The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma

The Body Keeps the Score by Bessel van der Kolk is a groundbreaking book that explores the deep connection between trauma, the brain, and the body. Drawing on years of research and clinical experience, van der Kolk shows how trauma reshapes both mind and body, and offers transformative insights into healing through therapies like mindfulness, yoga, and neurofeedback. A must-read for anyone seeking to understand trauma and its effects, this book is both informative and deeply compassionate.

Praise for The Body Keeps the Score

Praise for *The Body Keeps the Score*

“This book is a tour de force. Its deeply empathic, insightful, and compassionate perspective promises to further humanize the treatment of trauma victims, dramatically expand their repertoire of self-regulatory healing practices and therapeutic options, and also stimulate greater creative thinking and research on trauma and its effective treatment. The body does keep the score, and Van der Kolk’s ability to demonstrate this through compelling descriptions of the work of others, his own pioneering trajectory and experience as the field evolved and him along with it, and above all, his discovery of ways to work skillfully with people by bringing mindfulness to the body (as well as to their thoughts and emotions) through yoga,

movement, and theater are a wonderful and welcome breath of fresh air and possibility in the therapy world.” —Jon Kabat-Zinn, professor of medicine emeritus, UMass Medical School; author of *Full Catastrophe Living*

“This exceptional book will be a classic of modern psychiatric thought. The impact of overwhelming experience can only be truly understood when many disparate domains of knowledge, such as neuroscience, developmental psychopathology, and interpersonal neurobiology are integrated, as this work uniquely does. There is no other volume in the field of traumatic stress that has distilled these domains of science with such rich historical and clinical perspectives, and arrived at such innovative treatment approaches. The clarity of vision and breadth of wisdom of this unique but highly accessible work is remarkable. This book is essential reading for anyone interested in understanding and treating traumatic stress and the scope of its impact on society.” —Alexander McFarlane AO, MB BS (Hons) MD FRANZCP, director of the Centre for Traumatic Stress Studies, The University of Adelaide, South Australia.

“This is an amazing accomplishment from the neuroscientist most responsible for the contemporary revolution in mental health toward the recognition that so many mental problems are the product of trauma. With the compelling writing of a good novelist, van der Kolk revisits his fascinating journey of discovery that has challenged established wisdom in psychiatry. Interspersed with that narrative are clear and understandable descriptions of the neurobiology of trauma; explanations of the ineffectiveness of traditional approaches to treating trauma; and introductions to the approaches that take patients beneath their cognitive minds to heal the parts of them that remained frozen in the past. All this is illustrated vividly with dramatic case histories and substantiated with convincing research. This is a watershed book that will be remembered as tipping the scales within psychiatry and the culture at large toward the recognition of the toll traumatic events and our attempts to deny their impact take on us all.” —Richard Schwartz, originator, Internal Family Systems Therapy

The Body Keeps the Score is clear, fascinating, hard to put down, and filled with powerful case histories. Van der Kolk, the eminent impresario of trauma treatment,

who has spent a career bringing together diverse trauma scientists and clinicians and their ideas, while making his own pivotal contributions, describes what is arguably the most important series of breakthroughs in mental health in the last thirty years. We've known that psychological trauma fragments the mind. Here we see not only how psychological trauma also breaks connections within the brain, but also between mind and body, and learn about the exciting new approaches that allow people with the severest forms of trauma to put all the parts back together again." —Norman Doidge, author of *The Brain That Changes Itself*

"In *The Body Keeps the Score* we share the author's courageous journey into the parallel dissociative worlds of trauma victims and the medical and psychological disciplines that are meant to provide relief. In this compelling book we learn that as our minds desperately try to leave trauma behind, our bodies keep us trapped in the past with wordless emotions and feelings. These inner disconnections cascade into ruptures in social relationships with disastrous effects on marriages, families, and friendships. Van der Kolk offers hope by describing treatments and strategies that have successfully helped his patients reconnect their thoughts with their bodies. We leave this shared journey understanding that only through fostering self-awareness and gaining an inner sense of safety will we, as a species, fully experience the richness of life." —Stephen W. Porges, PhD, professor of psychiatry, University of North Carolina at Chapel Hill; author of *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*

"Bessel van der Kolk is unequaled in his ability to synthesize the stunning developments in the field of psychological trauma over the past few decades. Thanks in part to his work, psychological trauma—ranging from chronic child abuse and neglect, to war trauma and natural disasters—is now generally recognized as a major cause of individual, social, and cultural breakdown. In this masterfully lucid and engaging tour de force, Van der Kolk takes us—both specialists and the general public— on his personal journey and shows what he has learned from his research, from his colleagues and students, and, most important, from his patients. *The Body*

Keeps the Score is, simply put, brilliant.” —Onno van der Hart, PhD, Utrecht University, The Netherlands; senior author, *The Haunted Self: Structural Dissociation and the Treatment of Chronic Traumatization*

The Body Keeps the Score articulates new and better therapies for toxic stress based on a deep understanding of the effects of trauma on brain development and attachment systems. This volume provides a moving summary of what is currently known about the effects of trauma on individuals and societies, and introduces the healing potential of both age-old and novel approaches to help traumatized children and adults fully engage in the present.” —Jessica Stern, policy consultant on terrorism; author of *Denial: A Memoir of Terror*

“A book about understanding the impact of trauma by one of the true pioneers in the field. It is a rare book that integrates cutting edge neuroscience with wisdom and understanding about the experience and meaning of trauma, for people who have suffered from it. Like its author, this book is wise and compassionate, occasionally quite provocative, and always interesting.” —Glenn N. Saxe, MD, Arnold Simon Professor and chairman, Department of Child and Adolescent Psychiatry; director, NYU Child Study Center, New York University School of Medicine.

“A fascinating exploration of a wide range of therapeutic treatments shows readers how to take charge of the healing process, gain a sense of safety, and find their way out of the morass of suffering.” —Francine Shapiro, PhD, originator of EMDR therapy; senior research fellow, Emeritus Mental Research Institute; author of *Getting Past Your Past*

“As an attachment researcher I know that infants are psychobiological beings. They are as much of the body as they are of the brain. Without language or symbols infants use every one of their biological systems to make meaning of their self in relation to the world of things and people. Van der Kolk shows that those very same systems continue to operate at every age, and that traumatic experiences, especially chronic toxic experience during early development, produce psychic devastation. With this

understanding he provides insight and guidance for survivors, researchers, and clinicians alike. Bessel van der Kolk may focus on the body and trauma, but what a mind he must have to have written this book." —Ed Tronick, distinguished professor, University of Massachusetts, Boston; author of *Neurobehavior and Social Emotional Development of Infants and Young Children*

The Body Keeps the Score eloquently articulates how overwhelming experiences affect the development of brain, mind, and body awareness, all of which are closely intertwined. The resulting derailments have a profound impact on the capacity for love and work. This rich integration of clinical case examples with groundbreaking scientific studies provides us with a new understanding of trauma, which inevitably leads to the exploration of novel therapeutic approaches that 'rewire' the brain, and help traumatized people to reengage in the present. This book will provide traumatized individuals with a guide to healing and permanently change how psychologists and psychiatrists think about trauma and recovery." —Ruth A. Lanius, MD, PhD, Harris-Woodman chair in Psyche and Soma, professor of psychiatry, and director PTSD research at the University of Western Ontario; author of *The Impact of Early Life Trauma on Health and Disease.*

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Prologue: Facing Trauma

Prologue: Facing Trauma

Trauma can touch anyone, regardless of their circumstances or environment. It’s not limited to soldiers returning from war or those living in conflict zones like Syria or the Congo. The reality is that trauma affects our families, friends, and even ourselves. According to research from the Centers for Disease Control and Prevention (CDC), one in five Americans was sexually molested as a child, one in four was beaten by a parent, and one in three couples experiences physical violence. These statistics show that trauma is a widespread issue, often hidden in plain sight, impacting both the individual and their community in profound ways.

Humans are incredibly resilient, able to recover from wars, disasters, and personal betrayal, but trauma often leaves lasting marks. These effects don’t just disappear; they can manifest in various ways, from personal relationships to broader social interactions. Studies indicate that the trauma experienced by one generation can sometimes be unknowingly passed down to future generations. Furthermore, trauma affects the body and mind, influencing everything from emotional health to immune system function. This complex impact of trauma helps explain why its effects ripple through individuals and communities, shaping behaviors and emotional responses for years.

Trauma doesn’t only affect those who directly experience it; it also impacts those around them. For example, veterans returning from combat often struggle with anger and emotional detachment, which can frighten and isolate their families. Similarly, the children of parents with PTSD or depression are at a higher risk of developing their own emotional struggles. Growing up in a violent household can lead to difficulties in forming stable relationships in adulthood. These emotional scars are not just

memories; they are deep-seated challenges that influence one’s ability to trust and build healthy connections with others.

Trauma, by definition, is something that overwhelms the mind and body, making it difficult to cope with the emotional fallout. Victims of abuse, soldiers, and those who have witnessed violence often try to suppress these painful memories, continuing with their lives as if nothing happened. However, the brain’s survival instincts don’t easily allow for such denial. After a traumatic experience, even the slightest reminder can trigger a cascade of stress hormones and emotional responses. These reactions can be overwhelming, and many survivors fear they are irreparably damaged by their trauma.

The author’s journey into the study of trauma began during their medical training, particularly when they encountered the profound emotional complexities of the human mind. While they had always been fascinated by the body’s physical systems, the brain and its ability to process trauma presented a different kind of challenge. Unlike the straightforward functions of the kidneys or heart, the intricacies of the mind and emotions remain elusive. Early in their psychiatry rotation, the author realized the vast gap in knowledge regarding the psychological origins of trauma, which led them to seek out new fields of research.

Neuroscience, developmental psychopathology, and interpersonal neurobiology are three disciplines that have revolutionized our understanding of trauma. These fields explore how trauma physically alters the brain, changes brain chemistry, and impacts the body's response to perceived threats. One key discovery is that trauma recalibrates the brain’s alarm system, making it hypervigilant and overly sensitive to danger. This heightened state of alertness can prevent survivors from engaging in everyday life, as their brains are constantly on edge. Trauma also hinders one’s ability to learn from experiences, leading to repetitive destructive behaviors. These findings challenge the misconception that trauma victims are simply weak-willed or morally flawed.

As the understanding of trauma has deepened, new methods for healing have emerged. These treatments focus on harnessing the brain's natural ability to change, a process known as neuroplasticity. There are three primary approaches to healing: top-down, through conversation and connection with others; bottom-up, through physical experiences that counteract the helplessness or rage caused by trauma; and the use of medications to regulate the brain’s stress responses. Each individual responds differently, and a combination of these methods is often most effective. The ability to tailor treatment plans to the individual needs of trauma survivors has become a key aspect of modern therapeutic practices.

For over three decades, the author and their colleagues at the Trauma Center have worked to address the complexities of trauma. The center has treated thousands of individuals, including survivors of child abuse, war, accidents, and human trafficking. This work has revealed the deep and lasting effects of trauma on both children and adults, as well as the importance of creating safe spaces for survivors to process their experiences. The collaborative approach at the center, which involves detailed discussions about each patient’s needs, ensures that all aspects of trauma are addressed, providing hope for recovery and healing.

