Southwest Michigan

Children’s Trauma Assessment Center

A Partner in NCTSN

The National Child Traumatic Stress Network
How come understanding and intervening with attachment and its impact is so challenging for human service professionals and families?
“Neurons that fire together, Wire Together” (Siegel, 2004)
Mirror Neurons: "smart brain cells" that explain how we connect and relate to each other
From birth hardwired to detect sequences and make maps in our brains of the internal state, intentional stance of other people.
Our behavior sequencing circuits are initially dependent on parents. (What we expect from others)

- IF: Caregivers Straightforward: Map sequences with security embedding intentions in kindness and care
IF: Caregivers are confusing and hard to read our sequencing map of behavior are likely to be distorted.
The Impact of Mirror Neurons

- First Mind is the Internal State of Our Caregiver: Know ourselves as reflected in our caregivers first.

- Then through a process of development we develop separate self.
The Role of Oxytocin

- Recent Research: Released when we feel close and attached to someone. Children in orphanages had lower rates of oxytocin than control group.

- What happens without the chemical?
Both mother and infant contribute to the attachment process
The parent-child relationship shapes children’s:

- Peer relationships (concept of “first friend”)
- Sense of security re exploring the world
- Resilience to stress
- Ability to regulate emotions
- Capacity to carry a coherent story that makes sense of their lives
- Future interpersonal relationships
Strange Situation

- The Process

- Key Factor: Reunion with mother
  - How child greeted mother after separation?
  - How easily distressed was soothed?
  - How rapidly returned to play with toys?
What Strange Situation Taught Us

- Those who were securely attached:
  - Sensitive to the child’s bids for connection
  - Could read child signals
  - Effectively meet needs
Insecurely attached:

- Parent did not respond to child’s signals
- Seemingly indifferent to child’s distress

In order to cope “child minimizes activation of attachment circuitry”
Insecure Attachment:

- 80% of high risk groups such as drug addicted parents

Child may look terrorized upon absence, but then approaches but then withdraws, Freezes, fall down on the floor, clings and cries while simultaneously pulling away
What Strange Situation Taught Us

- Insecure Attachment: Disorganized
  - Sometimes were sensitive and others times not

Wary of separation, not easily soothed upon reunion, does not readily return to toys, may cling to parent

Contact with the parent does not bring relief
What Strange Situation Taught Us

- Insecure Attachment: Disorganized
  - Parents sow severe terrifying lack of attunement when child is frightened of them
Attachment Continuum

Healthy

Secure

Insecure

Disorganized

RAD
Child cannot find an effective means to cope
Brain does not experience an integration of energy and information as in the secure attachment.

Rather disrupted flow:
- Rigidity Avoidance
- Chaos Ambivalence
- Vacillation between the two extremes: Disorganized
Building the brain
From simple to complex:
Hierarchy of brain function

Abstract Thought
Concrete Thought
Executive Function
Attachment
Sexual Behavior
Emotional Regulation
Motor Regulation
Motivation
Arousal
Sleep
BP / Heart Rate
Respiratory Drive
Body Temperature

All sensory input enters here

Perry 2006
Building (& Rebuilding) the Brain

Neural systems can be changed... but some systems are easier to change
Attachment: Primarily Limbic Region Development

- Good bodily regulation
- Emotional balance
- Response flexibility
- Fear modulation
- Empathy and Insight
What Strange Situation Taught Us

- Brain Development in Insecure Attachment
  - Anxiety
  - Insecurity
  - Inability to relate to others
  - Inability to regulate emotions
  - Many symptoms of dissociation
  - Heighted risk for PTSD
Earlier the trauma and the closer the relationship with the perpetrator of the trauma, the more impactful the experience is on the child’s development (Walker, 2007).

More likely that the child will experience betrayal trauma (Freyd, 1994; Goldberg & Freyd, 2004).
“predicts that the degree to which a negative event represents a betrayal by a trusted, needed other will influence the way in which that even is processed and remembered” (Sivers, Schooler, & Freyd, 2002).
Adult Attachment

- Research: Best Predictor of Child’s Security of Attachment is not what happened to the child’s parents but how the parents made sense of their childhood experiences.
Examining Autobiographical Story

- Asking right questions can help us understand how they made sense of their past.

