

## Sensorimotor Approaches to Trauma Treatment

Janina Fisher Ph.D.

Research has consistently demonstrated a connection between affect dysregulation and experiences of early childhood neglect, trauma, and attachment failure (Ford et al 2005; Siegel 1999). Without autonomic regulation provided by secure attachment, the nervous system and affect-regulating brain structures fail to develop optimally (Schore 2003). Traditional therapeutic modalities address causation and access affect but do not directly alter the autonomic and somatic responses. Sensorimotor psychotherapy (Ogden et al 2006) is a body-oriented talking therapy that systematically addresses the somatic components of affect regulation without necessitating the use of touch. Its primary components of dual awareness, therapeutic attunement, and somatic-affective-cognitive reorganisation can effectively address many of the challenges inherent in the treatment of affectively-dysregulated patients.

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Traumatic events leave behind a bewildering array of cognitive, emotional and physical symptoms. In the aftermath of traumatic experiences, individuals are left with a host of easily re-activated neurobiological responses and an inadequate memory record (Van der Kolk 2002; Van der Kolk et al 1996). They report baffling, intense emotional responses without words having no apparent connection to the events which precipitated them. Uncertain of what happened and how she or he endured it, the survivor of trauma tends to interpret these re-activated somatic responses as data about identify or selfhood: “I am not safe,” “I am a marked woman,” “I am worthless and unlovable.” Over time,

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such beliefs gradually come to be reflected in the body: affecting posture, breathing, freedom to move, even heart rate and respiration.

Long after the events have ended, traumatized individuals continue to experience intense emotions of fear, shame, and rage; numbing of feelings and body sensation; loss of physical energy or agitation, and an inability to take purposeful action. Painful, negative beliefs about the self often further intensify the distressing feelings and bodily responses (van der Kolk et al 1996; Courtois & Ford 2009). As a consequence of trauma, it is also common for individuals to experience alterations in autonomic nervous system responsiveness to daily life stress and to any subtle or obvious reminder of the traumatic events. With a nervous system that does not easily recover from either heightened states of emotion or states of depression and numbing, survivors of trauma often report difficulty with affect regulation (van der Kolk 2006). Autonomically-driven emotional arousal may feel overwhelming and unmanageable, or affect may be blunted, disconnected, and numbed. Maintaining a state of calm or well-being can be challenged by heightened sensitivity to trauma-related stimuli. Patients report being driven by powerful internal forces to impulsive action, or finding themselves frozen in terror or inexplicably collapsed and passive. Non-threatening situational cues may activate sympathetic nervous system activity and fight-flight responses, while dangerous situations paradoxically elicit parasympathetic non-responsiveness and submission-compliance responses (Herman 1992). When the traumatic experiences have been chronic over many years or have occurred in the context of “enduring conditions” (Saakvitne 2002) of physical, emotional or sexual abuse

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coupled with neglect, the body and nervous system procedurally learn habitual responses adaptive in a traumatogenic environment: e.g., automatic obedience, hypervigilance, loss of sensation, heightened tolerance for pain. Because the procedural memory system (which governs the learning of habit and function) is operational at birth, prior to the capacity for declarative memory, these repetitive somatically-based responses often come to exist independent of any conscious narrative context that might account for them (Grigsby & Stevens 2001). Affect regulation is one such procedurally-learned capacity. The somatic ‘learning’ process leading to good self-regulatory ability occurs in the context of a secure attachment relationship providing a reliable source of external regulation (Schore 2003). Under conditions of neglect and trauma, with caregivers who not only fail to regulate but actively dysregulate the infant, individuals are more likely to develop autonomic tendencies toward sympathetic hyperarousal (in order to maintain hypervigilance and hyper-readiness for danger) or an autonomic propensity toward parasympathetically-mediated hypoarousal states of numb detachment and passivity (Ogden et al 2006) that facilitate “total submission” responses (Porges 2001).

