical production in the late '80s helped them process their experiences with PTSD. When these veterans, who had been receiving therapy at a VA clinic, joined forces with playwright David Mamet to create a script about their experiences, the power of acting took hold. This involvement was transformative—far more so than traditional therapy—as the veterans were able to confront their trauma publicly, with the added support of professional actors like Al Pacino and Michael J. Fox. Their performance was not just a way to raise awareness but a profound healing experience that allowed them to publicly process their trauma and reconnect with their humanity. This form of cathartic theater allowed these individuals to transform painful memories into a collective narrative, helping them regain their sense of self and a deeper understanding of their own emotional journeys.

The role of communal rhythms and theater in trauma recovery also echoes through various cultural practices, where collective movement and expression have been used for centuries to heal and unite communities. From ancient Greek tragedies to modern-day rituals, theater and communal performance have long served as vehicles for confronting deep emotional pain and societal issues. In fact, the ancient Greeks used theater as a form of civic healing, especially for returning war veterans, who were often the audience for plays like Aeschylus's *Oresteia*. The communal aspect of theater—where the audience's emotional reactions are visible to all—allowed for a collective experience of grief, trauma, and reconciliation. This approach of integrating theater with the lived experiences of individuals facing war, loss, and injustice has continued through modern projects like Bryan Doerries' *Theater of War*, which has used Greek dramas to help combat veterans and their families navigate the effects of PTSD. By immersing audiences in these ancient stories of trauma, sacrifice, and justice, modern theater has provided a space for survivors of violence to connect, process, and heal.

Through the continued exploration of theater as a therapeutic tool, various programs have emerged that help people confront trauma by engaging with the deep, emotional themes present in theatrical works. One notable example is the Possibility Project in New York, where youth in foster care write and perform their own musical productions, delving into personal stories and collective themes. This process empowers young people to express emotions they may have repressed, providing them with a platform to process their past while simultaneously developing skills that will help them navigate life's challenges. In this environment, theater becomes a pathway for self-empowerment, allowing participants to take control of their stories and transform their trauma into something creative and powerful. Similarly, Shakespeare in the Courts provides juvenile offenders with a structured space to confront their inner conflicts through the language of Shakespeare, a therapeutic technique that encourages emotional release and connection. By engaging with these powerful works, participants learn to channel their personal struggles into art, finding solace and strength in the process.

Ultimately, the therapeutic potential of theater lies in its ability to foster a deep connection between individuals and their emotions, allowing them to safely explore complex feelings of grief, anger, and loss. It is a powerful tool that can help individuals reclaim their agency, find their voice, and reconnect with their bodies and their sense of self. Through acting, whether on the stage or in therapeutic settings, people are given the chance to embody and express emotions that might otherwise be too overwhelming to face. As these stories illustrate, theater is not merely an artistic endeavor; it is a form of emotional and psychological healing, one that taps into the deepest parts of ourselves and helps us confront the past, process our trauma, and step into the future with renewed strength and purpose.

APPENDIX: CONSENSUS PROPOSED CRITERIA FOR DEVELOPMENTAL TRAUMA DISORDER

APPENDIX



CONSENSUS PROPOSED CRITERIA FOR DEVELOPMENTAL TRAUMA DISORDER

The goal of introducing the diagnosis of Developmental Trauma Disorder is to capture the reality of the clinical presentations of children and adolescents exposed to chronic interpersonal trauma and thereby guide clinicians to develop and utilize effective interventions and for researchers to study the neurobiology and transmission of chronic interpersonal violence. Whether or not they exhibit symptoms of PTSD, children who have developed in the context of ongoing danger, maltreatment, and inadequate caregiving systems are ill-served by the current diagnostic system, as it frequently leads to no diagnosis, multiple unrelated diagnoses, an emphasis on behavioral control without recognition of interpersonal trauma and lack of safety in the etiology of symptoms, and a lack of attention to ameliorating the developmental disruptions that underlie the symptoms.

