Relationships and Trauma in Young Children: Vulnerability, Reflection, and Transcendence

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Understanding the Impact of Trauma
What is a traumatic event?

Exposure to actual or threatened death, serious injury, or sexual violence in 1 or more of the following ways: (DSM-5)

1. Direct
2. Witnessing (not only electronic/other)
3. Learning about traumatic event for caregiver
4. Repeated exposure to aversive details (not for 6 and younger)

The 3 E’s: trauma is the sum of the event, the experience, and the effect (SAMHSA)
The Prevalence of Trauma  (DHHS, 2011)

• There are about **one million** substantiated cases of child abuse & neglect yearly in the U.S.
• Each year in the U.S., more than **1,500 children die** of abuse or neglect
• Of a total 695,000 victims of child maltreatment in 2010:
  • 81.3% were maltreated by a parent
  • 18.5% were maltreated by both parents
Youth & Traumatic Exposure
(DVS; Finkelhor et al., 2005)

According to general population studies, youth (2-17 years) experience trauma often:

- **71% 1 or more victimization incidents** in the past year
- Nearly **70% of victimized children experienced multiple exposures**, with an average of 3 different kinds of victimization reported

Experiencing trauma puts one at increased risk for victimization (Polyvictimization)
<table>
<thead>
<tr>
<th>Acute Trauma</th>
<th>Chronic Trauma</th>
<th>Complex Trauma</th>
<th>Neglect</th>
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<tr>
<td>• Single traumatic event that is limited in time</td>
<td>• The experience of multiple/varied traumatic events (e.g., being exposed to DV and then being in a serious car accident, or ongoing abuse/neglect)</td>
<td>• Both the exposure to chronic trauma and the impact of such exposure of a child</td>
<td>• Failure to provide for a child’s basic needs</td>
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<td>• During an acute event, children go through a variety of feelings, thoughts, and physical reactions that are frightening</td>
<td>• The effects of chronic trauma are often <strong>cumulative</strong></td>
<td>• Children who have experienced complex trauma have endured multiple interpersonal traumatic events from a young age</td>
<td>• Perceived as trauma by an infant or young child who is completely dependent on adults for care</td>
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<td>• <strong>Has profound effects on nearly every aspect of development and functioning</strong></td>
<td>• Opens the door to other traumatic events</td>
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<td>• <strong>May interfere with a child’s ability to recover from trauma</strong></td>
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The Adverse Childhood Experiences Study: ACE

Originally conducted at Kaiser Permanente from 1995 to 1997

More than 17,000 participants

Confidential survey
  - Childhood maltreatment and family dysfunction
  - Current health status and behaviors

Information was combined with the results of their physical examination
Adverse Childhood Experiences (ACE)s

- Recurrent physical abuse
- Recurrent emotional abuse
- Contact sexual abuse
- An alcohol and/or drug abuser in the household
- An incarcerated household member
- Someone who is chronically depressed, mentally ill, institutionalized, or suicidal
- Mother is treated violently
- One or no parents
- Emotional or physical neglect
Risk Factors Associated with ACEs

adolescent health problems
teen pregnancy
smoking, alcohol abuse, & illicit drug abuse
sexual behavior
mental health-risk of re-victimization
stability of relationships
performance in the workforce
Long-Term Impacts: Findings from the Adverse Childhood Experiences Study (ACE)

Almost $\frac{2}{3}$ of the participants reported at least one ACE.

The ACE score likely captures the cumulative (neuro)developmental consequences of traumatic stress.

The ACE score has a strong, graded relationship to numerous health, social, and behavioral problems throughout a person's lifespan.

http://www.cdc.gov/violenceprevention/acestudy/
Basic Trauma Neurobiology
Basic Trauma Neurobiology

- Brain development is **sequential & hierarchical**
- It involves the creation of a complex web of neural networks or associations
- Brains are shaped by experiences, both positive and negative
- The process by which experiences influence genetic expression is referred to as “epigenetics”
Basic Brain Structure

Brainstem or Midbrain
Autonomic nervous functions

Limbic System

*Emotion, behavior, motivation, & LTM*

Hippocampus – STM to LTM

Amygdala – memories associated with emotional events

Prefrontal Cortex

Abstract thought, logic, factual memory, planning, & inhibitory functions
The Role of Memory

Implicit memory – unconscious, traumatic, and early life experiences
  Involve the amygdala – rapid appraisal for danger, safety, and familiarity

Explicit memory – conscious learning of new information
  Modulated by arousal
  Regulated by the hippocampus
Survival & the Fear Response

From an evolutionary perspective, the brain has developed special talents for detecting & protecting us from danger.

