

# **Modulation, Mindfulness, and Movement in the Treatment of Trauma-Related Depression**

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So many clients with depression in their history complain of feeling sad, disinterested in life, unable to enjoy themselves, and challenged by normal daily activities. Sustained by a debilitating cycle of interaction between body and mind, trauma-related depression often manifests as a perpetual physiological state of low arousal, which is characterized by a lack of motivation and movement. These symptoms of depression prove difficult to treat, and therapists and clients alike may feel discouraged, perplexed, or defeated when therapeutic interventions fail to achieve the desired results again and again. In a sensorimotor approach, the use of mindfulness and movement to modulate low arousal levels may help to uplift the spirit and assist clients in fully reengaging in life.

## **PEARLS**

### ***Pearl #1. Keep Arousal in a Window of Tolerance***

The “window of tolerance” (Siegel, 1999) refers to a zone of autonomic and emotional arousal that is optimal for well-being and effective functioning. Falling between the extremes of hyper- and hypoarousal, this is a zone within which “various intensities of emotional and physiological arousal can be processed without disrupting the functioning of the system” (Siegel, 1999, p. 253). When arousal falls within this window, information received from both internal and external environments can be integrated (Figure X.1).

# The Window of Affect Tolerance

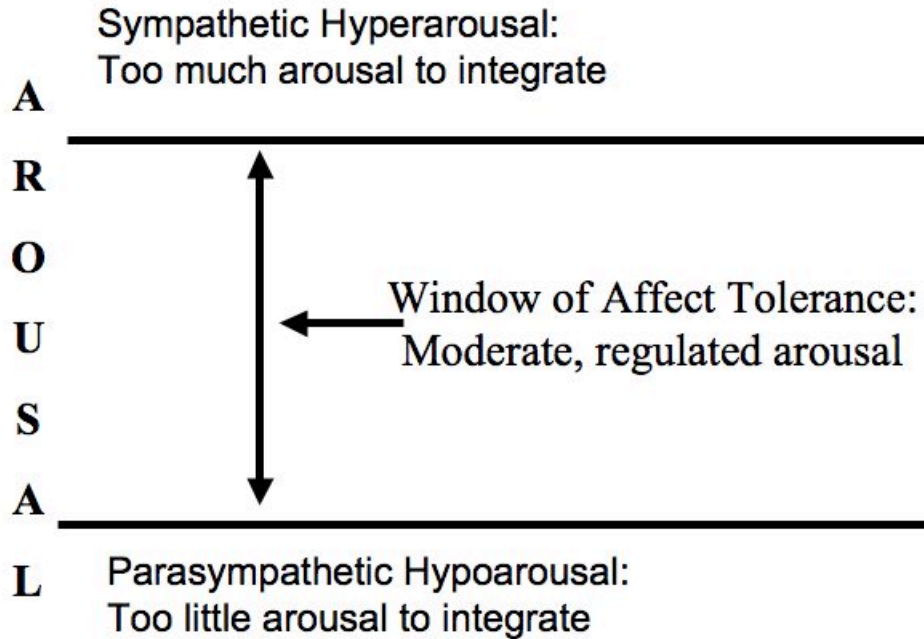


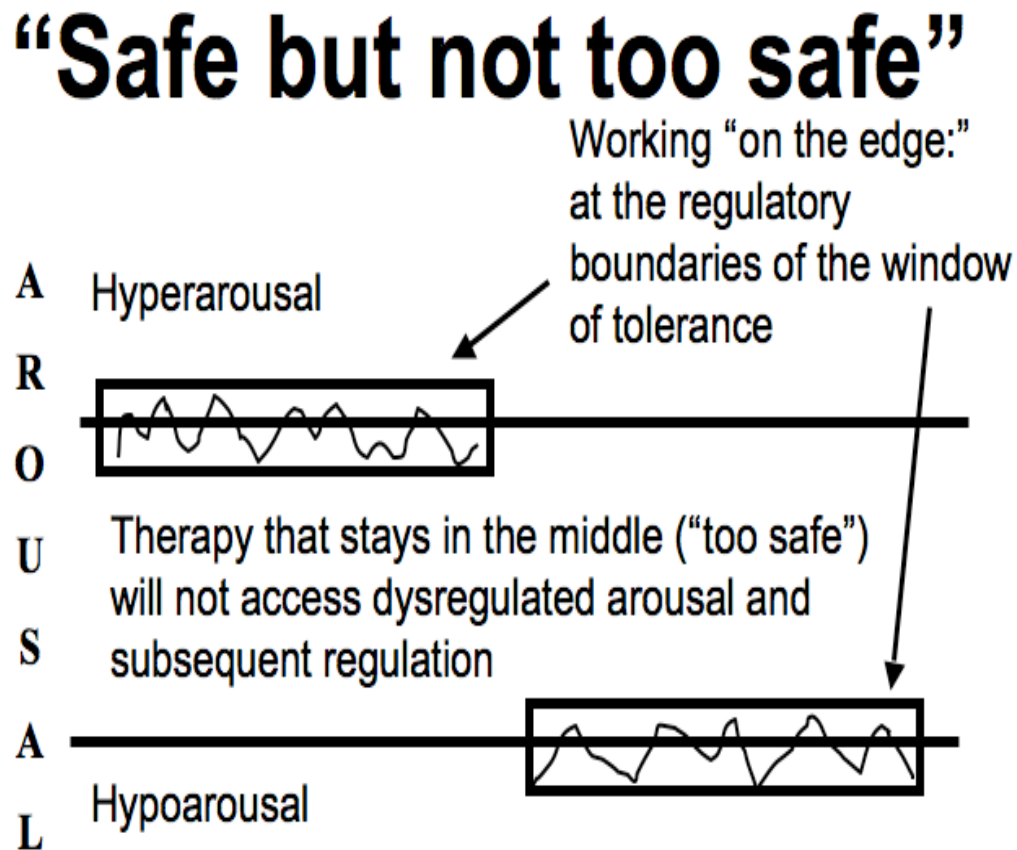
Figure X.1

