



## Heart & Work

Supporting Families Post-trauma by Integrating Neurobiology, Attachment & Nurtured Heart Approach

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### **Extreme Childhood Stressors**

- Violence
- Long-term separation
- Abandonment
- Divorce
- Death of Family or Friend
- Food or housing insecurity
- Neglect
- Parent Untreated Mental Illness
  - Maternal Depression
  - Substance Abuse







### **What is a Traumatic Event?**

- Actual, or threat of, serious harm to self
  - Child Abuse or Neglect
  - Loss of parent or caregiver
  - Natural disaster (fires, floods, hurricanes)
  - Violent crime (assault, kidnapping, shooting)
  - Accident (automotive or airplane)
- Witnessing actual, or threat of, harm or death
  - Community violence (shooting, gangs, war)
  - Domestic violence



### **Childhood Trauma Statistics**

- Studies:
  - 66% Children Experience Trauma (by age 16)
  - Most Recover in several weeks or months
- Attachment Buffer
  - One caring, supportive adult aids recovery
- Risks of Extended Trauma Response (PTSD)
  - Severe or repeated trauma
  - People hurting other people
  - Child close to the trauma
  - Parents reaction to the trauma

- Parent’s mental illness
- 6  **Trauma Symptoms**
  - Common to All Age Children
    - Anxiety & Fear
    - Negativity, Sadness or Depression
    - Hyperarousal & Reactivity
    - Re-experiencing Trauma
    - Trauma Dreams or Nightmares
    - Irritability & Anger
    - Emotional or Physical Dissociation
- 7  **Post Trauma Symptoms**  
**Ages 0-5**
  - Preschool Trauma Symptoms
    - Eating or Sleep Disruption
    - Startle Easily
    - Increased Separation Anxiety
    - Seek more Attention & Reassurance
    - New Fears or Sadness
    - Regression of Skills
    - Withdrawal or Avoidance of Contact
    - Fear of adults that remind of the trauma
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- 8  **Post Trauma Children**  
**Ages 5 - 12**
  - School Age
    - Recreate trauma in play or art
    - Altered time map
    - ‘Omen formation’ – Look for warning signs
    - Vigilance, avoid future trauma
    - Aggressions, controlling
    - Decline in schoolwork
    - Somatic - Stomachaches, headaches
    - Lack confidence, clinginess
    - Suicidal thoughts or actions
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- 9  **Post Trauma Adolescents**  
**Ages 12 - 18**
  - Teens
    - Impulsiveness
    - Aggressive behavior
    - Insecure, low self-esteem
    - Flashbacks or memory blocks (like adults)
    - Act out trauma in activities (like children)
    - Feel alienated or run away

- Drug & alcohol use
- Difficulty with friendships
- Overly self-reliant or isolated

10  **Abuse Statistics – US CPS**

- 4 Million Reports of Abuse Each Year
  - Involves 7.2 Million children
    - 3.4 Million receive investigation or services
    - 700,000 Child victims abuse & neglect
- Type of Abuse
  - 65% Neglect
  - 18% Physical abuse (girls & boys)
  - 10% Sexual abuse (1:4 girls, 1:8 boys by age 17)
  - 7% Emotional abuse

11  **Abuse Statistics**

- Abuse Victims by Age
  - 37% Age 0-6 years
  - 37% Age 7-12 years
  - 26% Age 13-17 years
  - Abuse Fatalities, 48%, Under 1 year old
- 90% Perpetrators are related in some way
  - 40% Parent or caregiver of child
  - 50% Relative, not parent
  - 10% Known, not family
- Majority of CPS Reports from professionals
  - Seldom reports from family or neighbors

12  **Parent or Caregiver Risks**

- Parent Increase Risks of Child Abuse
  - Difficulty Bonding with newborn
  - Parent history maltreatment as a child
  - Alcohol or drug abuse
  - Not nurturing the child
  - Untreated mental health disorder
  - Lack awareness of child development
    - Unrealistic expectations
  - Isolation, lacking support network
  - Involved in criminal activity
  - Financial crisis

13  **Parent/Caregiver Prevention**

- Parent Decrease Risks of Child Abuse
  - Visits by nurses to parents at home
  - Parent Educations Groups
  - Parent Support & information
  - Preschool & Childcare programs

- Abuse prevention programs in schools
- Early intervention programs
- New parent information
  - Dangers of shaking babies
  - Dealing with crying babies

14  **Childhood Symptoms of Abuse**

- Symptoms of Trauma
  - Increased fear & anxiety
  - Depression
  - Shame & self-blame
  - Anger & aggression
  - School or social disruptions
  - Dissociation and low self-esteem
  - Self-destructive behavior, substance abuse
- Sexual Abuse can also include ...
  - Sexually inappropriate behavior
  - Altered sexual development