The Consensus Proposed Criteria for Developmental Trauma Disorder were devised and put forward in February 2009 by a National Child Traumatic Stress Network (NCTSN)-affiliated Task Force led by Bessel A. van der Kolk, MD and Robert S. Pynoos, MD, with the participation of Dante Cicchetti, PhD, Marylene Cloitre, PhD, Wendy D'Andrea, PhD, Julian D. Ford, PhD, Alicia F. Lieberman, PhD, Frank W. Putnam, MD, Glenn Saxe, MD, Joseph Spinazzola, PhD, Bradley C. Stolbach, PhD, and Martin Teicher, MD, PhD. The consensus proposed criteria are based on extensive review of empirical literature, expert clinical wisdom, surveys of NCTSN clinicians, and preliminary analysis of data from thousands of children in numerous clinical and child service system settings, including NCTSN treatment centers, state child welfare systems, inpatient

psychiatric settings, and juvenile detention centers.

Because their validity, prevalence, symptom thresholds, or clinical utility have yet to be examined through prospective data collection or analysis, these proposed criteria should not be viewed as a formal diagnostic category to be incorporated into the DSM as written here. Rather, they are intended to describe the most clinically significant symptoms exhibited by many children and adolescents following complex trauma. These proposed criteria have guided the Developmental Trauma Disorder field trials that began in 2009 and continue to this day.

CONSENSUS PROPOSED CRITERIA FOR DEVELOPMENTAL TRAUMA DISORDER

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

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

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

- B.1. Inability to modulate, tolerate, or recover from extreme affect states (e.g., fear, anger, shame), including prolonged and extreme tantrums, or immobilization
- B.2. Disturbances in regulation in bodily functions (e.g., persistent disturbances in sleeping, eating, and elimination; over-reactivity or under-reactivity to touch and sounds; disorganization during routine transitions)
- B.3. Diminished awareness/dissociation of sensations, emotions, and bodily states
- B.4. Impaired capacity to describe emotions or bodily states

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

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

C.2. Impaired capacity for self-protection, including extreme risk-taking or thrill-seeking

C.3. Maladaptive attempts at self-soothing (e.g., rocking and other rhythmical movements, compulsive masturbation)

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

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

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

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

D.2. Persistent negative sense of self, including self-loathing, helplessness, worthlessness, ineffectiveness, or defectiveness

D.3. Extreme and persistent distrust, defiance or lack of reciprocal behavior in close relationships with adults or peers

D.4. Reactive physical or verbal aggression toward peers, caregivers, or other adults

D.5. Inappropriate (excessive or promiscuous) attempts to get intimate contact (including but not limited to sexual or physical intimacy) or excessive reliance on peers or adults for safety and reassurance

EPILOGUE: CHOICES TO BE MADE

EPILOGUE: CHOICES TO BE MADE

We are on the verge of becoming a trauma-conscious society. Almost every day one of my colleagues publishes another report on how trauma disrupts the workings of mind, brain, and body. The ACE study showed how early abuse devastates health and social functioning, while James Heckman won a Nobel Prize for demonstrating the vast savings produced by early intervention in the lives of children from poor and troubled families: more high school graduations, less criminality, increased employment, and decreased family and community violence. All over the world I meet people who take these data seriously and who work tirelessly to develop and apply more effective interventions, whether devoted teachers, social workers, doctors, therapists, nurses, philanthropists, theater directors, prison guards, police officers, or meditation coaches. If you have come this far with me in *The Body Keeps the Score*, you have also become part of this community.

Advances in neuroscience have given us a better understanding of how trauma changes brain development, self-regulation, and the capacity to stay focused and in tune with others. Sophisticated imaging techniques have identified the origins of PTSD in the brain, so that we now understand why traumatized people become disengaged, why they are bothered by sounds and lights, and why they may blow up or withdraw in response to the slightest provocation. We have learned how, throughout life, experiences change the structure and function of the brain—and even affect the genes we pass on to our children. Understanding many of the fundamental processes that underlie traumatic stress opens the door to an array of interventions that can bring the brain areas related to self-regulation, self-perception, and attention back online. We know not only how to treat trauma but also, increasingly, how to prevent it.