The fight against the lasting effects of trauma is ongoing, but the progress made in understanding and treating it offers new hope for those suffering in silence. Through continued research and practice, trauma survivors can find the tools they need to reclaim their lives, heal their emotional wounds, and build a future free from the weight of their past.

Chapter 1: Lessons from Vietnam Veterans

Chapter 1: *Lessons from Vietnam Veterans*. In the late 1970s, the author began their work as a psychiatrist at the Boston Veterans Administration Clinic, encountering a patient named Tom, a Vietnam War veteran. Tom's story unfolded over the course of his sessions, revealing a man deeply scarred by his experiences in Vietnam. He had joined the Marine Corps out of duty and idealism, rising quickly to the role of platoon leader. After surviving a harrowing experience during the war, where he witnessed the deaths and injuries of his platoon members, Tom returned to civilian life, hoping to leave the past behind. However, his attempts to integrate back into society were unsuccessful. His nights were plagued by flashbacks and nightmares, which were triggered by the sounds and experiences that reminded him of Vietnam. His behavior became erratic, and he often found solace in alcohol or reckless motorcycle rides, as he struggled to manage the overwhelming memories of war.

Tom's response to his trauma was not unique. As the author listened to Tom's story, memories from his own childhood emerged, evoking reflections on how war and trauma left marks on generations. The author had grown up in postwar Holland, where the effects of wartime experiences had profoundly shaped their family. Like Tom, both the author's father and uncle had been affected by the trauma they experienced during war. The rage and emotional numbness that characterized their behaviors mirrored Tom's struggles, revealing a pattern of unresolved trauma that spanned generations. As the author learned more about Tom's condition, it became clear that the psychological scars of war were not just about the memories of specific events but were deeply rooted in the very fabric of one's identity. This realization would shape the author’s understanding of trauma and its long-lasting effects.

While Tom was not the author’s first encounter with trauma, his case illustrated the complexity of post-traumatic stress disorder (PTSD). In medical school, the author had

been taught to approach trauma primarily as a psychological issue, but Tom’s experience revealed how trauma could physically alter a person’s ability to function. The memories of war were so ingrained in Tom’s psyche that they dictated his actions, rendering him unable to escape the trauma. The author’s early psychiatric training focused on symptoms and diagnoses, often treating the surface issues without delving into the root causes. However, Tom’s case challenged this conventional approach and led the author to reconsider the role of trauma in the mental health field. Over time, the understanding of PTSD would evolve, becoming a focal point in trauma research, and the author would continue to learn from veterans like Tom, as well as other patients suffering from emotional and physical scars.

Through Tom's story, the author discovered the deep connection between trauma and the body, an insight that would later contribute to their work in understanding PTSD. This connection highlights how the body holds onto past pain and distress, often manifesting in physical symptoms. The trauma that Tom experienced, like that of many veterans and victims of abuse, was not confined to the mind but seeped into every aspect of his being. As Tom sought ways to cope with his pain, he found it difficult to express the emotions that he had buried, which led to increased isolation and self-destructive behaviors. This is a common response to trauma, where individuals disconnect from their emotions in order to survive the overwhelming experiences. The challenge, therefore, was not just to address the psychological symptoms but also to help these individuals reconnect with their emotions and rebuild a sense of safety and control in their lives. In recent years, studies have shown that trauma can affect the brain's neurochemical balance, particularly in areas related to fear and memory. Understanding this has led to a more holistic approach in treating PTSD, combining therapy, medication, and new trauma-informed care practices.

As PTSD awareness grew, it became clear that trauma impacts more than just soldiers returning from war. The same patterns were seen in survivors of domestic violence, childhood abuse, and other traumatic experiences. The traumatic effects of war, abuse, and violence shape how individuals perceive the world, often causing them to view every situation through the lens of past trauma. The development of PTSD is

linked to changes in brain activity, particularly in the amygdala, which processes emotional responses to perceived threats. This insight has led to the understanding that trauma rewires the brain’s response to danger, making it harder for individuals to regulate their emotions and reactions. For many, recovery requires not just the removal of symptoms but a complete reorganization of their perceptions and sense of self. New therapies have emerged that focus on helping individuals process these traumatic memories in a way that allows them to regain control over their lives. The road to healing from trauma is often long and complicated, but with the right support and treatment, individuals can begin to reclaim their sense of self and move forward from the past.

Chapter 2: Revolutions in Understanding Mind and Brain

Chapter 2: *Revolutions in Understanding Mind and Brain.* In the late 1960s, during a year off from medical school, the author had an eye-opening experience at the Massachusetts Mental Health Center (MMHC), a prestigious psychiatric hospital. The hospital had long been regarded as one of the finest in the country, and it was here that the author was introduced to the rapidly changing landscape of psychiatric care. The prevailing treatment for mental illness at MMHC was psychotherapy, stemming from Freudian psychoanalysis, but a new wave of treatments was emerging. The discovery of chlorpromazine, a drug that had a calming effect on patients diagnosed with schizophrenia, was one of the first breakthroughs in the use of medication for mental disorders. This medication, branded as Thorazine, inspired hope that pharmacological solutions could be found for more severe conditions, such as depression, panic attacks, and mania. The success of Thorazine paved the way for further advancements in drug-based treatments, which were believed to be able to ease the most troubling symptoms of schizophrenia and beyond.

While the author’s role as an attendant was focused on organizing recreational activities for patients, they were exposed to the profound impact of mental illness firsthand. Patients at MMHC, many of whom were young adults, were grappling with emotional turmoil and struggling with delusions, self-harm, and intense feelings of fear. Some of them had attempted suicide, while others displayed signs of aggression or self-destructive behavior. The author spent a great deal of time interacting with these patients and listening to their stories. At night, when the hospital was quieter, patients would often confide in the author, sharing painful memories of abuse, assault, and trauma, much of it stemming from their families or close relationships. These stories were rarely mentioned during the daily medical rounds, where the focus

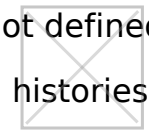
remained primarily on the symptoms rather than their potential origins in past experiences.

As the years went on, the author began to realize the deeper issues affecting these patients and questioned the medical model that treated their symptoms in isolation. They observed that patients often felt trapped in cycles of trauma, unable to break free from the emotional scars of their past. These insights were later reinforced by research showing that more than half of people seeking psychiatric care had experienced some form of childhood trauma, such as sexual abuse, neglect, or violence. Despite this, the trauma itself was rarely discussed in the context of treatment. Instead, doctors focused on managing symptoms and alleviating distressing behaviors, while the root causes were left unexplored. The lack of focus on trauma highlighted a major flaw in the mental health system, one that would take years to address.

The medical community’s approach to mental illness began to shift in the following decades, with an increasing emphasis on pharmacological treatments. The introduction of antidepressants and antipsychotics brought hope to patients who had previously been marginalized by the medical community. For many individuals, medications like Prozac offered relief from debilitating symptoms, such as depression and anxiety, that had interfered with their ability to function in daily life. These drugs became an essential part of the treatment toolkit, offering patients a sense of stability and a chance to regain control over their emotional well-being. However, the rise of pharmacological treatments also raised questions about the role of therapy and the importance of addressing underlying emotional issues. While medications could help manage symptoms, they did not necessarily address the trauma or unresolved emotional conflicts that were often at the core of mental suffering.

Today, the field of psychiatry continues to evolve, with a growing recognition that mental health is influenced by a complex interplay of biological, psychological, and social factors. Advances in neuroscience have shown that medications can play a significant role in managing mental health symptoms, but they are not a one-size-fits-

all solution. Trauma-informed care, which considers the impact of past experiences on an individual’s mental health, is now recognized as a vital component of effective treatment. Mental health professionals are increasingly focusing on understanding the emotional and psychological factors that contribute to mental illness, rather than simply treating the symptoms. This shift in perspective is helping to create more holistic and compassionate approaches to mental health care, recognizing that individuals are not defined by their diagnoses but are shaped by their unique experiences and histories.



Chapter 3: Looking into the Brain: The Neuroscience Revolution

Chapter 3: *Looking into the Brain: The Neuroscience Revolution.* In the early 1990s, the introduction of novel brain-imaging technologies marked a significant shift in neuroscience, allowing researchers to observe the brain in ways that were previously unimaginable. Techniques such as Positron Emission Tomography (PET) and functional Magnetic Resonance Imaging (fMRI) allowed scientists to visualize how the brain reacts when engaged in specific tasks or recalling memories. These advancements provided groundbreaking insights into the brain’s role in processing emotions, sensations, and memories, allowing scientists to essentially "see" the brain at work. Prior to these innovations, researchers could only speculate about the brain's function, relying on indirect methods like measuring brain chemicals. These images revealed that the brain is much more dynamic and complex than previously thought, particularly in understanding trauma and how it affects the brain long after the event has passed.

This shift in neuroscience led to new research exploring how traumatic memories are stored and re-experienced. Researchers began investigating the effects of trauma on the brain, using these new imaging technologies to study the brains of individuals who experienced flashbacks or relived past traumatic events. For example, a study involving trauma survivors used neuroimaging to recreate specific moments of their traumatic experiences. These individuals were asked to relive certain traumatic scenes while lying in an fMRI scanner. The results were striking, showing that just hearing a traumatic memory could trigger intense physiological responses such as increased heart rate and blood pressure. This finding highlighted how deeply the body and brain are connected and how trauma can re-engage the brain's stress response mechanisms, even many years after the event.

The results of this research have profound implications for understanding trauma. The scans showed clear activation in the brain's limbic system, specifically the amygdala, which is responsible for processing fear and other intense emotions. This region became highly active whenever trauma survivors recalled their experiences, even when those events happened years ago. This finding reinforced the concept that trauma is not just a psychological experience but a deeply physiological one, affecting both the body and the mind. Furthermore, the scans revealed another unexpected discovery: a decrease in activity in Broca’s area, a region of the brain responsible for speech. This deactivation was significant because it suggested that trauma victims often struggle to articulate their experiences, as their brains literally "shut down" the areas involved in speech and language. This neurological evidence helps explain why trauma survivors often find it so difficult to talk about their experiences, even when they want to.

This breakthrough in neuroimaging also pointed to the complex relationship between the two hemispheres of the brain. Researchers found that during flashbacks, the right hemisphere became more active, while the left hemisphere, which is involved in language processing and logical thinking, showed decreased activity. The right brain, known for processing emotional and visual information, seemed to take over when traumatic memories were triggered. In contrast, the left brain, which helps organize experiences and put them into words, became less active. This shift highlights why trauma can make it difficult for individuals to make sense of their experiences logically and communicate them effectively. Understanding this dynamic between the brain's two hemispheres is crucial for developing effective trauma treatments that address both emotional and cognitive aspects of recovery.

The impact of trauma on the brain is not only psychological but also physical. When individuals are exposed to traumatic events, their brain’s stress response system, including the release of adrenaline and other stress hormones, is activated. This response prepares the body for "fight or flight" but can become problematic if the stress response is triggered repeatedly, as is often the case in individuals with PTSD.