Most traumatized clients experience “too much” arousal (hyperarousal), or “too little” arousal (hypoarousal), and often oscillate between these two extremes (Ogden, Minton, & Pain, 2006; Post, Weiss, Smith, Li, & McCann, 1997; van der Hart, Nijenhuis, & Steele, 2006; van der Kolk, van der Hart, & Marmar, 1996). Hyperaroused clients are typically hypervigilant and anxious, suffering from intrusive images and dysregulated emotions. Hypoaroused clients endure another kind of torment, stemming from a dearth of emotion and sensation—a numbing, a sense of deadness or emptiness, passivity, and immobilization (Bremner & Brett, 1997; Ogden, Minton, & Pain 2006; Spiegel, 1997; van der Hart, Nijenhuis, Steele, & Brown, 2004). Prolonged states of hypoarousal are thought to contribute to depressive states.

In treatment, clients must first learn to modulate dysregulated arousal so that it returns to a window of tolerance. Once arousal is thus stabilized, clients can expand their window of tolerance by working with painful traumatic memories, repressed or dissociated emotions, and new physical actions. Bromberg (2006) stated that therapy must address such difficult issues in an atmosphere

that is “safe but not too safe” in order to expand the window of tolerance. If their emotional and physiological arousal consistently remains in the middle of the window of tolerance (for example, at levels typical of low fear and anxiety states), clients will not be able to expand their capacities because they are not in contact with disturbing traumatic or affect-laden attachment issues in the here-and-now of the therapy hour. However, if arousal greatly exceeds the regulatory boundaries of the window of tolerance, experience cannot be integrated (Figure X.2).

