What is a “trauma”? 

"Psychological trauma is the unique individual experience of a [single] event, a series of events, or a set of enduring conditions, in which:

• The individual’s ability to integrate his or her emotional experience is overwhelmed (i.e., the ability to stay present, understand what is happening, tolerate the feelings, or comprehend the horror), or
• The individual experiences (subjectively) a threat to life, bodily integrity, or sanity.”

Saakvitne et al, 2000

What is “traumatic” depends upon our vulnerability

Because children are so dependent on their caretakers for survival and safety, many experiences are traumatic for them that might not traumatize an adult

• “Frightened and frightening” caregiving (Lyons-Ruth)
• Neglect, separation, abandonment (Perry)
• Exposure to domestic violence, witnessing violence
• “Enduring conditions of threat” (Saakvitne)
• Secondary effects of parental PTSD (Yehuda)
• Accidents, medical crises, surgery, invasive procedures
• Death of a parent or parent figure

Fisher, 2012
At first sight it seems extraordinary that events experienced so long ago should continue to operate so intensely—that their recollection should not be liable to the wearing away process to which . . . we see all memories succumb. . . . We must, however, mention another remarkable fact,. . . that these memories, unlike the memories of their lives, are not at the patient’s disposal. On the contrary, these experiences are completely absent from the patient’s memory when they are in a normal psychical state or are only present in a highly summary form. . . .

Breuer & Freud, 1893, P. 7-11

The Problem with Trauma

“Under conditions of extreme stress, there is failure of . . . memory processing, which results in an inability to integrate . . . a coherent autobiographical narrative, leaving the sensory elements of the experience unintegrated and unattached. These sensory elements are then prone to return . . . when . . . activated by current reminders.”

Van der Kolk, Hopper & Osterman, 2001

Sensory elements without words = implicit memory

• Brain scan research demonstrates that traumatic memories are encoded primarily as bodily and emotional responses without words or pictures—detached from event or words

• This research also shows a decrease in activity in parts of the brain governing declarative memory and verbal language

• Without any connection to the event available, these implicit memories do not convey “the internal sensation that something is being recalled. . . . we act, feel, and imagine without recognition of the influence of past experience on present reality.” (Siegel, 1999) Fisher, 2015
Implicit memories take many different forms

• Intrusive emotions disproportional to the stimulus: fear, anger, shame, dread
• Thoughts the predict threat or failure, as well as intrusive, contradictory, or ruminative thoughts
• Impulses: to run, to hurt the body, drink or drug, hide under the bed, avoid going out
• Somatic sensations: spinning, dizziness, pain, heaviness, floating, tingling,numbing, ‘noise’ in the head, loss of hearing or vision
• Attachment symptoms: yearning for contact, painful loneliness, and a felt sense of abandonment

“Emotional memory converts the past into an expectation of the future. . . [and] makes the worst experiences in our past persist as felt realities.”

(Ecker et al, 2012, p. 6)

Trauma survivors do not suffer from remembering. They suffer from:

• intrusive images (perceptual memory)
• physical reactivity (increased heart rate, tightening, bracing, impulses to flee or fight)
• trauma-related cognitive schemas (“It was my fault”)
• procedurally learned habits (running, dissociating, complying), and
• emotional memory (grief, rage, shame)
Healing the Body, Healing the Mind: Working with the Legacy of Trauma

Triggers and Triggering

- The human body is self-protective: it becomes sensitized to any cue indicating the possibility of danger.
- The brain becomes biased to respond to any danger signal it has known before: times of day, days of the week, times of year, gender and age, facial expression, colors, smells or sounds, weather conditions, a tone of voice or body language, touch, even our own emotions and body sensations.
- When we get triggered, we experience sudden and overwhelming feelings, sensations, and impulses that convey the sense that "I AM in danger now," not "I was in danger then." (Fisher, 2015)

"The body keeps the score"

- It is more adaptive to encode memory for dangerous events at a muscular/emotional level so we respond rapidly and instinctively to future danger cues.
- But, when trauma is "remembered" implicitly, it is not experienced as memory. These non-verbal physical and emotional memory states do not "carry with them the internal sensation that something is being recalled. . . . We act, feel, and imagine without recognition of the influence of past experience on our present reality." (Siegel, 1999) (Fisher, 2009)

