Student: “What is the best way to work with an unmotivated client?”

Dr. B.: (Thinks for a minute) “I wouldn’t know, I’ve never worked with an unmotivated client.”

Students: Laughter: “No, seriously, what do you do when you have an unmotivated client?”

Dr. B.: “Every client I’ve ever worked with has been highly motivated. Unfortunately, many of them have been highly motivated to stay the same!”

If asked that same question today I would say …

“Unfortunately, many of them have been hardwired to stay the same!”

If you are traumatized, you are motivated/hardwired to seek safety!

If you are traumatized, you are motivated/hardwired to seek safety!
AUTOBIOGRAPHICAL MEMORIES ARE NOT PRECISE REFLECTIONS, THEY ARE STORIES WE TELL TO CONVEY OUR PERSONAL TAKE ON OUR EXPERIENCE!

VAN DER KOLK, 2014
In dissociation, there is interference with proper information processing and storage of information in narrative (Semantic) Memory.

“Speechless terror” when words fail to describe the situation.

Semantic memory is social and adapted to the needs of both the narrator and the listener.

Semantic memory is what we agree is fact, associated with the event!

It can be expanded or contracted, according to social demands.

Van der Kolk, 1996
• **Declarative Memory** – *explicit memory* referring to *intentional or conscious awareness* of facts or events that have happened to the individual
  - Episodic Memory – *(Opinion)* recall of subjective events in one’s life
  - Semantic Memory – *(Facts, knowledge)* – recall of objective facts and other non-personal information

• **Event Memory** *(Trauma Memory)* – subcortical mechanism of emotional learning that bypasses the cerebral cortex
  - Generally experienced as intense emotion or fragments of sensory information

• **Nondeclarative Memory** – *implicit memory* referring to *unconscious memories* of skills and habits, emotional responses, reflexive actions, and classically-conditioned responses.
  - Procedural Memory – learned from prior experience. Lack ability to utilize new existing knowledge, given unconscious nature of the memory.

Research indicates we spend 80% to 90% of our awake time in this memory system.
Involves a relatively slow learning process, that is very resistant to change.

- With repetition, performance of procedurally learned processes become increasingly automatic. So automatic that they become dissociated from conscious or declarative knowledge (i.e., unconscious).

- Examples include motor, cognitive, or perceptual skills, defense mechanisms, or behavioral routines that become automatic with repetition.

During the 1st few years of life, personality development is more influenced by procedural learning than by episodic or semantic memory.

- See Polyvagal/Triune Autonomic Nervous System Slide on neuroscience of attachment.

Character, a product of procedural learning system, when we engage constantly, repeatedly, automatically and nonconsciously.

- It is independent of the Hippocampal declarative memory systems, so over time, we tend to forget where we learned the process and schema become independent of original learning!
We think that we are aware and conscious most of the time.

The reality is that we spend 80% of our time in our unconscious mind.

This is what makes change go hard to make.

If we don’t become aware of the unconscious drivers of our defenses, irrational thoughts, emotional and biological reactivity, then we will have the desire to change, but not have access to the tools needed to change!
UNDERSTANDING TRAUMA MEMORY, (VAN DER KOLK, 1996)

**Thalamus**
- Auditory
- Olfactory
- Kinesthetic
- Gustatory
- Visual

**Pre-Frontal Cortex**
- Online/Available

**Hippocampus**
- Integration & Planning
- Spatial memory shift from short-to long-term
- Fit information into existing cognitive schema

**Processing memory and Emotional Reactions**

**Non-Traumatic Memory Integration**

**Amygdala**
- Low Threat

**Information filed in memory database**
- Available for autobiographical memory
- Top-down Memory – Experienced in context (past, near-past, etc.)
EFFECT OF EMOTIONAL AROUSAL ON DECLARATIVE (SEMANTIC) MEMORY, (VAN DER KOLK, 1996)

Thalamus

Auditory
Olfactory
Kinesthetic
Gustatory
Visual

Sensory, subjective experience of living.