Figure X.2

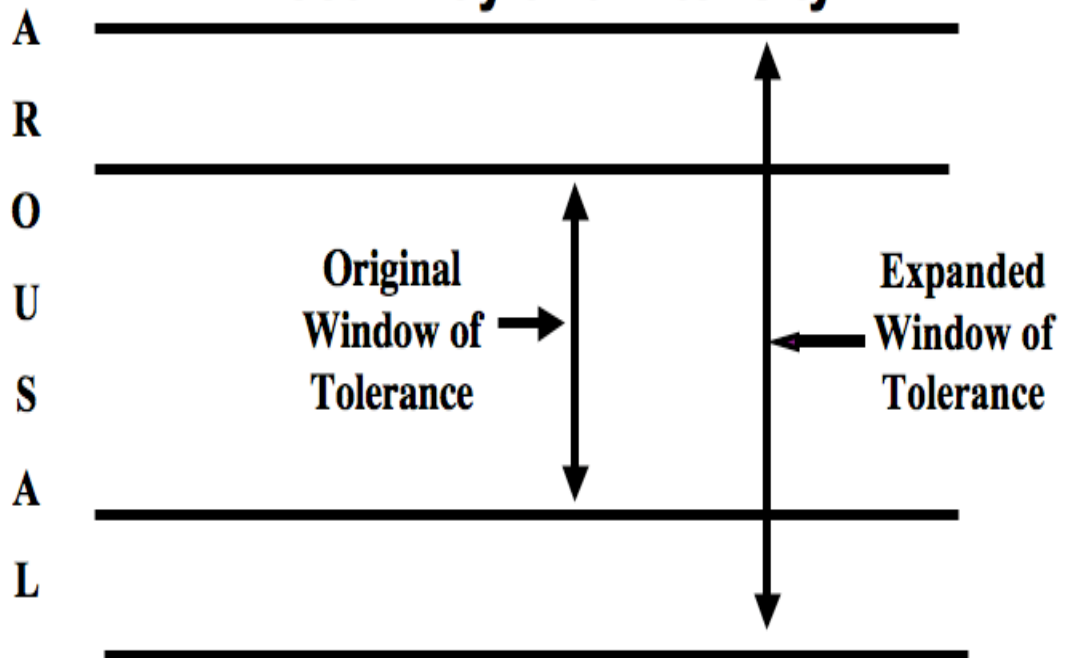


The therapist and client must continuously evaluate the client’s capacity to process at the regulatory boundaries of the window of tolerance to assure that arousal is high enough to expand the window but not so high as to sacrifice integration. Once arousal is at the regulatory boundary, it

is imperative to avoid stimulating additional emotional or physiological arousal, or execute physical actions that cause further dysregulation at the expense of integration. Addressing traumatic memories and expressing painful emotions, along with implementing new, empowering physical actions, might provide an antidote to depression and serve to expand affect array and even increase the client's capacity for positive affect (Figure X.3).

Figure X.3

## **Expand the Regulatory Boundaries of the Window of Tolerance to Integrate Previously Dissociated Emotions, Expand Affect Array and Intensity**



*Pearl #2. Challenge Procedural Memories.*

Most human behavior is driven by procedural memory, the memory for physical *processes*—the “how” rather than the “what” or “why.” Negative early attachment experiences and unresolved trauma both leave their imprint on the body’s procedural memory system, shaping the posture, gestures, and movements of the body. These physical tendencies, such as a sunken chest, limp arms, and shallow breath, reinforce chronic negative emotions and cognitive distortions and constrict affect array. Powerful determinants of current behavior, procedural tendencies are formed by repeated iterations of physical movements.

Long after environmental conditions have changed, we remain in a state of readiness to perform the procedurally learned actions that were adaptive in the past. Procedural learning is characterized by automatic, reflexive performance, becoming an even more potent influence because of its relative lack of verbal articulation, thus rendering most procedural behavior unavailable for thoughtful reflection.

In therapy, clients learn to execute new physical actions that challenge their maladaptive procedural tendencies. Replacing a slumped posture and shallow breath with an aligned, erect but relaxed posture, full breathing, and supple tonicity tends to support a positive sense of self and can alleviate depression. Learning actions of boundaries and defense, such as pushing away, can mitigate the immobilizing defenses of freezing and submission that often accompany trauma-related depression. Clients can also learn a variety of actions that engage a wide range of emotions, including positive affect. For example, adaptive anger is supported by increased alignment of the spine, a degree of physical tension, and the capacity to push away or strike out; joy by an uplifting of the spine and expansive movement; empathy by a softening of the face and chest and perhaps a gentle reaching out; play by a tilt of the head and spontaneous, rapid changes in movement. Executing these movements and experiencing the accompanying emotions can help to expand the regulatory boundaries of the window of tolerance.

