Overview

- Trauma and the impact on brain development
- General understanding of EMDR-8 stages and Play Therapy adaptations

Adaptive Information Processing Model

Francine Shapiro

AIP model, like other learning theories, postulates the existence of an information processing system that assimilates new experiences into already existing memory networks. These networks are the basis for perception, attitudes and behavior. Current situations are automatically linked to the association networks. Distressing incidences may become stored in the state-specific form, frozen in time in its own neural networks unable to connect with other memory networks that hold adaptive information.
Dysfunctionally stored memories lay the foundation for future maladaptive responses.

AIP views negative behavior as a result of dysfunctionally held information. In disconnected memory pathways.

Pathology is viewed as a result of unprocessed experiences.

Health is viewed as integrated memory networks forging new associations and connections enabling learning to take place with the memory stored in a new adaptive forms.

What does that mean for our kids?

- **Amygdala**: Evaluation of the emotional meaning of incoming stimuli.
- **Hippocampal system**: Storage of incoming stimuli in memory. Evaluation of spatially and temporally unrelated events, comparing them with previously stored information and determining whether and how they are associated with each other. The slow maturation of the hippocampus, which is not fully myelinated till after the third or fourth year of life, is seen as the cause of infantile amnesia.
- **Serotonin**: Studies of impulsive, aggressive and suicidal patients seem to find a robust association between those behaviors and histories of childhood trauma and a decrease in serotonin.

**Autonomic System**

Polyvagal System- allows adaptation and flexibility to their environments and connect with others.

- Porges(2011) Defines psychopathology as the persons’ inability to inhibit defense system in a safe environment and the inability to activate the defense in the presence of danger. The inaccurate assessment of safety and danger may lie at the core of the difficulties experienced by children.
Traumas: BIG "T" or little "t".
Type I Trauma and Type II Traumas

- Causes
  - Type I- single incident

- How kids look

- Type II- chronic

EMDR research

- Approximately 7 controlled randomized studies and 10- non-randomized studies with children found that EMDR therapy is effective in reducing PTSD symptoms and disaster related stress symptoms.

  www.emdrhap.org/emdr_info/researchandresources.php

Research with randomized subjects with PTSD for 8 weeks of treatment. Bessel A. van der Kolk, M.D

Early Trauma changes the brain- chemically, neurons, learning, memory, capacity, effectiveness, efficiency and structurally.

At 6mo follow-up 75% of adult onset trauma vs. 33% of child onset receiving EMDR achieved asymptomatic. None for Prozac.

Most childhood onset trauma subjects , neither tx produced complete sx remission.

Who wants to do research?...seriously
PTSD is an anxiety response (disorder?)
A learned response to traumatic experiences

“He started it”
- Kids perceived threat- hyperarosal-
  - Teachers', parents' and peers' comments, corrections or directions can trigger trauma response instantaneously. The child's brain has over generalized and reacts with dysregulation: fight, flight or freeze. Opportunity for learning is lost until calm state has returned. No Frontal Lobe available.
  - Teach and practice self-regulation skills in a calm state- not during melt-down.-

Sensory Processing Disorder
Inability to use information from senses to function (visual, auditory, gross and fine motor and taste)

Sensory Modulation
Problems:
How the child regulates his response to sensations.

Making the distinction and comorbidity ???
Adding OT?
It’s in!

...it doesn’t matter who you are; our physiologically stored memories are the basis of our currently perceptions of the present. Unprocessed memories not only can intensify our sensations and emotional responses, they can prevent us from feeling. F. Shapiro

EMDR 8 Phases

- History and Tx Planning
- Preparation
  - Assessment
  - Desensitization
  - Installation
  - Body Scan
  - Closure
  - Re-evaluation
  - 3 pronged
    - Past
    - Present
    - Future
  - Not a linear process