Over time, the constant release of stress hormones can lead to a variety of physical symptoms, including sleep disturbances, digestive issues, and chronic pain. This ongoing physiological strain is a key factor in the long-term health problems faced by trauma survivors. Therefore, addressing trauma requires not only psychological interventions but also physical treatments that help regulate the body's stress response.

As we move forward in the understanding of trauma, it’s clear that the brain’s response to stress and fear is deeply ingrained in our biological systems. The discoveries made through neuroimaging have opened up new possibilities for treatment, showing that trauma is not just something that resides in the mind but affects the entire body. Addressing both the psychological and physical aspects of trauma is essential for recovery. In the future, trauma treatments may involve a combination of therapies that target both the brain’s emotional centers and the body’s stress responses. This integrated approach holds promise for helping individuals heal from the deep scars left by traumatic experiences, offering a path toward recovery that recognizes the full complexity of the human brain and body.

Chapter 4: Running for Your Life: The Anatomy of Survival

Chapter 4: *Running for Your Life: The Anatomy of Survival*. Survival is the core function of the human brain, and understanding the mechanisms behind how it protects us during times of danger is vital to understanding trauma. The brain operates with intricate systems designed to ensure our protection in life-threatening situations, triggering automatic responses that prioritize safety. From the moment danger is sensed, the brain activates a series of responses to help us react appropriately, often before we can consciously process the threat. This primitive survival mechanism, known as the "fight or flight" response, is part of the brain’s limbic system, responsible for processing emotions and bodily sensations related to danger. As soon as the immediate threat dissipates, the body aims to regain balance, but in instances of trauma, the usual recovery process can be disturbed, leading to long-lasting psychological and physical consequences. The complexity of how our brains interpret and react to trauma is essential in comprehending why some people experience difficulties in recovering from traumatic events.

When trauma occurs, it can rewire the brain’s approach to future encounters with danger or stress. The body often remains in a heightened state of alertness long after the immediate threat is gone, which is characteristic of PTSD. Individuals with PTSD may continue to experience heightened emotional reactions and physical responses such as rapid heartbeat, shallow breathing, and muscle tension, as though the trauma is still occurring. This is not just a mental experience but a profound physical reaction that affects the entire organism. As the brain struggles to protect the individual from future harm, it can impair the ability to focus on the present, causing sufferers to feel disconnected or overly anxious. This constant state of vigilance can be exhausting, preventing individuals from fully engaging in their day-to-day lives, and affecting their

ability to establish trust or engage in meaningful relationships.

One of the most crucial aspects of trauma recovery is the rebalancing of the emotional and rational functions of the brain. The emotional brain, particularly the limbic system, tends to react instinctively and immediately, often leading to overwhelming feelings of fear, anger, or sadness. In contrast, the rational brain, housed in the prefrontal cortex, has the ability to assess situations more logically and can help regulate emotional responses. Unfortunately, trauma can impair the proper functioning of the prefrontal cortex, making it difficult for individuals to think clearly or calmly in the face of stress. This disconnection between the emotional and rational parts of the brain is why trauma survivors often struggle with overwhelming emotional reactions to situations that others might not find threatening. Therapy, mindfulness practices, and grounding techniques can help re-engage the prefrontal cortex, allowing trauma survivors to regain some control over their emotional states and begin to feel safe again.

A significant but often overlooked aspect of trauma recovery is how it manifests physically within the body. Many trauma survivors experience chronic pain, digestive problems, and other health issues, all of which stem from the body’s attempt to cope with the stress response. These physical symptoms are a direct result of the brain’s dysregulation of the autonomic nervous system, which controls automatic bodily functions like breathing and heart rate. When the body is stuck in a state of high alert, these systems can become disrupted, leading to ongoing discomfort and illness. Some individuals may also become disconnected from their physical sensations as a defense mechanism against overwhelming emotions, either numbing themselves or becoming hyper-aware of every sensation. Healing trauma often requires re-establishing a connection between the mind and body, allowing individuals to reawaken their bodily awareness in a safe and controlled manner. Techniques such as yoga, breathwork, massage, or even simply becoming more mindful of one's own body can help facilitate this reconnection, allowing the survivor to begin the journey toward holistic healing.

It is essential to recognize the profound link between body and mind when addressing trauma. Physical symptoms are not just secondary to the emotional experience of

trauma; they are a direct result of the body’s physiological reaction to stress and danger. For those dealing with the aftermath of trauma, the physical body becomes an expression of the unresolved emotional turmoil within. Through practices that bring attention back to the body, such as movement therapy, breath control, and physical touch, individuals can start to release stored tension and trauma held in the body. These practices offer a way to balance the nervous system, reset the body’s stress responses, and help individuals re-establish a sense of control over their lives. By attending to both the emotional and physical aspects of trauma, a more integrated healing process can occur, offering hope for those who have long struggled with the lingering effects of trauma. The road to recovery requires patience and effort, but it can lead to profound transformation, both emotionally and physically.

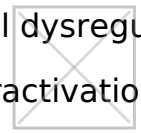
Chapter 5: Body-Brain Connections

Chapter 5: *Body-Brain Connections*, the intricate relationship between the body and mind has been a subject of scientific study for centuries. Early thinkers like Charles Darwin recognized that emotional expressions were not just mental states but were deeply intertwined with our physical selves. This concept is still valid today, as we understand more about how our bodies react to emotional stimuli and how these reactions shape our overall mental health. Darwin's observations in *The Expression of the Emotions in Man and Animals* provided the foundation for understanding the body-brain connection and its critical role in both our survival and emotional well-being.

One of the most fascinating aspects of Darwin's work is his exploration of how emotions drive behavior and communicate intention. For example, physical expressions such as anger or fear are universally recognized by others, even across species. This instinctual ability to read the emotions of others—whether through body posture, facial expressions, or tone of voice—plays a significant role in how we navigate our social world. When our bodies are under emotional stress, they send signals that, if ignored or not properly managed, can lead to chronic health problems or behavioral issues.

Emotions, from Darwin's perspective, are not just abstract psychological states but essential motivators for action. They initiate the necessary physical responses to threats or opportunities, preparing the body to act. However, when these emotional responses become prolonged, as seen in conditions like PTSD, they can hinder the body's ability to return to a state of balance. Constantly being on high alert, without the ability to shift into a more relaxed state, can lead to burnout, disconnection, and a loss of the ability to form meaningful relationships.

From a modern standpoint, we now know that the body and brain are in constant communication through the autonomic nervous system (ANS). This system is divided into the sympathetic nervous system (SNS), which activates the "fight or flight" response, and the parasympathetic nervous system (PNS), which promotes "rest and digest." Both systems must work in harmony to maintain emotional and physical health. When this balance is disrupted, either through trauma or chronic stress, it can lead to emotional dysregulation, anxiety, or depression, as the body becomes trapped in a state of overactivation.



The key to healing from emotional trauma lies in restoring the balance between these two systems. Techniques such as deep breathing, yoga, and mindfulness are proven to engage the parasympathetic nervous system, helping to calm the body and mind. This focus on the body’s natural ability to regulate itself is central to contemporary trauma therapy. By engaging the body in a process of mindful awareness, individuals can begin to reconnect with their inner sensations and emotions, helping them to heal from the inside out.

New advancements in neuroscience, particularly the Polyvagal Theory developed by Stephen Porges, have further deepened our understanding of how social connections affect the body’s ability to regulate stress. According to this theory, the vagus nerve, which plays a central role in the parasympathetic nervous system, is also responsible for social engagement behaviors such as facial expressions and vocalizations. The more attuned we are to the social cues around us, the better our bodies can regulate stress responses. Positive social interactions, such as being heard and seen by others, help to activate the body's calming mechanisms, promoting a sense of safety and emotional balance.

The importance of social connection cannot be overstated. Research has shown that social support acts as a buffer against the effects of trauma, promoting resilience and emotional recovery. The presence of a trusted person can help to reset the body’s stress response, providing the necessary safety for emotional healing. This is why therapy often incorporates group work or bonding exercises to help individuals

reconnect with others in a safe and supportive environment.

As we continue to explore the connections between the mind and body, it becomes clear that healing from trauma requires more than just cognitive interventions. The body must be engaged in the healing process through physical awareness, breathwork, and emotional attunement. Only by addressing both the mind and body can individuals truly recover from the effects of trauma and restore balance to their lives. This integrated approach holds the potential to transform how we understand and treat emotional distress, paving the way for more effective and holistic treatments.

Understanding how trauma impacts our nervous system and emotional regulation allows us to develop more nuanced and compassionate approaches to healing. Whether through therapy, physical exercises, or social connections, it is clear that the body holds the key to emotional recovery. As we continue to learn more about the body-brain connection, we can help individuals unlock the power of their own bodies to heal and thrive.

Chapter 6: Losing Your Body, Losing Your Self

Chapter 6: *Losing Your Body, Losing Your Self*, the journey of healing often begins with learning to live with the questions themselves, as Rainer Maria Rilke beautifully expressed in his letters to a young poet. Just as with the challenges in our emotional and psychological states, the answers to our struggles may come slowly, without our direct awareness. Instead, we might find our way toward understanding through the simple act of living with the discomfort of the questions.

Sherry walked into my office, her body language speaking volumes before she even uttered a word. Her slumped posture, with her chin almost touching her chest, told me that she was hiding from the world in more ways than one. When she began to speak, her voice was flat and monotone, revealing a deep emotional numbness that had taken root over the years.

Sherry’s story was one of neglect and deep emotional scars that had been left unaddressed. Growing up in a foster home where she was surrounded by other children in need of care, Sherry had always felt like an outsider in her own family. She shared memories of her mother telling her that she didn’t belong, that she was the "wrong baby," a comment that, though possibly meant as a joke, was laden with unspoken pain. This neglect wasn’t just emotional—it affected her sense of self and place in the world, a painful reality that would continue to shape her well into adulthood.

The trauma of her childhood wasn’t the only burden Sherry carried. Her adult life was marked by isolation, devoid of close relationships, and filled with painful reminders of her past. She described a terrifying incident in Florida during a college vacation where she was abducted, held captive, and assaulted for days. Despite the horrifying nature of her experience, her mother, who she had turned to for help, rejected her plea for

assistance, leaving Sherry with a profound sense of abandonment.

As Sherry's therapist, I came to realize that her struggles were not just psychological but deeply somatic. She exhibited behaviors like skin picking as a way to feel something, to regain a sense of control over her body when everything else felt out of her reach. This compulsive behavior, although harmful, wasn’t an attempt at self-harm but rather an attempt to feel alive when everything else felt numb and distant.

Over time, I began to understand the connection between trauma and the disconnection from the body. For many people with histories of trauma, physical sensations become a foreign territory, disconnected from the mind. This disconnection isn’t just a psychological issue but a somatic one, where the body’s internal sensors fail to engage, leaving individuals feeling detached from themselves and their surroundings.

Research has shown that trauma, especially when experienced at a young age, affects how we process sensory information. Studies on individuals with PTSD reveal that their brains struggle to integrate sensory inputs, which are vital for developing a coherent sense of self. When this connection is disrupted, it becomes nearly impossible to feel in tune with one’s body, leading to further emotional and physical issues.