***Pearl #3. Use Directed Mindfulness***

In therapy, clients are taught to mindfully observe their procedural tendencies—their movements, sensations, impulses, posture, and gestures—and to notice the interplay of these tendencies with cognitions, emotions, and perceptions. Therapist and client together “study what is going on, not as disease or something to be rid of, but in an effort to help the patient become conscious of how experience is managed and how the capacity for experience can be expanded” (Kurtz, 1990, p. 111). Through mindfulness, clients shift from being caught up in the story and upset about their reactions to becoming curious and interested in their experience. They discover the difference between “having” an experience and exploring their procedural tendencies in the here and now, days or weeks or years after the event itself.

Mindfulness is generally thought of as a state of awareness that is receptive to whatever elements of experience arise in the mind’s eye. However, when mindfulness is open-ended, clients may find themselves at the mercy of dysregulated arousal and internal experiences that appear most vividly in the forefront of consciousness. Instead of allowing clients’ attention to drift randomly toward whatever emotions, memories, or thoughts might emerge, “directed mindfulness” (Ogden 2007) interventions guide the client’s awareness toward particular elements of present-moment experience that are thought to support therapeutic goals. Directing mindfulness toward the movements, sensations, and gestures of the body makes it possible to utilize precise interventions targeted at procedural memory.

#### **CASE EXAMPLE: TINA**

A single woman in her late 30s, Tina sought therapy for a variety of reasons. She reported feeling depressed, haunted by the memories of sexual and physical abuse in her childhood, and complained that she was unable to enjoy herself. Although Tina maintained a high level of functioning in her profession as an associate professor, she stated that she felt awkward in groups, had few “real” friends, and was “not a social person.” She yearned for meaningful friendships as well as a mate.

Tina appeared depressed. Her posture was slumped, she walked into my office with a heavy and plodding gait, and she sat quite still on the sofa, head down. She was an attractive woman, with short, curly, dark hair, and a lovely peaches-and-cream complexion. Slightly overweight and dressed in baggy jeans, T-shirt, and sneakers, Tina wore no jewelry or makeup, and

her general presentation was a bit unkempt. There was visible tension across her hunched shoulders and a lack of movement throughout her body. Her speech was flat, punctuated by sighs, and lacked vitality and enthusiasm.

**Tina and I determined that we would begin with physical interventions targeted at her slumped posture** (*pearl #2: challenge procedural memories*). I suggested that positioning her legs and feet squarely under her body and aligning her spine so that her head could sit centered over her shoulders would support an ergonomic posture and might also lead to more vitality and confidence. First, I asked Tina to explore her lack of alignment by standing and slightly exaggerating her head jutting forward, tail tucked under, shoulders hunched, and spine curved. As she mindfully observed the emotions and thoughts that spontaneously emerged when she exaggerated her habitual posture, she discovered that her posture went hand in hand with feelings of inferiority, helplessness, and passivity.

I guided her to imagine being lifted upward by the crown of her head while sensing her feet firmly planted on the ground and allowing her spine to straighten and her chest to lift, thus enhancing her breathing and permitting her head to rest squarely on her shoulders. Tina reported that indeed, this new posture helped her “feel better” and raised her arousal level. Her thoughts correspondingly started to become less negative, her emotions more buoyant.

Although this “somatic resource” did not resolve Tina’s underlying depression, it did alleviate her tendency to slump and taught her a tangible skill (she called it “standing tall”) that she could use to make herself feel better. This countered her usual feeling that she was a victim of her moods. Although the new posture felt awkward initially, Tina agreed to practice it daily, and gradually it became increasingly comfortable. Tina learned to sense the physical support of her spine, taking deep, regular breaths, sensing her feet firmly on the ground, and perhaps most importantly, differentiating her experience as a dependent child (exemplified by her old posture) from her experience as a competent adult who could take positive action to modulate her excessively low arousal.

After a few months of treatment with a primary focus on developing somatic resources like the alignment described above, Tina began to discuss her desire for more ease in social situations.

Abused by her father throughout childhood, Tina said her body was always tense in childhood, and she shunned play dates with other kids. As an adult, the muscular tension remained, and although Tina desperately longed for a mate and meaningful friendships, her tension and accompanying fear were exacerbated at the thought of social contact. She said that when she thought of being with others, her first impulse was to withdraw.