And yet, after attending another wake for a teenager who was killed in a drive-by shooting in the Blue Hill Avenue section of Boston or after reading about the latest school budget cuts in impoverished cities and towns, I find myself close to despair. In many ways we seem to be regressing, with measures like the callous congressional elimination of food stamps for kids whose parents are unemployed or in jail; with the stubborn opposition to universal health care in some quarters; with psychiatry's obtuse refusal to make connection between psychic suffering and social conditions; with the refusal to prohibit the sale or possession of weapons whose only purpose is to kill large numbers of human beings; and with our tolerance for incarcerating a huge segment of our population, wasting their lives as well as our resources.

Discussions of PTSD still tend to focus on recently returned soldiers, victims of terrorist bombings, or survivors of terrible accidents. But trauma remains a much larger public health issue, arguably the greatest threat to our national well-being. Since 2001 far more Americans have died at the hands of their partners or other family members than in the wars in Iraq and Afghanistan. American women are twice as likely to suffer domestic violence as breast cancer. The American Academy of Pediatrics estimates that firearms kill twice as many children as cancer does. All around Boston I see signs advertising the Jimmy Fund, which fights children's cancer, and for marches to fund research on breast cancer and leukemia, but we seem too embarrassed or discouraged to mount a massive effort to help children and adults learn to deal with the fear, rage, and collapse, the predictable consequences of having been traumatized.

When I give presentations on trauma and trauma treatment, participants sometimes ask me to leave out the politics and confine myself to talking about neuroscience and therapy. I wish I could separate trauma from politics, but as long as we continue to live in denial and treat only trauma while ignoring its origins, we are bound to fail. In today's world your ZIP code, even more than your genetic code, determines whether you will lead a safe and healthy life. People's income, family structure, housing, employment, and educational opportunities affect not only their risk of developing

traumatic stress but also their access to effective help to address it. Poverty, unemployment, inferior schools, social isolation, widespread availability of guns, and substandard housing all are breeding grounds for trauma. Trauma breeds further trauma; hurt people hurt other people.

My most profound experience with healing from collective trauma was witnessing the work of the South African Truth and Reconciliation Commission, which was based on the central guiding principle of Ubuntu, a Xhosa word that denotes sharing what you have, as in “My humanity is inextricably bound up in yours.” Ubuntu recognizes that true healing is impossible without recognition of our common humanity and our common destiny.

We are fundamentally social creatures—our brains are wired to foster working and playing together. Trauma devastates the social-engagement system and interferes with cooperation, nurturing, and the ability to function as a productive member of the clan. In this book we have seen how many mental health problems, from drug addiction to self-injurious behavior, start off as attempts to cope with emotions that became unbearable because of a lack of adequate human contact and support. Yet institutions that deal with traumatized children and adults all too often bypass the emotional-engagement system that is the foundation of who we are and instead focus narrowly on correcting “faulty thinking” and on suppressing unpleasant emotions and troublesome behaviors.

People can learn to control and change their behavior, but only if they feel safe enough to experiment with new solutions. The body keeps the score: If trauma is encoded in heartbreaking and gut-wrenching sensations, then our first priority is to help people move out of fight-or-flight states, reorganize their perception of danger, and manage relationships. Where traumatized children are concerned, the last things we should be cutting from school schedules are the activities that can do precisely that: chorus, physical education, recess, and anything else that involves movement, play, and other forms of joyful engagement.

As we've seen, my own profession often compounds, rather than alleviates, the problem. Many psychiatrists today work in assembly-line offices where they see patients they hardly know for fifteen minutes and then dole out pills to relieve pain, anxiety, or depression. Their message seems to be "Leave it to us to fix you; just be compliant and take these drugs and come back in three months—but be sure not to use alcohol or (illegal) drugs to relieve your problems." Such shortcuts in treatment make it impossible to develop self-care and self-leadership. One tragic example of this orientation is the rampant prescription of painkillers, which now kill more people each year in the United States than guns or car accidents.

Our increasing use of drugs to treat these conditions doesn't address the real issues: What are these patients trying to cope with? What are their internal or external resources? How do they calm themselves down? Do they have caring relationships with their bodies, and what do they do to cultivate a physical sense of power, vitality, and relaxation? Do they have dynamic interactions with other people? Who really knows them, loves them, and cares about them? Whom can they count on when they're scared, when their babies are ill, or when they are sick themselves? Are they members of a community, and do they play vital roles in the lives of the people around them? What specific skills do they need to focus, pay attention, and make choices? Do they have a sense of purpose? What are they good at? How can we help them feel in charge of their lives?