Trauma affects our sense of "self" by interfering with the brain’s ability to register bodily sensations, which are critical for our emotional well-being. Without this sensory feedback, individuals may feel as though they are disconnected from their own body, leading to feelings of being "invisible" or "unreal." This phenomenon is seen not only in Sherry but in many others with a history of neglect and abuse, where the lack of connection to their body becomes a core part of their suffering.

One of the most effective therapeutic interventions for these patients involves helping them reconnect with their body. This process, known as somatic therapy, focuses on bringing awareness to bodily sensations and re-establishing the connection between the mind and body. As these individuals begin to feel more grounded in their physical experience, their emotional well-being often improves, as Sherry's case showed when

she began massage therapy and became more open and engaged in her life.

The journey to healing requires acknowledging the body as a vital part of the self, as it holds the key to understanding and processing our emotions. Learning to listen to our body’s signals is an essential step in overcoming trauma and regaining a sense of agency. When we are in tune with our physical sensations, we can begin to trust ourselves again and rebuild a sense of safety and control.

As we learn to interpret the signals our bodies give us, we gain a better understanding of how to care for ourselves and our emotional needs. This reconnection also helps individuals with trauma to navigate the world more confidently, without the constant fear of being overwhelmed by their internal state. The ability to recognize and manage our emotional and physical responses is crucial for long-term healing, and with the right therapeutic support, it is entirely possible to reclaim our sense of self from the grip of trauma.

Chapter 7: Getting on the Same Wavelength: Attachment and Attunement

Chapter 7 explores the critical role of attachment in shaping a child's emotional and psychological development. The research conducted at the Massachusetts Mental Health Center focused on children who had experienced severe neglect and abuse. These children, although exhibiting various disruptive behaviors, such as aggression, emotional numbness, and withdrawal, were also deeply in need of affection. The behavioral patterns observed in the clinic revealed how trauma had altered their ability to form healthy emotional bonds. Through a specialized set of test cards designed for children, researchers noted how children who had been exposed to traumatic events viewed seemingly ordinary situations as potential threats. Their responses to basic, benign images were colored by a deep sense of danger and aggression, which revealed the intense impact of trauma on their worldviews.

The findings of this study highlighted that children exposed to trauma developed a unique and distressing interpretation of the world around them. For example, in response to a card depicting a family scene, children who had been abused imagined violent and gruesome scenarios, while children without such experiences envisioned peaceful, optimistic endings. This stark contrast illustrated how trauma can alter a child’s perception of normality, turning even the most innocuous situations into triggers for fear and aggression. These responses were not mere overreactions; they reflected the children’s internalized feelings of insecurity and fear, which stemmed from their painful pasts. The inability of these children to imagine peaceful or positive outcomes from everyday scenes demonstrated how profoundly trauma had shaped their emotional and psychological frameworks. Moreover, it underscored the importance of a stable, safe environment in helping children rebuild a sense of trust and security.

Attachment theory, developed by John Bowlby and later expanded by Donald Winnicott, is key to understanding the emotional development of children. According to Bowlby, children are inherently predisposed to form strong emotional bonds with their primary caregivers, which act as a foundation for future relationships. Secure attachment allows children to feel safe enough to explore their surroundings, learn self-regulation, and develop empathy for others. In contrast, insecure attachment, often a result of neglect or abuse, leaves children emotionally fragmented and unable to trust others. These children may become anxious, avoidant, or develop disorganized attachment patterns, each of which significantly impacts their ability to engage with the world in a healthy, emotionally stable way. The nature of these early attachments has profound effects on the brain, as they shape how children perceive themselves and others, influencing their capacity for emotional regulation and interpersonal relationships throughout their lives.

Therapeutic intervention for children with disorganized attachment is focused on helping them rebuild a sense of emotional safety and stability. These children, having learned to expect fear or rejection from their caregivers, often struggle to regulate their emotions and respond appropriately in social situations. They may experience intense feelings of terror, leading to dissociation, self-harm, or avoidance. Rebuilding trust with a caregiver or therapist is a gradual process that involves fostering emotional attunement. In therapy, this means re-establishing a sense of connection through both verbal and nonverbal communication, enabling these children to experience and process emotions in a safe environment. For example, when a therapist helps a child feel seen, heard, and understood, it can begin to reverse the damage caused by early neglect and trauma. These therapeutic interventions aim not just to help children understand their past but also to enable them to heal through the restoration of a secure emotional base.

Attachment styles, once formed in early childhood, tend to persist into adolescence and adulthood, affecting the way individuals approach relationships and cope with stress. Children who experience secure attachment grow up with a deep sense of

emotional resilience and a greater capacity to handle life's challenges. They are able to trust others, regulate their emotions effectively, and engage in healthy relationships throughout their lives. On the other hand, children with insecure attachment often carry the emotional scars of their early experiences into adulthood. Anxiously attached individuals may constantly seek reassurance from others, while avoidantly attached individuals may struggle with emotional intimacy, preferring to isolate themselves. For these individuals, therapy focuses on helping them understand the root causes of their attachment patterns and developing new, healthier ways of interacting with others.

Understanding the impact of early attachment is not just a theoretical exercise; it has practical implications for therapy and parenting. Secure attachment provides a strong foundation for emotional well-being, while insecure attachment can lead to a variety of emotional and psychological challenges. However, the research also shows that attachment patterns can be modified through therapeutic intervention, as long as individuals are willing to work through their fears and traumas. For children who have experienced abuse, neglect, or other forms of trauma, restoring attachment involves helping them feel safe, valued, and understood. Whether through individual therapy or family therapy, creating an emotionally attuned environment where these children can process their experiences and rebuild trust is essential for their recovery.

This process of healing is particularly vital for individuals with disorganized attachment, who often face the most intense emotional challenges. These children, who have experienced inconsistent or frightening caregiving, may develop a profound sense of confusion about their place in the world. As adults, they may struggle with emotional regulation, impulse control, and the ability to form healthy relationships. Therapeutic interventions for disorganized attachment focus on creating a safe space where individuals can express their emotions, confront their fears, and develop new ways of relating to others. By addressing both the emotional and physiological aspects of trauma, these interventions aim to help individuals reconnect with themselves and others in a meaningful and healthy way. Through this process, individuals can begin to rewrite their internal maps, building more secure and fulfilling relationships as they move forward.

Chapter 8: Trapped in Relationships: The Cost of Abuse and Neglect

Chapter 8 dives deeply into the challenges faced by survivors of abuse and neglect, particularly through the lens of Marilyn's experience. She was a woman who, despite her professional success and outward composure, found herself ensnared in cycles of terror and numbness. Marilyn’s story sheds light on how childhood trauma can manifest in adult life, leading to overwhelming feelings of alienation, rage, and self-destructive behavior. These emotional scars often go unnoticed, even by the individuals themselves, until they seek help. Therapy, in such cases, is a slow but necessary process, allowing the person to reconnect with their emotions and their history in order to heal.

Marilyn’s reaction to intimacy was rooted in past trauma she couldn’t initially remember, reflecting how deeply embedded memories of abuse can resurface in unexpected ways. Her behavior, such as sudden outbursts of violence or dissociation, was a direct manifestation of the unresolved emotional pain she carried with her. As the therapy progressed, it became clear that the body and mind had their own way of remembering and expressing the trauma, even when conscious recollection was absent. Marilyn’s case was not unique; many survivors of abuse develop coping mechanisms that help them survive but leave them disconnected from their own feelings and bodies. They may struggle with feelings of numbness, a lack of agency, or emotional responses that feel disproportionate to the present situation. For such individuals, treatment must begin by creating a safe space for the emotions to surface and be experienced without judgment.

The chapter also highlights the concept of "dissociation," a defense mechanism where a person mentally disconnects from a painful or overwhelming experience. This coping

strategy often leads to a fragmented sense of self, making it difficult for individuals to engage fully in their relationships or sense of identity. As Marilyn worked through her therapy, it became evident that reclaiming a sense of safety in her body and mind was essential for recovery. Her body, which had been attuned to danger and survival, needed to relearn what it felt like to be safe. Therapy focused on teaching Marilyn techniques to manage her emotions and slowly dismantle the walls she had built around her vulnerability. It wasn't about forcing her to remember everything all at once, but about gently guiding her to process her emotions in a way that allowed her to regain control over her life.

In the process of healing, one of the most significant steps is learning to trust again—trust in others, and trust in oneself. Survivors of childhood trauma often feel as if they are trapped in a cycle of mistrust and fear, believing that any form of connection will inevitably lead to harm. Marilyn's struggle was a reflection of this: her inability to trust men or even herself due to the trauma she had endured. Her journey toward healing involved reworking her "inner map" of the world—learning to see herself as worthy of respect and love, and not defined by her past experiences. Slowly, Marilyn began to recognize that her past did not have to dictate her future, and she could start to build healthier relationships and a more positive view of herself.

The concept of "soul murder," as mentioned by psychoanalyst William Niederland, speaks to the deep psychological harm caused by sustained abuse and neglect. Survivors of such trauma often lose track of who they are and what they deserve in life. As Marilyn's story exemplifies, abuse does not just affect the mind—it impacts the body's ability to function, as evidenced by her autoimmune disease that was linked to her unresolved trauma. The body, like the mind, holds onto the effects of past abuse, often manifesting in physical illnesses or conditions. This connection underscores the importance of addressing trauma holistically—both psychologically and physically. Marilyn's healing journey highlighted the critical need for trauma-informed care that acknowledges the deep, lasting effects of abuse and neglect on both the body and the mind.

For readers who are navigating similar experiences, it is important to understand that healing from childhood trauma is possible, though it requires patience, support, and often, professional help. Whether through therapy, self-care practices, or the support of a compassionate community, reclaiming one's sense of safety and self-worth is a gradual process that can lead to profound transformation. Recognizing that trauma affects more than just emotions is key to understanding its full impact on one’s life. It is equally crucial to remember that seeking help is a sign of strength, not weakness. No one should have to face the repercussions of trauma alone.

Chapter 9: What’s Love Got To Do With It?

Chapter 9 begins by shedding light on the complexities surrounding individuals like Marilyn, Mary, and Kathy, who often receive multiple diagnoses due to a failure to understand the root causes of their struggles. Typically, these individuals might be labeled with disorders such as bipolar disorder, depression, or ADHD, depending on which aspect of their symptoms the healthcare provider focuses on. However, these diagnoses fail to capture the full extent of their experiences, particularly if the underlying issue is unresolved trauma. Psychiatric diagnoses, while useful, often miss the true nature of the patient's suffering, failing to account for the childhood experiences that may have shaped these individuals' emotional and psychological states. The reality of trauma and neglect during childhood shapes a person’s development in ways that cannot be adequately addressed through traditional psychiatric models.