Pre-Frontal Cortex
Offline/Unavailable

Extreme Stress interferes with hippocampal functioning, memories based on fragments of information! Broca's Area is off-line (language center) No language = No narrative memory

Hippocampus

Spatial Memory
Shift from Short to Long Term
Fit information into existing cognitive Schema

Information NOT filed in memory database
Experience memories as sensory triggers
Bottom-Up Memory – experienced as present

Auditory, Olfactory, Kinesthetic, Gustatory, Visual

Processing memory and Emotional Reactions

Thalamus & the Autonomic Nervous System

Triggers & the Autonomic Nervous System (Halsey®5 3006)

Hypothalamus

Amygdala
High Threat Fear-Terror

Extreme Stress interferes with hippocampal functioning, memories based on fragments of information!

Threat → Event → Semantic → Procedural → Time

Fight/Flight/Freeze

Hippocampus

Spatial Memory
Shift from Short to Long Term
Fit information into existing cognitive Schema

Thalamus
Cortisol is a stress hormone that is released when the individual experiences threat/stress and the HPA Axis is stimulated.
- It is a Steroidal Hormone - Glucocorticoid
- Cortisol vital in maintaining biological homeostasis to chronic stress.
- Lower Cortisol levels following traumatic event is associated with increased risk for PTSD
- Gender differences:
  - Men experience increased cortisol levels following experience of trauma memories.
    - May stimulate avoidance & increased Fight/Flight in men, which may mediate PTSD development.
  - Women’s cortisol levels stayed the same following experience of trauma memories.
- May also be associated with differences in how testosterone & estrogen interact with Oxytocin, which is also released during stress response.
State 0: (zero): calm, responsive, awake

State 1: slightly anxious, annoyed, nervous, physical tension

State 2: highly anxious, angry, panic symptoms, intense physical tension (stomach, chest, breathing), powerful fight or flight responses

State 3: Dual activated (a mixture of activation with dissociative symptoms): tension with somatic collapse, anxiety, sleepy, panic, hopelessness, heaviness, blurred vision

State 4: pure dissociation marked by a distinct lack of physical sensation and flat affect, numbed out, blank, feeling ‘floaty’, depersonalized, and disconnected
TRAUMA & THE AUTONOMIC NERVOUS SYSTEM
(WOLTERSTORFF, 2009)

Activation of Autonomic Nervous System

- Sympathetic NS
- Parasympathetic NS

Perceived Level of Threat

- Relaxed & Alert
- Stressed
- Strongly Stressed
- Overwhelmed

Dual Activation of Sympathetic & Parasympathetic NS

Body sensations

- Sounds
- Songs
- Backfire
- Guilt/Shame
- Powerlessness

Images
- Colors
- Smells
- Anxiety
- Anger
- Fear

That anger, disappointment, frustration, impatience look on another person’s face!

Parasympathetic NS Dissociative State

Severely Traumatized

That anger, disappointment, frustration, impatience look on another person’s face!
Rather than poor integration of trauma memories, some experience an enhanced integration of trauma memories.

Events that are rare, surprising and intensely emotional lead to highly accessible memories.

Because memories are highly accessible, may overestimate the frequency of such disturbing events.

Also overestimate the likelihood that such events will happen in the future.

Trauma becomes “anchoring event” or “turning Points in a life story” – a lasting reminder of the way that things are!

Become reference point for interpretation of other events - may lead to perception that even neutral current events are similar to traumatic event.
ENHANCED INTEGRATION OF TRAUMA MEMORIES: TRAUMA AS A KEY ASPECT OF IDENTITY (BERNTSEN & RUBIN, 2006)

- Feel increased, persistent threat and startle response in objectively safe situations.
- May cause symptoms of intrusion, avoidance, arousal
- May result in the individual ignoring life events that defy the trauma experience, minimize the positive events of the past and make the person overly preoccupied with the trauma.
- Social role of being a trauma victim, or trauma survivor, is likely to become salient in individual’s conception of self. Trauma becomes major component of personal identity.
HEALING TRAUMA – TRI-PHASIC MODEL OF TRAUMA RECOVERY (HERMAN, 1992)

- **Safety** – Starts with control of the body and then control of the environment.
- Management of hyperarousal (ANS Regulation), cessation of dangerous coping behaviors (self-harming, using drugs/alcohol, acting out, acting in), management of intrusive symptoms, begin to re-establish trust, relationships, attunement.
- In Trauma-Integrated Addiction Treatment - Great time to focus on Meeting Recovery Milestones, while also working on safety issues.