‘Body memory:’ habits of action and reaction

- Procedural memory is our implicit memory system for functional learning: skills, habits, automatic behavior, conditioned responses. It comes ‘online’ at birth, long before we have language.
- Driving a car, playing an instrument, swimming, riding a bike, tying our shoelaces are all examples of procedural learning as is most social behavior: shaking hands, making eye contact, averting our gaze, shrinking back.
- Procedural learning allows us to respond instinctively based on past experience, increasing our efficiency at the cost of self-awareness.” (Fisher, 2013)
“The neural substrate for procedural learning appears to develop prior to the capacity for declarative learning. **This means [that] templates for habitual behaviors may be acquired, and the behaviors become relatively automatic and routine, before the child has an episodic memory system capable of remembering the events that produced these behaviors.** [Thus,] very young children are likely to experience a kind of learning . . . that is dissociated from the content.”

Grigsby & Stevens, 2002

---

**Trauma-related Procedural Memory**

- **Social behavior:** difficulty making eye contact, asking for or accepting help, expressing feelings in words
- **“Default settings:”** tendencies to automatic self-blame, shame, anger, shutdown, dissociation
- **Behavioral responses:** impulsive acting out, isolation and avoidance, help-seeking, inability to say ‘no,’ collapse
- **Emotional expression:** emotional disconnection, cathartic expression, overwhelming intrusive emotions
- **Interpersonal behavior:** gets too close too quickly and expects too much from others, becomes the caretaker, or avoids closeness, dependency

Fisher, 2014

---

“Trauma survivors have symptoms instead of memories.”

Harvey, 1990
The Triune Brain [McLean, 1967]

- **Mammalian Brain** or Limbic System: emotional and somatosensory memory, attachment
  - Speaks the language of emotion
- **Reptilian Brain**: Autonomic arousal, instinctive responses
  - Speaks language of sensation and impulse
- **Frontal Cortex**: Regulatory abilities, cognitive and executive functioning
  - Uses verbal language and analytical reasoning

Threat and the Brain

- **Limbic System or Emotional Brain**: perceives and reacts to threat
- **Reptilian Brain**: controls our instinctive responses and functions
- **Amygdala**: Fire Alarm and Emotional Memory Center

When caregivers offer safe, secure attachment,

- **Sympathetic Activation**
  - Optimal Arousal Zone
  - Window of Tolerance
  - We can tolerate our emotions
  - We can think AND feel

- **Parasympathetic Activation**

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When the parent is frightening, dysregulating instead of regulating,

<table>
<thead>
<tr>
<th>Sympathetic Activation</th>
<th>Children become chronically on guard, “jacked up,” impulsive, quick to fight or flee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AROUSAL</strong></td>
<td></td>
</tr>
<tr>
<td>Window of Tolerance*</td>
<td>Fails to expand</td>
</tr>
<tr>
<td>Odgen and Minton, 2000; Fisher, 2009</td>
<td></td>
</tr>
<tr>
<td>Parasympathetic Activation</td>
<td>Or they become chronically checked out, numb, disconnected, “don’t care,” just go through the motions</td>
</tr>
</tbody>
</table>

‘Affect Intolerance’ = under- or over-activity of stress response system

<table>
<thead>
<tr>
<th>Sympathetic Activation</th>
<th>Inability to tolerate intense emotion, leading to acting out, addictive behavior, violence and self-harm to discharge arousal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AROUSAL</strong></td>
<td></td>
</tr>
<tr>
<td>Optimal Arousal Zone Window of Tolerance*</td>
<td>Even a little emotion is hard to tolerate</td>
</tr>
<tr>
<td>Odgen and Minton, 2000; Fisher, 2009</td>
<td></td>
</tr>
<tr>
<td>Parasympathetic Activation</td>
<td>States of low activation become a way of life: hours spent numb and inert, disengaged or engaged without affective connection</td>
</tr>
</tbody>
</table>

Triggers and Triggering

- The human body is self-protective: it automatically reacts to any cue indicating the possibility of danger.
- The brain is biased to respond to any danger signal it has known before: times of day, days of the week, times of year, gender and age, facial expression, colors, smells or sounds, weather conditions, a tone of voice or body language, touch, even our own emotions and body sensations.
- When we are triggered, we experience sudden and overwhelming feelings, sensations, and impulses that convey, “I AM in danger—right now!” not “I was in danger then.”

