

We Can't Wait Conference

The Early Child Development and Mental Health

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September 28, 2023

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Disclosures

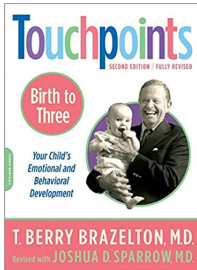
- I have no disclosures (CME requirement)
- I am committed to everyone reaching their fullest potential
- I want to create a field called Nurturology
- Neurobiology of the Developing Child from We Can't Wait 2020
<https://www.youtube.com/watch?v=uFcdXi5tLIY>

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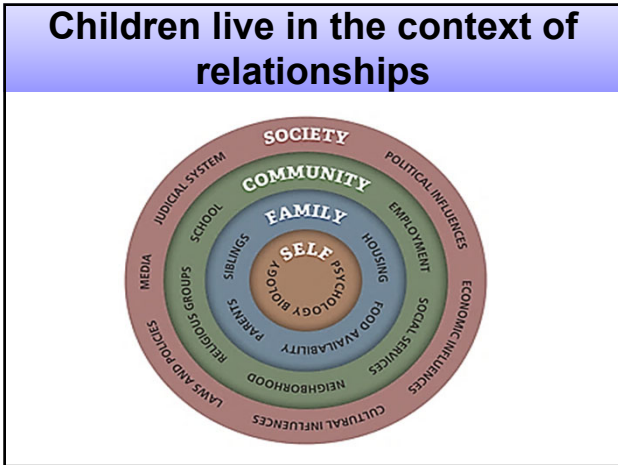
Inspired by T. Barry Brazelton, MD

His advice for frazzled new parents: "I'd like for them to learn that they can understand that baby by watching the baby's behavior."

- Touchpoints are periods, during the first years of life during which children's spurts in development result in disruption in the family system.
- The succession of touchpoints in a child's development is like a map that can be identified and anticipated by both parents and providers.



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- ### We See the World Through Our Lens and Filters
- Experience
 - Personal
 - Family
 - Cultural (Current and Historical)
 - Cultural Context
 - Expectations
 - Beliefs
 - Memories
 - Stories

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My Experiences - Career

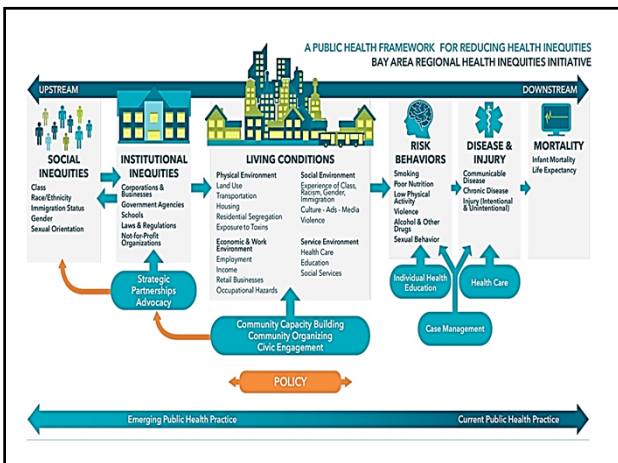
- First trip back to India – 5 years old (1st Generation Immigrant)
- Returned at 7, 9, 11, 13 and 17 (Overt Inequality)
- Tight-knit Progressive Indian Community (No native language)
- Mother - 1st surgeon at the Cleveland Clinic (Women's rights)
- College Anthropology Major (Covert Inequality)
- Field Working for the CDC in STD Prevention
- Congressional Commission Infant Mortality
- Pediatric Residency – Population Health (2nd Generation MD)
- Fellowship and MPH – Research in Boston
- Asthma work and Chronic Illness in San Diego
- Development and Behavioral Services in San Diego
- Yoga Teacher Training
- Studied with don Miguel Ruiz (Neurosurgeon and Shaman)