I suggested that we explore what happened as Tina decreased the physical distance between us. We stood at opposite ends of the office, and Tina slowly walked toward me while mindfully noticing her physical reactions. This exercise was intended to stimulate Tina's procedural tendencies about social contact, and, indeed, she reported that the tension in her body increased as she reached a distance of about 6 feet from me. She felt a constriction of her breath and tension in her viscera, and she expressed feeling uncomfortable as the distance between us decreased. The tension, the ensuing emotional numbing, and a physical preparedness to move away from me felt "familiar." Tina said she was afraid of what I would want from her if she sought to be close to me, and she talked about being forced to submit to more contact than she wanted in relationship to her father. These realizations were accompanied by a reexperiencing of the pain and despair she had felt as a child.

**Tina's window of tolerance expanded through practicing new actions and processing these painful early experiences over many therapy sessions** (*pearl #1*). She eventually learned to consciously refrain from tightening her body when in social situations, remind herself to take a deep breath, and sense her spine. She also tried new mental actions—such as repeating to herself that she was no longer a child and that she did not have to do anything she did not want to do.

Eventually, Tina was ready to directly address memories of early sexual abuse by her father. When traumatized clients first turn their attention to traumatic memories, they typically become aware of disempowering immobilizing defenses rather than triumphant actions, and Tina was no exception. As she first talked about the abuse, she became aware of increased physical tension, but then reported that she was spacing out, feeling "nothing." **I directed her to be mindful of her body and see if there was anything that came to her attention** (*pearl #3: mindfulness through directed attention*). She noticed a slight tightening in her jaw and throat. As



she stayed with the constriction, she said she wanted to shout “stop!”—an impulse she may have had during her childhood but wisely refrained from expressing because such assertive action probably would have made her father angry. We decided that on the count of 3 we would both shout the word *stop*. Tina enjoyed this intervention, saying she felt empowered and more energetic.

In a sensorimotor approach, clients are helped to rediscover their truncated physical defensive impulses to push away, strike out, or run—actions that were not executed during the abuse. As Tina remembered a particularly disturbing abusive event, she reported a small movement of her fists, a curling that seemed indicative of a larger aggressive movement. I asked her to see what her body “wanted” to do, and Tina became aware of an impulse to strike out, and she slowly executed this motion against a pillow that I held. Being able to be mindful of how her body wanted to respond, she became aware of the previously aborted physical urge to not only punch her father but also run away, reflected in a tightening and feeling of energy in her legs. These physical impulses that she did not—could not—act upon at the time of the abuse appeared spontaneously as she directed mindful attention toward her physical sensations and impulses as she recalled the abuse. Tina again reported feeling empowered and said that her body was “coming alive.”

Later in therapy, Tina’s hands came up in a protective gesture as she remembered her father coming into her bedroom. When I asked her to notice this movement, Tina expressed being ashamed and said she wanted to curl up and hide. As she followed the impulse to curl up, she tearfully said that as a child she thought she deserved this abuse. As we processed the shame, Tina began to believe that the abuse was not her fault—she was only a little girl when it happened. With that realization, she reported a tension in her arms and a feeling of anger—contrary to her usual pattern of helplessness, shame, and fear.

In previous therapy, Tina had repeatedly expressed shame and helplessness, but her propensity to dissolve into tears contributed to her depression and feelings of being victimized and unable to take action, which prevented more adaptive emotional and physical responses such as anger and assertive action. Once she discovered her anger at what had happened and was able to execute protective physical actions such as pushing away, she reported a core feeling of empowerment and strength, reflected in an upright posture and deeper breath. The future looked

promising, Tina said. Together, we shared our deep appreciation for these gains, and Tina began to softly cry. She expressed a depth of grief at the loss of the innocent trust in her father that she had treasured as a young girl. These very powerful emotions were accompanied by another surge of arousal, challenging the regulatory boundaries of her window of tolerance. Afterward, Tina reported that that she felt a new sense of movement and overall softening in her body. The depression was beginning to lift.

Over time, Tina's wish for a mate came to the fore. I encouraged her to be mindful of her body as she felt her need for a partner, and she experienced a softening in her entire body. She said that she felt less defensive and more vulnerable as her body softened, and then said she could also feel the desire for connection in her heart. We explored sensing the desire in her heart and initiating a reaching out movement from the core of her body through her arms. Tina first said that the thought of reaching out made her uncomfortable. When she did, her arm was stiff, the movement was awkward, and her body tightened again. Tina said the gesture felt unfamiliar, and that she felt more vulnerable, again afraid of having to meet the other's needs. She became sad, and her old belief emerged again as she said: "Others will use me if I reach out." Giving way once again to strong feelings of anger and hurt about the past helped to soften Tina's aversion to intimacy as well as to relax her body.

