

## **We Can't Wait Conference**

# **The Developing Child**

Pradeep Gidwani, MD, MPH  
September 15, 2022

1

## **Starting points**

- I have no disclosures
- Human Beings are
  - Complex
  - Our understanding is evolving
  - Social and Inter-connected
  - Cannot be reduced to parts
  - Models are useful, but are limited

2

## Today's Presentation

- History and Background
- Parent/Caregiver and Child Needs and Development
- Trauma and Stress Biology
- Our Approach and Healing Relationship

3

## Nurture as an Organizing Approach

- Promote Nurture to across the Life Span and throughout the community
- Goals to increase nurture for our
  - Children and Families
  - Service Providers
  - Organizations and Institutions
  - Community
  - Systems and Payors

4

Neurons to Neighborhood 2000

- All Children Are Born Wired For Feelings and Ready to Learn
- Early Environments and Nurturing Relationships Are Essential
- Society Is Changing and the Needs of Young Children Are Not Being Addressed
- Interactions Among Early Childhood Science, Policy, and Practice Demand Dramatic Rethinking

5

Children live in the context of relationships

The diagram consists of four concentric circles representing different levels of social context. The innermost circle is labeled 'SELF' and includes 'PSYCHOLOGY' and 'BIOLOGY'. The second circle is labeled 'FAMILY' and includes 'PARENTS', 'SIBLINGS', and 'FOOD AVAILABILITY'. The third circle is labeled 'COMMUNITY' and includes 'SCHOOL', 'RELIGIOUS GROUPS', 'NEIGHBORHOOD', and 'SOCIAL SERVICES'. The outermost circle is labeled 'SOCIETY' and includes 'JUDICIAL SYSTEM', 'POLITICAL INFLUENCES', 'EMPLOYMENT', 'HOUSING', 'ECONOMIC INFLUENCES', 'CULTURAL INFLUENCES', 'LAWS AND POLICES', and 'MEDIA'.

6

Dr. Urie Bronfenbrenner

Children don't grow up in  
programs...

They grow up in **families**  
and in **communities**

7

AAP Technical Report

Eco-Bio-Developmental  
Model of Human Health and Disease

Ecology  
Becomes **biology**,  
And together they drive **development** across the lifespan

8



9

### Brain Development is now known about

- Brain architecture is experience dependent
- Social-emotional buffering makes a big difference
  - Positive parenting
  - Trusted mentor
  - Healthy attachment
  - Social-emotional skills
  - Co-regulation and Self-regulation

A photograph showing a woman and a young child sitting on a grassy field. The woman is sitting on the ground, and the child is standing next to her, leaning in and looking at her. They are both smiling and appear to be in a close, affectionate relationship. The background is a clear blue sky with some clouds.

10

An Early Brain and Child Development Agenda

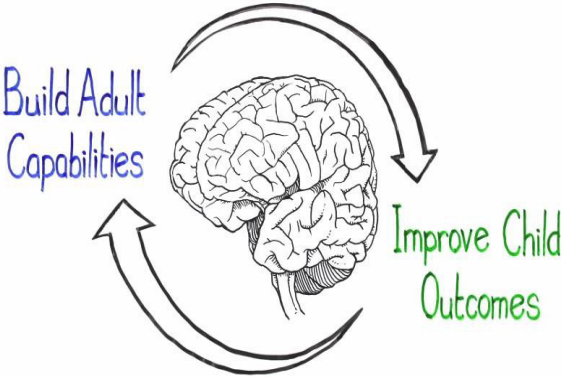
- Promote healthy relationships –Safe, Stable, Nurturing
- Promote the healthy early childhood foundations for life course health
- Promote kindergarten readiness and lifelong success
- Decrease toxic stress effects on health and developmental trajectories
- Strengthening the systems and community supports to address the social determinants of health



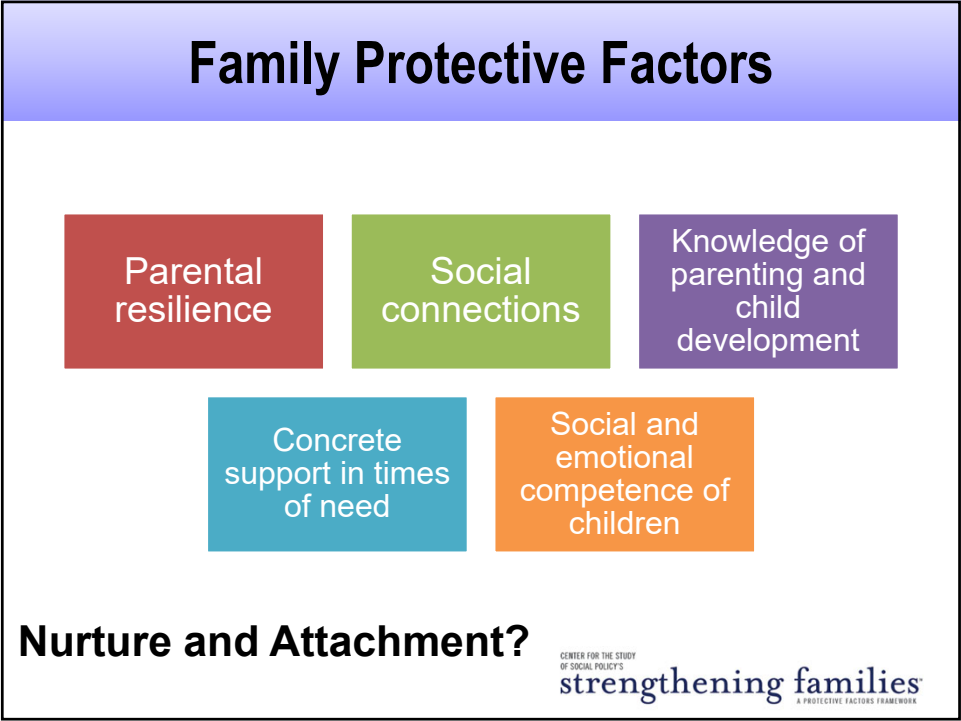
11

Focus on the Adults who Care for Children

If we really want to achieve breakthrough outcomes for children experiencing toxic stress, then we have to transform the lives of the adults who care for them.



12



13

### Working with Parents and Caregivers

- Understand Development (of the Mind)
- Emphasize the Importance of Relationships
- Explain Self-Regulation and Co-Regulation
- Discuss the impact of trauma
- Provide Healing Relationships
- Build Resilience

14

What do babies and young children need?



15

Nurture - to care for and to encourage the growth and development of ....



**Ideally**  
*Parents and  
Caregivers  
Are Available,  
Attuned, and  
Interested*

16



**Nurturing Relationships are  
Love in Action**



17

**Nurturing Relationships are Inborn**



18

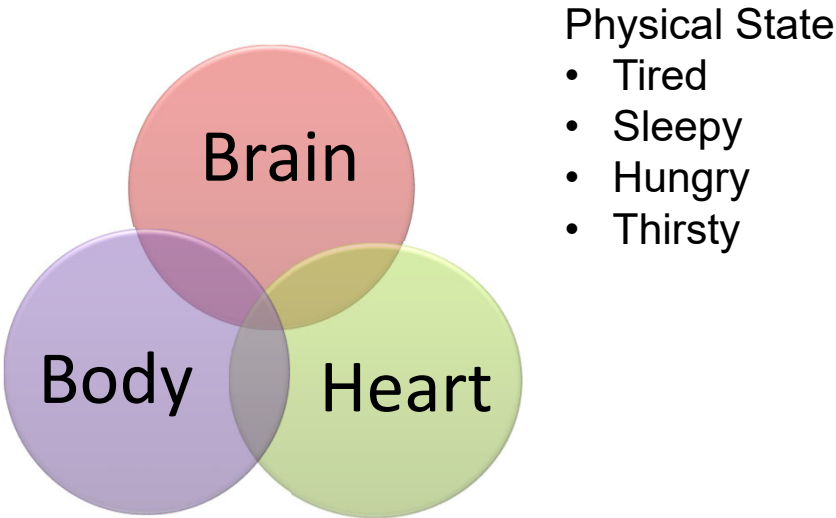
Nurturing the developing mind

What is the mind?

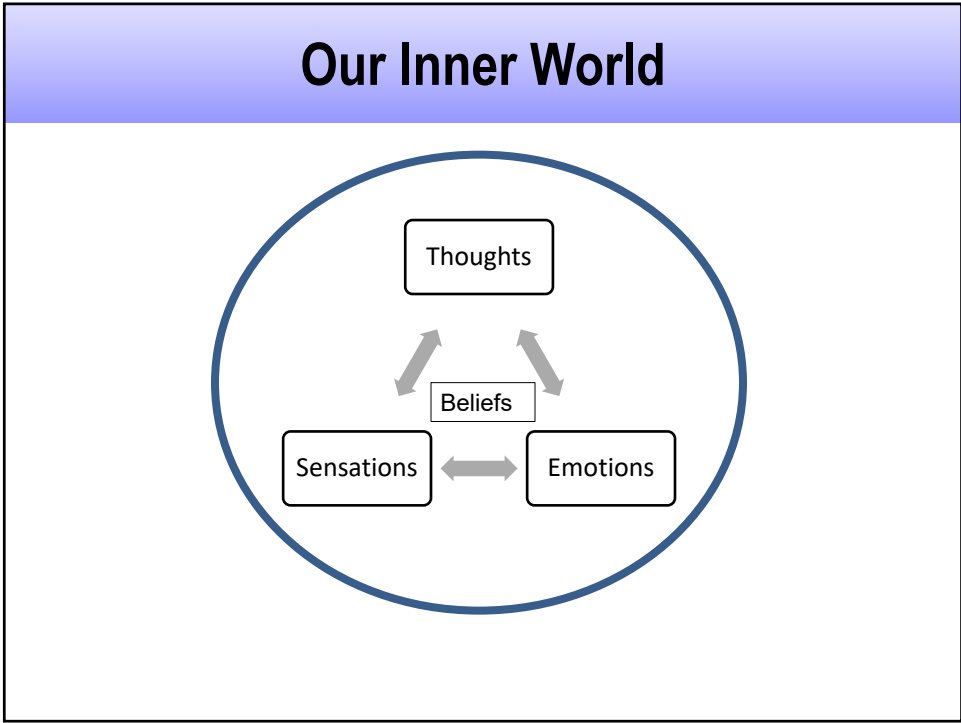
- Daniel Siegel, MD
- The mind can be defined, in part, as an **embodied and relational process** that **regulates the flow of energy and information**  
*(Involves our whole body and all of our relationships including to ourself)*
  - 2 aspects of the regulation process are **monitoring and modifying**  
*(watching ourselves and making changes to respond/react to current situation)*