Fisher, 2015
Autonomic Adaptation to a Threatening World

Hyperarousal-Related Symptoms:
- Impulsivity, risk-taking, poor judgment, racing thoughts
- Perceptual and muscular hypervigilance, post-traumatic paranoia, states of frozen terror
- Intrusive images, sensations, emotions, flashbacks and nightmares
- Self-destructive and addictive behavior

Hyperarousal

Hypoarousal

Hypoarousal-Related Symptoms:
- Flat affect, numb, feels dead or empty, "not there"
- Cognitive functioning slowed, "lazy"
- Preoccupied with shame, despair and self-loathing
- Disabled defensive responses, victim identity

Optimal Arousal Zone:
Feet can be tolerated in able to think and feel

“Long-lasting responses to trauma result not simply from the experience of fear and helplessness but from how our bodies interpret those experiences.”

Yehuda, 2004

“Assigning danger” to feelings

- “Assigning danger” = implicit memories (body sensations and feelings) are interpreted as threat cues
- Accelerated heart rate, tightness or hollow feelings in the chest, freezing, or muscle tension might be interpreted as: "I’m not safe" or "I’m trapped" or "I’m alone"
- The activation or emotion might lead to fears of a different kind of danger: "I won’t be able to function if I feel this," “I’ll be killed if I let my anger show”
- Or certain beliefs about the self may become connected to emotional reactions, such as: "I’m stupid for reacting like this," "It’s weak to cry," "No one will ever love me because I’m so defective," "It’s shameful to feel these things.”

Fisher, 2013
Still other symptoms develop as valiant attempts to cope with the dysregulation

- Self-injury and self-starvation to discharge tension somatically
- Suicidal thoughts and impulses to “control” overwhelm by combating feelings of helplessness
- High-risk behavior to activate the adrenaline response
- Re-enactment behavior to keep memories “in their place”
- Caretaking of others to combat a sense of worthlessness
- Addictive behavior to alter consciousness and to treat specific traumatic symptoms

Recovery = ‘Re-establishing ownership of body and mind’

[van der Kolk, 2015]

“This means feeling free to know what you know and feel what you feel without becoming overwhelmed, enraged, ashamed, or collapsed.”

Van der Kolk, 2015, p. 203-204

Recovery = ‘Re-establishing ownership of body and mind,” cont.

Four aspects to achieving this goal

1. “Finding a way to become calm and focused;
2. Learning to maintain that calm [despite stimuli] that remind you of the past;
3. Finding a way to be fully alive in the present and engaged with the people around you;
4. Not having to keep secrets from yourself, including secrets about the ways you have managed to survive.”

Van der Kolk, 2015, p. 203-204
Learning to Think “Bottom-Up”
[Bruce Perry, 2010]

• “The hardest parts of the brain to change are the lower levels... Cognitive processing works when there is mature cortical and limbic development but not with early neglect and trauma.” (Perry, 2010)

• This is the case because "the brain’s biological imperative is the stress response." Though repetition, strong [trauma-related] synaptic connections develop that need very infrequent re-activation to maintain them.

• Because sensory input from the environment is perceived in the lower levels of the brain, "by the time input gets to cortical levels, it’s too late." We have already reacted!

Bruce Perry’s Recipe for Trauma ‘Bottom Up’ Treatment

• To address these challenges, we need trauma treatments that are:
  • Relational (i.e., create safety in relationship)
  • Relevant (developmentally matched)
  • Repetitive (patterned)
  • Rewarding (pleasurable)
  • Rhythmic (resonant with neural patterns)
  • Respectful

• Relational does not mean what feels relational to US but what enhances the client’s feelings of safety and attunement: e.g., what does ‘relational’ mean to the client?

• Relevant: ‘talking about it’ is not always relevant to clients phobic of ‘it,’ overwhelmed, or feel ‘forced’ to tell

• Repetitive: “The ‘Goodnight Moon’ principle.” Repetition is comforting and regulating to all of us

• Rewarding: choosing interventions that feel good, e.g., interweaving humor and pain, now and then

• Rhythmic is regulating: trauma is not rhythmic

• Respectful: respecting the dysregulation, believing that symptoms represent the best possible adaptations
The ‘Negativity Bias’ [Hanson, 2014]

- Presented with negative and positive stimuli, the human brain is biased to attend to the negative. While the emotionally neutral left brain is biased toward the positive, the more emotional reactive right brain is biased toward the negative, as is the amygdala.
- Hamlin et al (2010) observed that the negativity bias is operative at ages as early as six months of age.
- “Locked and loaded dedicated circuitry” (Hanson, 2014) in the brain stimulates automatic over-reactions to normal stress via increased cortisol production, irritability in the amygdala, and emergency alarm responses. Our bodies tell us to assume the worst.