15 

16  **Acute Stress Reaction**

**- Emotional Shock**

- Acute Shock (1st Month)
  - Intrusive thoughts, reliving event
  - Avoiding reminders of trauma
  - Heightened reactivity, hypervigilance
  - Dissociative symptoms
    - Physical/emotional detachment
    - Dreamlike state
  - Memory loss or distortions

Can evolve into PTSD, if not regulated

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17  **Trauma on the Brain & Body**

- Brain & Nervous System Disruption
  - Attention & concentration
  - Self-regulation & neurosensitivity
  - Memory & mental confusion
- Body Stress Response
  - Sympathetic Nervous System
    - Fight, Flight or Freeze
    - Cortisol, norepinephrine, adrenaline
- Emotions
  - Fear & anxiety
  - Helplessness & depression

18 

18 

- Higher Cortex
  - Cerebral cortex
    - *Higher order thinking*
  - Prefrontal cortex
    - *Attention, self-awareness, regulation, morality*
- Limbic Region
  - Hippocampus, amygdala, cingulate gyrus
    - *Emotions, warnings, memory storage*
- Brain Stem
  - Motor & sensory nerves
    - *Regulation: Heart, breath, sleep/wake*
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19 

- Cortex
  - Shrinkage Prefrontal Cortex
    - High order thinking & attention
    - Self-awareness & social awareness
    - Self-regulation & coping skills
- Limbic Region
  - Smaller Hippocampus
    - Learning, mood, modulation
  - Enlarged Amygdala
    - Stress reactivity, emotions
- Neuronal Growth & Myelination

20 

- Limbic Region Activated
  - Amygdala
    - Recognize danger
    - Triggers stress hormones
- Broca's Area deactivated
  - Putting thoughts into words
- Brodmann's Area 19
  - Visual Cortex activated
  - Re-experiencing
- Right Hemisphere vs. Left Hemisphere
  - Re-experience as if in the present
  - Decreased capacity to organize mind
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21 

### **The Second Brain**

- Intestines: Gut, Core
  - 100 million neurons
    - Neurotransmitters
  - Neural network process information
    - Work with the brain
- Heart
  - Neuronal networks
    - Parallel network to process information
- Vagus nerve - 10<sup>th</sup> Cranial Nerve
  - Information between heart and brain
    - Both ways (afferent & efferent)

22 

### **Stress in Brain & Body**

## Autonomic Nervous System

*External stress, threat, or fear*

- Sympathetic: : Fight or Flight
  - Neurological
  - Cardiovascular
  - Respiratory
  - Muscular
  - Endocrine
  - Digestive
  - Immune

23  **Elevated Cortisol**


## Stress Hormone Research

- Increased fear response
- Increased stress and anxiety
- Increased negativity or depression
- Interferes learning and memory
- Increase risks
  - Brain reactivity in the future
  - Depression and anxiety
  - Learning & Mood Disorders

24  **Elevated Cortisol**

## Stress Hormone Research

- Risk heart disease
- Increased risk blood pressure
- Decrease immune function
- Raised cholesterol
- Decrease bone density
- Weight gain

25  **Costs Extreme Stress***Trauma, Abuse or Neglect*26  **Physical & Emotional Care****After****Trauma**27  **Post-trauma Care**

- Early Intervention
- Increase Security
  - Safety
  - Attuned, empathic caregivers
- Reduce Overall Stress
- Reduce Shame & Blame
  - Normalize the symptoms, biology
- Build on Strengths
  - Self-esteem & Confidence
  - Inspire play & joy
- Body-Brain Connection

28  **Best Practice after Trauma**

- Soothes a Child
  - Caregiver self-regulated
  - Responsive, warm, supportive
  - Respect for child's pacing

- Listen without judgment
- Stresses a Child
  - Additional demands
  - Anxious caregivers
  - Push to 'talk' about trauma
  - Shaming or impatience

29  **Healing Connection**  
***Mindful & Attuned***

- Mindful: Attentive, accepting, & responsive
- Attuned: Feel heard & understood by another
- Parent teaches how to listen, accept & understand

*The ability to listen and understand is essential in forming close relationships –learned in early secure attachments.*

30  **Responsive Parenting Study**  
**- Brody, et al, 2010**


- Parent Responsiveness to 4 year old
    - Responsive, warm, supportive
  - Stress Response test 10 years later (14)
    - Parental responsiveness correlates with cortisol reactivity
    - Less responsive parents age 4, more stress reactivity age 14
  - Animal Studies
    - Maternal licking & grooming decreases stress response
- Journal of Consulting Clinical Psychology*