I like to believe that once our society truly focuses on the needs of children, all forms of social support for families—a policy that remains so controversial in this country—will gradually come to seem not only desirable but also doable. What difference would it make if all American children had access to high-quality day care where parents could safely leave their children as they went off to work or school? What would our school systems look like if all children could attend well-staffed preschools that cultivated cooperation, self-regulation, perseverance, and concentration (as opposed to focusing on passing tests, which will likely happen once children are allowed to follow their natural curiosity and desire to excel, and are not

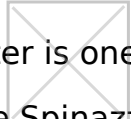
shut down by hopelessness, fear, and hyperarousal)?

I have a family photograph of myself as a five-year-old, perched between my older (obviously wiser) and younger (obviously more dependent) siblings. In the picture I proudly hold up a wooden toy boat, grinning from ear to ear: “See what a wonderful kid I am and see what an incredible boat I have! Wouldn’t you love to come and play with me?” All of us, but especially children, need such confidence—confidence that others will know, affirm, and cherish us. Without that we can’t develop a sense of agency that will enable us to assert: “This is what I believe in; this is what I stand for; this is what I will devote myself to.” As long as we feel safely held in the hearts and minds of the people who love us, we will climb mountains and cross deserts and stay up all night to finish projects. Children and adults will do anything for people they trust and whose opinion they value.

But if we feel abandoned, worthless, or invisible, nothing seems to matter. Fear destroys curiosity and playfulness. In order to have a healthy society we must raise children who can safely play and learn. There can be no growth without curiosity and no adaptability without being able to explore, through trial and error, who you are and what matters to you. Currently more than 50 percent of the children served by Head Start have had three or more adverse childhood experiences like those included in the ACE study: incarcerated family members, depression, violence, abuse, or drug use in the home, or periods of homelessness.

People who feel safe and meaningfully connected with others have little reason to squander their lives doing drugs or staring numbly at television; they don’t feel compelled to stuff themselves with carbohydrates or assault their fellow human beings. However, if nothing they do seems to make a difference, they feel trapped and become susceptible to the lure of pills, gang leaders, extremist religions, or violent political movements—anybody and anything that promises relief. As the ACE study has shown, child abuse and neglect is the single most preventable cause of mental illness, the single most common cause of drug and alcohol abuse, and a significant contributor to leading causes of death such as diabetes, heart disease, cancer, stroke, and suicide.

My colleagues and I focus much of our work where trauma has its greatest impact: on children and adolescents. Since we came together to establish the National Child Traumatic Stress Network in 2001, it has grown into a collaborative network of more than 150 centers nationwide, each of which has created programs in schools, juvenile justice systems, child welfare agencies, homeless shelters, military facilities, and residential group homes.



The Trauma Center is one of NCTSN's Treatment Development and Evaluation sites. My colleagues Joe Spinazzola, Margaret Blaustein, and I have developed comprehensive programs for children and adolescents that we, with the help of trauma-savvy colleagues in Hartford, Chicago, Houston, San Francisco, Anchorage, Los Angeles, and New York, are now implementing. Our team selects a particular area of the country to work in every two years, relying on local contacts to identify organizations that are energetic, open, and well respected; these will eventually serve as new nodes for treatment dissemination. For example, I collaborated for one two-year period with colleagues in Missoula, Montana, to help develop a culturally sensitive trauma program on Blackfoot Indian reservations.

The greatest hope for traumatized, abused, and neglected children is to receive a good education in schools where they are seen and known, where they learn to regulate themselves, and where they can develop a sense of agency. At their best, schools can function as islands of safety in a chaotic world. They can teach children how their bodies and brains work and how they can understand and deal with their emotions. Schools can play a significant role in instilling the resilience necessary to deal with the traumas of neighborhoods or families. If parents are forced to work two jobs to eke out a living, or if they are too impaired, overwhelmed, or depressed to be attuned to the needs of their kids, schools by default have to be the places where children are taught self-leadership and an internal locus of control.