“While we are failing to install positive states, negative mental states are rapidly being converted into traits via the negativity bias. The negativity bias includes loss aversion, greater motivational focus on the negative, hyperfocussing on and/or scanning for negative stimuli, and over-reactivity to negative stimuli versus positive.”

Hanson, 2014

Transforming trauma-related responses requires curiosity and mindfulness

“Where attention goes, neural firing goes. And where neurons fire, new connections can be made.”

Siegel, 2006
Cortical inhibition must be reversed

“In order for the amygdala to respond to fear reactions, the prefrontal region has to be shut down. . . . [Treatment] of pathologic fear may require that the patient learn to increase activity in the prefrontal region so that the amygdala is less free to express fear.”

LeDoux, 2003

The Ingredients of Mindfulness

• **Awareness** or recognition of sensation, thought, emotion, movement, external stimulus (medial prefrontal cortex)
• **Detachment**: noticing it but ‘not participating’ in it or getting swept away by it (medial prefrontal cortex)
• **Labeling**: putting neutral language to what is noticed (e.g., “I’m having a thought—some emotion is coming up”)
• **Mindfulness can be directed or directionless**: following the flow of thoughts, feelings and body experience as it unfolds or deliberately focused on an aspect of experience (e.g., the breath)

Fisher, 2009

Facilitating Mindful Awareness

• **Mindfulness in therapy depends upon the therapist becoming more mindful**: slowing the pace, refraining from interpretation or direction in favor of neutral observation, helping the patient begin to focus on the flow of thoughts, feelings, & body sensations
• **Mindful attention is present moment attention**: We use “retrospective mindfulness” to bring the client into present time: “As you are talking about what happened then, what do you notice happening inside you now?”
• **Curiosity is cultivated because of its role as an entrée into mindfulness**: “Perhaps by binging and purging, you were trying to help yourself get to the wedding…”

Fisher, 2009
Distinguishing Thoughts, Feelings, and Body Sensations

In traditional talking treatments, we do not always clearly differentiate cognition, emotion, and body responses:

For example, when we say, “I feel unsafe,”

• It could reflect a cognition: “I am never safe,” “The world is not a safe place”

• It could mean an emotion: “I’m feeling frightened”

• It could mean bodily sensation: “My chest is tight; my heart is racing; it’s hard to take a breath”

• It could mean action: “I want to hurt myself”

Trauma and neglect = ineffective and exaggerated defensive responses

“When neither resistance nor escape is possible, the human system of self-defense becomes overwhelmed and disorganized. Each component of the ordinary response to danger, having lost its utility, tends to persist in an altered and exaggerated state long after the actual danger is over.”

Judith Herman, 1992

Traumatized people tend to exhibit either hyperactive or passive defensive actions or an alternation between the two.

Habitual hyperactive defense responses: habitual defensiveness, aggression against self or others, hyper-alertness, hyper-vigilance, excessive motor activity, overly rigid boundaries, uncontrollable bouts of rage, and so on.

Habitual passive defense responses: chronic patterns of submission, helplessness, inability to set boundaries, feelings of inadequacy, automatic obedience, and repetition of the victim role. The person may appear lifeless and non-expressive and may fail to defend against or orient toward danger, or even attempt to get help.

Ogden, 2002
“Post-traumatic stress is a disorder of non-recovery” [Meichenbaum]

Meichenbaum identifies three variables most highly associated with non-recovery:

• Developing a ‘self-defeating story’ to explain what happened
• Ruminating: “chewing” on that story until it feels increasingly true
• Isolating: avoiding experiences that could contradict the self-defeating story or distract the individual from ruminating

Techniques that address trauma-related implicit memories

• EMDR: Eye Movement Desensitization and Reprocessing [Shapiro]
• Sensorimotor Psychotherapy [Ogden]
• Somatic Experiencing Therapy [Levine]
• Internal Family Systems [Schwartz]
• CRM [Schwartz]
• NARM

Sensorimotor Psychotherapy

Sensorimotor Psychotherapy is a body-oriented talking therapy developed in the 1980s by Pat Ogden, Ph.D. and enriched by contributions from Alan Schore, Bessel van der Kolk, Daniel Siegel, Onno van der Hart, Ellert Nijenhuis, and Kathy Steele.