19

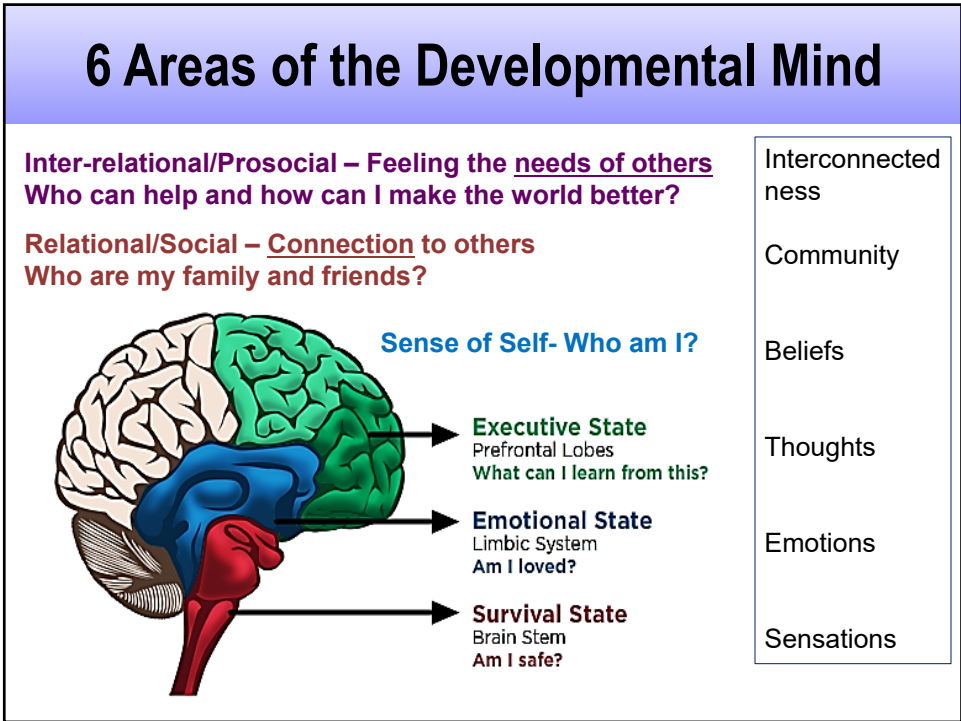
3 Inputs to our Mind



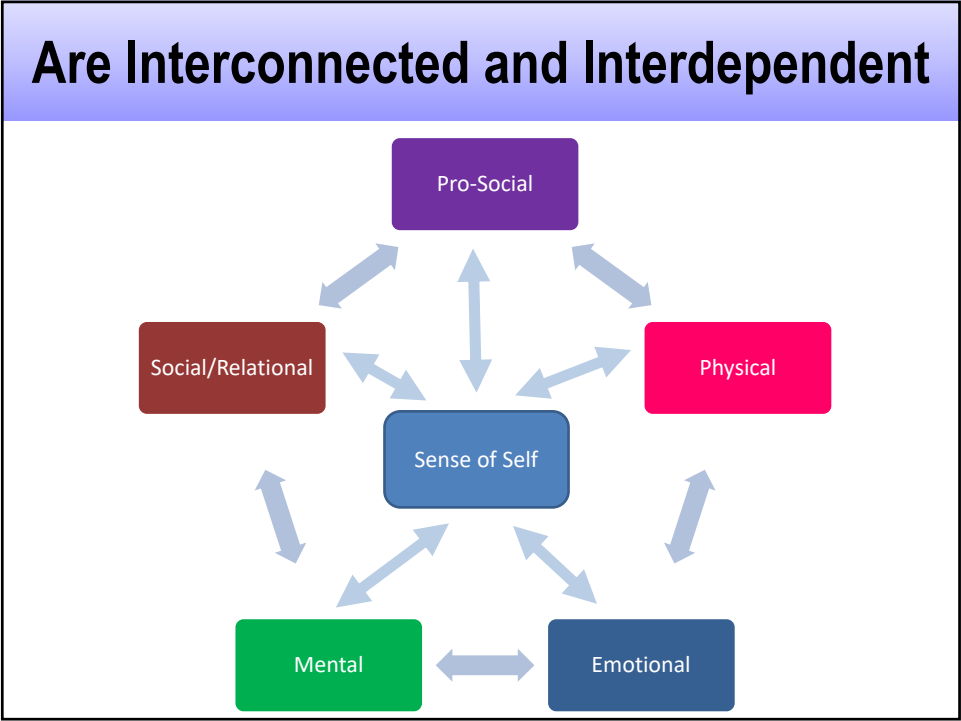
20



21



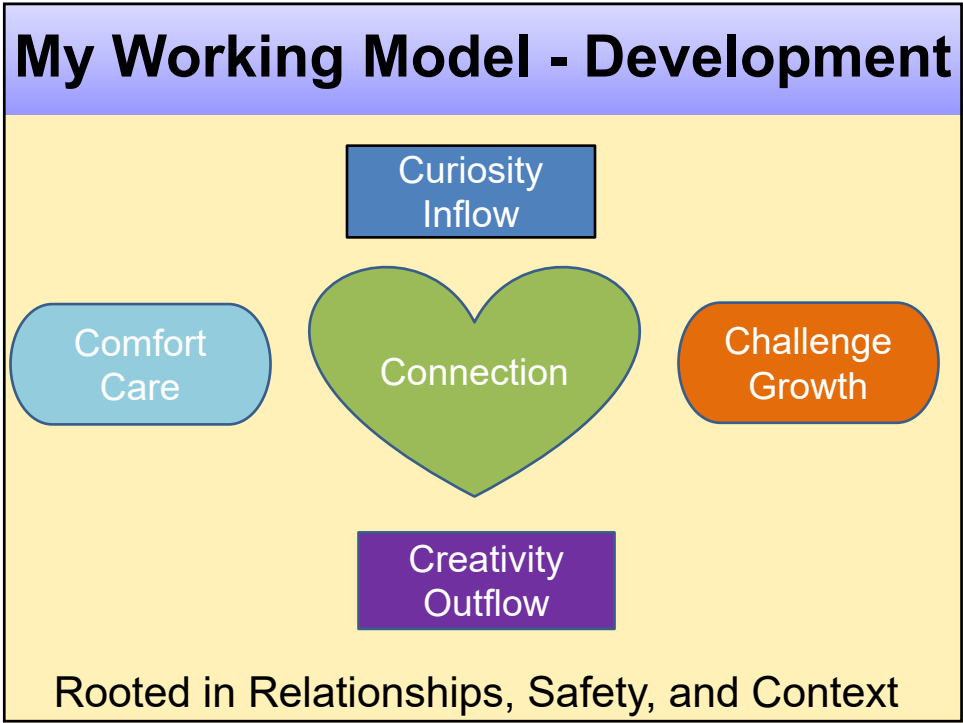
22



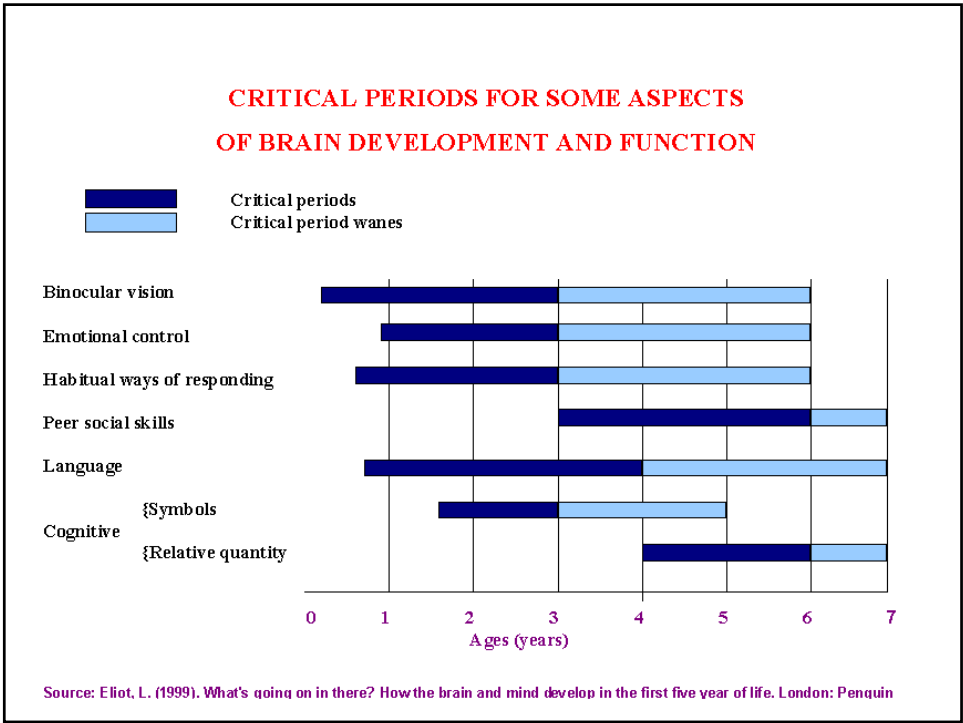
23

Are Interconnected and Interdependent		
Pro-Social	Caring, Empathy, Compassion, Service	Role of Relationships Play Regulation Co-Regulation Teaching Modeling
Social/Relational	Attachment, Temperament, Attunement	
Sense of Self	Self-Esteem, Identity Mastery, Morality	
Mental	Cognition, Concentration, Problem Solving, Communication (connects to physical), Imagination, Memory	
Emotional	Understanding, recognizing, regulating emotions	
Physical	Gross Motor, Fine Motor, Proprioception, Interoception	