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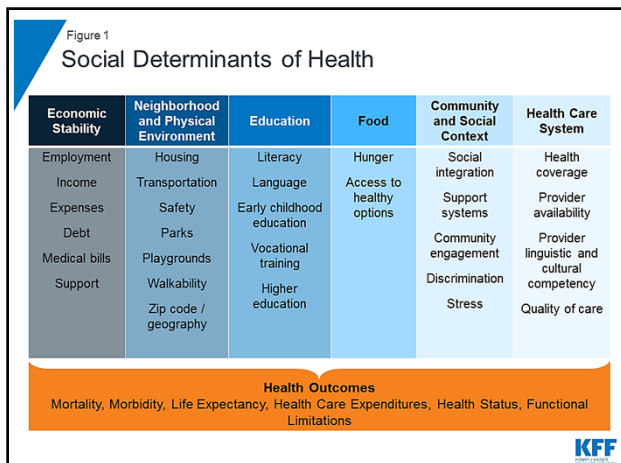
My Lens and Filters

- Relationships are central (especially family)
- Resilience
- Indian(ish)
- Cultural
- Inequality and justice – race/ethnicity and gender
- Clinical – Western (Allopathic) trained – open to other traditions – studied TCM/Ayurvedic/Energy Medicine
- Developmental – Attachment - Regulation
- Trauma – Post Traumatic Growth - Healing
- Family Support/Strengths based
- Nurture throughout the lifespan

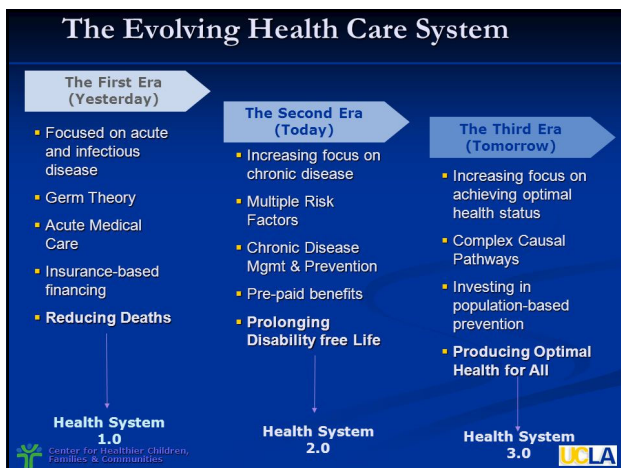
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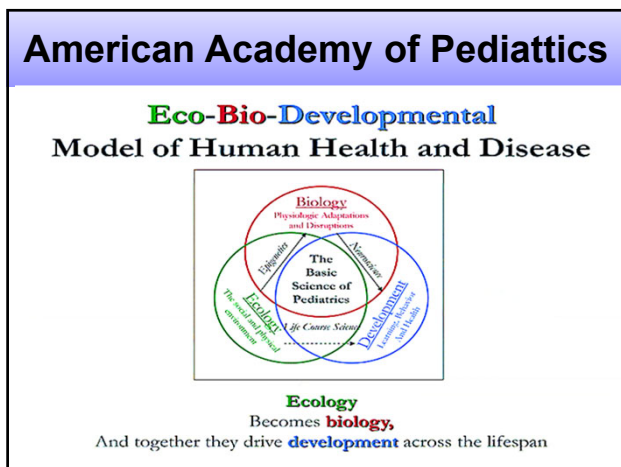
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Change Medical Homes
We need more help

Comprehensive, coordinated care provided by pediatricians with minimal staff support

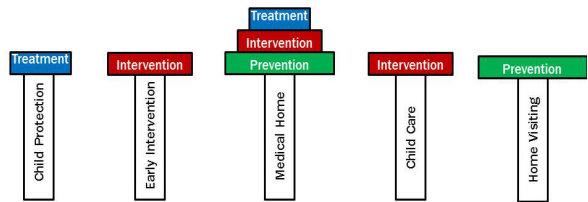


Community based team care involving several members bringing different skills to practice and community



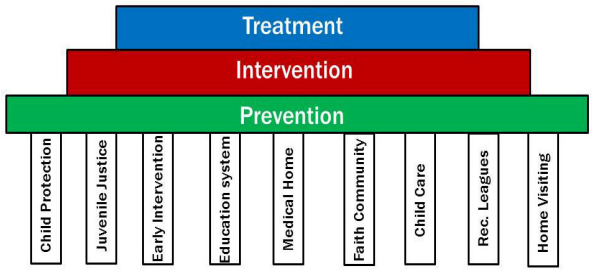
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Today's Model
From Individual Pillars ...