Sensorimotor work combines traditional talking therapy with body-centered interventions that directly address the somatic legacy of trauma.

By using the narrative only to evoke the trauma-related bodily experience, we attend first to resolving how the body has “remembered” the trauma

Sensorimotor Psychotherapy Institute [Ogden, 2002; Fisher, 2016]
“Small gestures and changes in breathing are at times more significant than the family tree”
(Christine Caldwell, 1997)

• Like EMDR, Sensorimotor Psychotherapy is less focused on the narrative of what happened then
• Instead, the narrative is used to evoke the nonverbal implicit memories: the autonomic responses, movements, postural changes, emotions, beliefs, etc.
• The therapist looks for patterns, for habits of response: too much or too little affect, movement or stillness, negative cognitions, patterns of gesture or movement
• We observe the client “right here, right now:” how is the client organizing internally in response to the narrative? How is the memory being expressed symptomatically?

“Non-violent” Attention to Somatic Experience

“Non-violent attention” assumes that somatic awareness can be threatening or problematic as well as helpful. Therefore, we start slowly and carefully to introduce attention to the body and observe the patient’s response:
• “When you talk about feeling scared, how does that feel inside?”
• “That’s the thought that goes with that scared feeling: what’s the visceral sensation that goes with it?”
• “What sensations tell you that you’re scared? How does your body tell you that?”

• Throughout, attention is paid to signs that the patient is becoming more, rather than less, dysregulated

• “Acting on thoughts affects body functions;
• Acting on body functions affects thoughts;
• Health is an emerging property of the [changing] relationship between the two.”

Servan Schreiber, 2005
Sensorimotor reactions to trauma

The focus of treatment becomes not the “story” of what happened but the physical movements and sensations associated with unassimilated sensorimotor reactions to trauma. We observe signs of unresolved trauma responses, such as:

- motor impulses
- muscular tension
- gestures
- gross motor movements
- heart rate
- breathing
- postural changes
- signs of autonomic arousal
- movements of the spine
- facial expression
- trembling
- micro-movements

Ogden, 2000

Tracking the Body

The therapist must learn to observe in precise detail the moment-by-moment unfolding of sensorimotor experience in the client:

Subtle changes: skin color change, dilation of the nostrils or pupils, slight tension or trembling, goose bumps, narrowing the eyes, micro-movements, etc.

Obvious changes: collapse through the spine, turn in the neck, lifting the hands, a push with an arm, or any other gross motor movement.

-Ogden & Minton 2000

“When you hear something, you will forget it.
When you see something, you will remember it.
But, not until you do something, will you understand it.”

Old Chinese proverb
Assess Autonomic Dysregulation

Hyperarousal-Related Symptoms:
- Is this client impulsive, risk-taking, or acting out? How impulsive is s/he?
- Is there a desperate desire for help? Or mistrust and hypervigilance?
- Flooding: does client report intrusive images, emotions, and sensations?
- Are there safety issues? i.e., self-destructive, aggressive, and addictive behavior

Window of Tolerance: only in this zone can clients integrate new learning/insight

Hyperarousal

Hypoarousal

Ogden and Minton (2000); Fisher, 2006
*Siegel (1999)

To resolve trauma, the Window of Tolerance must expand

Hyperarousal: over-activation creates chronic de-stabilization and desperate craving for relief

Hypoarousal: numbing, ‘deadness’ and passivity contribute to need for substance use to either shift or maintain this state

Original Window of Tolerance

Expanded Window of Tolerance

Curiosity is the quickest way to achieve an expanded window

Hyperarousal: curiosity stimulates the medial prefrontal cortex, decreasing autonomic arousal

Hypoarousal: curiosity also increases energy and focus, combating numbing and passivity

Ogden and Minton (2000)
Curiosity 1st, Intervention 2nd

- Approach crises mindfully rather than analyzing or imposing consequences: evoking curiosity, increasing self-awareness of patterns of triggering: what emotions got triggered first? What reaction was triggered next? Then what happened?
- Build curiosity: curiosity regulates autonomic arousal, lessens the need to act out, heightens focus, decreases shame
- Study the relationship between triggers and impulsive behavior: observing overwhelming feelings/impulses as “body memory,” noticing relationships between triggers, symptoms, and acting out behavior