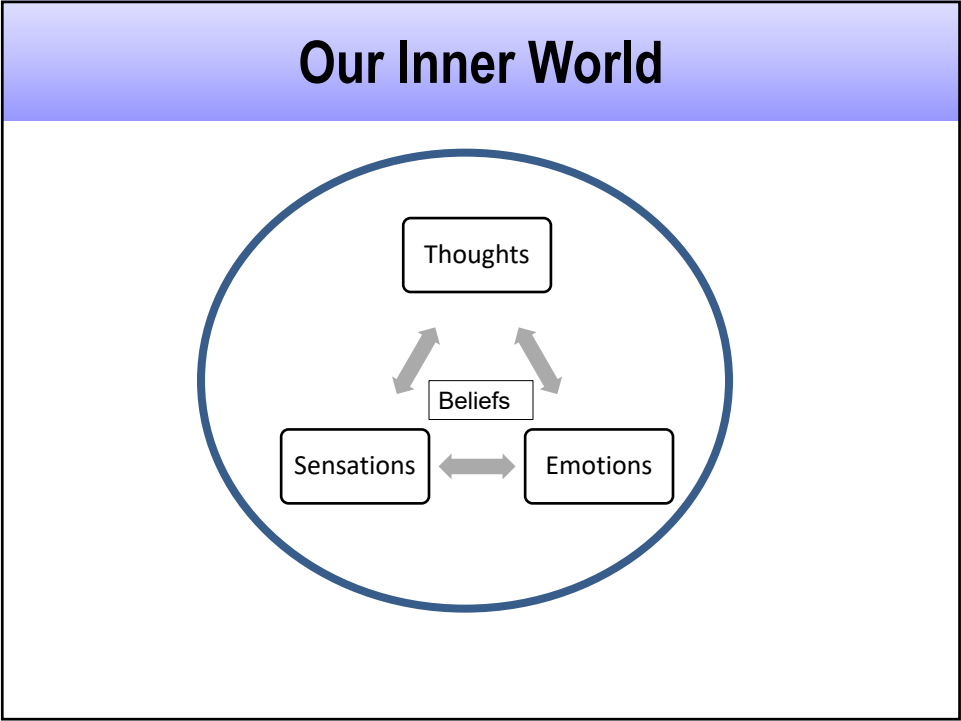
24



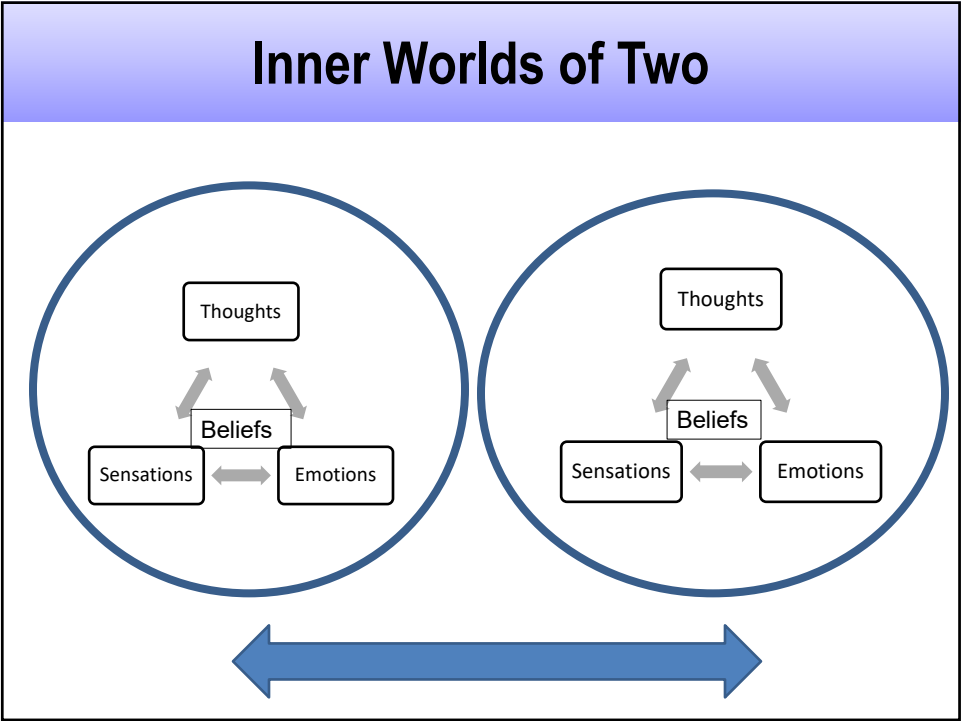
25



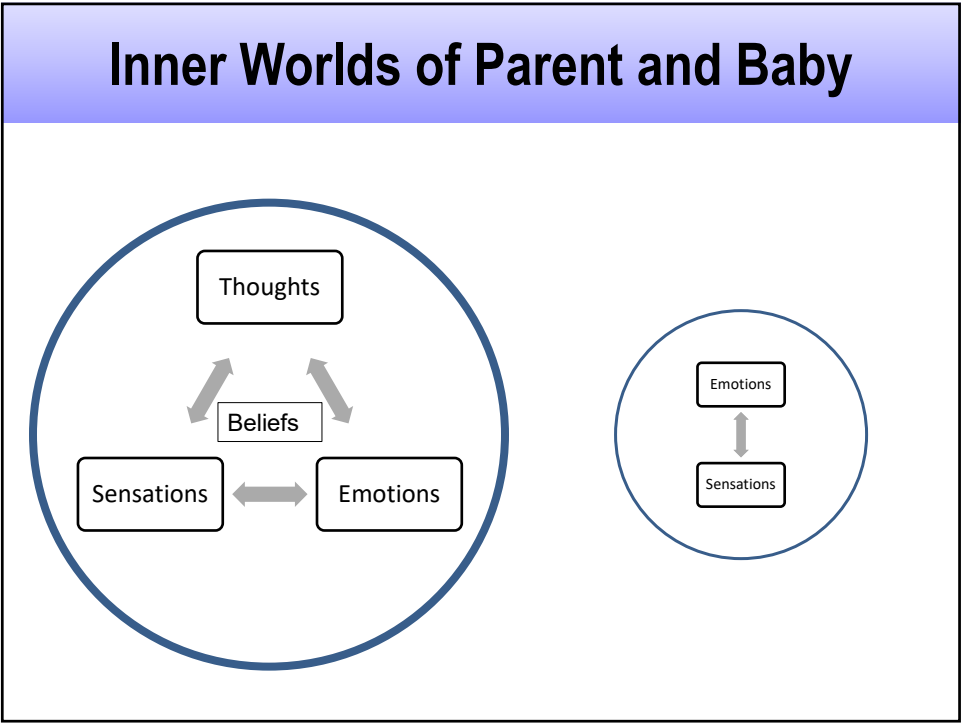
26



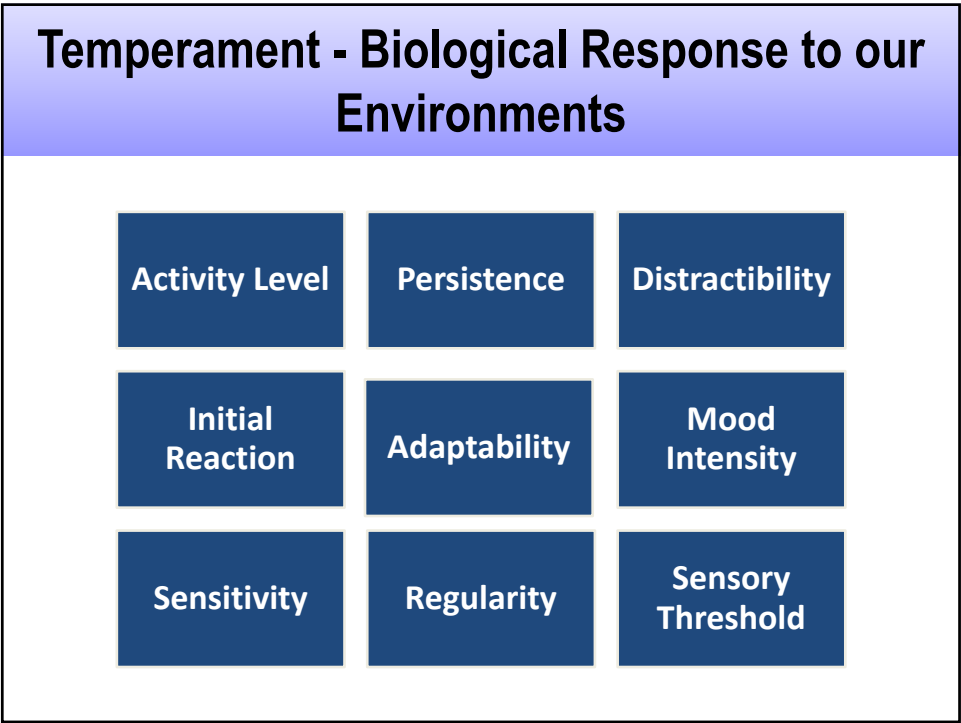
27



28



29



30

## **Stephen Porges, PhD**

### **Social Engagement System**

- A developing neuro-physiological system
  - to regulate contact with the external world
  - to modulate physiological and behavioral state
- In infants, vagal regulation in infants is associated with social behavior, ingestion, and state regulation
- Fussy infants may not experience the soothing effects of feeding

31

### **Social Engagement System**

- Voice prosody
- Auditory sensitivities
- Gaze
- Facial expression
- Posture during social engagement
- Mood and affect
- State regulation

32




## Understanding Attachment

Parent

→

Child

**Bonding:** Relationship or feeling a parent has for his/her child starting as early as conception.




Parent

↔

Child

**Attachment:** Quality of the relationship between an infant or child with his/her caregiver that develops overtime.



33

## Attachment - Why It Matters

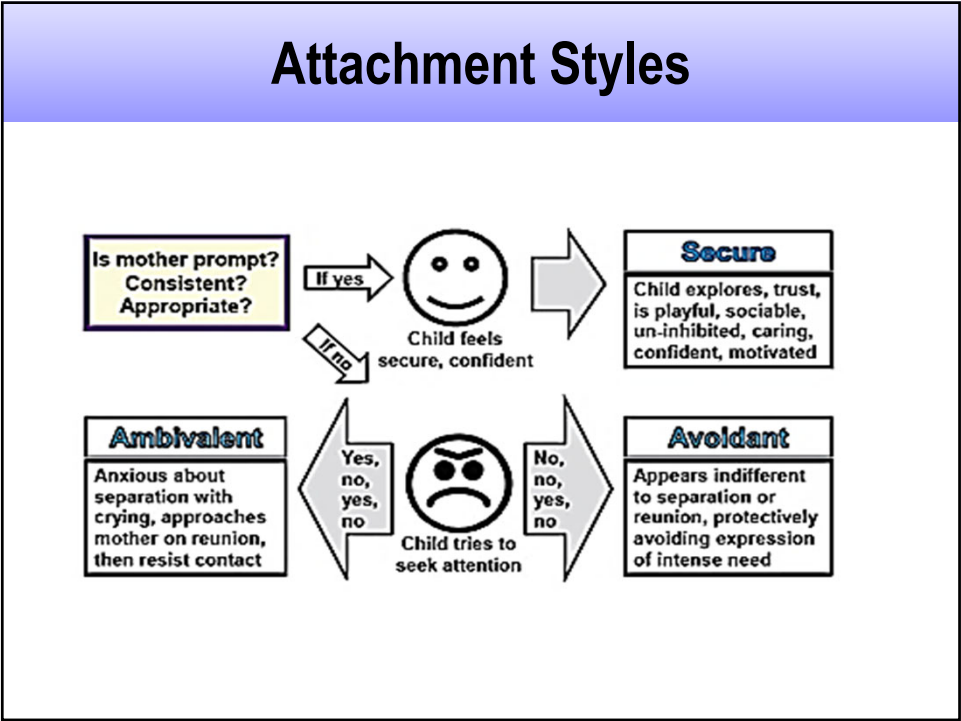
- Better understanding of etiology of psychopathology
  - Insecure attachment may be a (significant) **risk factor** for psychopathology, in both childhood and adulthood
  - Secure attachment may be a **resilience factor** in adversity
- Attachment system likely to be activated in times of stress
  - Attachment pattern may predict pattern of **help-seeking**, healthcare utilization and **compliance**
  - It may also influence the therapeutic alliance or **patient-clinician relationship** in ways that will help/ hinder treatment
- **Attachment pattern of clinician** may similarly be important
- However, attachment is not the be-all and end-all

34

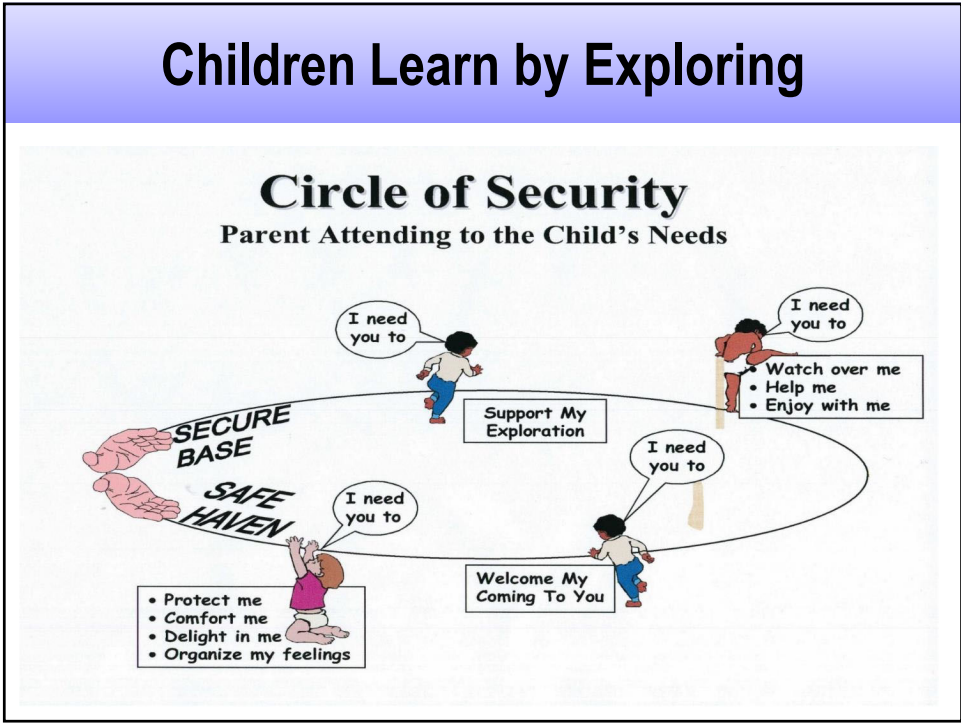
Attachment History

- John Bowlby observed orphaned infants after World War II (1940s)
  - Concluded that early social attachment between an infant and a caretaker is essential for normal social development
  - Determined that babies and mothers have an innate tendency to form an attachment
- Mary Ainsworth continued Bowlby’s research
  - Proposed that infants’ attachment to a caregiver differs in the degree of security in the attachment
  - Differences in security of attachment influence personality and social relationships in infancy and beyond