31  **Emotional Regulation System**  
***Born to Soothe***

- Homeostasis – Balance
- Self-regulating: *Thermostat*
  - In the moment: heart, breath
- Trauma creates Dysregulation
  - Overwhelmed systems, chaotic
  - Anxious, worried, depressed cycles
- Co-regulation after Trauma
  - Soothe with another
  - Caregiver soothing child
    - Attachment connection

32  **Attachment Co-regulation**

- Relational soothing
  - Reduce fear & anxiety
  - Calm nervous system
- Co-regulate
  - Child borrow regulation from parent
- Caretaker vs. Child Self-soothing
  - Help child when they *need* it
  - Let Self-soothe when they *can*

33  **Attachment, Oxytocin & Healing**

- Attachment Hormone - Love
- One Secure Attachment
- Antidote to Stress
  - Parasympathetic Nervous System
  - Increase feelings safety
  - Build empathy & trust
- Emotional Buffer
  - Less biological markers of stress

*Cuddling, breast feeding, attention, play*

34  |

- Top-Down (*Brain to Body*)
  - Support & Cognitive Skills
    - Reduce distressing, intrusive thoughts
    - Increase positive thoughts & emotions
    - Cognitive skills for self-regulation
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- Bottom-Up (*Body to Brain*)
  - Body Awareness & Regulation
    - Physical Self-soothing
    - Breathing, movement, guided meditation
    - Reconnect positively with the Body

35  **Mindfulness & Healing**

- Mindfulness & Meditation
  - Body-Brain Connection
    - Reduce anxiety
    - Improve mood
    - Less physical pain
    - Quicker healing
    -
- Meditation in the Brain
  - Research
    - Decrease amygdala
    - Increase prefrontal cortex
    - Increase hippocampus
    - Increase myelination


36  **Trauma & Abuse Recovery**

- Early Intervention
- Increase Safety & Security
- Reduce Overall Stress
- Reduce Shame & Stigmatization
  - Normalize the Biology
- Build on Strengths: Beyond vulnerability
- Body-Brain Connection
- Social/Community Support Children & Families



37  **Nurtured Heart Approach®  
Healing Interactions**

**After  
Trauma**

38  **Healing Interactions**

Supportive interactions are soothing to the nervous system and support regulation and healing.

- Adult self-regulation
- Positive interactions
- Authentic and responsive in the moment
- Predictable and structured
- Acknowledgement of child's physical and emotional state

39  **The Nurtured Heart Approach®**

A interactive and therapeutic model which meets these criteria

Its foundations are:

- Absolute no (Steady)
- Absolute yes (Enthusiastic)
- Absolute clarity (Clear)

40  **Adult Energy**

The power of:

- Relationship
- Connection
- Feeling the adult  
lights up for you

41  **Adult Energy**

Powerful even in negativity

- Scolding
- Yelling
- Lecturing

42 

- Regulated and safe adult
- Modeling self-regulation for child
  - Co-regulation
  - No "charge" directed to child's dysregulation and misbehaviors

43  **"Absolute No"**

**Steady**

**No energy for negativity**

Action Steps:

1. Decrease reactivity to misbehavior
2. No yelling, scolding, lecturing, heart-to-hearts, heavy sighs, grimaces
3. Intimacy not available  
only around trauma  
and misery

44 45 **"Absolute Yes"*****Enthusiastic*****High energy for on-track behavior**

Relentless focus on what is going right.

- Baby steps
- What child is doing/feeling now
- Active hunt for anything positive, anything that is OK, good, excellent.
- Authentic enthusiasm for  
child and moment

46 **"Absolute Yes"*****Enthusiastic*****High energy for on-track behavior**

Specific description of what is going right.

- What child is doing now that is ok
- Values child is demonstrating
- Problems not occurring; rules not broken
- Movement in the right direction

47 48 **"Absolute Yes"*****Enthusiastic*****High energy for on-track behavior**Action Steps:

- Consistent enthusiastic focus on acceptable behavior
- Rich verbal and physical responses to child, 2-3x/hr.
- Authentic recognition for all feelings and a range of behavior

49 **"Absolute Clarity"**

No confusion about rules, schedule, chores

- Predictable and reliable structure
- Predictable and reliable recognition whenever a rule is followed or boundaries respected
- Predictable and reliable consequence every time a rule is broken

50 **"Absolute Clarity"**Action Steps:

- Create clear rules
- Rich and enthusiastic verbal and physical responses to rules followed
- Consequence every time a rule is broken

51 

52  **Changing the World**

**One Child  
One Connection  
at a Time**