Neuralplasticity and Trauma Treatment

- Research shows that neuralplasticity is fostered by inhibition of old responses coupled with repetition of new, more adaptive responses. Old neural pathways are replaced by new neural pathways or neuronal growth
- In Sensorimotor Psychotherapy, we focus on neuralplastic change (rather than changes in meaning-making), by asking clients to pause, inhibit their old responses, and then “notice” what’s happening right now in your body as you focus on this
- Inhibition of old responses opens up the potential for new responses: new words, postures, or movements that can be practiced repetitively until well-integrated

How EMDR and Sensorimotor Therapy Challenge Implicit Learning

- Both challenge or disrupt “talking about” the events in ordinary consciousness
- Both focus just on single framed images of the experience, not the narrative of a whole event, to elicit the implicit memories associated with it
- Both emphasize awareness of each component of experience separately: thoughts, feelings, perceptual and bodily sensation
How EMDR and Sensorimotor Therapy Challenge Implicit Learning, cont.

- Both are mindfulness-based. Focus on bilateral stimulation or on body responses help clients stay focused in a mindful, witnessing state of dual awareness and just report what is noticed in present time.
- Time is either speeded up [EMDR] or slowed down and expanded [Sensorimotor Psychotherapy].
- There is an explicit assumption that movement will happen under the right conditions: neither the therapist nor the patient has to try to make it happen. Fisher, 2004

Both facilitate neural plasticity

- "Neural plasticity refers to the ability of neurons to forge new connections, to blaze new paths through the cortex, even to assume new roles." (Schwartz & Begley, 2002, p. 15)
- Neural plasticity is fostered by inhibition of old responses coupled with repetition of new, more adaptive responses. "Attending to one sense . . . does not simply kick up the activity in that region of the brain. It also reduces activity in regions responsible for other senses." (p. 333)
- “The way an individual willfully focuses attention has systematic effects on brain function, amplifying activity in [those] brain circuits.” (p. 334) Fisher, 2009

Practicing New Responses to Triggers

- Modulation of arousal: practice the skill of "just noticing" activation as "body memory" and describing the physical details of sensation in simple words.
- Somatic resources: grounding to settle the body; orienting to combat dissociation or panic; centering to calm and soothe; sighing to decrease hyperventilation.
- Treating body sensation as somatic communication: "If that tightness in your chest had words, what would it be saying?" "What might your legs be trying to tell you?"
- Somatic problem-solving: using resourced parts of the body to decrease activation in other parts. "Notice what happens if you shift your focus from that tightness in your chest to the warmth around your heart? To your strong, straight back?" Fisher, 2013
Healing the Body, Healing the Mind

- From the moment of birth, psychological functioning is built upon our developing physiological milestones
- When babies can roll over or sit up, their psychosocial development expands: they have increased capacity to focus attention, to regulate distress, to change state
- The abilities to reach, grasp, crawl, and walk all contribute to rapid psychological maturation
- E.g., willfulness at age 2 would not be possible without the child’s ability for locomotion: to be able to move toward and away from wanted and unwanted stimuli

Healing the Body, Healing the Mind, cont.

- The English language is replete with sayings that confirm this mind/body connection: “Hold your head high,” “Get a grip,” “I have no backbone,” “Weak in the knees,” “Stiff upper lip”
- When we help traumatized clients develop new physiological responses and new patterns of action and reaction, we help them overcome trauma-related procedural learning
- EMDR, CRM, IFS, SP, SE and NARM all disrupt procedural learning, facilitating new responses

Teaching the skills to regulate arousal within the Window of Tolerance

- Interventions
  - Psychoeducation
  - Curiosity
  - Regulation
  - Mindfulness
  - Identifying triggers
  - Movement
  - Gesture
  - Lengthen spine
  - Breathing or sighing
  - Hand over heart
  - Grounding with the feet
**Experimenting with Somatic Resources for Traumatic Reactions**

<table>
<thead>
<tr>
<th>Traumatic Reactions</th>
<th>Resources:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaking, trembling</td>
<td>Slowing the pace</td>
</tr>
<tr>
<td>Numbing</td>
<td>Sighing, changing breath</td>
</tr>
<tr>
<td>Muscular hypervigilance</td>
<td>Lengthening the spine</td>
</tr>
<tr>
<td>Accelerated heart rate</td>
<td>Hand over the heart</td>
</tr>
<tr>
<td>Collapse</td>
<td>Grounding with the feet</td>
</tr>
<tr>
<td>Impulses to hurt the body</td>
<td>Clenching/relaxing</td>
</tr>
<tr>
<td>Numbing, disconnection</td>
<td>Movement</td>
</tr>
</tbody>
</table>

— Somersove Psychotherapy Institute, Ogden, 2000

“[The therapist must act as an auxiliary cortex] and affect regulator of the patient’s dysregulated states in order to provide a growth-facilitating environment for the patient’s immature affect-regulating structures.”