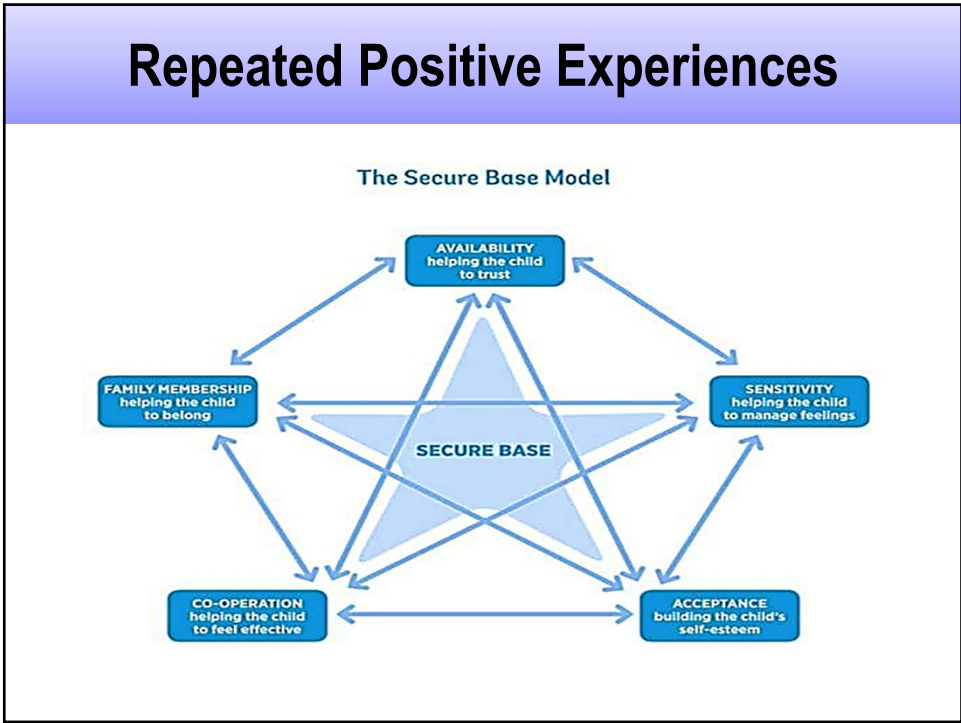
35



36



37



38

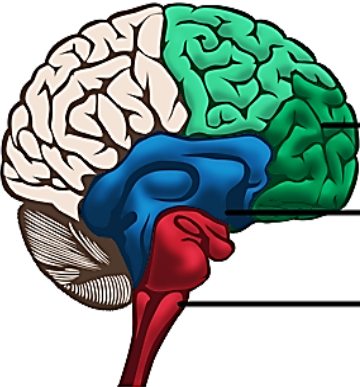
Trust

Safe, Consistent, and Comforting Across Areas  
of the Developing Mind

Prosocial

Social/Relational

Sense of Self



Executive State

Prefrontal Lobes

What can I learn from this?

Emotional State

Limbic System

Am I loved?

Survival State

Brain Stem

Am I safe?

39

Self-Regulation

- Take in information from our environment that is useful or tune out what is not useful
- Depends on our level of stress and arousal
- Critical to self-control and our ability to form relationships with others



40


Self-Regulation Skills

- Allows kids to manage their emotions, behavior and body movement when they're faced with a situation that's tough to handle
- Allows them to do that while still staying focused and paying attention

41

Self-Regulation Metaphor

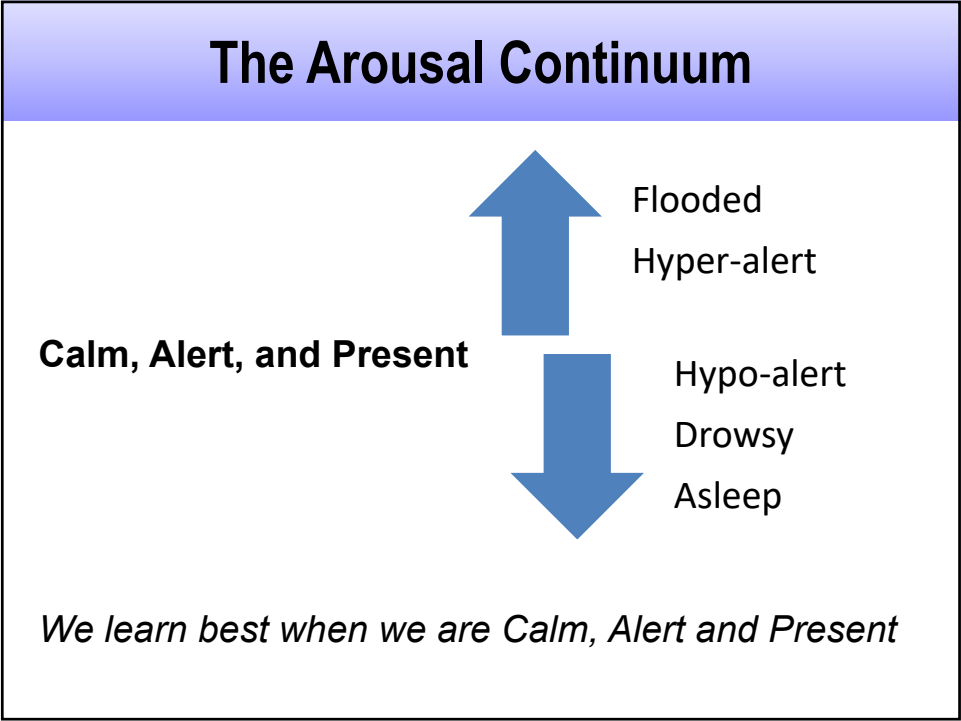
- Think about:



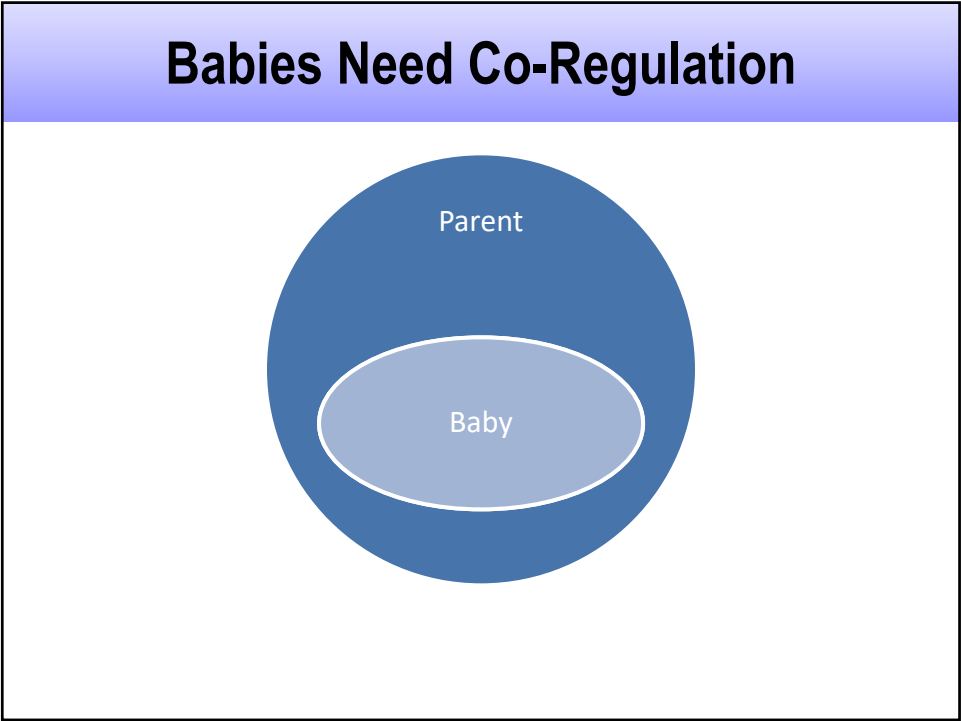
How parts work together  
Engine  
Accelerator  
Brakes  
Gas Tank  
Speedometer  
Gauges  
Tires

Needs to consider  
Roads  
Weather  
Traffic

42



43



44

Babies Need External Regulation

- Babies cannot self-regulate
- Massive brain growth occurs in areas critical to self-regulation in the early years of life
- Primary caregiver serves as an “external brain” *regulating and stimulating* the baby
- By being regulated, the baby develops the ability to self-regulate

45

Children Learn to Self-Regulate

The diagram consists of two circles. On the left is a large, solid blue circle with the word 'Parent' centered inside it. To its right is a smaller, light blue circle with the word 'Child' centered inside it. The circles are positioned side-by-side, with the 'Parent' circle being significantly larger than the 'Child' circle.