When our team arrives at a school, the teachers' initial response is often some version of "If I'd wanted to be a social worker, I would have gone to social work school. But I came here to be a teacher." Many of them have already learned the hard way,

however, that they cannot teach if they have a classroom filled with students whose alarm bells are constantly going off. Even the most committed teachers and school systems often come to feel frustrated and ineffective because so many of their kids are too traumatized to learn. Focusing only on improving test scores won't make any difference if teachers can't effectively address the behavior problems of these students. The good news is that the basic principles of trauma-focused interventions can be translated into practical day-to-day routines and approaches that can transform the entire culture of a school.

Most teachers we work with are intrigued to learn that abused and neglected students are likely to interpret any deviation from routine as danger and that their extreme reactions usually are expressions of traumatic stress. Children who defy the rules are unlikely to be brought to reason by verbal reprimands or even suspension—a practice that has become epidemic in American schools. Teachers' perspectives begin to change when they realize that these kids' disturbing behaviors started out as frustrated attempts to communicate distress and as misguided attempts to survive.

More than anything else, being able to feel safe with other people defines mental health; safe connections are fundamental to meaningful and satisfying lives. The critical challenge in a classroom setting is to foster reciprocity: truly hearing and being heard; really seeing and being seen by other people. We try to teach everyone in a school community—office staff, principals, bus drivers, teachers, and cafeteria workers—to recognize and understand the effects of trauma on children and to focus on the importance of fostering safety, predictability, and being known and seen. We make certain that the children are greeted by name every morning and that teachers make face-to-face contact with each and every one of them. Just as in our workshops, group work, and theater programs, we always start the day with check-ins: taking the time to share what's on everybody's mind.

Many of the children we work with have never been able to communicate successfully with language, as they are accustomed to adults who yell, command, sulk, or put earbuds in their ears. One of our first steps is to help their teachers model new ways of

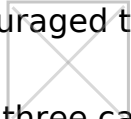
talking about feelings, stating expectations, and asking for help. Instead of yelling, “Stop!” when a child is throwing a tantrum or making her sit alone in the corner, teachers are encouraged to notice and name the child’s experience, as in “I can see how upset you are”; to give her choices, as in “Would you like to go to the safe spot or sit on my lap?”; and to help her find words to describe her feelings and begin to find her voice, as in: “What will happen when you get home after class?” It may take many months for a child to know when it is safe to speak the truth (because it will never be universally safe), but for children, as for adults, identifying the truth of an experience is essential to healing from trauma.

It is standard practice in many schools to punish children for tantrums, spacing out, or aggressive outbursts—all of which are often symptoms of traumatic stress. When that happens, the school, instead of offering a safe haven, becomes yet another traumatic trigger. Angry confrontations and punishment can at best temporarily halt unacceptable behaviors, but since the underlying alarm system and stress hormones are not laid to rest, they are certain to erupt again at the next provocation.

In such situations the first step is acknowledging that a child is upset; then the teacher should calm him, then explore the cause and discuss possible solutions. For example, when a first-grader melts down, hitting his teacher and throwing objects around, we encourage his teacher to set clear limits while gently talking to him: “Would you like to wrap that blanket around you to help you calm down?” (The kid is likely to scream, “No!” but then curl up under the blanket and settle down.) Predictability and clarity of expectations are critical; consistency is essential. Children from chaotic backgrounds often have no idea how people can effectively work together, and inconsistency only promotes further confusion. Trauma-sensitive teachers soon realize that calling a parent about an obstreperous kid is likely to result in a beating and further traumatization.

Our goal in all these efforts is to translate brain science into everyday practice. For example, calming down enough to take charge of ourselves requires activating the brain areas that notice our inner sensations, the self-observing watchtower discussed

in chapter 4. So a teacher might say: “Shall we take some deep breaths or use the breathing star?” (This is a colorful breathing aid made out of file folders.) Another option might be having the child sit in a corner wrapped in a heavy blanket while listening to some soothing music through headphones. Safe areas can help kids calm down by providing stimulating sensory awareness: the texture of burlap or velvet; shoe boxes filled with soft brushes and flexible toys. When the child is ready to talk again, he is encouraged to tell someone what is going on before he rejoins the group.