- How mind made sense of their experiences predicted the attachment style that their child had.
Adult Interview Question Handout
Life Narrative

- Securely attached:
  - Most often acknowledged both positive and negative aspects of their family experiences
  - Show how their experiences related to their later development
  - Had coherent account of their past and who they were
Life Narrative

- Secure Attached: Even if difficult childhood had:
  - A relationship with a person attune to them
    - Helped build experience of wholeness
    - Able to reflect on ways that help them make sense of their experiences
  - Called “Earned Secure” Life Narrative
Adult Style

- Dismissing Mind (Avoidant as Child)
  - Left side dominant (factual) versus Right side autobiographical details (relationships)
  - Minimization of the need for others
  - Left adaptation so as not to feel the pain of missed connections
  - Integration of right hemisphere. Feelings become more available
Preoccupied: Confused state of self

- Inability due to ambivalent attachment to develop sense of self (fears of abandonment)
- I need others but I cannot depend on them
- Inability to become differentiated from parent affects adult relatedness of not being able to see the other as separate (Hyperarousal of A.S.)
- Understanding the origins to integrate left side with the dominant right
Disorganized: Fear without solution
- Child self becomes fragmented
- Often result of unresolved trauma and dissociation and betrayal
- Specific triggers create an exaggerated survival response
- Bringing terrified right hemisphere images into relationship with left brain ability to understand them; Developing a narrative
Study in England of adoptive children between the ages of 3 and 7.

- The adult attachment style predicts the child’s ability to attach and the decrease of behavioral challenges.
Coherent Narrative relationship with self

- Curiosity
- Openness
- Acceptance

Have the ability to feel other people
Insecurely attached:

- Challenging childhood often resulted in incoherent account of
Recognition that fear due to unresolved early childhood trauma may curtail parents conscious deployment of attention to infants fear signals to avoid their own retriggering
Van der Kolk: “The earliest and possibly most damaging psychological trauma is the loss of a secure base.”
When parent involved in trauma

- Parent becomes source of protection and also represent harm
  - “fear without solution”
  - “caught between approach and avoidance”
  - “intractable emotional dilemma”
  - “source of solution and source of alarm”
  - “parent as traumatic reminder”
82% maltreated youth have serious disturbances in their attachment to caregivers

Recognizing impact to neurodevelopment, perception of others, and perception of self
Impact to Children Ages 0–5, N=526

- Developmental: 15% No Concern, 46% Moderate Concern, 39% Significant Concern
- Behavioral: 12% No Concern, 43% Moderate Concern, 44% Significant Concern
- Family: 20% No Concern, 47% Moderate Concern, 40% Significant Concern
- Trauma Index: 11% No Concern, 42% Moderate Concern, 47% Significant Concern
Moderate to Major Concerns (Age 4–6)  
CTAC children (n=133) vs. Community Sample

<table>
<thead>
<tr>
<th>Category</th>
<th>CTAC Kids</th>
<th>Community Sample</th>
</tr>
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<tbody>
<tr>
<td>Gross Motor</td>
<td>66%</td>
<td>18%</td>
</tr>
<tr>
<td>Visual-Fine Motor</td>
<td>85%</td>
<td>31%</td>
</tr>
<tr>
<td>Sequencing</td>
<td>86%</td>
<td>21%</td>
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<tr>
<td>Linguistic</td>
<td>79%</td>
<td>15%</td>
</tr>
<tr>
<td>Preacademic</td>
<td>77%</td>
<td>7%</td>
</tr>
<tr>
<td>Attention</td>
<td>87%</td>
<td>13%</td>
</tr>
</tbody>
</table>
Neurodevelopmental Status
Ages 0–3, N=155

Percent Below Age Levels

- Perceptual/Fine Motor: 58%
- Cognitive: 68%
- Language: 76%
- Self-Care: 48%
- Gross Motor: 41%
Sensory Processing Concerns

CTAC Kids

- Tactile
- Movement
- Underresponsive
- Auditory Filtering
- Low Energy
- Visual Sensitivity
Child traumatic resolution when

- 1) intensity of trauma and accompanying horror in not too overwhelming

- 2) attach figures provides adequate ongoing comfort, communication, and protection regarding fear evoking experiences
Observation of visits: Caution: The ability to engage in play with children does not necessarily indicate that parent can provide comfort and soothing in times of child distress, anger, or noncompliance
Assessment

- Strange Situation for Young Children Under two years of age.
- Marschak Intervention Method (Therapy Play)
- Handout
Interventions

Surrounded in Controversy due to the intensity and challenges of the continuum of insecure attachment.

Rewiring someone’s relational brain can take a lifetime
Psychoeducation about attachment, trauma, and its impact on not only to the child but to them as well.

