A photograph of a woman with long dark hair and a young girl with curly hair, both smiling and hugging each other outdoors. The woman is wearing a light blue striped shirt, and the girl is wearing a white t-shirt. The background is a blurred outdoor setting with greenery and other people in the distance.

Trauma Informed Practice throughout the Child and Family Teaming Stages

**UC DAVIS
EXTENSION**
CENTER FOR HUMAN SERVICES

RESOURCE CENTER FOR
FAMILY-FOCUSED PRACTICE

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

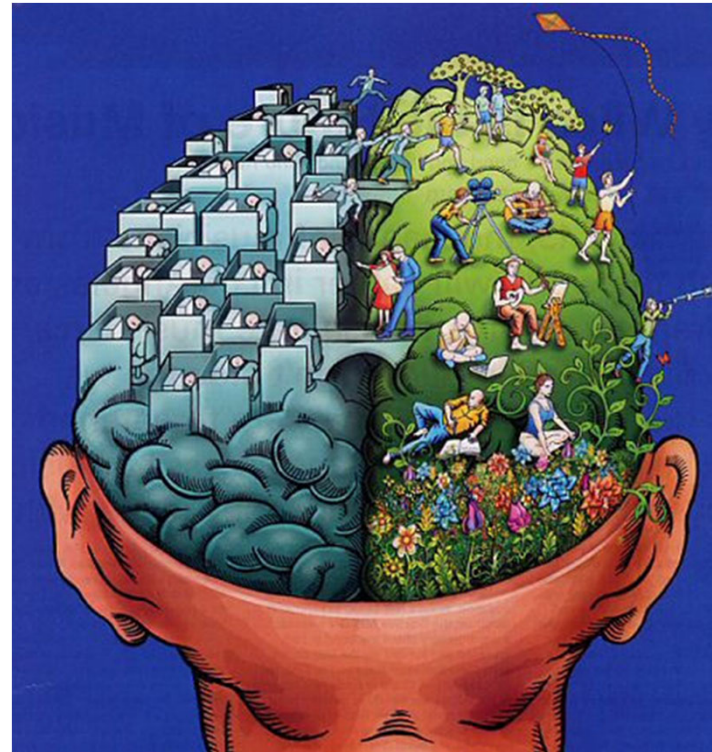


Image: (Knight, 2009)

4 Divisions of the Brain: Activity

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

Dan Siegel

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

The Limbic System

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

Attachment and the Limbic System

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

Amygdala identifies fear



Caregiver provides soothing response



Pleasure system activated



Down-regulation of amygdala

Down-regulation of amygdala



Increase in connections between
cortex and limbic system



Normal cortex development



Healthy attachment & emotion
regulation

Attachment and the Limbic System

Serve & Return Interaction Shapes Brain
Chemistry



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Attachment and Trauma

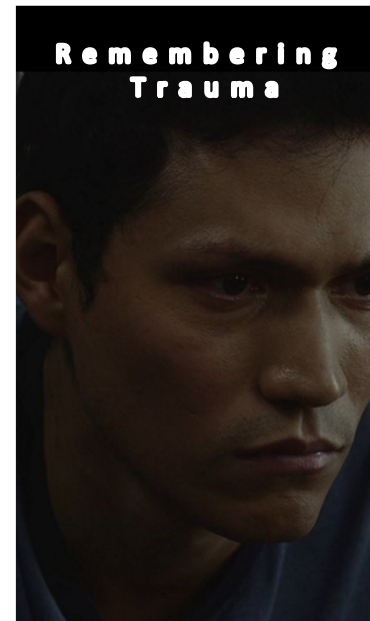
“The loss of ability to regulate the expression of emotions is the most far-reaching effect of early trauma and neglect; it is through the attachment bond that emotions are regulated” (Montgomery, 2013 p. 197)

<http://www.rememberingtrauma.org/>

Director: [Nathanael Matanick](#)

Writer: [Emily Catalano](#)

Producer: [Tracy Fehrenbach](#), [Cassandra Kiesel](#),
[Christina Matanick](#), [Nathanael Matanick](#)