The treatment of trauma-related depressive disorders, anxiety disorders, and PTSD is complicated not just as a result of autonomic and affect dysregulation but also because of the potential array of secondary symptoms that may develop as “survival resources” (Ogden et al 2006) to offer temporary autonomic regulation. These include addictive disorders, eating disorders, self-destructive behavior, and suicidality. Traditional talking therapies (including

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psychodynamic psychotherapy, psychoanalytic methods, cognitive-behavioral treatment, and exposure techniques) can effectively address the emotional, relational, and cognitive symptoms of trauma-related disorders and/or manage the secondary symptoms to ensure patient safety, but traditional psychotherapy models generally lack techniques that directly treat the autonomic and somatic effects perpetuating the psychological symptoms. It is in this arena that the use of Sensorimotor Psychotherapy can be invaluable in treating the autonomic and affective dysregulation that constitutes the “legacy of trauma.”

Developed in the 1980s by Pat Ogden, Ph.D. as a body-centered talking therapy, Sensorimotor Psychotherapy (Fisher & Ogden 2009; Ogden et al 2006) is designed to specifically address both the cognitive-emotional aspects and the bodily and autonomic symptoms of traumatic stress and attachment-related disorders without requiring the use of hands-on interventions. Consequently, it is a somatic approach easily integrated into all traditional inpatient and outpatient treatments for trauma-related disorders. Sensorimotor Psychotherapy incorporates approaches drawn from psychodynamic psychotherapy, gestalt therapy, cognitive-behavioral treatments, and the Hakomi method of body psychotherapy (Kurtz 1972). Its theoretical principles draw heavily on the work of Pierre Janet, Bessel van der Kolk, Allan Schore, Steven Porges, Onno van der Hart, Ellert Nijenhuis, Kathy Steele, and Daniel Siegel, emphasizing attention to therapeutic attunement and collaboration, modulation of autonomic arousal, and re-instatement of adaptive defensive action (Van der Kolk et al 1996; Van der Hart et al 2006). A typical session begins as would most psychotherapy sessions: with a

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client's narrative. However, rather than using narrative techniques to "talk about" the experience, to connect to affect or identify pathogenic cognitions, the Sensorimotor psychotherapist instead directs the client's focus to the procedurally-learned patterns evoked by the recollection. As the patient speaks of the traumatic event, the therapist observes his or her emotional and bodily responses to discover how these experiences have been "organised" or encoded as non-verbal, implicit memories in mind and body (Ogden et al 2006). Even when different individuals are exposed to the same traumatic event, their organisation of it will differ (Terr 1992). Each traumatized individual uniquely encodes an event or events in the form of images, smells, sounds, autonomic responses, visceral and muscular sensations, movements and impulses, emotions, and cognitive and narrative components.

Rather than focusing on the events themselves, the Sensorimotor psychotherapist works with the encoding of the event (i.e., the effects of the memory in present time), helping clients become mindful of the persistent physical, cognitive and emotional responses evoked by the narrative or by trauma-related stimuli. When the therapist focuses on helping the patient become curious about the ways in which the trauma has been encoded in mind and body, the result is two-fold. First, the emphasis on mindful curiosity is often affectively and autonomically regulating in itself. Narrative re-telling or over-learned interpretations of what happened (such as 'It was my fault') activate left hemisphere long-term memory areas, resulting in emotional and autonomic reactivity, while curiosity and mindfulness activate the medial prefrontal cortex (Davidson et al 2003), thought to be an integrative center and the part of the brain responsible for

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interoception or internal awareness. The medial prefrontal cortex has deep connections to both cortical and subcortical areas, including the amygdala, which facilitates its ability to regulate emotional and autonomic activity (van der Kolk 2006).

A significant clinical feature of Sensorimotor Psychotherapy is the emphasis on mindfulness and the fostering of dual awareness (Ogden et al 2006). The ability to maintain dual awareness in the face of post-traumatic dysregulation is necessary both for effective resolution of symptoms and for prevention of inadvertent re-traumatisation during memory work. Long after patients have reached the intellectual conclusion that they are safe in their current lives, the body's post-traumatic responses re-create an internal experience of threat (Van der Hart et al 2006).