In this chapter, the author discusses the inadequacies of the Diagnostic and Statistical Manual of Mental Disorders (DSM) in diagnosing individuals with histories of trauma. While the DSM has become a crucial tool for mental health professionals, its categories often lack precision, leading to an oversimplification of the patients' conditions. This lack of accuracy in diagnosis can result in improper treatment and a lack of understanding of the patient’s core issues. One critical aspect that is often overlooked is the profound impact of early childhood trauma on a person’s emotional regulation, attachment patterns, and overall well-being. As the chapter highlights, trauma is often a silent and invisible force in people’s lives, with patients frequently unable to articulate their experiences or even recognize how their past shapes their present behaviors.

To better understand the connection between childhood trauma and psychiatric disorders, the author recounts a collaborative study with psychiatrist Judith Herman.

The study focused on patients diagnosed with borderline personality disorder (BPD) who shared a common theme—early trauma, often in the form of neglect or abuse. Through the development of the Traumatic Antecedents Questionnaire (TAQ), the researchers were able to uncover the deep-seated effects of childhood trauma. Many patients reported a lack of safety and affection during childhood, with no one to turn to for emotional support. This revelation further highlighted the gap in understanding trauma and its long-lasting effects. The results were clear: patients with histories of trauma exhibited complex, often contradictory behaviors that could not be fully explained by traditional psychiatric diagnoses.

A pivotal finding of the study was that trauma-related disorders, particularly those stemming from childhood abuse, have a unique set of symptoms that differ from those associated with trauma in adults, such as combat-related PTSD. While PTSD in adults typically involves vivid memories and flashbacks of traumatic events, individuals with complex trauma, especially from early childhood, often don’t have clear memories or may not be preoccupied with their past experiences. Instead, their symptoms are more pervasive, manifesting as emotional dysregulation, chronic self-destructive behavior, and difficulty in forming stable relationships. These individuals are often misdiagnosed with multiple, unrelated disorders, resulting in fragmented care that does not address the core issue: the trauma they have endured and its profound effect on their psychological development.

Through these insights, the study expanded the understanding of how childhood trauma impacts individuals' lives, pushing for a new approach to diagnosing and treating those who have experienced such adversity. The authors argue that traditional diagnoses fail to account for the complexity of trauma’s effects, and thus, new frameworks are needed to address these underlying issues. Understanding trauma's role in shaping emotional and behavioral patterns is essential for creating more effective treatments. This approach emphasizes not just managing symptoms, but addressing the trauma itself in a compassionate and thorough way, which could lead to long-lasting healing and better quality of life for those affected.

The findings also challenge the misconception that trauma only affects a person's mental health, emphasizing the significant physical and emotional toll it can take on the body. Individuals who experience chronic stress and neglect during childhood are at a higher risk of developing lifelong health issues, including heart disease, diabetes, and chronic pain. These findings highlight the necessity of considering the full scope of a person's history when diagnosing and treating mental health disorders. The link between physical health and psychological trauma should no longer be overlooked, and healthcare providers must adopt a holistic approach to treatment, one that integrates both physical and emotional healing.

Furthermore, the study emphasizes the importance of early intervention and support systems for those who have experienced trauma. While some individuals may develop coping mechanisms that help them manage their emotions and navigate life, many others struggle with the long-term effects of their experiences. Early intervention, whether through therapy, social support, or community-based programs, can make a significant difference in preventing the long-term consequences of trauma. These individuals often need more than just psychiatric care—they need comprehensive support that addresses the emotional, social, and physical aspects of their lives. By shifting the focus from symptom management to trauma-informed care, healthcare providers can offer more effective treatment that supports individuals in healing from their past and leading fulfilling lives.

Lastly, this chapter brings attention to the limitations of the current psychiatric system in addressing the needs of individuals with complex trauma histories. While the DSM provides a framework for diagnosing mental health conditions, it fails to offer a comprehensive solution for those who suffer from the aftereffects of childhood trauma. This is where the trauma-informed care approach comes in, offering a more nuanced understanding of how past experiences shape present behaviors and emotions. By acknowledging the role of trauma in the development of mental health issues, practitioners can help individuals rebuild trust, regulate their emotions, and ultimately find healing. This shift in perspective is essential for providing effective care to individuals whose trauma has been largely ignored or misunderstood by traditional

diagnostic frameworks.

Chapter 10: Developmental Trauma: The Hidden Epidemic

Chapter 10 emphasizes the profound and often hidden impact of developmental trauma, underscoring how adverse childhood experiences shape not only a child's emotional development but also their physiological and psychological growth. These early maltreatments—be they physical, emotional, or neglectful—create lasting scars that affect brain structure and function. The consequences are far-reaching, as these children, unable to process their early-life experiences healthily, struggle with numerous challenges, including behavioral issues, cognitive impairments, and a heightened vulnerability to mental health disorders. While traditional psychiatric frameworks have often failed to recognize the underlying trauma, a growing body of research reveals that early abuse and neglect are key contributors to the development of these disorders, making it imperative for society to address these issues head-on in order to break the destructive cycle of trauma.

The complexities surrounding the diagnosis of trauma in children are further compounded by the fact that many of these children do not fit into typical psychiatric categories. Behaviors that manifest in troubled children—such as withdrawal, aggression, anxiety, and difficulty regulating emotions—are often mistaken for conditions like ADHD, PTSD, or conduct disorders. However, these diagnoses miss the root causes, which lie in unresolved trauma, and instead focus on symptomatic behaviors. As a result, many children are misdiagnosed, leading to treatments that fail to address the emotional and psychological wounds they carry. When children exhibit extreme reactions, they are often labeled with multiple conflicting diagnoses, which leaves them with little hope of receiving the appropriate help needed to heal and overcome their trauma.

In response to this, recent advancements in neuroscience and psychological research have shed light on how early traumatic experiences can permanently alter the brain's wiring. For example, studies in epigenetics have shown that traumatic experiences, such as neglect and abuse, can change the way genes are expressed, leading to alterations in the brain's stress response systems. One of the most influential studies in this field was conducted by Michael Meaney, who studied the effects of maternal care in rats. His research found that rats raised by attentive mothers had healthier stress response systems, which helped them recover from stress more quickly. In contrast, those raised by neglectful mothers exhibited high levels of stress hormones and struggled to regulate their emotions. This same mechanism is observed in humans, where children raised in abusive or neglectful environments often face lifelong challenges in managing stress and emotional regulation. These findings suggest that nurturing, supportive relationships during early childhood are essential for the healthy development of the brain.

Furthermore, the environment in which a child grows up plays an equally crucial role in determining their emotional and behavioral development. Research by Stephen Suomi on rhesus monkeys, who share a significant portion of their DNA with humans, demonstrates how early social environments can profoundly shape behavior. The study found that monkeys raised in stable and supportive social groups developed healthier coping mechanisms, while those raised in isolation or in stressful conditions exhibited heightened aggression and anxiety. Similarly, human children who grow up in secure, loving environments are more likely to develop emotional resilience and healthy interpersonal relationships. However, children exposed to neglect or abuse often develop maladaptive behaviors, such as aggression or emotional numbness, due to a lack of positive social support and guidance. This highlights the importance of providing not just safe homes but also enriching environments that foster healthy emotional and social development.

To mitigate the long-term effects of developmental trauma, it is essential to recognize the critical role that early caregiving plays in a child's development. The importance of

providing consistent, sensitive, and nurturing care cannot be overstated, as it directly impacts a child's ability to regulate their emotions and develop secure attachments. Studies, including the Minnesota Longitudinal Study of Risk and Adaptation, have shown that children who experience inconsistent or neglectful caregiving are more likely to face difficulties with emotional regulation, leading to a higher risk of developing mental health disorders later in life. The study's findings reinforce the idea that the early years are formative in shaping a child's emotional and cognitive abilities, and that disruptions in caregiving during this period can have lasting effects. The key takeaway is that early intervention and support for both children and caregivers are vital to reducing the impact of trauma and ensuring better outcomes for at-risk children.

Recent research on childhood trauma has also introduced the concept of Developmental Trauma Disorder (DTD), which seeks to address the specific needs of children who have experienced chronic and ongoing trauma. The need for a formal diagnosis of DTD has been emphasized by experts in the field, as it would help to create a more accurate understanding of the symptoms and long-term effects of developmental trauma. Unlike traditional diagnostic labels that focus solely on behavioral symptoms, DTD aims to recognize the full range of emotional, cognitive, and physiological impacts of trauma. These children often experience a constant state of dysregulation, with difficulties in attention, emotional control, and interpersonal relationships. By providing a clear and comprehensive diagnosis, clinicians can better address the underlying causes of these symptoms and offer more effective treatments tailored to the unique needs of traumatized children.

Additionally, the establishment of the National Child Traumatic Stress Network (NCTSN) has been a pivotal step in raising awareness and improving the treatment of childhood trauma across the United States. The NCTSN, which began with a small group of experts in 2001, has since expanded to over 150 centers nationwide, providing a platform for the collaboration of mental health professionals, educators, and social workers. Through this network, thousands of children have received more

accurate diagnoses and targeted interventions, leading to better outcomes and improved quality of life. The NCTSN's work highlights the importance of addressing trauma early on and providing a comprehensive approach to treatment that encompasses emotional, psychological, and social support. As the network continues to grow and evolve, it offers hope for a future in which children who have experienced trauma are given the tools they need to heal and thrive.

In conclusion, developmental trauma is a pressing issue that requires urgent attention and action. Through research and the efforts of organizations like the NCTSN, we are beginning to understand the profound effects of early trauma on a child's brain and behavior. However, much work remains to be done in providing accurate diagnoses, effective treatments, and long-term support for these children. By focusing on the root causes of their struggles—chronic trauma and disrupted attachment—we can begin to break the cycle of violence and neglect, ensuring that future generations have the opportunity to lead healthy, fulfilling lives. With continued investment in research and intervention programs, we can begin to address this hidden epidemic and make a meaningful difference in the lives of children who need it most.

Chapter 11: Uncovering Secrets: The Problem of Traumatic Memory

Chapter 11 explores the complexities of traumatic memory, using the case of Julian, a man who had repressed memories of being sexually abused by a Catholic priest, as a pivotal example. The story is a powerful illustration of how trauma can lie dormant for years, only to resurface unexpectedly, often triggered by a single event or memory. Julian’s experience, marked by vivid images and overwhelming emotions, reflects the fractured nature of traumatic memory, where the mind struggles to process and integrate the events fully. The delayed recall of traumatic events, coupled with intense physical reactions, exemplifies how the body and mind can become trapped in a loop of distress that is difficult to break.

The understanding of traumatic memory, especially in cases like Julian's, has been crucial in shaping how mental health professionals approach therapy for trauma survivors. Trauma is not simply about forgetting—it is often about dissociation, where memories are not integrated into the person's life narrative. As seen in Julian’s case, these memories are often fragmented and vivid, with the traumatic experience replaying itself through sensory details and emotional responses rather than coherent recollections. This phenomenon is not unique to Julian but is shared by many individuals with PTSD, whose trauma remains trapped in the body and mind until they can confront and process it fully. Understanding this mechanism is crucial for therapists, as it underscores the need for therapeutic approaches that focus not only on verbalizing the trauma but also on creating a safe environment for the body to release the tension that comes with such distressing memories.