Attachment and Trauma

Amygdala identifies fear



Chronic stress or Neglect



Amygdala gets reinforced



Increase in size of Amygdala

Bigger Amygdala



Decrease in connections between
cortex and limbic system



Underdevelopment of cortex



Reduced ability to regulate
emotions, inability to discriminate
levels of threat

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?**

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

The Upper Right Cortex

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

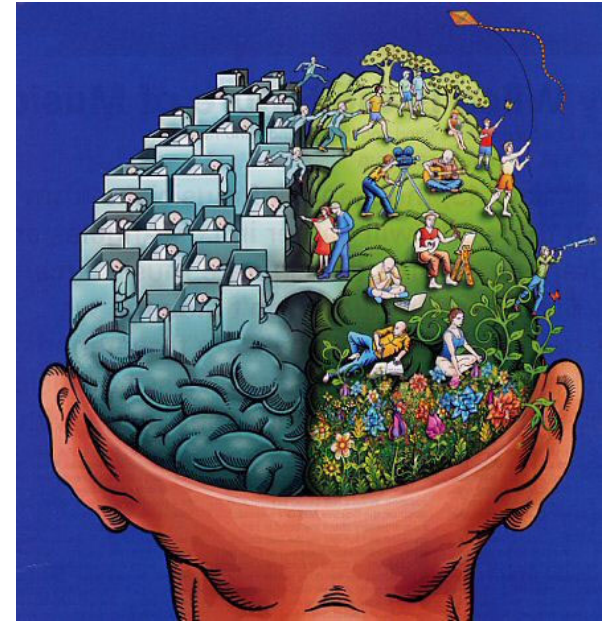


Image: (Knight, 2009)

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!

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?**

Phases and Activities of Child Family Teaming

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

Signs of Trauma in the CFT Process

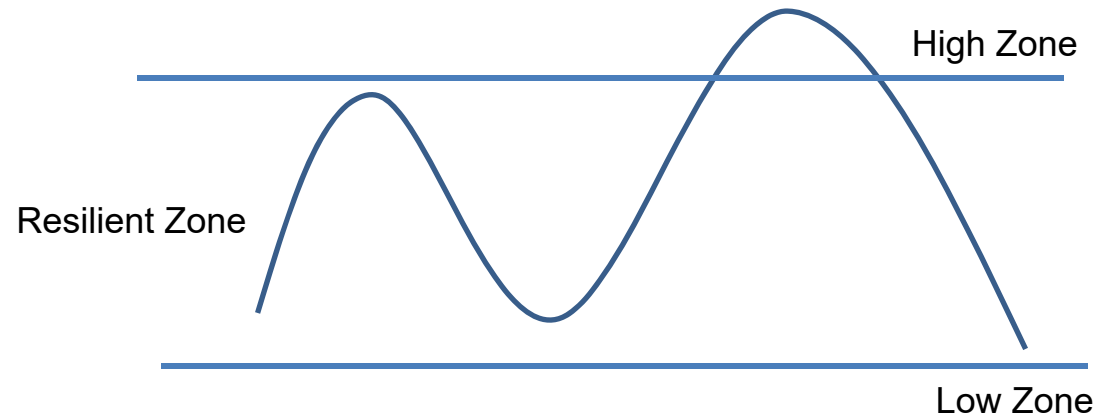
- Work together in teams:
- Using the list of trauma symptoms, decide where in the CFT process each symptom is most likely to manifest or create challenges

Deeper Look: Engagement

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

Deeper Look: Engagement

- Emotion Regulation



Engagement Strategies

Brainstorm!