In a mindful state that encourages observation rather than reaction, patients become more curious rather than fearful about their emerging thoughts, emotions, sense perceptions, internal body sensations, and movements. As patients 'tell the story' to the therapist, they are invited to pause and observe the interplay of thoughts, feelings, and visceral or movement responses that arise moment-to-moment in response to recalling or even 'thinking about thinking about' distressing or overwhelming events. Mindful observation takes not only practice but often education as well: the therapist may need to teach the patient how to distance from trauma-related sensations or to understand the role of autonomic activation and the body's defensive responses of fight-flight-freeze and submission. Understanding how these systems preserve physical and psychological integrity under threat and how either or both may still be driving the

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symptoms now (van der Kolk 2006) is often helpful to clients in lessening self-judgment and increasing curiosity. At the moment of threat, a cascade of neurochemicals secreted by the adrenal glands initiates a stress response: heart rate and respiration increase in preparation for fight or flight, sending oxygen to muscle tissue; and prefrontal cortical activity is inhibited to facilitate automatic instinctive animal defenses (LeDoux, 2002). However, the price we pay for engaging these ‘bottom-up’ instinctive defensive responses is loss of the ability to bear witness to the entirety of the experience. Our bodies have responded instinctively at a time when observation or reflection might have cost us precious seconds needed to survive in the face of danger. Subsequently, each time we face the same threat, a reminder of it, or a potential danger cue, the body responds with the same defensive responses that were once adaptive and effective, whether or not they are still appropriate. The effect of repeated activation of the emergency stress response system on affect tolerance and regulation predispose many traumatized individuals to chronic mental illness: chronic depression or anxiety, chronic PTSD, or borderline personality disorder.

In Sensorimotor Psychotherapy treatment, psychoeducational input is utilized to educate patients about trauma’s effect on body experience and to increase their capacity to sustain ‘dual awareness’ in the face of traumatic activation. An important priority in treatment is the restoration of the ability to self-witness without becoming overwhelmed (Ogden, Minton & Pain, 2006). In each session, patients are asked to practice observing and naming, without judgment or interpretation, any thoughts, feelings, body sensations, and movement impulses that arise as they

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are sitting with the therapist. Mindfully study of how an event was once organised somatically and emotionally is the precursor to its potential re-organisation and encoding as an event that is finally 'over,' rather than 'still happening' or 'never over.'

In the course of these observations, patients typically begin to notice patterns of response. Guided by the therapist, the patient might observe how a trauma-related body sensation immediately leads to thoughts or 'conclusions,' how the thoughts evoke emotional responses which in turn evoke body responses, how the visceral reactions lead to another negative thought, then another, resulting in increased emotional overwhelm. Through the practice of mindful observation, patients gradually develop increased ability to become aware of these inner experiences without becoming overwhelmed and to choose which sources of information to study and which to put aside for the time being. As they increase the ability to maintain greater distance from distress and to deliberately shift focus away from disturbing material until the autonomic arousal subsides, their confidence and sense of mastery are enhanced and feelings of helplessness diminished. In those moments, their relationship to the memory or event is 're-organised.' An ability to recall the event as distressing without becoming overwhelmed, to feel emotions without flooding, represents a transformation of the memory from 'here now' to 'finally over.'

In addition to increasing the patient's capacity to maintain dual awareness and thereby the capacity for states of optimal arousal, the sensorimotor therapist also teaches the use of somatic skills that prevent overwhelm, increase ability to recover from traumatic reminders, and

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restore states of calm. For example, the therapist may help a patient to notice that, each time he has the thought, ‘It was my fault,’ he experiences an emotional flooding of shame leading to a simultaneous slump in his spine, collapse in the chest, and movement of the head down and away. Having noticed the pattern, the therapist then begins a process of helping the patient to reorganise it, first by noticing it and becoming curious, then by exploring how a physical intervention (such as lengthening the spine or lifting the head) affects this habitual organization of experience. If the patient lengthens his spine and raises his head slightly, what happens? Or what happens if he exaggerates the collapse and gaze aversion? Does the fear increase or decrease? If the issue is ‘being seen,’ the therapist might offer to close his or her eyes, giving the patient control over the experience of ‘being seen.’ Can she now lift her gaze spontaneously? Or is ‘not being seen’ even more dysregulating? And if it is, then what happens if therapist and patient continue to experiment with a relational distance and gaze that re-organises the experience of ‘being seen.’ Does the novelty of sitting with a therapist whom she can see, but who cannot see her, lead to increased energy and aliveness? Is there a change in the experience of being seen?