- **Remembrance and Mourning** - Working on specific traumatic events
- Telling the story in its entirety, in depth, and in detail.
- May use trauma-specific models of care such as EMDR, Somatic Experiencing, Sensory Motor Psychotherapy.

- **Reconnection with the Community**
- Reconsider safety issues from phase 1 and implement action plan for return to community.
- Generally focused in IOP or Outpatient level of care
BEFORE FAMILIES CAN ENTER THE HEALING PROCESS, THEY MUST UNDERSTAND THE BASIC BIOLOGY THAT EACH MEMBER IS EXPERIENCING.

Like a mobile adjusts to wind to maintain stability, all families adjust to life's demands to maintain stability, and system integrity.

- Intoxication
- Anxiety, Hyperarousal/Agitation
- Intrusive Thoughts, Nightmares
- Dissociation, Depression
- Anger, Conflict, Arguments
- Medical, Legal, Employment Crises

"Trauma Survivor/Patient"

Family members’ behaviors may seem random, but they are highly routinized! The neurons that fire together, wire together!
Family Systems can act like one big limbic system? Who is the Amygdala?

- Isomorphism?
- Therapist ability to self-regulate?
Cortical, Cognitive processing that initiates with thoughts, which flow down to emotions, sensory information.

Pre-frontal cortex fully engaged

More relaxed emotional state

Intentional interaction with full executive functioning

Environment experienced as safe or relatively safe

Talk therapy works!
  • CBT, MI, 12 Step Facilitation

Subcortical, limbic system processing of sensory information, Autonomic Nervous System Response, Pre-Frontal Cortex off-line

Highly activated, anxious, panic, dissociative

Reactive Interaction with limited to no executive functioning.

Environment experienced as threatening or dangerous.

Talk Therapy does not work!

Clinical focus must shift to affect regulation, resourcing, DBT skills until patient resumes lower stressed state.

Depending on which Memory System is active in any given point in therapy, it is important to have tools for working with each memory system.
**Declarative Memory** – explicit memory referring to intentional or conscious awareness of facts or events that have happened to the individual
  - Episodic Memory – recall of subjective events in one’s life
  - Semantic Memory – (knowledge) – recall of objective facts and other non-personal information

**Event Memory** – subcortical mechanism of emotional learning that bypasses the cerebral cortex
  - Generally experienced as intense emotion or fragments of sensory information

**Nondeclarative Memory** – implicit memory referring to unconscious memories of skills and habits, emotional responses, reflexive actions, and classically-conditioned responses.

**Procedural Memory** – learned from prior experience. Lack ability to utilize new existing knowledge, given unconscious nature of the memory.
  - Anger, depression, avoidance, dissociation, hypervigilance, control
A lens that we look through to understand client behaviors and to better understand the roadblocks that trauma symptoms provide for clients in addiction treatment.

- 12 Step Immersion & 12 Step Facilitation
- Individual Therapy
- Process Groups
- Schema Groups
- Education Groups
- CBT
- DBT
- MI
- Horticultural Therapy
- Wellness/Fitness

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**NeuroAffective Relational Model (NARM) Organizing Therapeutic Model**

**Top-Down Therapies**
- NARM Resolve Core Survival Needs:
  - Connection
  - Attention (Needs)
  - Trust
  - Autonomy
  - Love and Sex

**Bottom-Up Therapies**
- Traumatic Stress Symptoms
  - Biofeedback
    - HeartMath
    - BioSound
    - Polyvagal Group
  - Mindfulness
  - Meditation
  - Relapse Prevention Group
  - DBT
  - Somatic Trauma Therapy Techniques
  - Auricular Acupuncture
  - Wellness/Fitness

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**Attachment Differentiation**
Resolution of Recovery Milestones in Phase 1

- Commit to abstinence and on-going recovery
- **Connect life consequences to:**
  - Chemical use
  - Personal identity, thoughts, feelings, and behaviors
  - Family and social relationships
  - Grief, loss, and trauma issues
  - Co-occurring disorders
  - Process addictions (i.e., spending, sex, etc.)
  - Chronic pain and other medical complications
- Learn recovery concepts, such as **powerlessness, acceptance, surrender, rigorous honesty**
- Investigate issues with **higher power, spirituality** and how they may be impacting recovery
- Become open to need for continuing care