Phase 1: History and Tx Planning

- Child
  - Trauma Screening Questionnaire
  - What gets in the way? How?
  - When did it start?
  - What would it be like if you didn’t have...do...?
  - Why do your parents want you here? Guess?
Family
- Window of affect tolerance
  - What happens when exceeded: parent and child
    - Parent acts as external regulator
- Developmental Expectations
- Emotional availability
- Trauma hx
- What has worked—even once

Time line
- Pregnancy--------------------------------------------Now
  - Identified traumas
  - Births
  - Deaths
  - Moves
  - School
  - Siblings
  - Deployments
  - Medical
  - Separations

Child
- Begin listening for NC
  - Affect tolerance
- Avoidance
- Nightmares
- Internal and external resources
  - PC and comfort place
  - Robin Adler Tapia
Relationship

- Relationship based on acceptance, empathy and safety set the foundation for connection. (Siegel)
- Boundary setting and responses
- Competitive
- Dysfunctional, dysregulating relationship needs to be repaired

Frequency, Intensity and Duration

- What is the most difficult/concerning/troubling/interfering behaviors?
  - How often?
  - How big?
  - For how long?
  - How will you know there is improvement??
  - What bothers you the most?

Phase 2 - Preparation

- Primary Goals
  - Resource Development
    - Teach, practice and achieve some mastery of self and family regulation
  - Explore the child’s ability to tolerate negative and positive affect. Window of Tolerance.
Safe place-containers-resource development and installation.
Build, repair and reinforce neuro-pathways for positive and safe connections.
The more complex the trauma and/or the less family support the more time spent here.

Explore positive, regulating and attuned interactions.
Create and practice self regulation and a new body sense.
Preparation Phase ongoing throughout therapy.

Kids want to know...
- Brain parts
- How they work together, keep us safe and learn.
- Stuck thoughts and quick reactions.
- Build new roads.
- Brain muscle training.
- Give it some air baby.
- Tiger in the room.
- Walking a trail.

...and they get it.
Seek familiar vs. Helpful

Ah HA- I knew it!!
Working the stuck muscle

Comfort Place

- Reprocessing trauma without a safe back drop will not be affective. Child may become flooded.
- See, Hear, Temp, Body sensations, Taste, Emotions and SMELL.

□ Message to self
□ Breathe
□ BLS
Practice

- Title- one word access
- Object
  - Picture
  - Jewelry-toy-animal
  - Pillow case
  - Song
- Experience within play

Self-Regulate

- Healing Light
- Muscle tension
- Butterfly
- Move – activate Limbic Sx

Energy Psychology and Emotional Freedom Technique EFT

- Energy Psychology and EMDR: Hartung and Galvin
- Tapping for Trauma:
- Heart Math [http://www.heartmathstore.com](http://www.heartmathstore.com)
- TAT Tapas Acupressure Technique [tatforlife.com](http://www.tatforlife.com)
### Container
- Prep and unfinished sessions
- Bag, Box, jar, suit case, trash can...
  - Secure? Placement
  - Real or imagined
  - Enhanced-

### Resources and Practice
Reprocessing trauma cannot occur if the adaptive and positive pathways aren’t there.

- Emotional vocabulary
- Prescribe nurturing routines
- Start with positive
- Experiences within play tx
- Nurturing parent touch-
  - avoid flooding
  - Short -avoid accessing upsetting material

### Light touch, warmth and sense of comfort,
- increases oxytocin and endorphins that enhance social bonds through association with feelings of well being.
- Increases cortisol receptors- allows for uptake that prevents flooding. Cozilino (2006)
What are we doing here?

- Ride a bike or scooter
- Going to the Pool
- Working new brain muscles
- Video
- Just Visiting
- Let your brain do the work
- Questions are for more information not because it’s not right.

Building Internal Resources

- Bubble and shields
- Supporter
- Heroes
- Animals
  - Role play positives

What didn’t you say?