Schore, 2001

**Being a neurobiological regulator**

- Being a neurobiological regulator requires that the therapist be attuned simultaneously to both the regulating and dysregulating effects of the therapeutic relationship and, like a “good enough” mother, strive to create an optimal level of arousal in the moment and from moment to moment.
- Effective neurobiological regulating on the part of therapists requires paying more attention to how we are affecting autonomic arousal than we pay to the content of the patient’s communication and with how to maintain an optimal level of arousal in the room.

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Social engagement is a prerequisite for co-regulation

- The social engagement system as described by Steven Porges is a neurobiological system that relies upon the “muscles that give expression to our faces, allow us to gesture with our heads, put intonation into our voices, direct our gaze, and permit us to distinguish human voices from background sounds.” (Porges, 2004, p. 21)
- The social engagement system is naturally engaged when human beings feel safe, and it goes offline when we are not.
- Neglect and trauma interfere with social engagement: blunted affect, frozen facial expressions, monotone speech alert us to its absence in our clients

Ogden, 2004; Fisher, 2015

Making use of social engagement

- Maximizing positive affect’ requires using the “social engagement system” as we instinctively do with children. As the client describes events, feelings, reactions, the therapist makes use of the physiological components of social engagement: gaze, facial expression, body language, turning and tilting of the head, the larynx for vocal tone.
- “Tracking” the client’s moment-to-moment somatic reactions and adjusting the quality of our social engagement accordingly brings us into ‘synch’ with the client. Like a parent, our only goal must become dyadic dancing with the client, capitalizing on whatever creates a positive moment or avoids dysregulation

Fisher, 2014

“Not only is the therapist . . . unconsciously influenced by a series of slight and, in some cases, subliminal signals, so also is the patient. Details of the therapist’s posture, gaze, tone of voice, even respiration, are [unconsciously] recorded and processed. A sophisticated therapist may use this processing in a beneficial way, potentiating a change in the patient’s state without, or in addition to, the use of words.”

Meares, 2005, p. 124
Experiment with the impact of different styles of communicating

• Vary your voice tone and pace of speech: soft and slow, hypnotic tone, casual tone, strong and energetic tone, playful tone
• Experiment with facial expression: does the client respond differently to calm vs. warm, expressive, or playful expressions?
• Change energy level: very “there,” energetic vs. quiet, calm
• Does the client respond better to empathy or to challenge? Better to playfulness or seriousness?
• Amount of information provided: does s/he do better with more explanation? Or does information cause overwhelm or spacing out?
• Experiment with proximity: is the client more comfortable with distance, closeness, or neither?

“Leavening” Distress States with Positive States

“The primary therapeutic attitude [that needs to be] demonstrated [by the therapist] throughout a session is one of:

P = playfulness
A = acceptance
C = curiosity
E = empathy

“Playful interactions, focused on positive affective experiences, are never forgotten. . . Shame is always met with empathy, followed by curiosity. . . All communication is ‘embodied’ within the nonverbal. . . All resistance is met with [playfulness, acceptance, curiosity, and empathy], rather than being confronted.”

Hughes, 2006
Principles of Trauma Treatment

• "The symptoms tell the story better than the story" that the client recalls
• "Slower is faster"
• If it isn’t working, we’ve given the client “too much.” Make the intervention smaller
• Simplicity is the key to complexity
• Repetition facilitates new patterns
• Remember! "The goal of trauma treatment, no matter what modality we employ, is to be ‘here’ instead of ‘there.’"  
  (van der Kolk, 2002) 
  Fisher, 2009

“[Successful treatment of traumatic memory] consists of helping patients to overcome the traumatic imprints that dominate their lives: the sensations, emotions, and actions that are not relevant to the demands of the present but are triggered by current events that keep reactivating old, trauma-based states of mind.”

van der Kolk, 1996

Sensorimotor Psychotherapy for the Treatment of Trauma

Training in Belfast begins September 2018.
Training in Dublin begins in March 2019

For information and registration, go to www.sensorimotor.org or email studentservices@sensorimotor.org

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