Resolution of Developmental and Shock Trauma Symptoms (NARM, Heller & LaPierre, 2014)

- Increase capacity for aliveness (meaningful, energetic life, feel feelings, engage in healthy activities)
- Resolve identity struggles (self-acceptance, esteem)
- Resolve shame-based and pride-based identifications
- Self and affect regulation
- Regulate Autonomic Nervous System
- Work on core survival needs resulting from failed attachment, childhood and adult trauma:
  - **Connection** (to people, body, emotions)
  - **Attunement** (awareness and meeting needs)
  - **Trust** (self and others)
  - **Autonomy** (set boundaries, self-directed)
  - **Love and Sex** (build capacity for loving relationships)
TRADITIONAL APPROACHES TO POST TRAUMATIC STRESS TREATMENT (TOP DOWN APPROACHES)

- Evidence Based Therapies for PTSD

- **Prolonged Exposure Therapy** (Keane, Foa & Rothbaum)
  - Modify fear structure through exposure and habilitation to feared stimulus. Gradual, controlled & repeated exposure of client to traumatic memories/experiences, etc.
  - Challenge clients to see circumstances realistically and understand that they can be safe in return to daily life.

- **Cognitive Processing Therapy** (Resick)
  - 12 Session Program. Includes exposure, with increased focus on cognitive strategies to change erroneous thinking.

- **Trauma-Focused Cognitive Behavioral Therapy** (Mannarino, Cohen & Deldinger)
  - For children and their parents. 12 to 16 sessions. Includes Psychoeducation, Parenting Skills, Relaxation Skills, work on Trauma Narrative and Cognitive Processing of the traumatic event, In Vivo mastery of trauma reminders, conjoint family sessions.
Eye Movement Desensitization and Reprocessing (EMDR)

- Originally called Eye Movement Desensitization (EMD).
- Shift in 1990 from Eye Movement Desensitization and Reprocessing (EMDR) with development of Adaptive Information Processing (AIP) Model.

“AIP regards Most pathologies as derived from earlier life experiences that set in motion a continued pattern of affect, behavior, cognitions, and consequent identity structures.” (Shapiro, 2018)

- New Experiences link into previously stored memories which are the basis of interpretations, feelings, and behaviors. (Leeds, 2013)
- High disturbing experience can be stored in non-declarative, procedural memory. Can be seen in client perceptions, affects, sensations, and coping strategies associated with the experience. (Leeds, 2013)

- Using EMDR’s structured protocols, the therapist guides the client through bi-lateral stimulations using eye movements, hand-taps, or sounds while he or she thinks of happy and safe things, then moves into painful memories, emotions, or events, and concludes with installing positive self-beliefs.

- “The goal of EMDR is to resolve the emotional difficulties caused by disturbing, difficult, or frightening life experiences” (EMDRIA, 2008).
Somatic Approaches to Trauma Therapy

- **Somatic Experiencing** (Levine)
  1. (Levine, 2003): the human response to threat is biological, primitive, instinctual, and physiological. It is subcortical in nature, multisensory, held in implicit memory (i.e., smells, sounds, and images) and can trigger emotional dysregulation.
  2. Event memory stores ANS states accessible through sensation
  3. Ethology: Initial conditions required for ANS to recalibrate on its own

- **Containment and Resolution** (Eric Wolterstorff)
  - Now known as Trauma Reducing Protocol (TRP)
- **Sensorimotor Psychotherapy** (Pat Ogden)
- **Somatic Trauma Therapy** (Babette Rothschild)
- **Tension and Trauma Release Exercises** (TME – David Bercelli)
COMMON THREADS AMONG SOMATIC THERAPIES

- Mind-body connection: The quality of our *emotional / mental* health is reflected in the *physical state of the body* and vice versa.

- Post Traumatic Stress has both *physiological elements* - heightened activation of the autonomic nervous system (ANS) - as well as *psychological elements*.

- Autonomic Nervous System hyper-arousal is at the core of PTS and the driving force behind phenomena such as dissociation, freezing and flashbacks.

- Target ANS directly to reduce ANS response by teaching awareness and modifying body response to trauma triggers.