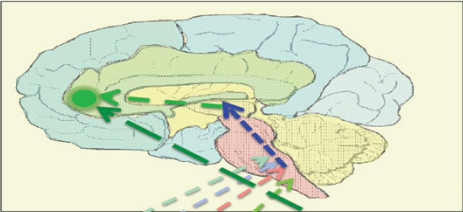
46

When distressed, we all need someone  
to respond to us



47

Soothing a baby or child is happening at the  
physical and emotional level



**Somatosensory cues**

**Primary caregiver** ↔ **Decrease physiological distress**

**VTA  
DA**

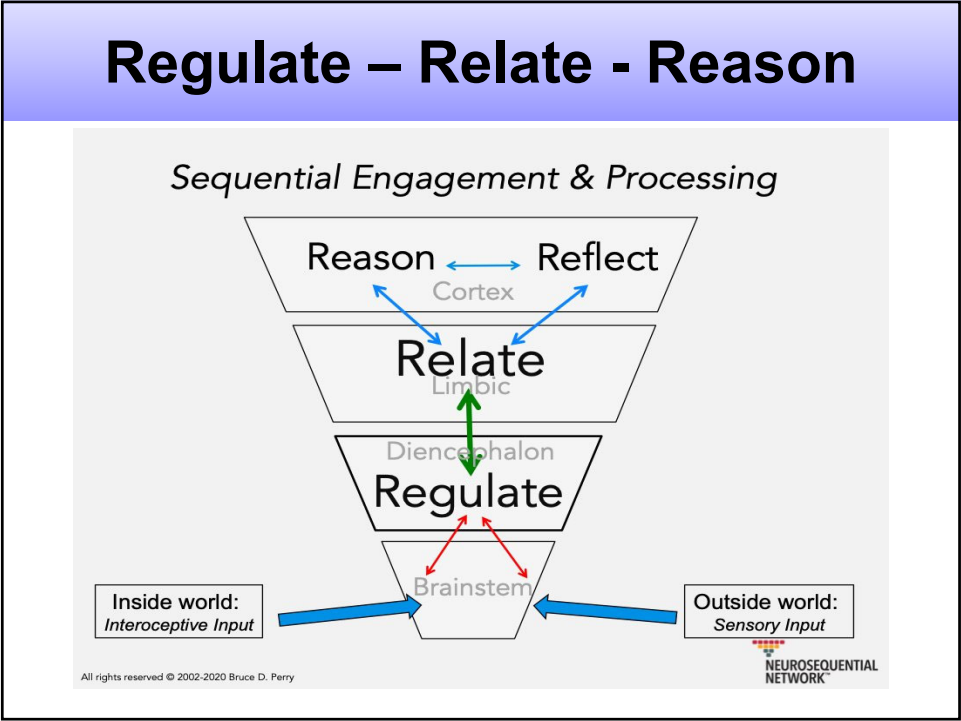
**Sensation of pleasure and safety**

**Release of hormones and “calmer” regulation of key stress related neural systems**

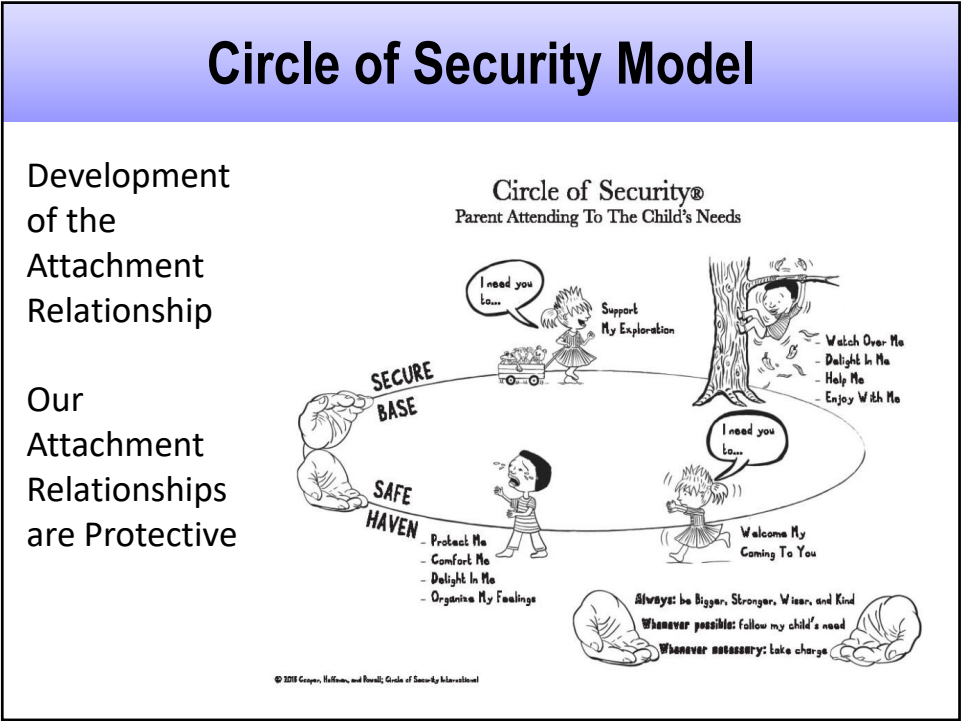
All rights reserved © 2012 Bruce D. Perry

48





49



50

## Secure Base

- Top of the Circle
- I need you to “Support My Exploration”
  - How
    - Watch Over Me
    - Delight In Me
    - Enjoy with Me
    - Help Me

51

## Safe Haven

- Bottom of the Circle
- I need you to “Welcome My Coming to You”
  - How
    - Protect Me
    - Comfort Me
    - Delight In Me
    - Organize My Feelings

52

### Be the Hands

- Always: Be Bigger, Stronger, Wiser and Kind
- Whenever Possible: Follow My Child's Needs
- Whenever Needed: Take Charge

53

### Attunement

The powerful emotional connection in which the caregiver connects with and shares the child's "inner state"

54

## Attunement

*Dr. Dan Siegel, MD says,*

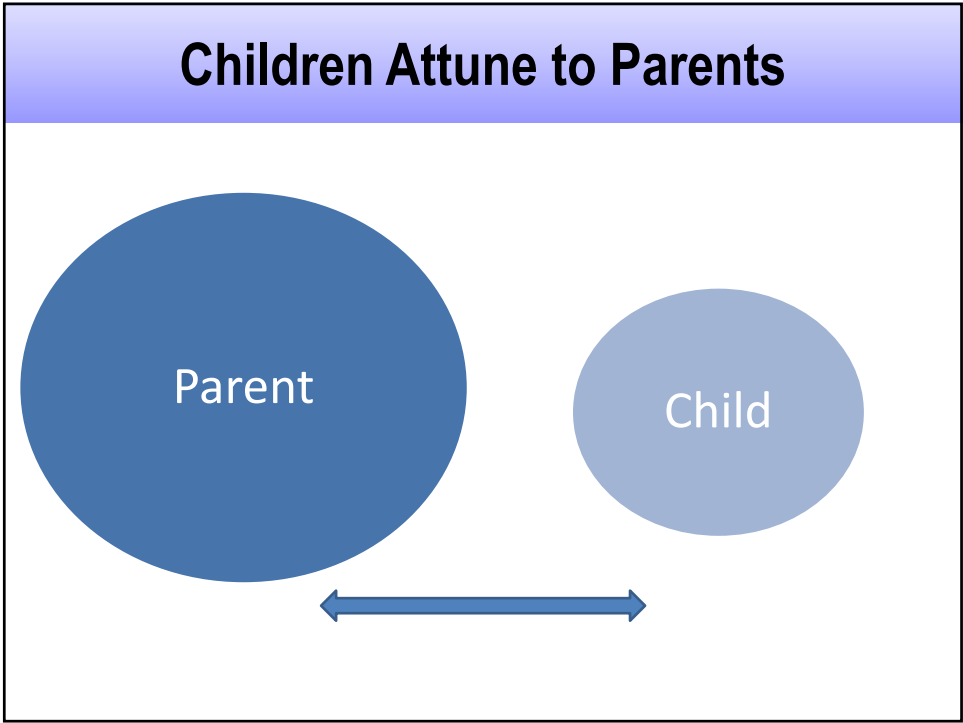
*"When we attune with others, we allow our own internal state to shift, to come to resonate with the inner world of another. This resonance is at the heart of the important sense of 'feeling felt' that emerges in close relationships. Children need attunement to feel secure and to develop well, and throughout our lives we need attunement to feel close and connected."*

55

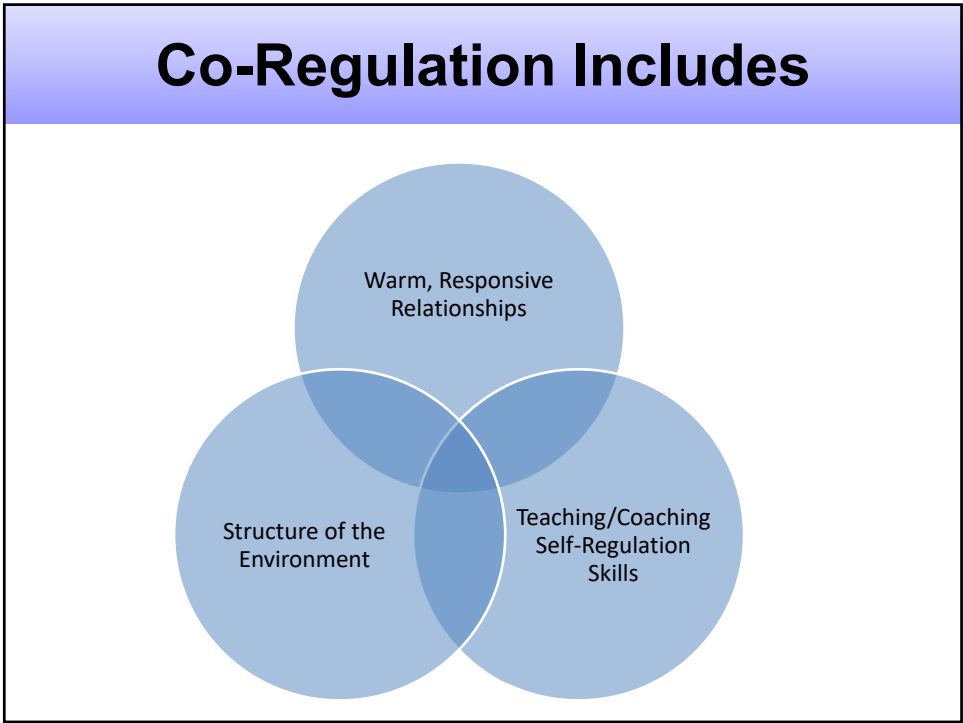
## Attunement Examples

- A caregiver seeing a baby crying, recognizing that the baby is hungry, and then picking up the baby to feed her.
- In an adult relationship, when someone says, "I'm fine," you know he doesn't mean it, and you dig a little deeper to find out what's going on.
- With your child
  - Knowing the feelings and motivations of your child
  - Being able to analyze your child's actions and interpret cues accurately
  - Provide a correct response that meets the child's underlying emotional needs

56



57



58

AGILE Co-Regulation

- **A - Affect:** how your tone and expressions convey your emotions. In times of stress, is your affect loving, supportive, and soothing?
- **G - Gesture:** Facial expressions, hand gestures, body moment, posturing and pacing all reflect your emotions and are felt by a child during your interactions.
- **I - Intonation:** Modulating the tone of your voice helps convey affect and social/emotional meaning. This is “felt” and “understood” long before words. And even after language develops, affect, gestures and intonation convey the genuine meaning of the interpersonal exchange. This communication is stronger than words.
- **L - Latency (Wait):** Wait and give the child time to take in your gestures and intonations. Co-regulation requires patience.
- **E - Engagement:** Before you continue, be sure you have engaged the child. Your baby's facial expressions, sounds and body language will tell you if she is engaged.

*Gerard Costa, PhD, the founding director of the Center for Autism and Early Childhood Mental Health at Montclair State University in New Jersey*

59

Winnicott’s “Good Enough Parenting”

- Through Winnicott’s eyes, perfect parenting is not desirable
- Infants need immediate attention and all of their needs met
- As long as parent is usually reliable and her child is well-cared for, her “failures”—minor miscues and slip-ups—are par for the course.
- Being good enough ultimately fosters independence and autonomy in the growing child.
- There is flexibility and room for real-life mistakes and limitations to our parenting abilities.

60

## Section 2

- Definition of Trauma
- Stress Basics
- Developmental Impact of Stress

61

## Hurt Happens

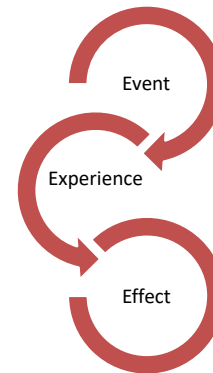
- All human beings experience “hurt”
- We seek out help when we are hurt
- When does hurt become trauma?