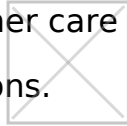


Kids as young as three can blow soap bubbles and learn that when they slow down their breathing to six breaths per minute and focus on the out breath as it flows over their upper lip, they will feel more calm and focused. Our team of yoga teachers works with children nearing adolescence specifically to help them “befriend” their bodies and deal with disruptive physical sensations. We know that one of the prime reasons for habitual drug use in teens is that they cannot stand the physical sensations that signal fear, rage, and helplessness.

Self-regulation can be taught to many kids who cycle between frantic activity and immobility. In addition to reading, writing, and arithmetic, all kids need to learn self-awareness, self-regulation, and communication as part of their core curriculum. Just as we teach history and geography, we need to teach children how their brains and bodies work. For adults and children alike, being in control of ourselves requires becoming familiar with our inner world and accurately identifying what scares, upsets, or delights us.

Emotional intelligence starts with labeling your own feelings and attuning to the emotions of the people around you. We begin very simply: with mirrors. Looking into a mirror helps kids to be aware of what they look like when they are sad, angry, bored, or disappointed. Then we ask them, “How do you feel when you see a face like that?” We teach them how their brains are built, what emotions are for, and where they are registered in their bodies, and how they can communicate their feelings to the people around them. They learn that their facial muscles give clues about what they are feeling and then experiment with how their facial expressions affect other people.

We also strengthen the brain's watchtower by teaching them to recognize and name their physical sensations. For example, when their chest tightens, that probably means that they are nervous; their breathing becomes shallow and they feel uptight. What does anger feel like, and what can they do to change that sensation in their body? What happens if they take a deep breath or take time out to jump rope or hit a punching bag? Does tapping acupressure points help? We try to provide children, teachers, and other care providers with a toolbox of ways to take charge of their emotional reactions.



To promote reciprocity, we use other mirroring exercises, which are the foundation of safe interpersonal communication. Kids practice imitating one another's facial expressions. They proceed to imitating gestures and sounds and then get up and move in sync. To play well, they have to pay attention to really seeing and hearing one another. Games like Simon Says lead to lots of sniggering and giggling—signs of safety and relaxation. When teenagers balk at these “stupid games,” we nod understandingly and enlist their cooperation by asking them to demonstrate games to the little kids, who “need their help.”

Teachers and leaders learn that an activity as simple as trying to keep a beach ball in the air as long as possible helps groups become more focused, cohesive, and fun. These are inexpensive interventions. For older children some schools have installed workstations costing less than two hundred dollars where students can play computer games to help them focus and to improve their heart rate variability (HRV) (discussed in chapter 16), just as we do in our own clinic.

Children and adults alike need to experience how rewarding it is to work at the edge of their abilities. Resilience is the product of agency: knowing that what you do can make a difference. Many of us remember what playing team sports, singing in the school choir, or playing in the marching band meant to us, especially if we had coaches or directors who believed in us, pushed us to excel, and taught us we could be better than we thought was possible. The children we reach need this experience.

Athletics, playing music, dancing, and theatrical performances all promote agency and community. They also engage kids in novel challenges and unaccustomed roles. In a devastated postindustrial New England town, my friends Carolyn and Eli Newberger are teaching El Sistema, an orchestral music program that originated in Venezuela. Several of my students run an after-school program in Brazilian capoeira in a high-crime area of Boston, and my colleagues at the Trauma Center continue the Trauma Drama program. Last year I spent three weeks helping two boys prepare a scene from *Julius Caesar*. An effeminate, shy boy was playing Brutus and had to summon up his full force to put down Cassius, played by the class bully, who had to be coached to play a corrupt general begging for mercy. The scene came to life only after the bully talked about his father's violence and his own vow never to show weakness to anyone. (Most bullies have themselves been bullied, and they despise kids who remind them of their own vulnerability.) Brutus's powerful voice, on the other hand, emerged after he realized that he'd made himself invisible to deal with his own family violence.

These intense communal efforts force kids to collaborate, compromise, and stay focused on the task at hand. Tensions often run high, but the kids stick with it because they want to earn the respect of their coaches or directors and don't want to let down the team—all feelings that are opposite to the vulnerability of being subjected to arbitrary abuse, the invisibility of neglect, and the godforsaken isolation of trauma.