The brain (especially the amygdala) works in concert with the hormonal system – hypothalamic-pituitary-adrenal axis (HPA).

An adaptive system for stress management is built from early experiences:

- one system “revs” us up (sympathetic)
- the other brings us down (parasympathetic)
The Body’s Alarm System

The body’s alarm system is designed to make us efficient & keep us safe

Depending on the circumstances, there are 3 ways to respond to threat:

1. Flight
2. Fight
3. Freeze
Fear and the Brain

Many areas and networks in the brain are involved in dealing with fear

The amygdala and fear response
The Orbital Medial Prefrontal Cortex (OMPC) - higher-level functioning, top-down processing
When the amygdala is activated, the OMPC is suppressed

...So, fear literally makes us dumber
Fear and Brain Functioning

When threatened, many primitive regions of the brain are activated, including those that regulate:

- arousal
- vigilance
- affect
- behavioral irritability
- locomotion
- attention
- response to stress
- sleep
- the startle response

Later recollections of traumatic events activate these same regions.
Young Children’s Vulnerability to Trauma

The belief that trauma does not impact the very young have been disapproved by science.

Infants and young children are particularly vulnerable to trauma and toxic stress.
- Rapid brain development, neuro-circuitry being “wired”.
- “Sensitive” periods for development in all areas: social, emotional, cognition/language, physical.
The Path Most Taken
Overuse of the Stress Response System: Sensitization

System becomes “sensitized” - overactive and hypersensitive
Anything, rather anybody, can be a threat
Major “predators” of humans are other humans
Need for constant hyper-arousal and constant activation of stress response system
Signs of A Sensitized Stress Response System

Startle response
Generalized fears/anxiety
Aggressive stance, especially towards those perceived as powerful
Tense/irritable/angry
Re-enact moments, to make events more predictable and memories more tolerable
“Provoke” chaos to prompt familiar experiences
    prefer the “certainty of misery over uncertainty”
"I bark at everything. Can't go wrong that way."
Over Use of the Stress Response System: Desensitized

System becomes “desensitized” or shut-down/dissociated
Brain prepares body for injury – heart rate slows, flood of opioids
Adaptive in the moment, but can become associated and therefore used to cope with memories of trauma/stress
Signs of A Desensitized Stress Response System

“Freeze” moments
  Staring, shutting down
Not responding, withdrawal
  Hiding
“Oppositional” behavior
Neurobiology of Neglect

“Use it or lose it”

Sensory deprivation
Lack experiences to explore their environment (physical and human) and to use their 5 senses
Critical to build foundations for neurocircuitry and social/emotional templates

Nurturance deprivation
Human physical affection and touch needed to release growth hormone
Deprivations cause delays in all areas
Signs of Neglect

Sensory deprivation:
  Broad cognitive, social, physical, emotional delays

Nurturance deprivation:
  Failure to thrive
  Limited ability to connect/attach or indiscriminate attachments
  Difficulty taking perspectives of others, impaired social and emotional communication (can look like spectrum disorders)
The Impact of Trauma

- Attachment
- Biology
- Mood regulation
- Dissociation
- Behavioral control
- Cognition
- Self-concept
- Development
Post-Traumatic Stress Disorder (PTSD)

1. Re-experiencing
2. Avoidance
3. Hyperarousal/vigilance
4. Negative cognitive triad
   - I am worthless...
   - I am always in danger of being hurt or overwhelmed
   - I am powerless
The Role of Attachment
Let’s go back to the beginning...
Evolution & Social Neuroscience

Evolution and the attachment system – survival and protection
Caregivers and infants have characteristics and behaviors that developed to maximize survival
  Attractiveness
  Neurotransmitters
  Cues and signals – mirroring
Safety, Self-Regulation & the Caregiver Relationship

Our safety as young children is dependent upon our caregivers’ ability to make us feel safe.