62

62

## Definition of Trauma

- Trauma is often the result of an overwhelming amount of stress that exceeds one's ability to cope, or integrate the emotions involved with that experience
- Trauma differs between individuals, according to their subjective experiences



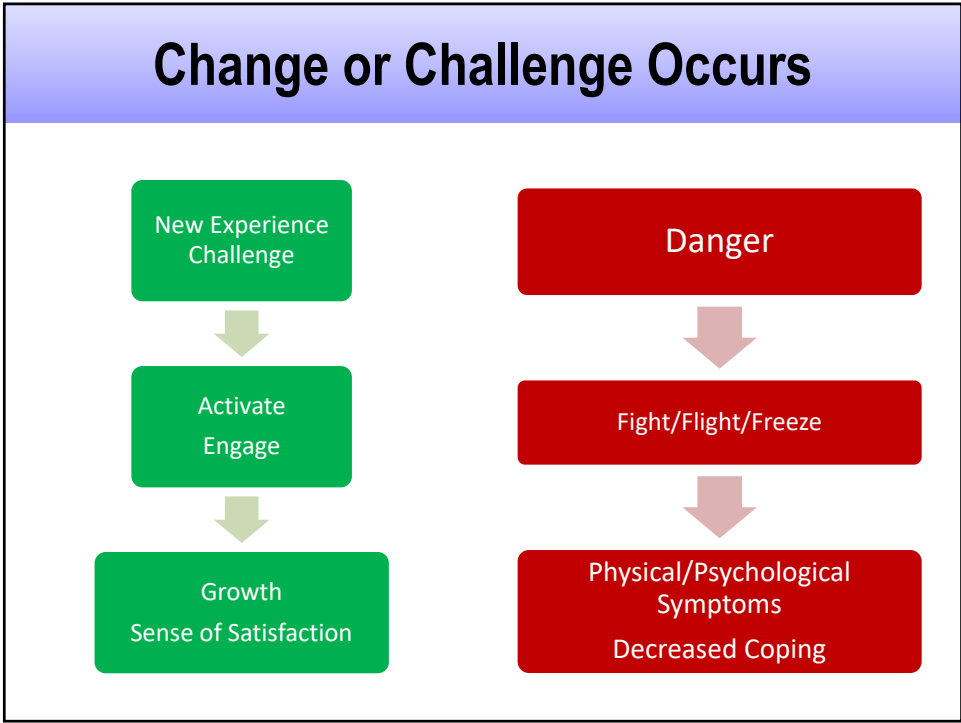
63

## What Is Stress?

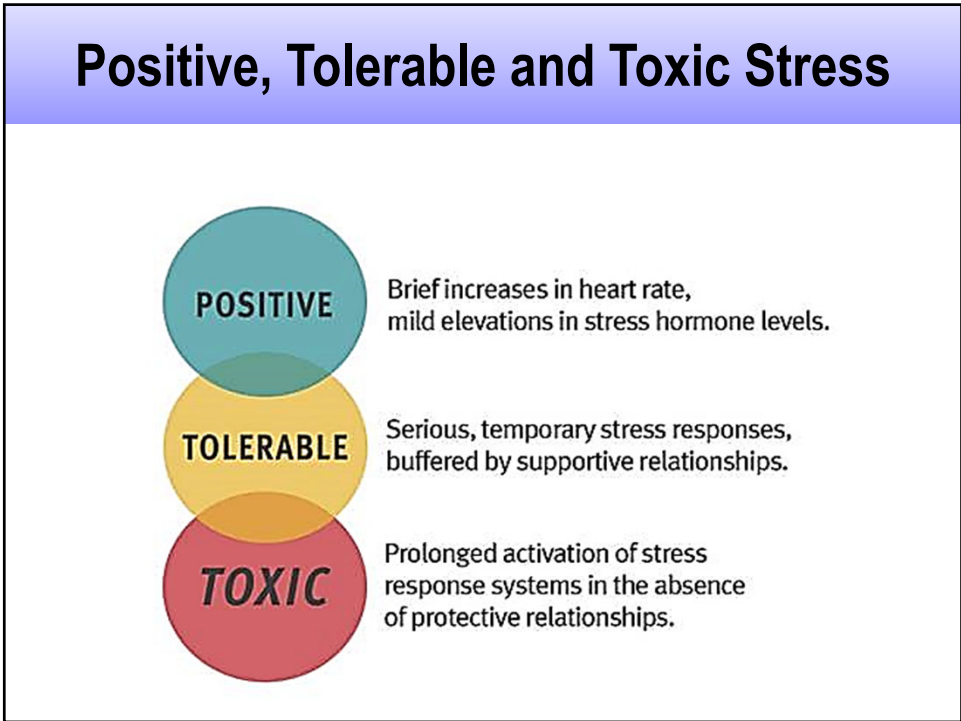
- Stress is a normal human reaction
- Your body produces physical and mental responses when you experience changes or challenges (stressors)
- Stress responses help your body adjust to new situations.
  - Positive - keeping us alert, motivated and ready to avoid danger
  - Negative - when stressors continue without relief or periods of relaxation

64

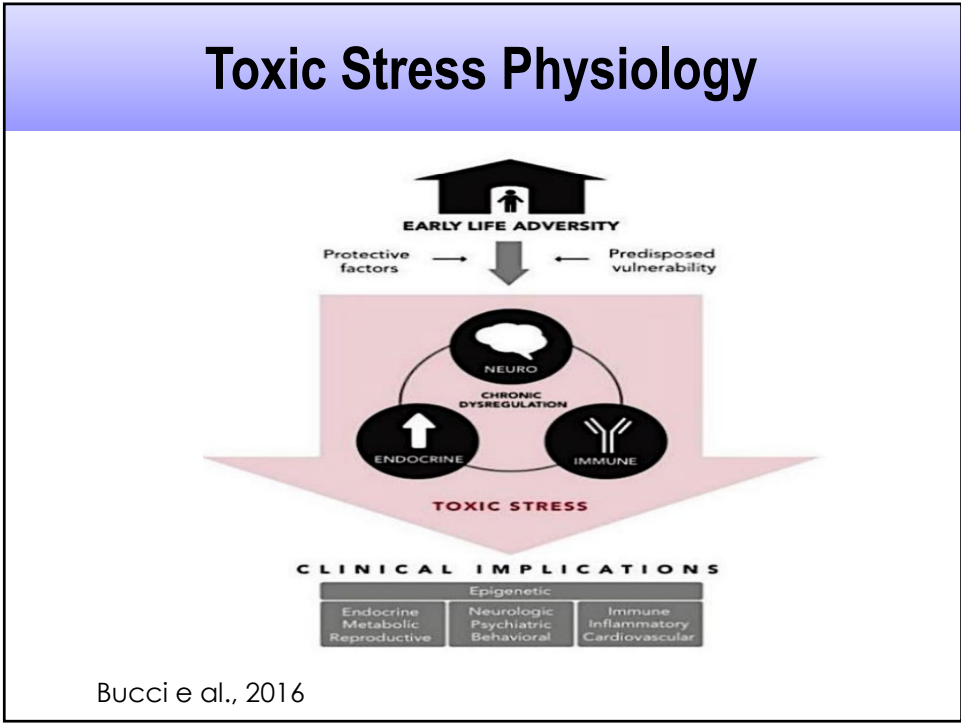




65



66



67

### Childhood Trauma

- The physical and emotional responses to events that threaten the **life or integrity of the child or of someone critically important to the child**
- Traumatic events overwhelm a child’s capacity to cope and elicit feelings of terror, powerlessness, and out-of-control physiological arousal
- Failure to provide sensitively responsive and mutually confirming interaction during developmentally important periods of life

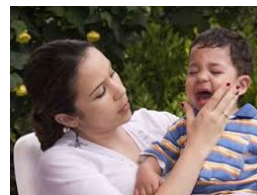
68

## Vulnerability of the Developing Child

- Immature alert/alarm systems
- Dependent on caregiver for support and context
  - Lack of physical ability to shield self
  - Lack of emotional resources
  - Lack the ability to discriminate novelty from threat
  - Need for child to stay with caregiver even if caregiver is the source of arousal/trauma