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Community Model



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Where to Start in Practice?

- Relationships as a vital sign
 - safe, stable, and nurturing relationships (secure attachment)
 - Social-emotional surveillance at every visit because the quality of the early parent-child relationship is fundamental
- Communicating with Families
 - Discuss with parents and caregivers the power of relationships to proactively build the **critical social-emotional-language** skills that buffer toxic stress
 - Emphasize that early relationships need to be “safe, stable, and nurturing” or “Protect, Relate, and Nurture” – PRN all the time (PRN is medical lingo for as needed)

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An Early Brain and Child Development Agenda

- Promote healthy relationships
- 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



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What do babies and young children need?



No More Toxic Tub
Getting children ready for school starts at home. [Learn more.](#)

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Nurture

- To care for and to encourage the growth or development of
- Occurs when a parent or caregiver is available and able to sensitively respond to and meet the needs of their child



*Available, Attuned, and Interested
Parents and Caregivers*

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Nurturing Relationships are Inborn



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**Nurturing Relationships are
Love in Action**



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Nurturing Relationships Builds

- Better brains
- Healthy attachment
- SE intelligence
- Self regulation
- Resilience

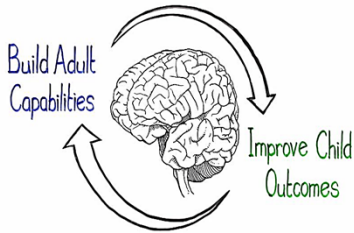


Relationships + Regulation = Resilience

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Focus - 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.



Center for the Developing Child

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Family Protective Factors CENTER FOR THE STUDY OF SOCIAL POLICIES
strengthening families A PARTNER OF ZERO TO THREE

- Parental resilience
- Social connections
- Knowledge of parenting and child development
- Concrete support in times of need
- Social and emotional competence of children

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**Moms in the Fourth Trimester
The Golden Months**

- Needs 1 - 3 months to recover nutritionally, hormonally
- Needs mothering
 - Rest -- sleep when baby sleeps
 - Resting moms have less postpartum depression
 - Support
 - Apprenticeship
 - A Little Information
 - Traditional diets
- Help with sleep, fussy baby, emotional issues and fall in love with baby

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What Can We Do?

- Strengthen parenting
- Identify family needs
 - Health leads, medical-legal partnership, nutrition assistance
- Connect to community resources
- Advocate at state, federal levels
 - Minimum wage
 - Welfare reform
 - Preschool education investment
 - Affordable Care Act implementation, including Medicaid changes

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Normal Interactions

- Cues and quality of interactions
 - Moments of Meaning and Joy
 - Rupture and Repair
 - Rupture without Repair
- Attachment and Attunement
- Temperament
- Co-regulation leads to self-regulation
- How to play
- Behavioral limit setting

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Supports for Parents

- Rest and Respite
- Nutrition
- In home help - Doulas, home visits
- Connection with other parents and grandparents
- Specific help with critical events (divorce, foster care, incarceration, grief and loss, unemployment)
- Quality Universal and Therapeutic daycare and preschool
- Training all parents, professionals and society on ECMH issues
- Improved supportive messaging
- Healthier communities with better nutrition, exercise, atmosphere, and reduced toxicity

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Case for Income Supports

Panel Study of Income Dynamics over >30 years
Analyses modeled effects of adding \$3,000 income to households with <\$25,000 per year, controlling for wide variety of non-income variables

- Income and related programs:
 - 17% increase in annual earnings
 - 152 more work hours per year
 - Marked decrease in food stamp use as adults
- Health outcomes (mid-late 30s) –reductions in:
 - Obesity 20%
 - Hypertension 29%
 - Arthritis 45%
 - Work-limiting chronic conditions 33%

Duncan et al., Child Development, 2010

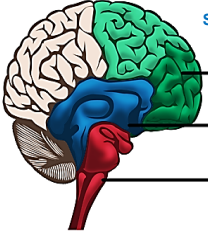
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6 Dimensions of the Developing Mind

Inter-relational/Prosocial/Spiritual – Feeling the needs of others
Who can help and how can I make the world better?