Such interventions for increasing somatic and ego functioning are termed “somatic resources” (Ogden et al 2006). Many somatic resources, such as feeling the ground under one’s feet, placing a hand over the heart, lengthening the spine, turning toward or away, moving closer or farther, impact psychological functioning. Conversely, many psychological resources have somatic correlates: confidence is often experienced somatically as a feeling of being taller,

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physically stronger, more solid, or more flexible. Acceptance or compassion are often accompanied by a warmth in the chest, sense of opening, relaxation of the musculature. The English language includes many expressions that capture this relationship between body and psyche: 'keep your head high,' 'hang-dog,' 'having backbone,' 'weak in the knees.'

Dysregulated arousal occurs both situationally and habitually in traumatized patients, not always specifically tied to images or events, and it is easily interpreted as a sign of threat in the here-and-now environment. For the client to experience a somatic sense of safety now, the autonomic nervous system must be stabilized and the capacity for optimal arousal cultivated. Allowing patients simply to access traumatic reactions of fear, horror and helplessness is of little therapeutic benefit. In Sensorimotor Psychotherapy practice, the therapist's goal is re-organisation rather than re-experiencing. Without an observing ego or the ability to regulate these intense emotional states, many patients are unable to resolve their post-traumatic symptoms. Thus, attention to the regulation of arousal must be a key feature of any effective treatment for trauma.

In Sensorimotor Psychotherapy practice, the therapist addresses this issue by helping patients observe their trauma-related tendencies toward either hyper- or hypoarousal moment-by-moment long before they cause dysregulation. For example, a therapist might notice that, as the client begins to speak about a traumatic event, her body tightens, and her breath becomes shallow. The therapist might then 'empathically interrupt' the patient's narrative and help her to pause and take a few minutes to establish dual awareness so that she can orient away from the

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event and toward the body sensations, physical impulses or movements that have been evoked by the memory. By continually ‘tracking’ the patient’s body for signs of increasing regulation versus dysregulation, the therapist senses when to direct attention back to the relationship between narrative content and somatic or emotional responses and when to focus on ‘just what is happening in the body.’ The patient is frequently reminded to maintain a curious, observational attitude, rather than becoming frightened by the activation, and to notice the physical signs that indicate dysregulated hyper- or hypoarousal. Next, the therapist teaches the client how to make use of somatic resources, such as body posture, gesture, and movement, to regulate arousal. As patients learn to notice their habitual reactions and to practice alternative somatic interventions, notice the results, and then repeat or discard them in favor of yet another experiment, a sense of greater control is facilitated, the very experience they were denied at the time of their traumatic experiences.

These interventions, like those of the mother interactively regulating the child’s distress or dysregulation, rely for their effectiveness on the attunement of the therapist. Just as peek-a-boo provides children a way of non-verbally ‘working through’ proximity and mastery issues, enabling them to affectively tolerate separation, the mindful experiments of the sensorimotor therapist also increase regulatory ability and a somatic sense of mastery. As the ‘mindful experiments’ are practiced, patient curiosity is enhanced and shame generally mitigates. Without verbal interpretation or cognitive re-structuring, the exploration of how the body ‘supports’ and reinforces cognitive distortions leads to their gradual or spontaneous alteration and diminishes

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their effect on the affective state of the patient. Because loss of interpersonal support and disconnection is common in traumatic experience, the restoration of a sense of support and collaboration is key to treatment. In Sensorimotor Psychotherapy, the therapist functions as a neurobiological regulator for the patient whose affect and arousal are unregulated (Schore 2003), much like an adult might with a young child, experimenting to find just the right combination of voice tone, pace of speech, energy versus calm, and amount of information versus comfort and reassurance, until the client experiences a sense of greater equilibrium and support. Within the context of an attuned therapeutic relationship that promotes collaboration and engagement, somatic interventions facilitate the client's growing ability to maintain states of optimal autonomic arousal even in the face of trauma-related stimuli. If somatic interventions were employed simply as rote physical exercises, without the therapist's ability to facilitate mindful exploration of the interface between body, emotion, and cognition, therapeutic benefit would be minimal. Only within the context of attunement and collaboration can fears and phobias of the body and body sensation can be successfully overcome.