69

## When distressed, we all need someone to respond to us



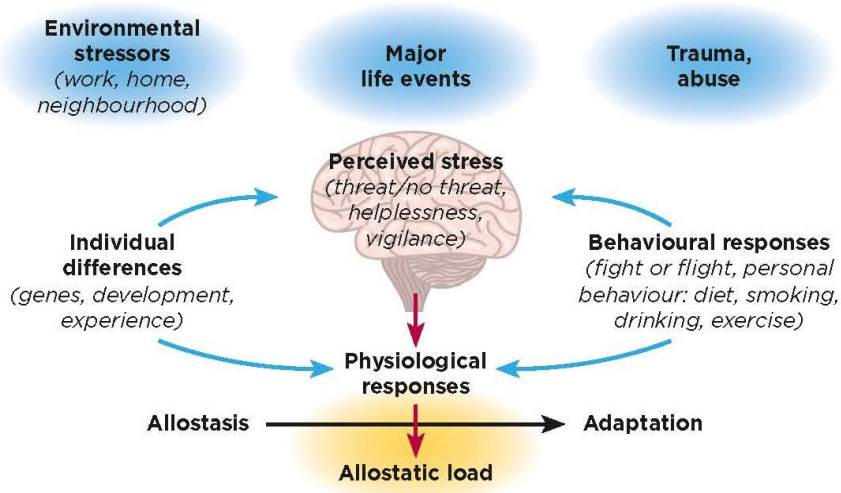
70

Sometimes the person is the stessor

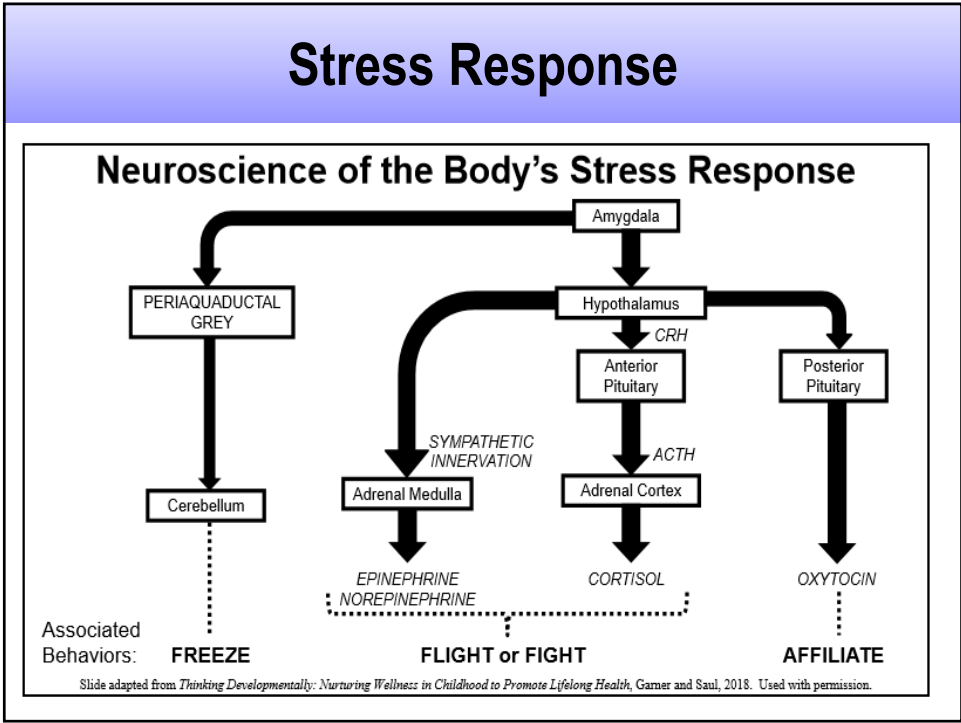


71

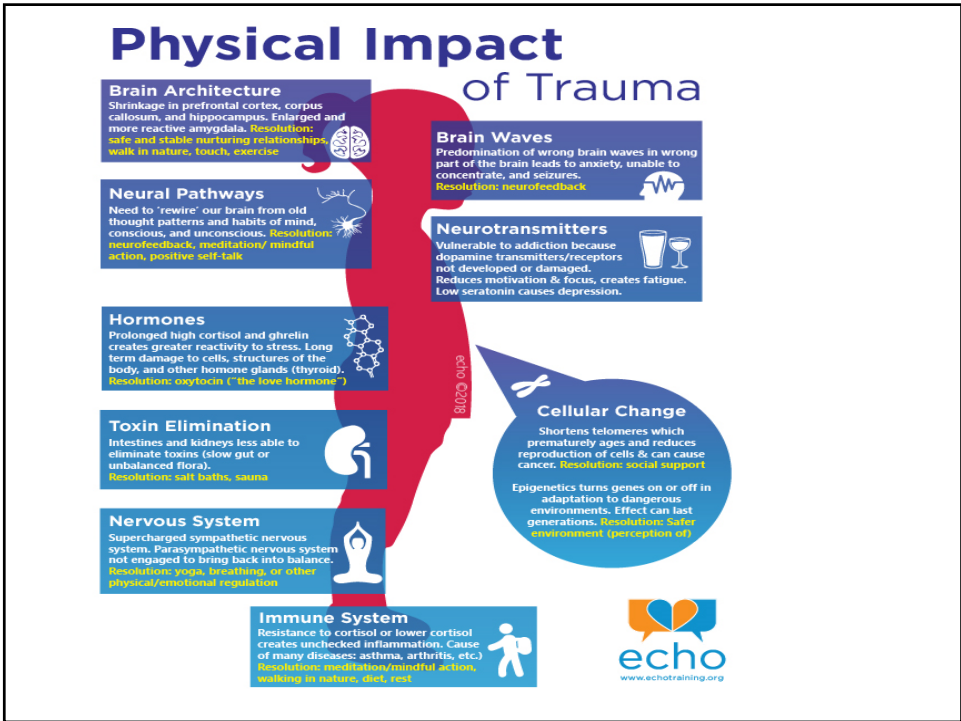
Response to Stress is Individual



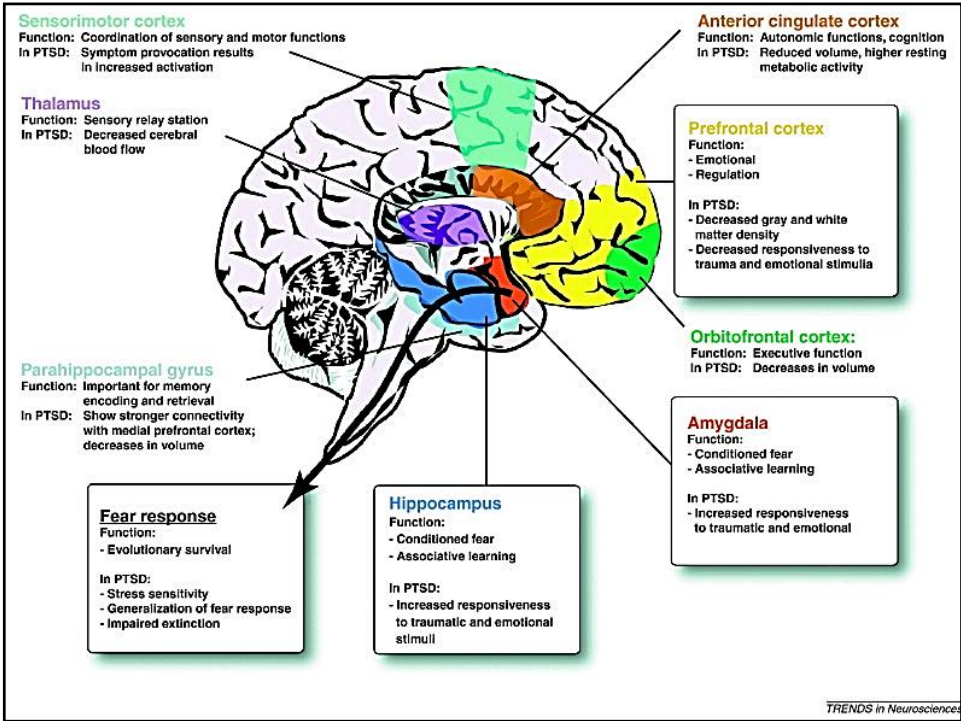
72



73



74



75

Changes in the Hormonal System

- Fight or flight or flee response dysregulated
- ↑ responses to subsequent stressors (hyper-arousal, irritability) loss of feedback inhibition

**PITUITARY**  
GROWTH HORMONE (GH)  
THYROID STIMULATING

**PINEAL**  
MELATONIN

**THYROID**

**PANCREAS**  
INSULIN

**ADRENALS**  
CORTEX  
CORTISOL  
ALDOSTERONE  
DEHYDROEPIANDROSTERONE  
ANDROSTENEDIONE

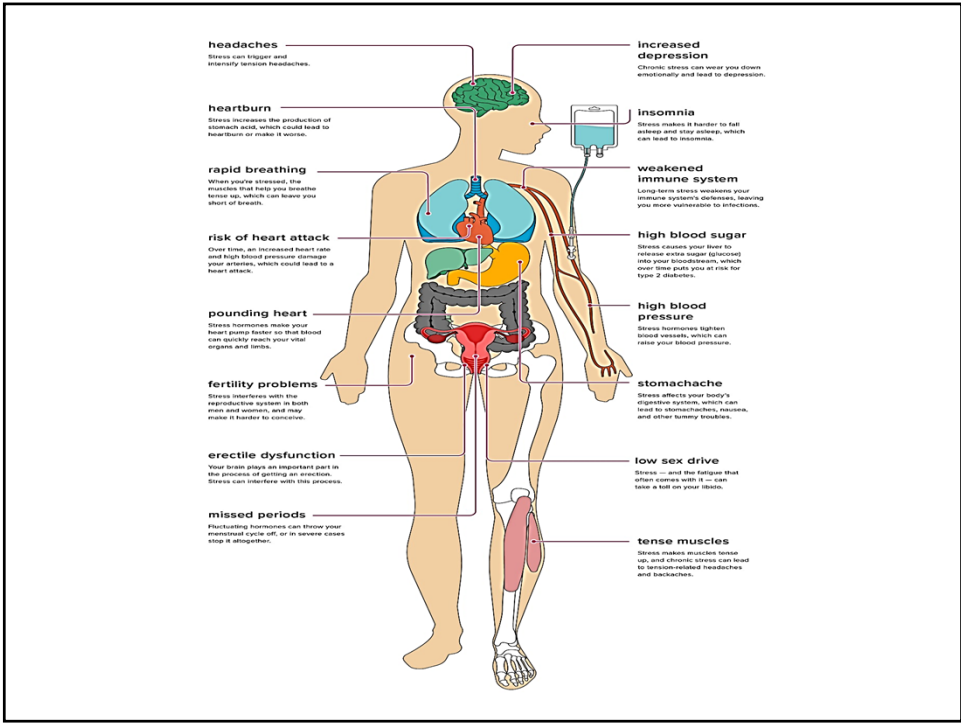
**MEADULLA**  
EPINEPHRINE  
NOREPINEPHRINE

**PLACENTA**  
PROGESTERONE  
ESTROGEN

**TESTIS**  
TESTOSTERONE  
ESTRADIOL  
ANDROSTENEDIONE

**GONADS**  
**OVARY**  
PROGESTERONE  
TESTOSTERONE  
ESTRADIOL  
ANDROSTENEDIONE

76



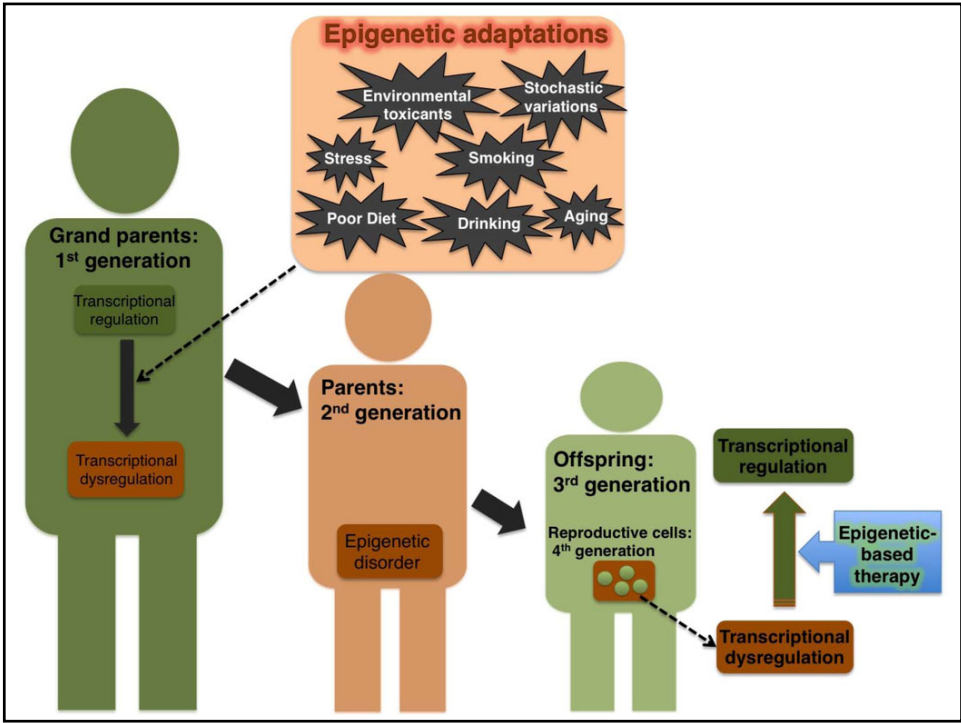
77

Effects of Childhood Trauma

- Attachment: The world and other people are unsafe, uncertain and unpredictable. (Withdrawal and difficulty forming relationships)
- Physical: Problems with movement and sensations
- Emotion Regulation: Difficulty regulating their emotional states.
- Behavioral control: Poor impulse control, risky behaviors, and aggression towards others.
- Development/Cognition: Inattention, learning difficulties, regression of previously attained milestones, and either global or domain specific developmental delays (e.g. speech/language, motor skills, self-care abilities, etc.)

78





79

Positive Relationships Down Regulates Stress



**Safety  
Pleasure**

**Hormonal  
Cascade**

**Creates Calm**

....

80



Reframe Trauma – Fuel for Growth

Post-Traumatic Growth

- Greater appreciation of life
- Greater appreciation and strengthening of close relationships
- Increased compassion and altruism
- The identification of new possibilities or a purpose in life
- Greater awareness and utilization of personal strengths
- Enhanced spiritual development
- Creative growth

Facilitated by education, emotional regulation, disclosure, narrative development, and service

Tedeschi, R., & Calhoun, L. (2004). Posttraumatic Growth: Conceptual Foundations and Empirical Evidence.