Social/Relational/ – Connection to others
Who are my family and friends?

Sense of Self- Who am I?



- **Executive State**
Prefrontal Lobes
What can I learn from this?
- **Emotional State**
Limbic System
Am I loved?
- **Survival State**
Brain Stem
Am I safe?

Interconnectedness

Community

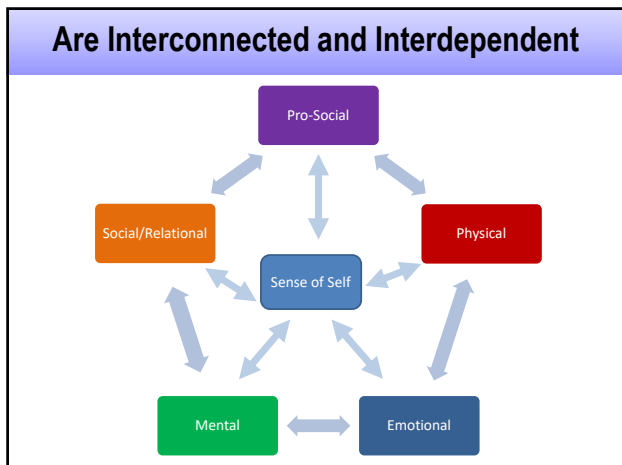
Beliefs

Thoughts

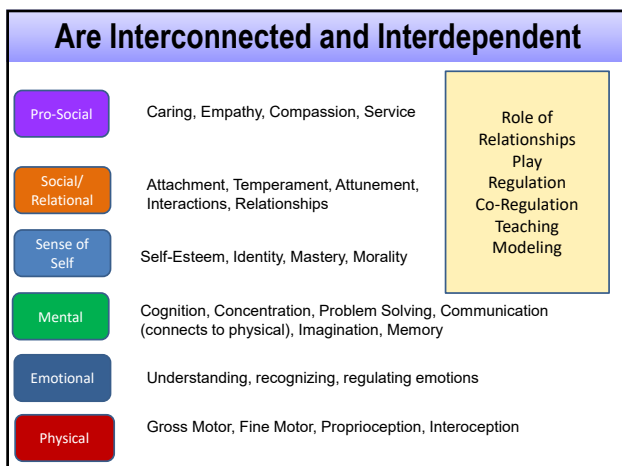
Emotions

Sensations

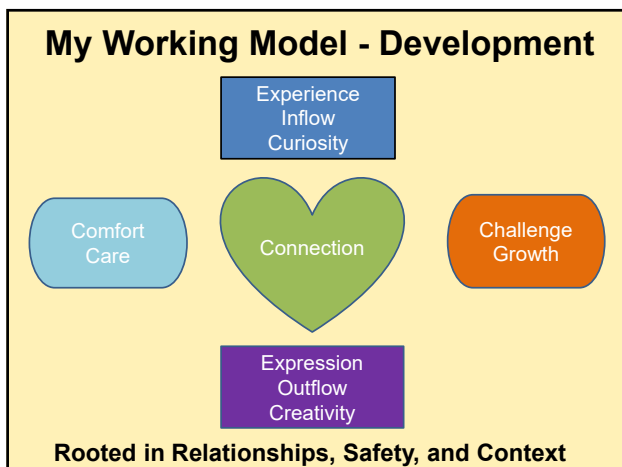
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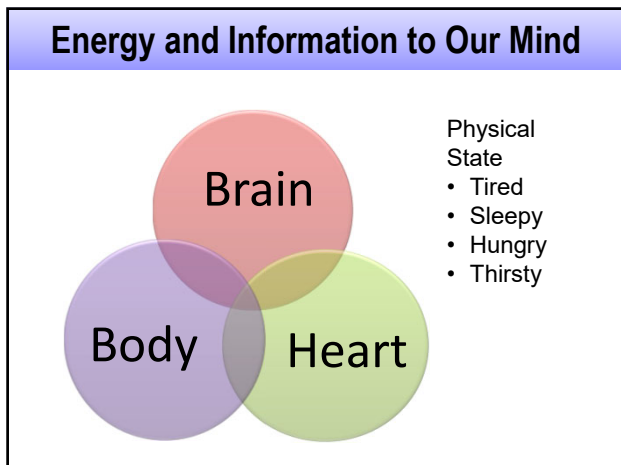
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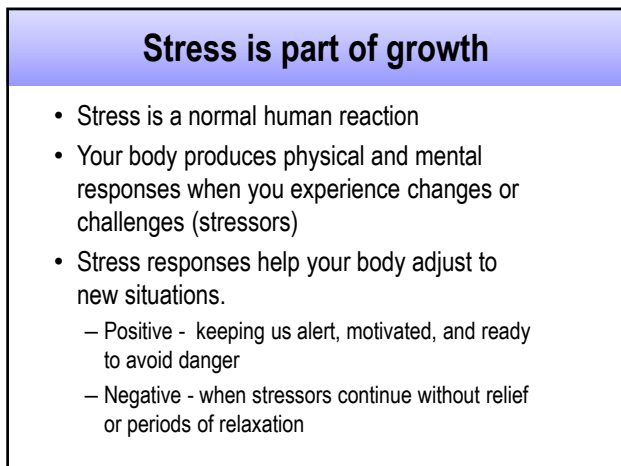
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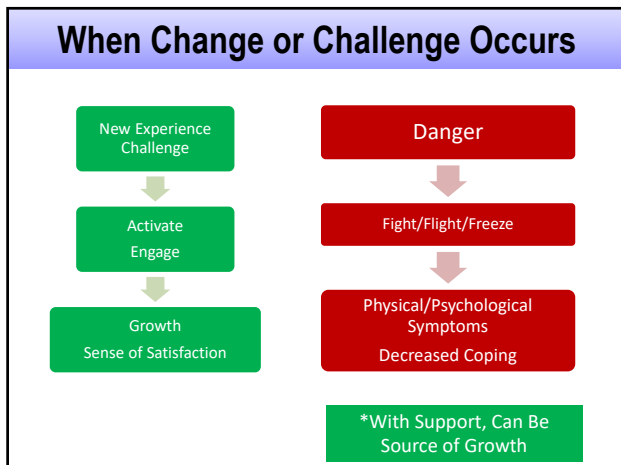
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Positive –Tolerable -Toxic Stress

Types of stress responses

POSITIVE

A normal and essential part of healthy development
EXAMPLES
 getting a vaccine, first day of school

TOLERABLE

Response to a more severe stressor, limited in duration
EXAMPLES
 loss of a loved one, a broken bone

TOXIC