- To treat Post Traumatic Stress is to treat both mind and body.

- The body knows what it is supposed to do following traumatic events. Therapy is designed to allow that process to proceed, as appropriate.

- Energy from traumatic events is held in the body. Somatic Therapy designed to release this energy.

- Combines talk therapy (top-down) and a somatic (bottom-up) intervention.
SHARED STEPS IN SOMATIC THERAPIES

- Establishing Therapeutic Relationship
- Safety – Resourcing
- Nervous System Monitoring – Body Awareness
- Trigger bodily Responses and Emotions Based in Traumatic Event(s)
- ANS Recalibration
• Trauma Resiliency Model (TRM) is innovative (bottom-up) therapeutic approach for trauma.
• Built on concepts of Somatic Mindfulness, Resourcing, Somatic Experiencing Interventions, etc.

• TRM is a set of 9 skills, with the first 6 called Community Resiliency Model (CRM).
  • CRM is NOT therapy and can be taught to non-healthcare providers, techs, other helpers!
  • It is a stand-alone set of skills, with a free app (www.ichillapp.com).
  • TRM adds three additional elements, that are therapeutic trauma processing techniques adapted from Somatic Experiencing.

Community Resilience Model

• **Skill 1: Tracking** (client monitors physical reactions to stress, distinguishes between sensations of distress or welling.

• **Skill 2: Resourcing and Resource Intensification** (client identifies person, place, memory, activity, belief, or personal strength that brings comfort, peacefulness, or joy.)

• **Skill 3: Grounding** (client becomes fully in contact with present moment, dealing with dissociation, safety, etc.)
• **Skill 4: Gesturing** (Client engages in spontaneous expressions beneath conscious awareness, self-soothing movements, become aware of sensations that are associated with the actions).

• **Skill 5: Help Now** (Activities to either decrease or raise activation of ANS. Counting Steps, Pushing against a wall, walking meditation, identifying colors, etc. Become aware of differences in ANS)

• **Skill 6: Shift and Stay** (When client aware of trauma triggers/distress, access toolbox for activity that might work to relieve distress. Shifting awareness from distress to one of prior Skills).

**Trauma Resilience Model**

• **Skills 7: Titration** (Client asked to become aware of smaller, more manageable sensations associated with a traumatic experience. Intensity is diminished with focus on smaller aspect of experience.)

• **Skill 8: Pendulation** (Shifting back and forth between sensations of distress and sensations of greater well-being. Client invited to become aware of places in body with less tension, etc.)

• **Skill 9: Completion of Survival Response** (Completion of orienting response, mobilization for fight or flight, completion of survival response, and return to Resilient Zone.)
The primary work of individual therapy will be to work on Addiction Milestones, while connecting with the patient in the present moment, with a focus on present moment experience.

**Trauma & the Autonomic Nervous System (Wolterstorff, 2009)**

- **Sympathetic NS**: Overwhelmed
- **Parasympathetic NS**: Traumatized
- **Duress**: Stressed
- **Trauma**: Severely Traumatized

**States**:
- **State 0**: Calm, responsive, awake
- **State 1**: Slightly anxious, annoyed, nervous, with physical tension
- **State 2**: Highly anxious, angry, panic symptoms, intense physical tension (stomach, chest, breathing), powerful fight or flight responses
- **State 3**: Dual-activates (a mixture of activation with dissociative symptoms); tension with somatic collapse, anxiety, sleep, panic, hopelessness, heaviness, blunted vision
- **State 4**: Pure dissociation marked by a distinct lack of physical sensation and flat affect, numbed out, blank, feeling ‘faintly’, depersonalized, and disconnected

**Questions**:
- What are you thinking? (Cognitions)
- What are you feeling? (Emotions)
- What are you feeling the Impulse to do? (Behavior)
• **Next Webinar is on May 12, 2020**

• 12:00 Noon to 1:15 PM

• **ACES & Attachment: Understanding the Impact of Adverse Childhood Experiences on Neurobiology, Adult Illness, Anxiety and Trauma.**

• Will address major issues in Attachment and Developmental Trauma. It will cover specific therapeutic interventions for dealing with avoidant and anxious attachment styles and how to address the core needs of Developmental Trauma
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