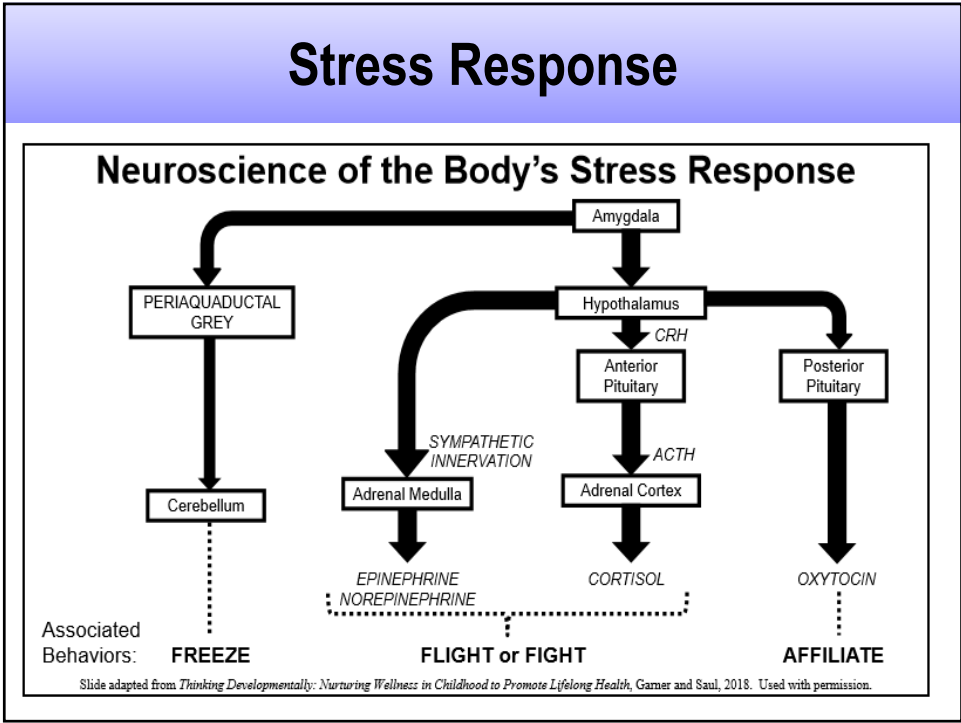
81

Positive Childhood Experiences Help

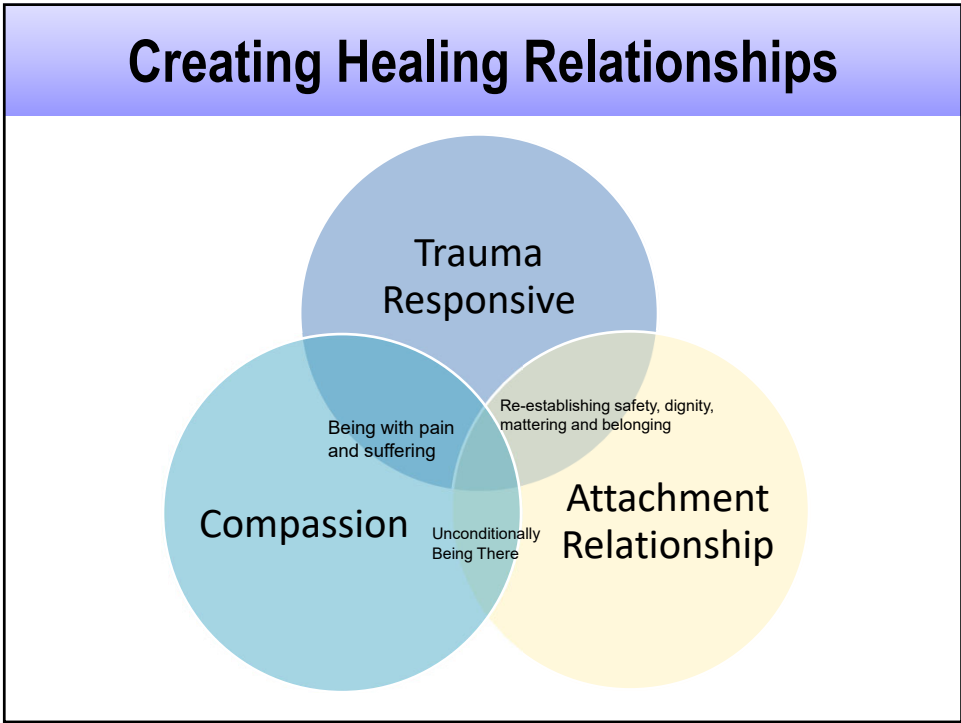
- The positive experiences with the greatest protective impact for those with 4+ ACEs included:
  - feeling that your family stood by you in hard times
  - having someone to talk with about difficult feelings

Sege, R., Bethell, C., Linkenbach, J., Jones, J., Klika, B. & Pecora, P.J. (2017). Balancing adverse childhood experiences with HOPE: New insights into the role of positive experience on child and family development. Boston: The Medical Foundation

82



83



84

### Being Trauma Responsive – Our Families’ Unspoken Questions

- Are you safe? (physically, emotionally, mentally, and our relationship)
- Can you “see” me? Do you understand me?
- Can you help me? Are you useful?
- Will you be around? For the long run? When things get tough?
- “Yeah, I’ve heard that before.” (emotional hurt – betrayal, abandonment, etc.)

85

### Our Experiences and Relationships Shape our View

The world is not safe

The world is safe

86

### Start with Establishing Safety and Trust



- We might be the first person that our client feels safe with



- Convey caring and a sense of worthiness



- Add stability, support and time



- As trust develops, our client's inner world shifts




87

### Trust Creates Inner Space

#### Building Trust

- Benevolence
- Reliability
- Competence
- Honesty
- Openness

*When a parent begins to trust herself, her world moves from 2D to 3D*




More room for sensations, emotions, and thoughts

88


### Safety and Inner Space

By focusing on the parent's strengths and helping them build skills, their inner space grows

The world is not safe



The world is safe



With **safety** and **inner space**, a parent can reflect  
With **reflection**, a parent can change their view of the world - **reframe**  
With **safety**, **inner space**, and **inner strength**, a parent can make meaningful change

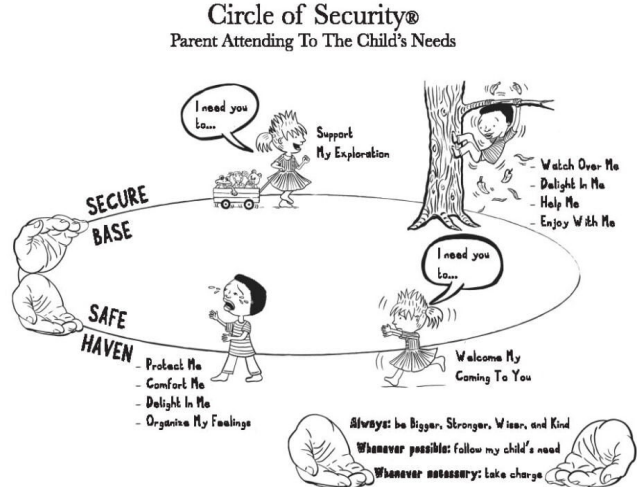
89

### Attachment - Circle of Security Model

Attachment Relationships are Needed Throughout Life

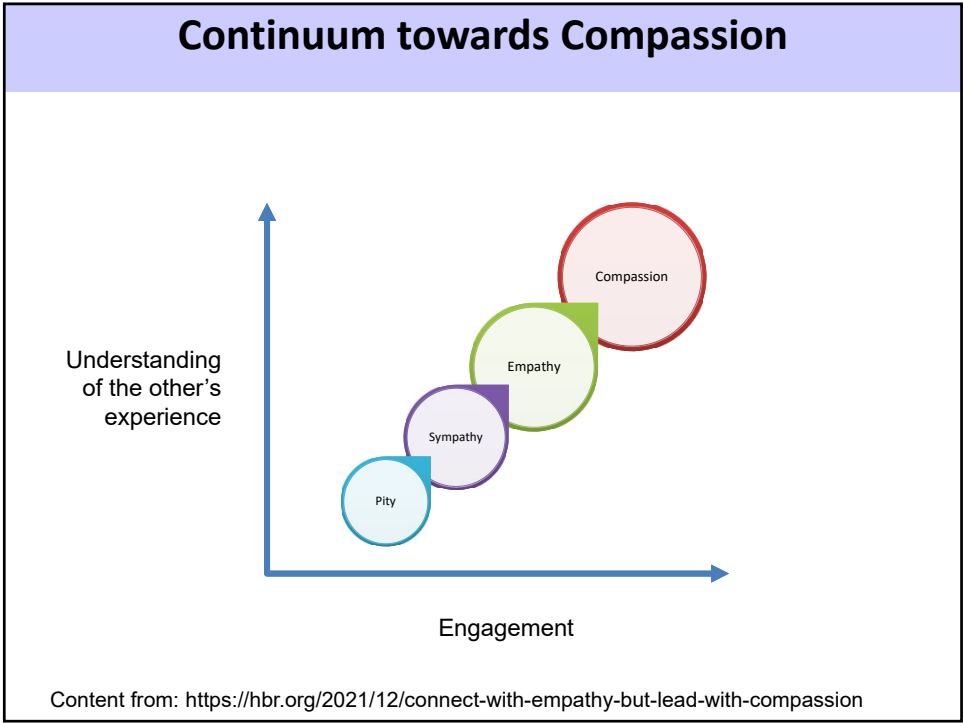
The Attachment Relationship is Necessary but Sufficient to Heal Trauma

Circle of Security®  
Parent Attending To The Child's Needs



© 2016 Cooper, Hoffman, and Powell, Circle of Security International

90



91



92

Compassion Can Be Developed



93

Family Protective Factors

Parental resilience

Social connections

Knowledge of parenting and child development

Concrete support in times of need

Social and emotional competence of children

CENTER FOR THE STUDY  
OF SOCIAL POLICY'S

strengthening families<sup>®</sup>

A PROTECTIVE FACTORS FRAMEWORK

94

## Resilience Can Be Developed

*Resiliency is developed in the context of relationships*

```
graph LR; A[Relationships] --> B[Regulation – Reflection – Reframing]; B --> C[Resilience]
```

Calm, Consider and Create a New Way to See Things

95

## Parental resilience

Managing stress and functioning well when faced with challenges, adversity and trauma

### How our everyday actions can help

- Projecting a positive & strengths-based approach to all families
- Demonstrate in multiple ways that parents are valued
- Honor each family’s race, language, culture, history and approach to parenting
- Support parents as decision-makers for their families and communities and help build decision-making and leadership skills

CENTER FOR THE STUDY  
OF SOCIAL POLICY'S

strengthening families<sup>SM</sup>

A PROTECTIVE FACTORS FRAMEWORK

96



## Parental resilience

Managing stress and functioning well when faced with challenges, adversity and trauma

### How our everyday actions can help

- Normalize the fact that parenting is stressful and help the parent plan proactively about how to respond to stressful parenting situations
- Validate and support good decisions
- Encourage parents to manage stress effectively
- Encourage parents to take care of themselves, particularly during stressful times
- Help parents understand how to buffer their child during stressful times

CENTER FOR THE STUDY  
OF SOCIAL POLICY'S

strengthening families<sup>™</sup>

A PROTECTIVE FACTORS FRAMEWORK

97

## Parental resilience

Managing stress and functioning well when faced with challenges, adversity and trauma

CENTER FOR THE STUDY  
OF SOCIAL POLICY'S

strengthening families<sup>™</sup>

A PROTECTIVE FACTORS FRAMEWORK

### Questions to ask

- Where do you draw your strength?
- How does this help you in parenting?
- What are your dreams for yourself and family?
- What kind of worries and frustrations do you deal with during the day? How do you solve them?
- How are you able to meet your children's needs when you are stressed?
- How does your spouse, partner, or closest friend support you? When you are under stress, what is most helpful?
- What do you do to take care of yourself when you are stressed?

98

Pradeep Gidwani © 2022

49

## Parental resilience

Managing stress and functioning well when faced with challenges, adversity and trauma

What to look for

- Problem solving skills
- Ability to cope with stress
- Self-care strategies
- Help-seeking behavior
- Receiving mental health or substance abuse services if needed
- Not allowing stress to impact parenting

CENTER FOR THE STUDY  
OF SOCIAL POLICY'S  
**strengthening families**  
A PROTECTIVE FACTORS FRAMEWORK

99

## Parental resilience

Managing stress and functioning well when faced with challenges, adversity and trauma

Activities to do with parents

- Ask the parent to write down their self-care strategies and ensure that they are taking time for self-care each day
- Ask the parent to identify situations they find stressful and make a plan in advance for how they will keep themselves calm and centered in these circumstances

CENTER FOR THE STUDY  
OF SOCIAL POLICY'S  
**strengthening families**  
A PROTECTIVE FACTORS FRAMEWORK

100