Acute Crisis and Trauma Prevention: Strategies for Self Regulation (SSR)

The Community Response Network
A Project of ICMHHR.org, 501(c)3

Saturday, February 16, 2013
Learning Objectives

1. Reviewing key concepts in interpersonal neurobiology as it relates to trauma and perceived threat.

2. Understanding the importance of practicing internal self-awareness in acute crisis and its aftermath.

3. Learning the SSR model - a paradigm shift in acute crisis trauma prevention.
Preface

To work most skillfully in the field of trauma today requires understanding a new paradigm of mind/body/brain and to open to a “first-person” methodology.
Acute Crisis and Trauma Prevention

Part I: SSR Theoretical Framework
Part II: SSR Clinical Implementation
Part I: SSR Theoretical Framework

The Neurobiology of Trauma
The Brain’s Emergency Circuitry
The Optimal Window of Arousal
Neural Integration
The Attachment Stance
The Neurobiology of Trauma
Neurogenesis allows for the growth of new neural circuitry enabling learning and the capacity for healthy child development. The active growth of neural circuitry continues to the early twenties but new neural pathways grow throughout life.
A child’s brain is *experience dependent* and extremely vulnerable to the impact of acute or prolonged negative stress.

We “grow” our capacity to self-regulate, depending almost entirely upon our environment to provide soothing and the ability to learn self-soothing.
The Brain’s Emergency Circuitry
Normal Response to the Threat

Perception of Threat

→ Limbic System

→ Amygdala/Hypothalamus Activation

Sympathetic Nervous System (SNS)

→ Adrenal Glands

→ Mobilization for Fight/Flight

Pituitary Gland

ACTH

→ Cortisol

→ Regulates Alarm Reaction

Graphic adapted from *The Body Remembers: The Psychophysiology of Trauma and Trauma Treatment*, Babette Rothschild, Norton & Co, 2000
Post Traumatic Stress Response

Perception of Threat

Limbic System

Amygdala/Hypothalamus Activation

Sympathetic Nervous System (SNS)

Adrenal Glands

Mobilization for Fight/Flight

Mobilization Persists

Trauma Symptoms

Pituitary Gland

ACTH

Cortisol

Dysregulates Alarm Reaction

Graphic adapted from The Body Remembers: The Psychophysiology of Trauma and Trauma Treatment, Babette Rothschild, Norton & Co, 2000
A New Paradigm

Trauma symptoms are NOT caused by the event itself.

Trauma occurs when arousal overwhelms the capacity to “down-regulate,” leaving a child or an adult unable to calm themselves or without a good enough calming environment.

Trauma is expressed by subtle or dramatic symptoms of dysregulation.
“Traumatic symptoms are not caused by the triggering event itself. They stem from the frozen residue of energy that has not been resolved and discharged; this residue remains trapped in the nervous system where it can wreak havoc on our bodies and spirits.”

~ Peter Levine, 1997
Symptoms of Trauma
Dysregulation

Hyper-arousal

intense emotional reactivity, panic, sleep disturbance, increased heart rate, chronic stress, racing thoughts, excessive worry, agitation, muscle, chest and gastro-intestinal tension and tightening, difficulty with pro-social behavior such as empathy, compassion, cooperation and compassion
Symptoms of Trauma
Dysregulation

Hypo-arousal

dissociation, daydreaming, distractibility and inattentiveness, a blank stare, easily and frequently stressed, living in an imaginary world, slowed response, freeze, fatigue, cognitive and emotional numbing, shut down, feelings of helplessness and hopelessness, difficulty with pro-social behavior
• Children who are left with chronically and/or acutely unresolved arousal can develop trauma symptoms over time

• a narrowed window of tolerance
• diminished response flexibility
• compromised ability to self-regulate
• limitations in the development of pro-social behavior
• **Self Regulation**- the ability to manage our internal level of arousal and emotion, making it possible to make more adaptive choices about our behavior
Self-Regulation enables the capacity

• To know and manage our emotions
• To bear an immediate stimulus without experiencing overwhelm or avoidance
• To recognize emotions in others
• To self soothe, returning to calmness
• To reflect and respond adaptively
• To make use of these abilities in attachment relationships
The Optimal Arousal Zone
The Optimal Arousal Zone

- **Arousal** is physiological activation experienced as sensation in the body.