Memory plays a significant role in how individuals process and make sense of their past. The brain's response to trauma is often characterized by the inability to fully

integrate the traumatic event, leaving the memory in a disjointed and fragmented form. This fragmentation is particularly evident in PTSD, where the memory does not fade or become less intense with time as typical memories do. Instead, the trauma remains raw, vivid, and often dissociated from the rest of the person's life experiences. Studies, such as those conducted by pioneers like Janet, have shown that traumatic memories are not simply erased but become embedded in the nervous system, influencing how individuals react to new experiences. Integrating these fragmented memories into a coherent narrative is key to healing, as it allows individuals to recognize that the trauma is part of their past, not their present.

Furthermore, modern therapeutic practices have evolved significantly in addressing these deeply ingrained memories. Techniques like Cognitive Behavioral Therapy (CBT) and Exposure Therapy help individuals gradually confront their trauma in a safe and controlled way, enabling them to reprocess their memories and reduce their power over daily life. These therapies are not designed to erase the trauma but to allow the individual to regain control over how the memory is experienced. Through these methods, patients can work toward integrating their traumatic memories into their broader life story, reducing the emotional distress that accompanies them. This process is crucial for helping trauma survivors reclaim their lives, move forward, and ultimately heal from the invisible scars of their past.

Understanding trauma as a complex and multifaceted experience is essential for both clinicians and survivors. Trauma is not just about what happens in the moment; it is about how the mind and body react, store, and attempt to make sense of those events in the long term. As research and therapeutic techniques continue to evolve, it is clear that memory is not a passive storehouse of events but an active, dynamic process that is deeply influenced by emotional experiences. By addressing both the psychological and physiological impacts of trauma, therapy can help individuals break free from the grip of their past, fostering healing and growth. This holistic approach is key to supporting trauma survivors and empowering them to live fuller, more integrated lives.

Chapter 12: The Unbearable Heaviness of Remembering

Chapter 12 delves into the profound and complex nature of trauma and its enduring effects on the mind and body. The historical perspective on trauma has evolved over the centuries, with medical and psychological communities initially reluctant to acknowledge the depth of its impact. Not until the horrors of World War I forced the issue into the limelight did society begin to confront the long-lasting physical and psychological effects of trauma, often termed "shell shock" at the time. Despite this, the stigma surrounding mental health and the lack of proper understanding led to various dismissals and a lack of recognition for many soldiers suffering from these symptoms. The psychological scars left by the trauma of war extended far beyond the battlefield, with many veterans' struggles being ignored or misinterpreted by both medical professionals and society at large.

The treatment of trauma has progressed significantly over the years, but misconceptions and challenges continue to plague recovery. For instance, the concept of repressed memory—where individuals forget traumatic events only to recall them years later—has been both a source of controversy and a key area of study. Repressed memories, while contested in some circles, are supported by extensive research and clinical evidence showing that trauma can sometimes be suppressed in the mind only to resurface when the individual is ready or capable of confronting it. This phenomenon is not exclusive to wartime experiences but spans a range of traumatic events, including childhood abuse, natural disasters, and violent assaults. Understanding how trauma can be suppressed and later recalled helps clinicians address the complexities of trauma recovery, though the science of repressed memory continues to be debated.

For those who have experienced trauma, the journey to recovery is often filled with setbacks, confusion, and ongoing challenges. In many cases, traumatic memories are fragmented, coming back not as coherent stories but as disjointed images, sensations, and emotional reactions that the individual may not fully understand. The disorganization of traumatic memories is a hallmark of how the mind processes intense stress, and while these memories may fade or become more integrated over time, they never completely disappear. Therapy aimed at helping individuals reconstruct these memories into a coherent narrative has shown to be beneficial for many trauma survivors, yet it is not without its own set of complications. As research continues to explore the intricacies of trauma and memory, it becomes increasingly clear that the path to healing requires both patience and compassion, as each individual’s journey is unique.

Trauma not only affects the mind but also profoundly impacts the body. When a traumatic event occurs, the body often stores the emotional and physical responses, which can lead to long-term physical symptoms such as chronic pain, gastrointestinal problems, and even autoimmune conditions. These physical manifestations of trauma are not simply "in the mind" but are deeply rooted in the body's response to stress. Healing, therefore, involves not only addressing the psychological aspects of trauma but also recognizing the need for physical recovery, which might include techniques such as somatic therapy, physical therapy, and mindfulness-based practices. By treating the whole person—mind, body, and spirit—individuals can work toward full recovery, breaking free from the grip of past trauma and finding a way to live fully in the present.

In conclusion, trauma is a multifaceted experience that leaves lasting scars on both the psyche and the body. As we continue to expand our understanding of trauma, its effects, and the complex nature of memory, it is crucial to approach healing with a holistic mindset. The recovery process is not linear, nor is it without its challenges, but with the right support, therapies, and a deeper understanding of the trauma experienced, individuals can begin to reclaim their lives. Healing from trauma is about more than just surviving—it is about thriving, integrating painful memories into one’s

life story, and reclaiming the strength that has always been within.

Chapter 13: Healing from Trauma: Owning Your Self

Chapter 13: *Healing from Trauma – Owning Your Self*, focuses on the transformative journey of healing from trauma, highlighting the importance of taking ownership of your mind, body, and emotions. Trauma is not just about the horrific events themselves, but the lasting imprints they leave on the body, mind, and soul. People may find themselves grappling with a range of challenging symptoms such as anxiety, depression, self-loathing, nightmares, flashbacks, and an overall sense of being disconnected from the present moment. The crux of healing lies in reclaiming self-leadership, learning to manage overwhelming emotions, and regaining control over how we react to triggers that remind us of past traumas. The path to recovery involves not just surviving but actively choosing to live fully, engaging with the people around you and reconnecting with your deeper sense of self.

Trauma recovery begins with understanding how the emotional brain responds to traumatic events, and why these reactions persist long after the event itself. The emotional brain houses the imprints of trauma and is responsible for triggering physical sensations such as a rapid heartbeat, shallow breathing, and intense fear when reminded of past experiences. This is often seen as the body’s way of trying to keep us safe, but when these responses are activated without a real threat, they can cause distress and interfere with everyday life. While the rational brain can help us understand why we feel the way we do, it is the emotional brain that requires focused attention and healing. Restoring the balance between the two is key to self-leadership and emotional regulation. This balance allows individuals to acknowledge their feelings without becoming overwhelmed by them and to regain the ability to respond to situations with calm and clarity.

A crucial part of the healing process is learning to tolerate and regulate these intense emotions. Self-awareness is a vital tool for this, as it allows individuals to notice the sensations they are experiencing without being controlled by them. The act of "noticing" allows for a deeper connection to the body and the present moment. Through techniques such as mindfulness, somatic therapies, and bodywork, trauma survivors are encouraged to reconnect with their inner experiences. These practices help to break the cycle of hyperarousal and dissociation that can keep people stuck in a reactive state, preventing them from being fully present and engaged in life. By paying attention to the body's sensations and the emotions tied to them, individuals can gradually learn to feel safe in their own bodies again.

The journey to healing also requires confronting past trauma, but it must be done in a safe and controlled manner. Re-traumatization, or experiencing intense emotional distress when recalling traumatic memories, can hinder recovery. Therefore, it’s essential for individuals to first develop a foundation of emotional regulation and coping strategies before revisiting traumatic events. Techniques like mindfulness, breathwork, and movement can help manage these overwhelming emotions, allowing individuals to process their experiences from a place of safety. By focusing on the present and grounding themselves in the body, trauma survivors can begin to reclaim their sense of control and ownership over their experiences, both past and present.

Healing from trauma is not a one-size-fits-all journey, and different individuals may find different approaches helpful at various stages of their recovery. Practices such as yoga, tai chi, and other mindfulness-based therapies have been shown to help people heal by addressing both the body and mind. These practices work by activating the body’s natural ability to heal and regulate itself. They promote physical relaxation, improve body awareness, and reduce stress, all of which help individuals move from a state of hyperarousal or numbness to a place of balance and calm. Furthermore, the importance of building healthy, supportive relationships cannot be overstated. A strong support system, whether through family, friends, or community, provides the emotional safety needed for healing. Feeling connected to others and receiving love

and understanding is a critical aspect of trauma recovery, as it helps individuals feel grounded and reassured as they face the challenges of healing.

An integral component of trauma recovery is the process of integrating traumatic memories. Rather than trying to forget or block out these painful experiences, healing involves recontextualizing them as part of a larger life story. This is where therapeutic techniques such as Eye Movement Desensitization and Reprocessing (EMDR) and sensorimotor therapies come into play. These approaches help individuals revisit their traumatic memories, not to relive the pain, but to view the events with a greater sense of perspective and control. By processing the trauma in this way, individuals can begin to distance themselves from the emotional intensity tied to those memories, allowing them to reclaim their power over their past.

Healing is not linear, and it often involves setbacks along the way. For many, the path to recovery may require a combination of different therapeutic methods, each addressing different aspects of the trauma. It is important to recognize that recovery is not just about "fixing" the past, but also about learning to live fully in the present and taking active steps toward creating a new future. This involves reclaiming a sense of agency, self-worth, and connection with others. Trauma survivors must be gentle with themselves, allowing time for their bodies and minds to heal at their own pace. By engaging in practices that foster emotional regulation, self-awareness, and physical relaxation, individuals can gradually restore their sense of safety and self-leadership.

In conclusion, healing from trauma is a multifaceted journey that requires dedication, patience, and support. The process involves not only addressing the emotional and physical reactions tied to the past but also learning to live fully and present in the here and now. Self-awareness, mindfulness, and bodywork can help individuals regain control over their emotions, while supportive relationships and therapy provide the foundation for safe healing. As individuals work through their trauma, they can come to understand that recovery is not about erasing the past but about integrating it into a new, empowered version of themselves. Through these processes, survivors can reclaim ownership of their minds and bodies, moving forward with resilience and

strength.

Chapter 14: Language: Miracle and Tyranny

Chapter 14: *Language: Miracle and Tyranny*. This chapter focuses on the complexity of trauma and the role of language in its processing. The difficulty of articulating the effects of traumatic events highlights the limitations of traditional therapies like psychoanalysis and cognitive behavioral therapy (CBT). Many individuals, especially those recovering from trauma such as the September 11 attacks, have found more effective relief from non-verbal therapies like acupuncture, massage, yoga, and EMDR (Eye Movement Desensitization and Reprocessing), which focus on alleviating the physical aspects of trauma rather than forcing verbal expression. This shift in therapeutic preferences raises the fundamental question of how effective talking about trauma truly is for those who cannot find the words to describe their deepest pain.

Trauma, by its nature, often leaves individuals unable to express or even comprehend the magnitude of their emotions. Words fail to capture the raw, immediate experience of fear, grief, and terror; these feelings are often experienced as overwhelming images or visceral sensations, as seen with those impacted by the events of 9/11. T.E. Lawrence's reflection on war highlights this inability to fully process intense emotions: "There are pangs too sharp, griefs too deep, ecstasies too high for our finite selves to register." It is often not until trauma victims can articulate their experiences, piece by piece, that they begin to regain a sense of agency and coherence in their lives.