We feel safe when our caregivers accurately read our cues and meet our needs for regulation.

We use our caregiver as secure base for exploration of the surroundings (proximity seeking) (Bowlby).

We learn how to cope with stress through observations of our caregivers.
Social Neuroscience

Mirror Neurons

Our brains have developed to watch, listen, and attune to those around us. We *imitate the behaviors* and *resonate with the emotions* of others in ways that connect us as couples, families, and groups.

“Connections with emotional circuitry allow us to get a sense of what is in the heart of another person by stimulating in our bodies through what we see, hear, and feel them communicating to us across the social synapse” (Cozolino, p. 138).
The Neurobiology of Attachment

Our brain remembers experiences, and how they made us feel, before our cortex develops & is capable of abstract thought & language.

The amygdala holds memories about sensory experiences & feelings & are aimed at keeping us safe.

The amygdala modulates the fear response which is regulated through the attachment system (parent-child relationship).

We don’t “know” these memories through thoughts and words – they are implicit.
A caregiver’s ability to provide a sense of safety for children—to observe, mirror, and co-regulate for them—is reliant upon their own brain development.

When caregiver did not receive loving interactions, pleasure reward system and mirror neuron systems were not formed. Interactions with their own child are not as pleasurable. Ability to mirror, empathize, co-regulate their child is compromised.
Caregiving Experiences & Core Beliefs

Repeated interactions with caregivers teach the child about the world, especially about safety and fear.

We develop our beliefs about ourselves, others, and the world based on our experiences with caregivers.

These beliefs are also referred to as “internal working models” or “schemas.”

Attachment schema are...

“summations of thousands of experiences with caretakers that become unconscious reflexive predictions of the behaviors of others” (Cozolino, 2006)
Attunement & Mirror Neurons

“Tuning In” to others
Mirror neuron systems literally allow us to map what we see others experiences onto our own nervous system
Often others are attuned to our internal emotional state – even before we are
Attunement & Parallel Process

The downside to emotional attunement...

*We are susceptible to being infected by the negative feelings of others*

The upshot...

*We have the power to impact the emotions of others*

Working with traumatized youth has an impact on caregivers such that they experience the same thoughts, emotions, and behaviors (parallel processes)
The Invisible Suitcase  (NCTSN – Child Welfare Trauma Toolkit)

Overwhelming negative beliefs and expectations...

I am...worthless, in danger of being hurt or overwhelmed, powerless

But also you as a caregiver...

You are unresponsive
You are unreliable
You are, or will be, threatening, dangerous, rejecting
The Invisible Suitcase (NCTSN – Child Welfare Trauma Toolkit)

You didn’t fill the suitcase AND the beliefs inside aren’t about you personally

Your understanding of the suitcase contents is essential for a child to heal from trauma

Carrying the suitcase around ALL THE TIME is exhausting...and overwhelming

This contributes to the challenging behaviors that are exhibited by traumatized children
Reenactment (NCTSN – Child Welfare Trauma Toolkit)

The habit of recreating old relationships with new people
Behaviors that evoke in caregivers some of the same reactions that traumatized children experienced with other adults
Their behaviors can cause the new adults in their lives to feel negative and hopeless about them
What does this happen?
   Familiarity, proof, venting, gaining mastery
Strategies for Traumatized Youth
The Self as Tool
What’s in your suitcase?

- Childhood history
- Relationship experiences
- Current stressors
- Beliefs & attitudes
- Physical health status
- Cognitive capacity
- Mood & emotion regulation ability
Create A Safe Environment

Predictability and Familiarity
  Routine, rituals, people, places, things
Low and slow (Bolick)
Optimize stress – the inverted U
Dealing with Affective Arousal (Myles, 2005)

Control fight or flight tendency
Remember that less is more
Remain calm and quiet
Do not take behaviors personally
Be conscious of your nonverbal cues
Take deep breaths
Nurture the Receptive Brain

Use PACE:
- **P**layfulness
- **A**cceptance
- **C**uriosity
- **E**mpathy

Use of stories and narrative
Encourage curiosity and wonder
Foster Emotional Attunement

Be a safe haven

Develop a relationship that is “safe enough to allow for fear, confusion, and uncertainty, while supportive and encouraging of growth” (Cozolino, 2014)

Listening – having a “be with attitude”

Attune emotionally – “Imagining your heart as a 3rd ear – what is the emotion behind the words” (Cozolino, 2014)

Engage in congruent communication
Support Healthy Self-Concept

Healthy reflections – what do they see in your eyes
Frame benign intentions/assume positive intent
Encourage mistakes
Avoid shame

Shame and guilt
Core shame
Am I safe? Am I lovable?
Provide Disconfirming Experiences

Send messages that tell the child...