- The optimal arousal zone is a “window of tolerance” referring to the range of emotional and physiological activation an individual can tolerate without becoming dysregulated.
Optimal Arousal Zone

Arousal capacity

Hyperarousal
Optimal arousal zone
Freezing/numbing

Bi-phasic Trauma Response (Problematic)
Trauma occurs when *self-regulatory processes* are compromised and it is not possible to stay within an optimal arousal zone.

At the center of all self-regulatory processes is neural integration.
Neural Integration
Neural Integration

• the process by which one part of the brain communicates with another

• the flexible oscillation of neural circuitry that enables all parts of the brain to function as a “whole

• characterized structurally by a strong mid-prefrontal cortex and lengthened dendrites enabling the transfer of energy and information
Neural integration emerges from a complex system of interrelated neurobiological processes that make the regulation of arousal in the mind/body/brain possible.
Characteristics of Healthy Neural Integration
Characteristics of Healthy Neural Integration

• Regulation of the body’s physical reactions
Characteristics of Healthy Neural Integration

• Regulation of the body’s physical reactions
• Regulation of emotion
Characteristics of Healthy Neural Integration

- Regulation of the body’s physical reactions
- Regulation of emotion
- Emotionally attuned interpersonal communication with others (often involving eye contact)
Characteristics of Healthy Neural Integration

- Regulation of the body’s physical reactions
- Regulation of emotion
- Emotionally attuned interpersonal communication with others (often involving eye contact)
- Response flexibility- re-balancing attention to take in new information, capacity to shift foreground to background (sitting with the unknown)
Characteristics of Healthy Neural Integration

- Regulation of the body’s physical reactions
- Regulation of emotion
- Emotionally attuned interpersonal communication with others (often involving eye contact)
- Response flexibility - re-balancing attention to take in new information, capacity to shift foreground to background (sitting with the unknown)
- Internal self awareness - noticing sensations, arousal, images, feelings and thoughts (meta-cognitive processing, mindfulness, mentalization)
Characteristics of Healthy Neural Integration

• Regulation of the body’s physical reactions
• Regulation of emotion
• Emotionally attuned interpersonal communication with others (often involving eye contact)
• Response flexibility - re-balancing attention to take in new information, capacity to shift foreground to background (sitting with the unknown)
• Internal self awareness - noticing sensations, arousal, images, feelings and thoughts (meta-cognitive processing, mindfulness, mentalization)
• Coherency of the autobiographical narrative
Characteristics of Healthy Neural Integration

• Regulation of the body’s physical reactions
• Regulation of emotion
• Emotionally attuned interpersonal communication with others (often involving eye contact)
• Response flexibility - re-balancing attention to take in new information, capacity to shift foreground to background (sitting with the unknown)
• Internal self awareness - noticing sensations, arousal, images, feelings and thoughts (meta-cognitive processing, mindfulness, mentalization)
• Coherency of the autobiographical narrative
• Morality - pro-social behavior
Neural integration makes secure attachment possible. Secure attachment makes neural integration possible.
The Attachment Stance
The attachment stance is at the heart of the therapeutic relationship characterized by calm, reliable, and emotionally responsive interaction—

strengthening the capacity for self-regulation

stabilizing the nervous system in the face of a traumatic event
The capacity for **self-regulation** evolves within the neuro-developmental context of **dyadic attachment**; the felt sense of having been held within the heart and mind of a loving, attuned and competent other.

In this way the developing child “borrows” the nervous system of the care giver as an insulation barrier against a traumatic event.
Relational attunement is an implicit right brain-to-right brain communication involving responsive signals of comfort, distress or resonance.

Relational attunement includes attention to the language of non-verbal communication.
Relational attunement is expressed and experienced non-verbally through visual and auditory signals indicating levels of arousal.