Traumatic experience often results in conditioned “over-association” or “coupling” of unrelated stimuli: for example, the stimulus of a male person might become associated with autonomic hyperarousal; increases in heart rate can become coupled with a sense of dread and the belief that something bad is going to happen. The result is that normal or even positive experiences (for example, enjoyment of being in male company or increased sympathetic tone resulting from excitement or playfulness) are experienced as threatening or bad. Utilizing

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interventions that “uncouple” traumatic memories from their intense emotional and somatic responses, Sensorimotor patients are helped to experience a sense of safety in the body even when faced with reminders of past psychological trauma. The “uncoupling” process involves learning to shift focus from the details of a memory to the way in which the body is responding during the remembering. For example, as a patient recalls being beaten by his father as a child, what is his internal experience of that event? Does the recall trigger increased arousal or body sensations? A thought or belief? Some feelings or emotions? Or impulses to move in some way? With the guidance of the therapist, he is asked to notice, “What is happening right here, right now?” One of the characteristics of trauma-related disorders is the loss of present time orientation, and Sensorimotor Psychotherapy addresses that issue by helping clients to differentiate past and present: “When you remember that experience then, what happens here and now inside you?”

Historically, psychotherapeutic treatments for trauma and attachment failure have focused on the task of creating a narrative in order to access and express the affects connected to it (Herman 1992). In a Sensorimotor treatment, the narrative is used first to understand the patient’s history and design a treatment plan and then as an entry point into the unresolved somatic and affective components of the memory. As the patient relates a traumatic experience, the therapist continues to listen attentively until signs of unresolved emotional, muscular, visceral or autonomic activity are observed. Neither insight nor understanding can replace what happens next. Thoughtful, attuned therapeutic interruption of the trauma-related automatic reactions

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allows these intense somatic experiences to be witnessed as sensations and emotions rather than a signal of danger. Through the patient's growing ability to maintain dual awareness, arousal and affect gradually come under greater control. The 'window of tolerance' (Siegel 1999) for affect and arousal increases in breadth and depth. Re-organisation of the experience (impossible during the actual event itself) enables the patient to trust the body's resources and ability to protect. Affect regulation is restored via a physical-somatic "dyadic dance" that enables the patient to gradually achieve self-regulation in the context of attunement and physical experience, the very process observed in secure attachment relationships. The patient now has a narrative that places the events in the past and a body that experiences these events as 'over.'

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### Multiple Choice Questions:

1. Which of the following is NOT a sequelae of traumatic experience?
  - a. Dysregulated autonomic arousal
  - b. Intrusive emotions and body sensations
  - c. Depression and numbing
  - d. Delusions and hallucinations
  - e. Hypervigilance
2. Development of affect regulatory abilities are dependent upon which of the following:
  - a. Secure attachment
  - b. Temperament and heredity
  - c. Socio-economic status of caregivers
  - d. Emotional maturity of parents
  - e. Cognitive enrichment
3. Sensorimotor Psychotherapy is characterized by which of the following features:
  - a. Use of touch
  - b. Catharsis-promoting techniques
  - c. Curiosity and mindfulness
  - d. Focus on traumatic events
  - e. Non-verbal approach
4. The benefits of mindfulness as a therapeutic technique result from which of the following:
  - a. Emphasis on the achievement of calm
  - b. Activation of the prefrontal cortex
  - c. Regulatory effects on amygdala activation
  - d. Effect on the transference
  - e. Opportunity to observe procedurally learned patterns

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5. Somatic resources have which of the following benefits:
  - a. Provide somatic support for psychological functioning
  - b. Increase immune system functioning
  - c. Increase muscle tone and body strength
  - d. Positively impact self-esteem
  - e. Support mindfulness

### **Declaration of Interest:**

Dr. Fisher is a faculty member of the Sensorimotor Psychotherapy Institute and is compensated by the Institute for instructing psychotherapists in the theory and practice of Sensorimotor Psychotherapy.