- You are worthwhile and wanted
- You are safe
- You are capable

And you, as a caregiver...

- Are available and won’t reject him/her
- Are responsive and won’t abuse him/her
- Will protect him/her from danger
- Will listen and understand
Tame Big Feelings Though Connection & Language

“Connect and redirect”

Begin by acknowledging and validating feelings
Don’t “dismiss and deny”
Or...”command and demand”

The language/meaning-making part of the brain is accessed by creating safety and connectedness in the relationship

Once connectedness and calm are established, then try to re-direct to another focus/activity
“Name It to Tame It” (Siegel, 2012)

Identify emotions & traumatic responses

Putting words to emotions allows us to make meaning of experiences and to gain a sense of control.

Teaching kids that emotions come and go (“let the clouds roll by”) helps them to observe their emotions and anticipate something different.
Teach Kids About their Brains

Using the “flipping your lid” description to explain brain function
Focus on executive functioning
Teach kids to value a tribal community
Be Trauma-Informed

Identifying and normalizing the traumatic response
Know how the body’s alarm system works
Recognize and deal with triggers
Create safety
Dealing with Trauma: Understanding Triggers  
(Adapted from ARC, Kinniburgh & Blaustein, 2005)

Body’s alarm system

Link between danger response and increased arousal (Fight-Flight-Freeze)

Overactive alarm

Triggers

How triggers manifest

Recognizing triggers
Common Childhood Triggers
(Adapted from ARC, Kinniburgh & Blaustein, 2005)

- Unpredictability or sudden change
- Transition
- Loss of control
- Feeling vulnerable or rejected
- Loneliness
- Sensory overload
- Confrontation
- Praise, intimacy, and positive attention
Take Care – Avoid Compassion Fatigue

Know the signs...
- Increased irritability or impatience
- Denial of the impact of traumatic events
- Feelings of numbness or detachment
- Intense feelings and intrusive thoughts/dreams
- Beware of isolation
- Accept your reactions
- Work on your own traumas
Basic Assumptions About Educating Traumatized, Attachment-Resistant Children

- Both you and your student are doing the best you can.
- You both—at a deep level—want to improve.
- Your student is trying to establish safety by controlling the other.
- Your student tries to be safe by avoiding everything that is stressful & painful.
- His attacks (emotional, verbal, physical) on you & his resistance to you, reflect his fear of your motives for your nurture & discipline of him, his poor affect regulation, fragmented thinking, pervasive sense of shame, inability to trust, and lack of behavioral controls.
- For her to change, she will need you to accept, comfort, & teach her.
Basic Assumptions About Educating Traumatized, Attachment-Resistant Children

- You will need to validate his sense of self, while teaching him important developmental skills.
- You will need to come to know her developmental age, and fine tune your expectations to match that age so that she will have success, not failure. Your physical and psychological presence are the foundation of your comforting & teaching her. Structure and supervision are crucial.
- Under stressful emotional conditions, he will regress and revert to his solitary defenses that he used to survive in his terrifying, lonely past.
Basic Assumptions About Educating Traumatized, Attachment-Resistant Children

- She will have to work hard to learn how to live well. You cannot do her work for her, nor can you save her. You can comfort & teach her.
- **You will need** support and consultation from trusted others if you are to be able to successfully comfort & teach him. You will make mistakes and you need to face these, learn from them, and continue. Your own attachment/parenting histories will often be awakened as you navigate your relationship with your student. You will have to address anything from your past that has not been resolved in order to persist in your difficult role as teacher.
“Be the change you want to see...” (Ghandi)

Thank you!!

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