Our NCTSN programs are working: Kids become less anxious and emotionally reactive and are less aggressive or withdrawn; they get along better and their school performance improves; their attention deficit,

FURTHER READING

FURTHER READING

DEALING WITH TRAUMATIZED CHILDREN

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ACKNOWLEDGMENTS

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Let me start with the people who helped me organize, and eventually publish, this book. Toni Burbank, my editor, with whom I communicated many times each week over a two-year period about the scope, organization, and specific contents of the book. Toni truly understood what this book is about, and that understanding has been critical in defining its form and substance. My agent, Brettne Bloom, understood the importance of this work, found a home for it with Viking, and provided critical support at critical moments. Rick Kot, my editor at Viking, supplied invaluable feedback and editorial guidance.

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Finally, my patients, to whom I dedicate this book—I wish I could mention you all by name—who taught me almost everything I know—



NOTES

NOTES

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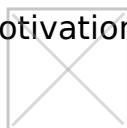
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CHAPTER 4: RUNNING FOR YOUR LIFE: THE ANATOMY OF SURVIVAL

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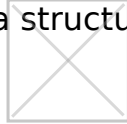
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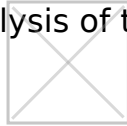
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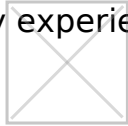
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CHAPTER 9: WHAT'S LOVE GOT TO DO WITH IT?

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CHAPTER 10: DEVELOPMENTAL TRAUMA: THE HIDDEN EPIDEMIC

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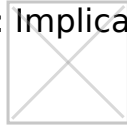
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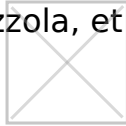
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Ford, Joseph

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17. The proposed criteria for Developmental Trauma Disorder can be found in the
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18. <http://www.traumacenter.org/products/instruments.php>.

19. Read more about Sroufe at www.cehd.umn.edu/icd/people/faculty/cpsy/sroufe.html
and more

about the Minnesota Longitudinal Study of Risk and Adaptation and its publications at
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the chance of developing an anxiety disorder. Parental psychological unavailability or sexual

abuse doubled the chance of later developing PTSD. The chance of receiving multiple diagnoses

was 54 percent for children who suffered neglect, 60 percent for physical abuse, and 73 percent

for both sexual abuse.

24. This was a quote based on the work of Emmy Werner, who has studied 698 children born on

the island of Kauai for forty years, starting in 1955. The study showed that most

children who grew up in unstable households grew up to experience problems with delinquency, mental and physical health, and family stability. One-third of all high-risk children displayed resilience and developed into caring, competent, and confident adults. Protective factors were 1. being an  appealing child, 2. a strong bond with a nonparent caretaker (such as an aunt, a babysitter, or a teacher) and strong involvement in church or community groups. E. E. Werner and R. S. Smith, *Overcoming the Odds: High Risk Children from Birth to Adulthood* (Ithaca and London: Cornell University Press, 1992).

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attachment, PTSD, trauma, child abuse, or neglect. The word “maltreatment” is used in passing

in just one of the sixty-three articles. There is nothing about parenting, family dynamics, or



about family therapy.

27. In the appendix at the back of the DSM, you can find the so-called V-codes, diagnostic labels

without official standing that are not eligible for insurance reimbursement. There you will see

listings for childhood abuse, childhood neglect, childhood physical abuse, and childhood sexual

abuse.

28. Ibid., p 121.

29. At the time of this writing, the DSM-5 is number seven on Amazon’s best-seller list.

The APA

earned \$100 million on the previous edition of the DSM. The publication of the DSM constitutes, with contributions from the pharmaceutical industry and membership dues, the

APA’s major source of income.

30. Gary Greenberg, *The Book of Woe: The DSM and the Unmaking of Psychiatry* (New York:

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31. In an open letter to the APA David Elkins, the chairman of one of the divisions of the

American Psychological Association, complained that DSM-V was based on shaky evidence,

carelessness with the public health, and the conceptualizations of mental disorder as primarily medical phenomena.” His letter attracted nearly five thousand signatures. The president of the American Counseling Association sent a letter on behalf of its 115,000 DSM-buying members to the president of the APA, also objecting to the quality of the science behind DSM-5—and  “urge(d) the APA to make public the work of the scientific review committee it had appointed to review the proposed changes, as well as to allow an evaluation of “all evidence and data by external, independent groups of experts.”