- PET scans show that individuals dx with PTSD- during recall of traumatic events show significant decrease in Boca’s area. These finding point to the inability of traumatized individuals to use words when experiencing deregulated affective states.
  - Show me-move, dance, statue, walk
  - Draw
The research and experts

- Stimulating the Rt and Lt side of the brain through play and games that promote participation, creates the stage for the rapid processing and assimilation of trauma memories - Siegel
- Affect labeling improves neural regulation - Cresswell
- Use Lt language centers to calm the excessively firing Rt emotional areas - Pankseep
  - Link not replace

Positive Cognitions

- Games
  - Ball
  - Bean bag
  - Heartmath
- PC Cards and feeling faces
  - Limit selection
  - Pictures of self-feeling wheel

Timeline

- Chronological
  - Today
  - Location
  - Lifetime
  - Event specific
- First
- Worst
  - What gets in your way

Memory detector
- Titrate - affect tolerance
- State change
- Self regulate
  - Resources in tool box
  - Limit processing container

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**Still Prep**

- Extension of Preparation
  - Play with EMDR skills
    - Role play
    - Games
  - Familiar process and language
- Emotional and Physical Awareness
  - Affect tolerance
  - Identify Targets

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**Negative Cognition**

- List
  - What mixed up thoughts or something yucky you learn about yourself when...
  - Volume, face, body
  - What do you tell yourself about yourself when...
- What names do you call yourself
  - When was the 1st or worst
How Much?

- Hands
- Number line
  - HAP
  - Draw own
  - Picture of self
  - Continuum of feelings-

Your in charge.. State Changes

- Start with 2-3
- Role Play
- Freeze- Regulate!
- Double duty
- Jump

Phase 3 - Assessment

- Access memory network with trauma
- Activate cog., affect and somatic aspects of memories
- Baseline for VoC and SUD
Access and Connect
- Parasympathic and Sympathic System
- Dissociation – Avoidance
- (Some) Chronically traumatized children automatically respond to minor environmental challenges by collapsing and surrendering (Levin).
- If they are living in the state of hyperarousal, they may withdraw, dissociate… fantasy, imagination…
- Some adapt by “doing” rather than “being”.

Cartooning
- Re-Processing
- Resource development
- Container
- Future Template

Phase 4: Desensitization
- Long word- short process
  - Stay out the child’s way
  - Help when stuck
  - Add cognitive interweave when needed
  - Affect tolerance
Cognitive Interweaves

- "Jump-start" and "light-touch"—
  - Questions or instruction when child is stuck or looping—
    - Safety
    - Responsibility
    - Choice
    - Empowerment
  - Socratic questions. "What if your best friend was feeling the same way—what would you tell your friend?
  - Questions to allow the child to find their own internal wisdom

Phase 5: Installation

- Hold PC and Initial Target—Strengthen the new muscle
  - When VOC is 7
  - New and improved PC? More than one?
  - May be the next session after Desensitization

Phase 6: Body Scan

- Unsure or Icky sensations
  - Healing light
  - Breathe in and blow out
  - Add warm or cold
  - Tell it what it needs (verbal)

When positive and comfortable—BLS
Phase 7: Closure

- Return to container if still working
  - Comfort place and resources
  - Your in charge

Phase 8: Re-evaluation

- So, ah, yeah... remember that thing you talked about...
  - 0-10

- Return to baselines:
  - Child report
  - Parent report
  - School
  - Formal assessment

Family Involvement

- Assessment of Parents own attachment hx
- Assess developmental understanding
  - Psychoeducational and coaching
    - Trauma
    - Developmental stages
- Current Parent/Child interaction
  - Then – thoughts of self and child regarding trauma
  - Now - willing to repeat nurturing routines
Family

- Psychoeducational
- Self –Regulation
- Memory Reprocessing and Integration

Comfort

ICES
- Image-
- Trigger-
- Cognition-
  - Positive 1-7-
  - Negative 0-10-
- Emotion-
- Somatic/Body Sensations-

Comfort and Contain

- Past- Present- Future-