Deeper Look: Assessment

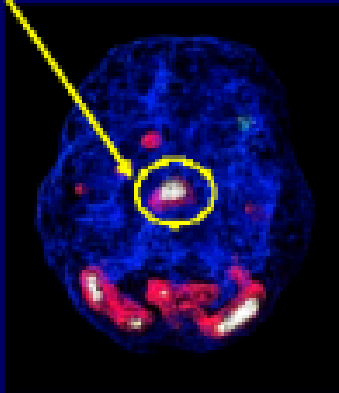
- Depression
- Anxiety
- Anger

Depression

Diminished Serotonin Activity

Overactive Deep Limbic System

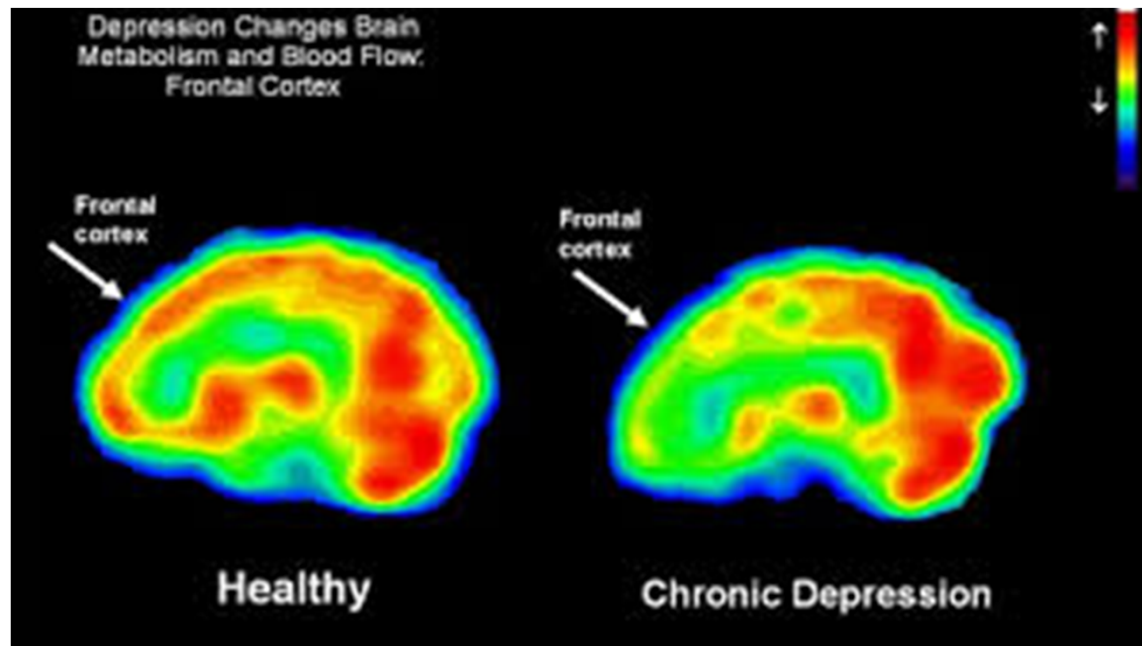
- Depression
- Negativity
- Moodiness
- Irritability
- Social isolation
- Hopelessness
- Excessive guilt
- Easily offended



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

Depression



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

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

Anger: Oppositional Defiant Disorder

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

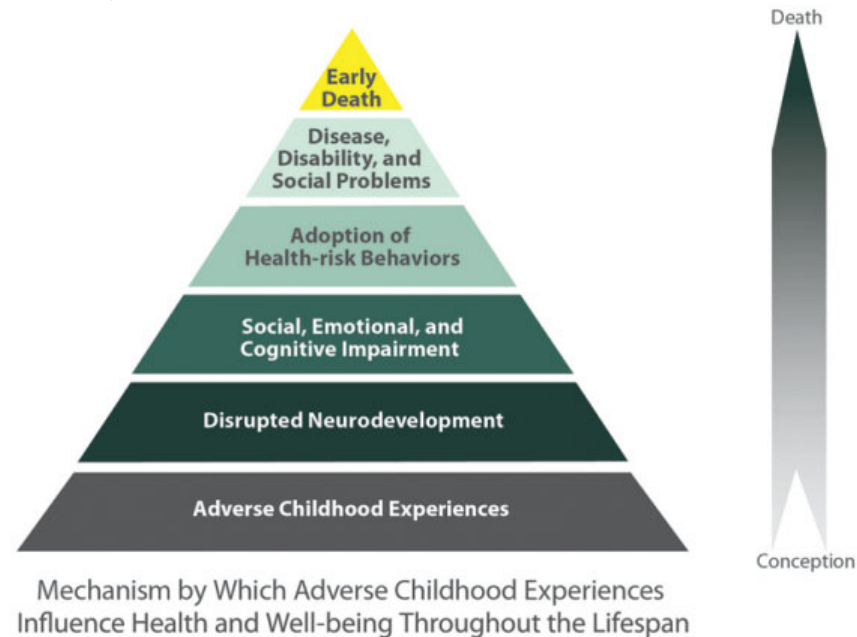
Anger: Conduct Disorder

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

Deeper Look: Service Planning and Implementation

- Adverse Childhood Experiences Study (ACE Study)

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



Deeper Look: Service Planning and Implementation

Executive Functions

“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

Overcoming Executive Function Deficits

- Brainstorm!