32. Thomas Insel had formerly done research on the attachment hormone oxytocin in non-human primates.

33. National Institute of Mental Health, “NIMH Research Domain Criteria (RDoC),” <http://www.nimh.nih.gov/research-priorities/rdoc/nimh-research-domain-criteria-rdoc.shtml>.

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35. B. A. van der Kolk, “Developmental Trauma Disorder: Toward a Rational Diagnosis for Children with Complex Trauma Histories,” *Psychiatric Annals* 35, no. 5 (2005): 401–8; W.

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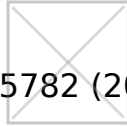
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Childhood," *Clinical Psychology Review* 30, no. 6 (August 2010): 749-67; Olds, Henderson,

Chamberlin, & Tatelbaum, 1986; B. C. Stolbach, et al., "Complex Trauma Exposure and

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CHAPTER 11: UNCOVERING SECRETS: THE PROBLEM OF TRAUMATIC MEMORY

1. Unlike clinical consultations, in which doctor-patient confidentiality applies, forensic evaluations are public documents to be shared with lawyers, courts, and juries. Before doing a



forensic evaluation I inform clients of that and warn them that nothing they tell me can be kept confidential.

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CHAPTER 12: THE UNBEARABLE HEAVINESS OF REMEMBERING

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CHAPTER 13: HEALING FROM TRAUMA: OWNING YOUR SELF

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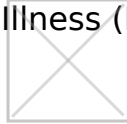
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23. My colleagues at the Justice Resource Institute created a residential treatment program for

adolescents, The van der Kolk Center at Glenhaven Academy, that implements many of the

trauma-informed treatments discussed in this book, including yoga, sensory integration,

neurofeedback and theater. <http://www.jri.org/vanderkolk/about>. The overarching treatment

model, attachment, self-regulation, and competency (ARC), was developed by my colleagues

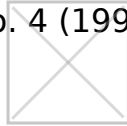
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29. P. Ogden, K. Minton, and C. Pain, *Trauma and the Body* (New York, Norton, 2010); P. Ogden and J. Fisher, *Sensorimotor Psychotherapy: Interventions for Trauma and Attachment* (New York: Norton, 2014).

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32. S. Freud, *Remembering, Repeating, and Working Through* (Further Recommendations on the Technique of Psychoanalysis II), standard ed. (London: Hogarth Press, 1914), p. 371

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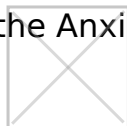
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memories; it also happened when they were asked to pay attention to neutral words.

This means

that, as a group, traumatized patients have a harder time to articulate what they feel and think

about ordinary events. The PTSD group also had decreased activation of the medial prefrontal

cortex (mPFC), the frontal lobe area that, as we have seen, conveys awareness of one’s self, and

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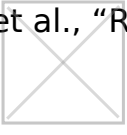
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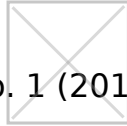
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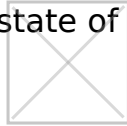
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which IFS calls a state of "being in self." Dick Schwartz claims that with persistence anybody



can achieve such a state, and indeed, I have seen him help very traumatized people do precisely

that. I am not that skilled, and many of my most severely traumatized patients become frantic or

spaced out when we approach upsetting subjects. Others feel so chronically out of control that it

is difficult to find any abiding sense of "self." In most psychiatric settings people with these

problems are given medications to stabilize them. Sometimes that works, but many patients lose

their motivation and drive. In our randomized controlled study of neurofeedback, chronically

traumatized patients had an approximately 30 percent reduction in PTSD symptoms and a

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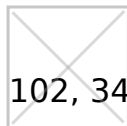
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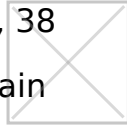
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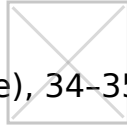
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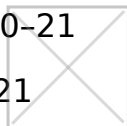
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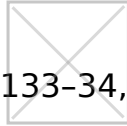
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