

Objectives

- Gain understanding of the complexities of the parent-child relationship
- Understand how trauma impacts this relationship and looks like "behavioral problems"
- Learn to discuss attachment and trauma in a strength-based way
- Identify when trauma may impact the CFT process and how to effectively engage youth and families when this occurs
- Gain a better understanding of how trauma may affect the individual and family dynamic
- Provide practical tools for all positions to move forward in individual and family meetings.

Brain Development

- Human brain works in a "use it or lose it way"
- In early childhood (0-5 yrs): rapid rates of growth in matter and connections
- Followed by "synaptic pruning," where connections that are not used are lost
- Adolescence (13-17 yrs): Strengthen established connections, development of frontal cortex

Brain Development

Experiences Build Brain Architecture



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Hemispheres

- Left:
 - Logical, analytical, facts
 - Linear thinking
 - Thinking in words
 - Language
- Right:
 - Creativity, Imagination
 - Holistic thinking
 - Intuition, non-verbal
 - Feelings

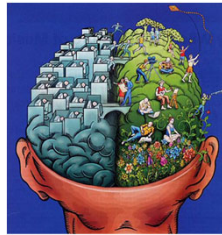


Image: (Knight, 2009)

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4 Divisions of the Brain: Activity

- **Brain Stem**
- **Cerebellum**
- **Limbic System**
- **Cerebrum (Cortex)**

Dan Siegel

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The Limbic System

- **Thalamus:** processes and relays sensory information to cortex, regulates sleep, arousal and wakefulness
- **Hypothalamus:** hormones, maintain homeostasis, autonomic nervous system
- **Hippocampus:** explicit memory (long-term memory)
- **Amygdala:** implicit memory, emotional memory, flight or fight, safety vs. danger, attachment

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The Limbic System

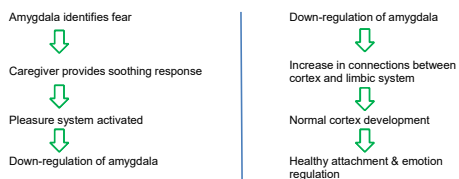
- Process emotions and memory
- Emotion regulation
- Energy levels
- Sleep patterns
- Attachment

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Attachment and the Limbic System

- First system to be activated and heavily relied upon by infants



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Attachment and the Limbic System

Serve & Return Interaction Shapes Brain Chemistry



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Attachment and Trauma

"The loss of ability to regulate the expression of emotions is the most far-reaching effect of early trauma and neglect; it is through the attachment bond that emotions are regulated" (Montgomery, 2013 p. 197)

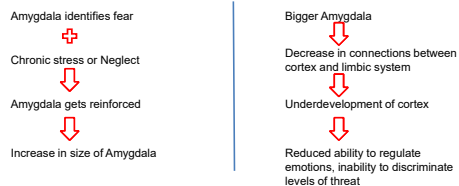


<http://www.rememberingtrauma.org/>
Director: [Nathanael Matanick](#)
Writer: [Emily Catalano](#)
Producer: [Tracy Fehrenbach](#), [Cassandra Kisiel](#),
[Christina Matanick](#), [Nathanael Matanick](#)

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Attachment and Trauma



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Trauma and Attachment

Toxic Stress Derails Healthy Development



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Trauma Signs

- Overreactive to stimuli (emotional and physical)
- Constant threat analysis
- Difficulty calming down when upset
- Depression, anxiety, anger
- Numb
- Chronic illness or physical symptoms

Which do we see
in Manny?

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The Cerebral Cortex

- **Frontal Lobe:** planning, organizing, decision making, selective attention, impulse control, personality
- **Parietal Lobe:** processes sensory input (esp. vision and touch), spatial orientation, speech, math, reading and writing
- **Temporal Lobe:** auditory perception, selective listening, language and speech production, memory association and formation
- **Occipital Lobe:** visual processing center

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The Upper Right Cortex

Emotional experiences and label
emotional expressions
Self-concept
Self-regulation
Attachment
Read facial expressions
Control attention
Associates emotions with thoughts

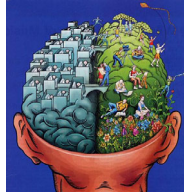


Image: (Knight, 2009)

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The Upper Right Cortex

Exerts the highest level of control on behavior!
Rapid periods of growth in childhood and adolescence!
Influenced by Trauma and Attachment Styles!

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Cortex and Development

In Brief: Executive Function – Skills for Life and Learning

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Trauma Signs

- Problems thinking, reasoning, problem solving
- Poor impulse control
- Inability to concentrate
- Difficulty identifying emotions
- Low frustration tolerance
- Risk-taking behavior, poor judgement
- Substance abuse

Which do we see
in Manny?

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Phases and Activities of Child Family Teaming

- Engagement
- Assessment
- Service Planning and Implementation
- Monitoring and Adapting
- Transition

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Signs of Trauma in the CFT Process

- Work together in teams:
- Using the list of trauma symptoms, decide where in the CFT process each symptom is most likely to manifest or create challenges

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Deeper Look: Engagement

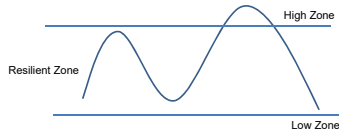
- Hyperarousal and Constant Threat Analysis
 - Difficulty sleeping
 - Difficulty concentrating
 - Easily startled
 - Irritability, anger, agitation
 - Hypervigilance

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Deeper Look: Engagement

- Emotion Regulation



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Engagement Strategies

Brainstorm!