Tina first practiced actions of reaching out merely as a physical exercise, attending only to integrating the core and periphery of her body, with no psychological content until that task was accomplished. She then practiced reaching out to me, which brought up the long-forgotten childhood longing for her mother's protection from her abusive father, and Tina again wept with grief. Naturally, these new motor actions were accompanied by new meanings: Tina began to express the conviction that perhaps it would be safe to reach out in her current life, that she knew everyone was not like her father. Eventually, she found herself spontaneously reaching out to others instead of isolating herself, which had been her tendency for so long.

Tina also verbalized her desire to be more playful. Her history of abuse precluded playfulness, which cannot develop in the shadow of threat and danger, a fact that carries debilitating and far-ranging consequences characteristic of the plight of traumatized individuals.

During the course of therapy, Tina and I practiced other movements that facilitated playfulness and lightness of spirit, such as exchanging her plodding gait for a bouncy, “head up” walk, and her hunched shoulders and rounded spine for an upright, shoulders-down posture that encouraged eye contact and engagement with others. We giggled as we together exaggerated the “bounce” and talked about what her life would be like if she sustained this playful bounce in her step. Over time, with continued practice, Tina’s new upright posture and movements became more natural, and her enjoyment of social interactions increased.

## **CONCLUDING COMMENTS**

We cannot change what happened in the past, but we can help clients change the procedural tendencies that they formed in response. I believe that therapeutic change occurs not only by formulating a narrative but also by mindfully challenging and changing procedural tendencies that sustain trauma-related dysregulation and depression. If traumatic memories largely consist of reactivated nonverbal implicit-type memories and habitual procedural responses with limited explicit-memory components, then such memories may not be transformed adequately by insight alone.

Sensorimotor interventions that directly address the movement of the body can work to process implicit-type memories, challenge procedural memory, help to regulate dysregulated autonomic arousal, and expand modulation capacities. The clients’ cognition can be engaged in mindful observation of the interplay of their perceptions, emotions, movements, sensations, impulses, and thoughts to discover procedural tendencies, and then to change them. Innate somatic regulatory capacities, or “somatic resources,” become spontaneously available or can be evoked by the therapist—resources such as taking a breath, adjusting the spine, making a movement, and orienting perceptually and physically to the environment. Through mindful attention to the body, clients become aware of the previously aborted physical impulses that they did not—could not—act upon in childhood because they would not have been effective. Clients can be helped to discover truncated movements—from defensive actions, such as pushing, kicking, or running, to actions that support relationships, such as reaching out, opening up, or letting go.

Although words are indispensable in the treatment of trauma, they cannot substitute for the meticulous observation of how clients attempted to defend themselves and the exploration of how such physical defenses were thwarted during the original traumatic event. Nor can words take the place of the thoughtful therapeutic facilitation of the client's actual experience of empowering, adaptive physical actions. I propose that the satisfaction and pleasure of finally being able to know and perform direct physical actions such as those described earlier alter the somatic sense of self in a way that talking alone does not. Knowing, feeling, and doing—and thus experiencing—these physical actions helps to reorganize the way in which clients consciously and unconsciously hold and organize their understanding of past traumas, and this may prove effective in the treatment of depression. Changing these procedural tendencies through movement changes the way clients respond in their current life and the way they envision the future.

## **BIOGRAPHY**

Pat Ogden, PhD, is a pioneer in somatic psychology and the founder/director of the Sensorimotor Psychotherapy Institute, an internationally recognized school specializing in somatic-cognitive approaches for the treatment of posttraumatic stress disorder and attachment disturbances. She is a clinician, consultant, international lecturer and trainer, cofounder of the Hakomi Institute, and faculty at the Naropa University. Ogden is the first author of the groundbreaking book *Trauma and the Body: A Sensorimotor Approach to Psychotherapy*. She is currently working on her second book, *The Body as Resource: Sensorimotor Interventions for the Treatment of Trauma*.

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