The silent weight of unspoken trauma can cause profound psychological and physical harm. When individuals keep their suffering hidden, whether out of fear, shame, or disbelief, they reinforce their isolation, which can perpetuate their distress. As Marion Woodman wisely noted, the neglected parts of ourselves, those parts silenced by trauma, become a "hungry animal" craving attention. For true healing to begin, the words of trauma must be spoken, not only for validation but for transformation. Naming the pain—whether through writing, speaking to others, or self-reflection—can

initiate the long process of recovery. When individuals can give voice to their suffering, it is the first step in breaking the cycle of silence and shame.

Another key element in trauma recovery is the therapeutic use of writing. Writing to oneself allows individuals to express their feelings without fear of judgment. In many cases, putting trauma into words can foster self-understanding and emotional release, as evidenced by studies led by James Pennebaker. Participants in these studies who wrote about traumatic experiences showed marked improvement in both mental and physical health, including fewer doctor visits and better immune function. Writing serves as a bridge between the mind and body, helping people reconnect with their innermost feelings and integrate them into their broader life narrative.

Trauma survivors often carry the burden of internal conflict—part of themselves wants to move forward, while another part clings to the past. Neuroscience supports the idea that trauma disrupts brain functions, particularly in areas related to emotional regulation and memory processing. Overcoming trauma requires not just reliving past events but engaging with the body’s sensations and emotional responses. Effective therapies like EMDR focus on integrating these fragmented experiences, allowing survivors to reframe traumatic memories and move beyond their emotional paralysis. This process empowers individuals to regain control over their lives, helping them transform from passive victims of their trauma to active participants in their healing journey.

For trauma victims, the journey to recovery is not just about revisiting painful memories but learning to live with and adapt to new ways of thinking and feeling. Writing, speaking, or even engaging in physical movement helps survivors reconnect with their emotional self in ways that can significantly alter their mental and physical health. By embracing language, whether spoken or written, individuals can begin to reclaim their identities and rewrite their personal stories. Trauma may have reshaped their lives, but with language, they have the power to reconstruct their narrative and heal from the wounds of the past.

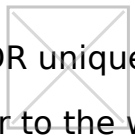
Chapter 15: Letting Go of the Past: EMDR

Chapter 15: *Letting Go of the Past: EMDR* (Eye Movement Desensitization and Reprocessing) is a therapeutic approach that helps individuals process and release trauma that continues to impact their present lives. It works by using bilateral stimulation, often through eye movements, to access traumatic memories, and encourage the brain to reframe them. The process helps to integrate these memories in a way that allows individuals to view their trauma as something that happened in the past, rather than something that controls their present.

David, a middle-aged contractor, sought therapy to manage the intense rage attacks and emotional numbness that had plagued him for years. He was haunted by a traumatic experience from when he was 23, involving a brutal assault that cost him his left eye. Despite various attempts at therapy and self-regulation, David struggled with anger, an inability to connect with others, and a constant sense of impending danger. In his second therapy session, he was introduced to EMDR. As David revisited the memory of the attack while following the therapist's finger, a cascade of emotions and sensations surfaced. He could feel the terror and pain of the moment, but after completing the session, the traumatic memory no longer held the same intensity. Over the next few sessions, David's emotional regulation improved significantly, and he began to reconnect with his family, reflecting on how the trauma had shaped his life. By the end of his therapy, David reported feeling at peace and more connected to his wife and children, experiencing a sense of inner calm and stability that had eluded him for decades.

EMDR works by helping people access and process deeply ingrained memories, often without requiring them to verbalize the specifics of their trauma. This approach is particularly useful for individuals who have been unable to process their trauma through traditional talk therapy, as it bypasses the need for conscious recollection. The

technique also encourages the brain to reframe traumatic memories as past events, rather than as ongoing threats. By allowing individuals to process the emotional and physical sensations connected to their trauma, EMDR promotes a sense of integration and resolution, which reduces the emotional charge associated with traumatic memories. For David, this meant that his long-standing rage and tension began to dissipate as he no longer felt controlled by the memories of the attack.



What makes EMDR unique is its ability to activate the brain’s natural healing processes, similar to the way the brain processes memories during REM sleep. Research has shown that REM sleep plays a crucial role in memory consolidation and emotional regulation, helping the brain make sense of traumatic experiences and integrate them into a coherent life narrative. EMDR mimics this process by stimulating the brain's bilateral systems, enabling it to process trauma in a way that allows individuals to view their past with greater perspective. This process can be especially beneficial for those suffering from PTSD, as it helps to rewire the brain’s response to traumatic memories, turning them into manageable recollections rather than overwhelming emotional triggers.

EMDR’s effectiveness in trauma recovery extends beyond the mere reduction of symptoms; it helps individuals regain a sense of agency over their lives. Through EMDR, patients like David and Kathy have learned to confront their trauma and integrate it in ways that enable them to live more fully in the present. For those who struggle with the emotional aftereffects of trauma, EMDR provides a unique opportunity for transformation—turning traumatic events into stories of the past, rather than ongoing, intrusive experiences. This shift in perspective not only alleviates emotional pain but also restores a sense of empowerment and control.

Chapter 16: Learning to Inhabit your Body: Yoga

Chapter 16: *Learning to Inhabit Your Body: Yoga*. Yoga offers more than physical benefits—it facilitates a deeper connection with our bodies and emotions, fostering a sense of inner peace and self-acceptance. When we begin to focus on the body, we activate a natural inclination toward self-care that emerges from within. This shift in attention, away from societal pressures and external standards, allows us to experience a new level of authenticity in how we care for ourselves. By practicing mindfulness and yoga, we can strengthen our connection to our bodies and reclaim our sense of wholeness. This process often starts with learning to quiet the body and mind, bringing us back to a place of comfort where healing can take root.

For individuals like Annie, who have experienced significant trauma, yoga provides a safe space to re-establish control over their bodies. Annie's journey began with deep-seated fear and anxiety, which manifested physically as muscle tension and hypervigilance. By engaging in gentle breathing exercises and yoga postures, she learned to reconnect with her body without fear, observing the sensations without judgment. This practice allowed Annie to release the emotional and physical trauma stored within her, gradually transforming her relationship with her body from one of survival to one of self-love. Over time, yoga became a pathway for her to access and heal the fragmented parts of herself that had been silenced by years of trauma.

Yoga not only helps individuals become more attuned to their bodily sensations, but it also serves as a tool for emotional regulation. The practice encourages the cultivation of mindfulness, which fosters awareness of how emotions manifest physically. By noticing these shifts in the body, individuals can learn to separate their emotions from the trauma that once overwhelmed them. This process enables them to respond to their experiences with greater self-compassion and emotional clarity, rather than with reactivity or avoidance. As Annie discovered, yoga helped her process memories and

emotions that had previously felt unmanageable, providing her with the tools to respond to life with a sense of agency and calm.

For those recovering from trauma, yoga also offers the potential to rewire the brain, particularly in areas related to emotional regulation and stress response. Research on yoga's impact on heart rate variability (HRV) has demonstrated its ability to balance the autonomic nervous system, which governs our fight-or-flight and rest-and-digest responses. Individuals with PTSD or chronic anxiety often experience an imbalance in this system, making them more prone to overreacting to stress. Yoga's focus on breath control and body awareness helps to restore equilibrium, enhancing both mental and physical resilience. Through consistent practice, individuals can retrain their bodies to respond to stress in healthier, more balanced ways, improving overall well-being and reducing the effects of trauma.

Additionally, the concept of interoception—the ability to sense and interpret bodily sensations—plays a crucial role in trauma recovery. Trauma survivors often become disconnected from their bodies as a coping mechanism, leading to a lack of awareness of their physical sensations. Yoga practice encourages individuals to slow down and tune into these sensations, fostering a deeper understanding of how emotions and physical states are interconnected. As individuals develop this awareness, they can better manage their emotional responses, creating a stronger foundation for self-regulation and healing. By learning to listen to their bodies, trauma survivors can begin to feel more present and connected to themselves, fostering a sense of safety and security that was once lost.

The benefits of yoga in trauma recovery are not limited to the physical aspects of healing. The practice also enhances emotional processing by allowing individuals to acknowledge and release pent-up emotions that have been buried for years. As seen in Annie's case, regular yoga practice can lead to breakthroughs in emotional expression, enabling individuals to articulate their feelings and experiences more freely. Over time, yoga becomes a tool for transforming not only the body but also the mind, helping individuals regain their sense of self and agency. Through the discipline

of yoga, trauma survivors learn to reclaim their bodies, heal emotional wounds, and ultimately live more fulfilling lives.

Chapter 17: Putting the Pieces Together: Self-Leadership

Chapter 17: *Putting the Pieces Together: Self-Leadership*. In life, we all experience moments where parts of ourselves seem to take over. For example, when confronted with trauma, we develop coping mechanisms that help us survive but may also fragment our sense of self. One of the key aspects of self-leadership is understanding and managing these internal parts, each with its own needs and responses. This process of integration is central to healing, especially for those who have faced significant trauma or hardship. The healing journey involves acknowledging these parts, understanding their roles, and finding ways to guide them toward a harmonious balance.

A person’s internal system is much like an organization that requires leadership to function effectively. Internal parts often emerge to protect the individual from overwhelming emotions, especially when these emotions are tied to painful experiences. Over time, these parts can become entrenched, influencing behavior and emotional responses in ways that may no longer be helpful. One of the critical goals of self-leadership is to develop the ability to observe and manage these parts with compassion and curiosity. By fostering mindfulness and self-awareness, individuals can engage with their inner selves in a more harmonious way, transforming the conflict between these parts into a cooperative internal dialogue.

To heal from trauma, it is essential to revisit and integrate these parts rather than suppress them. Parts like the inner critic, the childlike protector, or the angry adolescent are often products of past experiences, such as abuse or neglect, and have learned survival strategies that no longer serve the individual. For example, in cases of dissociative identity disorder (DID), these parts may become so fragmented that they

take on distinct personalities or roles. Understanding that these parts are not inherently negative but have protective functions allows individuals to work toward self-leadership, helping each part find its place in a healthy internal system. This process involves separating the “Self” from these parts, so that the person can lead their internal family with the wisdom and compassion needed to heal.

A crucial aspect of self-leadership is learning to address the needs of each part and ensuring that none of them dominate or sabotage the others. For instance, when working with trauma survivors, many of the defensive parts such as anger, numbness, or fear, are protecting vulnerable exiled parts from further harm. By recognizing these parts and understanding their origins, individuals can begin to dismantle the extreme beliefs and behaviors they have developed to protect themselves. This allows for a more integrated sense of self, where past trauma no longer dictates responses to current life situations. The process is not about eliminating these parts but about integrating them into a cohesive and functional whole. By doing so, individuals create an inner environment where all parts can coexist and support the person’s overall well-being.

Mindfulness plays a central role in fostering self-leadership. It allows individuals to become aware of their internal states and engage with them in a non-judgmental way. This helps prevent parts from blending into one another, allowing the "Self"—the core, undamaged part of the person—to emerge. When the Self takes the lead, it can help manage these parts and guide them towards healthier interactions. This is especially important for trauma survivors, whose parts may often be in conflict, causing emotional distress or self-sabotage. Mindful self-leadership gives individuals the ability to step back from emotional reactions and view their internal landscape with clarity, enabling them to respond to life’s challenges with greater resilience and insight.