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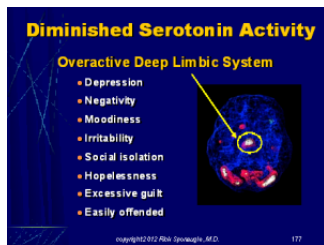
Deeper Look: Assessment

- Depression
- Anxiety
- Anger

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Depression



<http://sponauglewelness.com/wellness-programs/depression/>

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Depression



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Anxiety and PTSD

- Overactive Amygdala
 - Fear, Excessive Worry
 - Nightmares
 - Anger, Aggression
 - Low Self-Esteem
 - Reduced ability to trust
 - Post-traumatic Play
 - Reenactment in Play
- Bigger Amygdala
 - ↓
 - Decrease in connections between cortex and limbic system
 - ↓
 - Underdevelopment of cortex
 - ↓
 - Reduced ability to regulate emotions, inability to discriminate levels of threat

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ADHD

- Smaller brain size particularly in areas that control attention, social judgement, and movement:
 - Prefrontal Cortex
 - Striatum
 - Cerebellum
 - Basal Ganglia
- Imbalance of dopamine and noradrenaline
- Atypical activation of neural circuits

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Anger: Oppositional Defiant Disorder

- Angry and irritable mood
- Argumentative and defiant
- Spiteful or vindictive

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Anger: Conduct Disorder

- Aggression to People or Animals
- Destruction of Property
- Deceitfulness or Theft
- Serious Violation of Rules

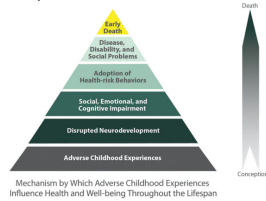
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Deeper Look: Service Planning and Implementation

- Adverse Childhood Experiences Study (ACE Study)

<https://www.cdc.gov/violenceprevention/acesstudy/about.html>



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Deeper Look: Service Planning and Implementation

Executive Functions

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“High Functioning” Trap

- Development is sequential
- Later development builds on earlier development
- Later developmental milestones may “mask” deficits in functioning
- Youth may be doing adequately in certain areas, however there still may be gaps in development

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Overcoming Executive Function Deficits

- Brainstorm!

- Strengths and Concerns
- Needs and Goals
- Brainstorming Ideas
-

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Emotions and Memory

Memory recall by Emotion type:

Negative 😞 > Positive 😊 > Neutral 😐

However...

Negative affect/content leads to “Memory Narrowing”

Positive affect/content leads to “Memory Broadening”

Link interventions to positive experiences so kids remember them!

Narine S. Yeghyan and Andrew P. Yonelinas
(2011)

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Monitoring and Adapting

Why is this important?



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Transition

Why is this important?



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ASAP Science



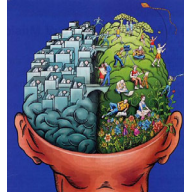
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Adolescents

Upper Right Cortex Functions:

Emotional experiences and labeling of emotional expressions
 Self-concept
 Self-regulation
 Attachment
 Reading facial expressions
 Control attention
 Associates emotions with thoughts

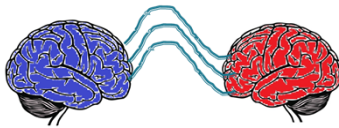


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Overcoming Trauma

Attunement, Bonding and Attachment



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Attunement, Bonding & Attachment

- Attunement: subtle adjusting between two brains
- Bonding: experienced connection between two brains
- Attachment: affect management strategy developed over time

★ Developing brains use these processes to "borrow" the functioning of more developed brains, leading to the development of new neural circuits

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Manny's Connections

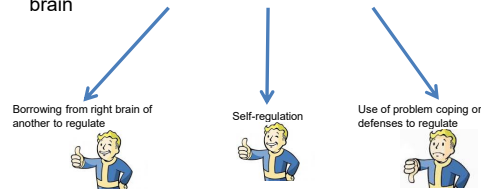
Activity

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Trauma Effects

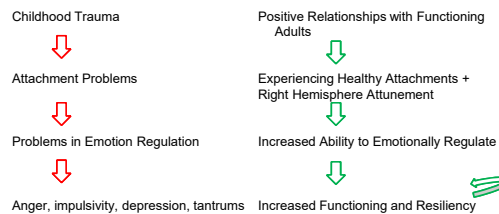
- Event → Physical reaction → Emotion/affect/feeling from brain



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Trauma, Attachment & Recovery



Coping Skills

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Adolescents

"The most favorable situation for adolescent right-hemisphere development is positive synchronized interactions with the mature brain of another person, leading to appropriate affective management." (Montgomery, 2013 p. 197)



Promote change through **positive relationships**: mentorship, support, role-modeling and **simply being present!**

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Review

Questions?
Comments?

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Intervention Resources for Trauma

- Center for the Developing Child
<https://developingchild.harvard.edu/science/key-concepts/>
- National Child Traumatic Stress Network
<https://www.nctsn.org/>
- Trauma Resiliency Model, <http://traumaresourceinstitute.com/>
- Dan Siegel- drdanielsiegel.com
- Dr. Bruce Perry- <https://childtrauma.org/cta-library/>
- Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)
- Parent Child Interaction Therapy (PCIT)

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