- posture
- gesture
- eye contact
- tone and volume of voice
- micro facial expressions
- speech rhythm and rate
- body movement
- timing, intensity and voice modulation
The emotional regulatory activity of one person’s nervous system affects the emotional regulatory system of another’s. The arousal, thoughts, emotions, and actions of one individual can affect the internal regulation of another.

~ Diana Fosha, 2003
“Born with limited capacities for self regulation, human infants are dependent on...the interactive affect regulation of their primary attachment figures to maintain their arousal within the optimal window of tolerance”

~Ogden, Minton, & Pain, 2006
With the attachment stance we shift the focus from caring to calming.

~Tollison, Synatschk and Logan (2011)
Calm Creates Calm

The presence of a safe, caring, calm other increases oxytocin, which creates a calming effect and “down regulates” amygdala circuitry.

~Taylor et al, 2008
The #1 predictor of a child’s wellbeing is you.

~ Daniel Siegel, MD
Part II: Clinical Implementation
Part II: Clinical Implementation

Theoretical Framework
Crisis Response Fundamentals
The SSR Model
Arousal Assessment
Trauma Prevention in the Classroom
Individual and Small Group Intervention
Small Group Demonstration
SSR Theoretical Framework

• A new paradigm- unresolved trauma is about the nervous system NOT the event

• The caregiver must put his/ her oxygen mask on first

• We teach grounding and mindful awareness to track sensation, regulating physiological arousal

• When arousal is in an optimal window, a safe action plan can be created
Crisis Relief Response Fundamentals

• We begin with ourselves
• We cultivate a culture of calm and remember “calm creates calm”
• We focus on the present, what we currently and factually know about what is occurring
• We do not probe for memories or recounting of the traumatic event
• We assess and strengthen an individual or groups’ capacity for self-regulation
The SSR Model- We Begin with Ourselves

**Grounding**- The practice of connecting to the ground and to our somatic experience in the moment.

**Mindful awareness**- The practice of non-judgmentally gathering attention to the breath in the moment then observing, labeling and staying.

**Tracking sensation**- The practice of bringing attention and increasing awareness to one’s own moment-to-moment sensory experience and current state of arousal.
The Language of Sensation

pressure, vibrating, twitchy, warmth, dizzy, excited, faint, tired, energetic, dull, numb, shaky, pounding, shivery, tense, racing heart, calm, itchy, jitters, frozen, paralyzed, heavy, tight, gut feeling, pulsing, chills, tingling, buzzy, goosebumps, trembling, burning, prickly, shudder, paralyzed, sweaty, spinning, throb.
**Sensations** are internal physiological activations not associated with thought which precede emotion.

**Emotions** are internal physiological activations associated with thought.

Dysregulated *arousal* leads to escalated *emotion*.
By becoming familiar with sensations, and noticing how sensations change, we can identify our first signals of dysregulated arousal.

We can discover that returning to calm is possible and we can intervene on escalating emotion and behavior.
Arousal Assessment

- Listen and watch for signs of arousal in the moment with individual or group.

- Scale calm (1 the least calm and 10 the most calm).

- Separate those with more intense exposure from those with minimal exposure.
Trauma Prevention in the Classroom

- Remember calm creates calm
- Ground ourselves first and re-regulate as needed
- Accurately state what has occurred while avoiding graphic details
- Teach the importance of paying attention to internal self awareness under stress
- Normalize responses
- Teach grounding skills to calm “emergency arousal energy”
- Re-orient to the present and immediate next steps
- Keep an eye out for trauma symptoms over time
Individual and Small Group Intervention

• Keep in mind, we are addressing arousal.

• We begin with our own calm, taking an attachment stance.

• Create a safe container, gently avoid details of event, and explain the usefulness of the grounding skill.

• Inquire about physical sensations.

• Normalize responses.
• Depending on developmental level or urgency teach part of the SSR model or all three skills.

• Remember it is the arousal we are addressing.

• Encourage students to practice calming and to identify it as their own internal resource.

• After students are calm and can reliably re-regulate, help them make sense of their experience.
Small Group Demonstration
Questions?

Comments?

Discoveries?
References