Furthermore, the role of a compassionate observer is essential in the healing process. Whether through therapy or self-reflection, acknowledging and witnessing each part’s struggles without judgment is crucial. By offering compassion to the parts that carry trauma and pain, individuals can begin to transform their relationship with themselves.

This approach not only fosters healing but also strengthens the person’s sense of agency, helping them feel more connected to their own body, mind, and emotions. Over time, this leads to greater emotional stability and the ability to engage with life more fully, free from the constraints of past trauma.

Chapter 18: Filling in the Holes: Creating Structures

Chapter 18: *Filling in the Holes: Creating Structures*. Addressing trauma is more than just remembering the past—it involves confronting the deep voids left by feelings of neglect, fear, and abandonment. Growing up without affection, in a world where your pain went unseen, often leaves a person struggling to feel loved or wanted. The emotional scars from such experiences can distort one's sense of self-worth and agency, creating a lifelong challenge in forming a healthy identity.

Research by Judy Herman and others has demonstrated that individuals who felt unwanted or unsafe as children often struggle to fully benefit from conventional therapy. These people may possess a deep intellectual understanding of their issues, yet find it hard to engage with the emotions and memories that would allow for healing. As a psychiatrist, I witnessed firsthand how this emotional disconnect prevented some of my most committed patients from making meaningful progress in therapy. They could not access the emotional memories that could reframe their negative beliefs and feelings about themselves.

A breakthrough came when I attended a workshop led by Albert Pesso, a former dancer and the creator of PBSP (Pesso Boyden System Psychomotor Therapy). Pesso’s approach was centered around using physical movements and group interaction to help individuals reconnect with their emotions and memories. His technique involved creating "structures," physical role-playing scenarios where participants could explore and re-enact critical moments from their past. Through these structures, the protagonists could confront the emotional absence in their lives, often for the first time, and begin to fill the void with experiences of care and validation. The physicality of this approach helped the participants experience emotions in a visceral way,

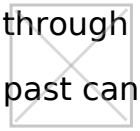
something traditional talk therapy often struggled to achieve.

This innovative approach was especially powerful when dealing with unresolved trauma. By using role play and "contact persons," participants could recreate situations where they felt neglected or unloved, and then insert idealized figures into these scenes, such as a nurturing parent or a supportive friend. This process allowed them to experience what it would have felt like if their needs had been met, giving them a new internal map of safety and care. Research on neuroimaging suggests that trauma is often imprinted on the right hemisphere of the brain, the area responsible for nonverbal communication, such as facial expressions and body language. By engaging this part of the brain, PBSP therapy facilitates a deeper, more profound healing experience than cognitive approaches alone.

Through these physical structures, individuals could also explore new forms of emotional expression and release. For instance, when one participant confronted her father’s abuse, she was able to create an idealized version of him, one who could provide care and protection. As the exercise unfolded, she not only experienced the pain of the past but also began to feel the relief of witnessing a father who was capable of love and understanding. This process helped shift her perception of herself, allowing her to internalize a more balanced and caring image of her father, which in turn improved her sense of self-worth.

The role of the therapist in these sessions is crucial—they guide participants in creating these emotional shifts by facilitating the movement of the structures and offering feedback through "witnessing." The witnessing presence provides validation and recognition of the participant's feelings, offering a safe space for deeper exploration. As the protagonist moves through their structure, they often have powerful emotional breakthroughs, experiencing a catharsis that is difficult to achieve through words alone. For many, these breakthroughs are essential for overcoming the trauma that has shaped their identity for so long.

In these types of therapy, individuals not only come to terms with the hurt of the past but also create new, empowering narratives for their futures. Just like revisiting a difficult childhood memory, these therapeutic exercises help individuals rewrite the story of their lives, giving them a sense of control and agency over their emotions. The result is not only a change in how they see themselves but a transformation in their ability to relate to others, ultimately fostering healthier, more fulfilling relationships. As we have learned through decades of psychological research, changing the emotional landscape of the past can have a profound impact on the present, allowing individuals to rewrite the script of their lives.



Psychomotor therapy offers a tangible and transformative way to reconnect with lost parts of oneself and heal from the wounds of trauma. By creating structures, individuals can relive past events in a controlled, safe space and experiment with rewriting them in a way that fulfills unmet emotional needs. This approach helps break the cycle of trauma and abandonment, offering participants a chance to rebuild their self-worth and reclaim their emotional agency.

Chapter 19: Rewiring the Brain: Neurofeedback

Chapter 19: *Rewiring the Brain: Neurofeedback*. The summer following my first year of medical school, I found myself working as a part-time research assistant in a sleep lab at Boston State Hospital. My responsibilities involved preparing and monitoring study participants while analyzing their EEG, or electroencephalogram, readings. Subjects would come in, I'd attach electrodes to their scalps and around their eyes, and set up machines to record brain activity throughout the night, all while analyzing the data and even taking time for a quick check of baseball scores on the radio. These quiet nights, spent observing the brain's electrical signals during sleep, ultimately contributed to key findings in sleep research, but also led me to question how electrical activity in the brain could provide deeper insights into psychiatric disorders.

The relationship between electrical signals in the brain and psychiatric conditions became clearer through studies in the late 20th century. Initially, much of the focus was on pharmacological treatments, but research dating back to the 1920s, when Hans Berger first recorded brain activity using EEG, showed that different mental activities produced different brain wave patterns. For example, certain brain wave frequencies appeared when individuals were solving problems, suggesting that brain activity could potentially be mapped to mental states. However, this insight didn't immediately lead to the breakthroughs scientists hoped for in understanding the neurological roots of psychiatric issues. As I navigated my own medical career, EEG results from my patients rarely helped in identifying clear patterns tied to emotional instability, and the lack of effective treatments often left me frustrated with the limitations of brain wave analysis.

This changed when I came across a 2000 study by Dr. Alexander McFarlane and his team in Adelaide, which explored the differences in brain activity between traumatized individuals and non-traumatized subjects. The study revealed that, while both groups

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

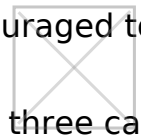
talking about feelings, stating expectations, and asking for help. Instead of yelling, “Stop!” when a child is throwing a tantrum or making her sit alone in the corner, teachers are encouraged to notice and name the child’s experience, as in “I can see how upset you are”; to give her choices, as in “Would 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

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ACKNOWLEDGMENTS

This book is the fruit of thirty years of trying to understand how people deal with, survive, and heal from traumatic experiences. Thirty years of clinical work with traumatized men, women and children; innumerable discussions with colleagues and students, and participation in the evolving science about how mind, brain, and body deal with, and recover from, overwhelming experiences.

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.

My colleagues and students at the Trauma Center have provided the feeding ground, laboratory, and support system for this work. They also have been constant reminders of the sober reality of our work for these three decades. I cannot name them all, but Joseph Spinazzola, Margaret Blaustein, Roslin Moore, Richard Jacobs, Liz Warner, Wendy D’Andrea, Jim Hopper, Fran Grossman, Alex Cook, Marla Zucker, Kevin Becker, David Emerson, Steve Gross, Dana Moore, Robert Macy, Liz Rice-Smith, Patty Levin, Nina Murray, Mark Gapen, Carrie Pekor, Debbie Korn, and Betta de Boer van der Kolk all have been critical collaborators. And of course Andy Pond and Susan Wayne of the Justice Resource Institute.

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Peter Levine, Pat Ogden, and Al Pesso read my paper on the importance of the body in traumatic stress back in 1994 and then offered to teach me about the body. I am still learning from them, and that learning has since then been expanded by yoga and meditation teachers Stephen Cope, Jon Kabat-Zinn, and Jack Kornfield.

Sebern Fisher first taught me about neurofeedback. Ed Hamlin and Larry Hirshberg later expanded that understanding. Richard Schwartz taught me internal family systems (IFS) therapy and assisted in helping to write the chapter on IFS. Kippy Dewey and Cissa Campion introduced me to theater, Tina Packer tried to teach me how to do it, and Andrew Borthwick-Leslie provided critical details.

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Licia Sky created the environment that allowed me to concentrate on writing this book; she provided invaluable feedback on each one of the chapters; she donated her artistic gifts to many illustrations; and she contributed to sections on body awareness and clinical case material. My trusty secretary, Angela Lin, took care of multiple crises and kept the ship running at full speed. Ed and Edith Schonberg often provided a shelter from the storm; Barry and Lorrie Goldensohn served as literary critics and inspiration; and my children, Hana and Nicholas, showed me that every new generation lives in a world that is radically different from the previous one, and that each life is unique—a creative act by its owner that defies explanation by genetics, environment, or culture

alone.

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

PROLOGUE

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York Times on December 28, 2004, Angell and Relman pointed out that the previous year one
drug company had spent 28 percent of its revenues (more than $6 billion) on marketing and
administrative expenses, while spending only half that on research and development; keeping 30

percent in net income was typical for the pharmaceutical industry. They concluded: “The
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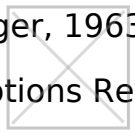

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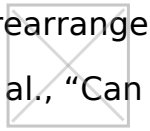
to what degree consistent and concentrated parenting of children with early histories of abuse
and neglect can rearrange biological systems.



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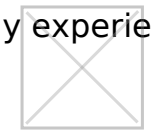
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situation and a conflict of loyalties: By disclosing the abuse, she betrays and hurts the perpetrator (who may be an adult on whom the child depends for safety and protection), but by
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CHAPTER 9: WHAT'S LOVE GOT TO DO WITH IT?

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CHAPTER 10: DEVELOPMENTAL TRAUMA: THE HIDDEN EPIDEMIC
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17. The proposed criteria for Developmental Trauma Disorder can be found in the Appendix.

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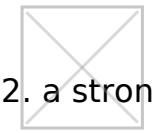
abuse doubled the chance of later developing PTSD. The chance of receiving multiple diagnoses
was 54 percent for children who suffered neglect, 60 percent for physical abuse, and 73 percent
for both sexual abuse.
24. This was a quote based on the work of Emmy Werner, who has studied 698 children born 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

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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:
Penguin, 2013), 239.
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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
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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
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shall have to speak presently of the internal causes; great and lasting importance attaches at this

period to the accidental external [Freud’s emphasis] contingencies. In the foreground we find
the effects of seduction, which treats a child as a sexual object prematurely and teaches him, in
highly emotional circumstances, how to obtain satisfaction from his genital zones, a satisfaction
which he is then usually obliged to repeat again and again by masturbation. An influence of this
kind may originate either from adults or from other children. I cannot admit that in my paper on
‘The Aetiology of Hysteria’ (1896c) I exaggerated the frequency or importance of that influence,
though I did not then know that persons who remain normal may have had the same experiences
in their childhood, and though I consequently overrated the importance of seduction in comparison with the factors of sexual constitution and development. Obviously seduction is not
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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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trauma-informed treatments discussed in this book, including yoga, sensory integration,
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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
dampens activation of the amygdala, the smoke detector. This made it harder for them to
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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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