Teaching caregivers attunement skills to respond not to the behaviors, but what is underneath that behavior.
Intervention Keys

- Integration of the left and right side of the brain
  - Multiple sensory based methods
    - Music,
    - dance,
    - rhythm,
    - touch,
    - story telling,
    - creating narratives
Intervention Models

- Trauma Focused Cognitive Behavioral Therapy
- Real Life Heroes
- ARC
- Theraplay
Interventions
ARC Treatment Goals

1) Build/Rebuild healthy attachments between children and their traumatized parents

2) Creating a safe environment for the child that facilitates healthy recovery
Four Basic Principles of ARC

1) Creating a safe and predictable environment by establishing rituals and routines.

   1) Adults being in Control
   2) Rules are defined for keeping everyone safe
   3) Bedtime rituals
   4) Objects of Affection
   5) Daily Schedules
Basic safety and security a child is provided is the key to all developmental competencies including regulation of emotion, behavior, and relationships.
2. Increasing caregivers ability to manage the child’s intense affect
Self Regulation: Identification

- Ability to identify what one is feeling
- Ability to connect these feelings to experience
- Ability to read emotional cues of others
Self Regulation: Expression

- Build capacity to safely express emotions and emotional experiences
Self Regulation: Modulation

- Ability to recognize and shift from emotional experiences
- Ability to return to a comfortable state of arousal
Normal Stress: The Brain & Body Working Together

The brain
- brain
- spinal cord
- nerves

The nervous system

Alarm System (amygdala)
Filing Center (hippocampus)
Thinking Center (prefrontal cortex)
Extreme stress / trauma
The Alarm Takes Control

The brain

The nervous system

Alarm System (amygdala) → Filing Center (hippocampus) → Thinking Center (prefrontal cortex)

No control

Spinal cord
Nerves
SOS: Three Steps to Focusing

Step #1: SLOW DOWN
Take a time out; sit comfortably; allow one thought at a time; pay attention to the natural rhythm of your breathing.

Step #2: ORIENT YOUR SELF
Notice your surroundings – where you are and who is with you; Focus on something of interest that you can see or hear.

Step #3: SELF - CHECK
How much stress?  How much control?

Stress Level:  Low Stress  1  2  3  4  5  6  7  8  9  10 High Stress

Personal Control:  No Control  1  2  3  4  5  6  7  8  9  10 Complete Control
3) Improve caregiver attunement so as the caregiver is responding to the child’s underlying affect and not behavioral manifestations

  Teaching parents not to personalize
  Teaching parents how to recognize their own triggers
  Teaching parents how to absorb affect
4. Increase PRAISE of the child to facilitate the child’s identification with competencies not deficits.
Must consider an ecological approach that targets all three areas

- Individual child
- Family system
- Larger system
Such children are likely to be frequently disconnected to their own relational experiences (not being aware of what they are doing during the intense affect dyregulation moment.
Competency

- Building or restoring efficacy
- Fostering developmental competencies
  - Planning
  - Social skills
  - Impulse control

Building familial and systemic supports
Helping child gain mastery over their environment

- What can you tell the child that he or she does that demonstrates this?
  - School success
  - Physical success
  - Relational success
  - Emotional regulation success
Create opportunities for child connection with peers and adults and community

- Extracurricular school activities
- Play groups
- Church youth groups
- Orchestrating relational opportunities
Build on child’s strengths to foster self esteem
  - Creating specific opportunities for success based on what you know the child does well
Encourage practice and learning from outcomes

- Spending the times to talk about what happened
- What went well, what didn’t
- How come this may have happened?
- How could there have been a different outcome
Interplay between refusal to seek out caregiver comfort and rejection of caregiver attempts and challenging behaviors often overwhelm resource parents
Observation of visits: Caution: The ability to engage in play with children does not necessarily indicate that parent can provide comfort and soothing in times of child distress, anger, or noncompliance.
Resiliency is a product of the child’s interactions with the environment.

Resiliency is a product of the balance between risk and protective factors. If balance tilts can lose resilience.
Building the brain
From simple to complex:
Hierarchy of brain function

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Motor Regulation
Motivation
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Perry 2006
Building (& Rebuilding) the Brain

Neural systems can be changed... but some systems are easier to change

Complexity

Neocortex

Limbic

Diencephalon

Brain-stem

Plasticity & Ease of change
Insecure Attachment

- Caregiver:
  - Impairment
  - Inconsistency
  - Unpredictability
  - Own history of unresolved trauma
  - Abandonment due to multiple placements, caregivers incarceration,
Child must deal with overwhelming experiences through primitive survival strategies

- Aggression
- Dissociation
- Avoidance
- Child cannot adequately develop emotional regulation skills because of overwhelming relational experiences and the lack of caregiver modeling.

- Child continues to rely on primitive coping strategies (Spinazzola, et. al, 2005) that often lead to impaired functioning.