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

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)

Monitoring and Adapting

Why is this important?



Transition

Why is this important?



ASAP Science



Adolescents

Upper Right Cortex Functions:

Emotional experiences and labeling of emotional expressions

Self-concept

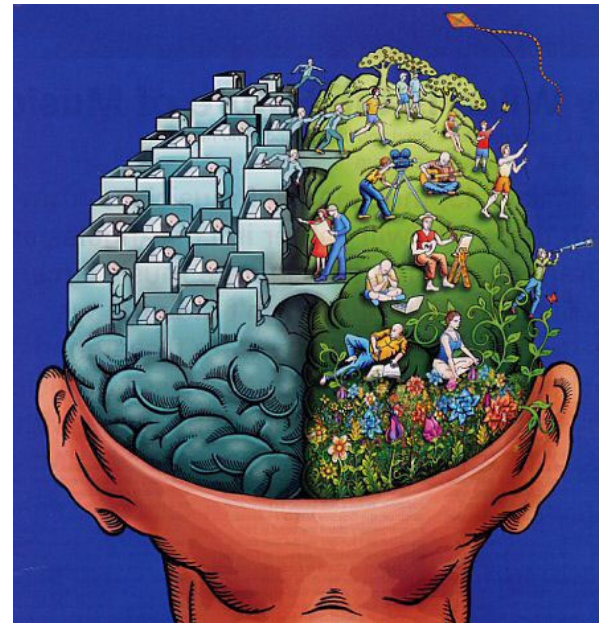
Self-regulation

Attachment

Reading facial expressions

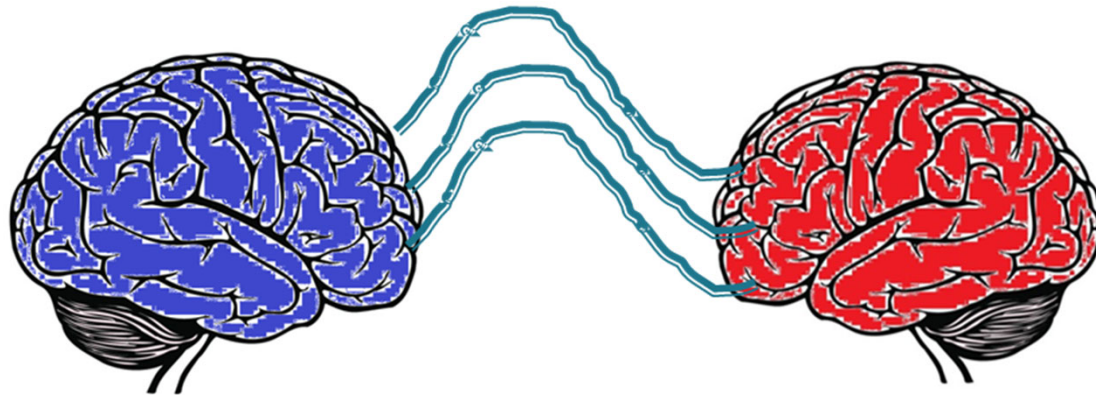
Control attention

Associates emotions with thoughts



Overcoming Trauma

Attunement, Bonding and Attachment



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

Manny's Connections

Activity

Trauma Effects

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

Borrowing from right brain of another to regulate



Self-regulation



Use of problem coping or defenses to regulate



Trauma, Attachment & Recovery

Childhood Trauma



Attachment Problems



Problems in Emotion Regulation



Anger, impulsivity, depression, tantrums

Positive Relationships with Functioning Adults



Experiencing Healthy Attachments +
Right Hemisphere Attunement



Increased Ability to Emotionally Regulate



Increased Functioning and Resiliency



Coping Skills

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!**

Review

Questions?
Comments?

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- drdansiegel.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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- Montgomery, A (2013). *Neurobiology essentials for clinicians: What every therapist needs to know*. New York, NY: Norton & Company, Inc.
- Yegiyan, N & Yonelinas, A. (2011) Encoding details: Positive emotion leads to memory broadening. *Cognition and Emotions*, 25, 1255-62. DOI: 10.1080/0.2699931.2010.540821