Experiencing strong, frequent, and/or prolonged adversity
EXAMPLES
 physical or emotional abuse, exposure to violence

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Stress Response

Neuroscience of the Body's Stress Response

Slide adapted from Thinking Developmentally: Nurturing Wellness in Childhood to Promote Lifelong Health, Ganss and Sait, 2018. Used with permission.

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Trauma and Difficult Experience

- 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
- **Unprocessed events, experiences, or emotions can be triggering**

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When distressed, we all need someone to respond to us (Safe Haven)

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

All rights reserved © 2012 Bruce D. Perry

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When we comfort, a lot happens

MUTUAL REGULATION

Gene Nathan, MD

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Positive Relationships Down Regulates Stress



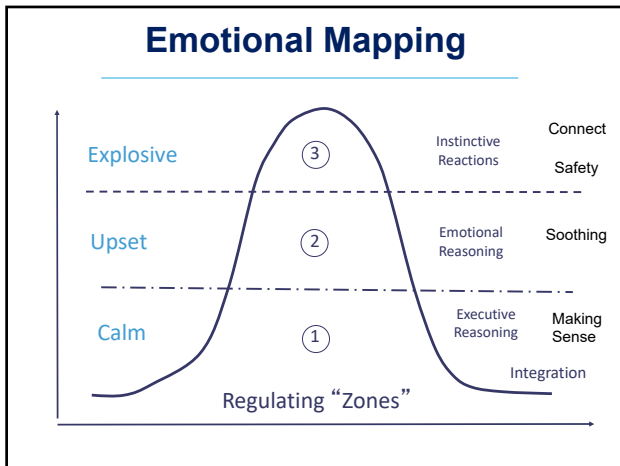
**Safety
Pleasure**

**Hormonal
Cascade**

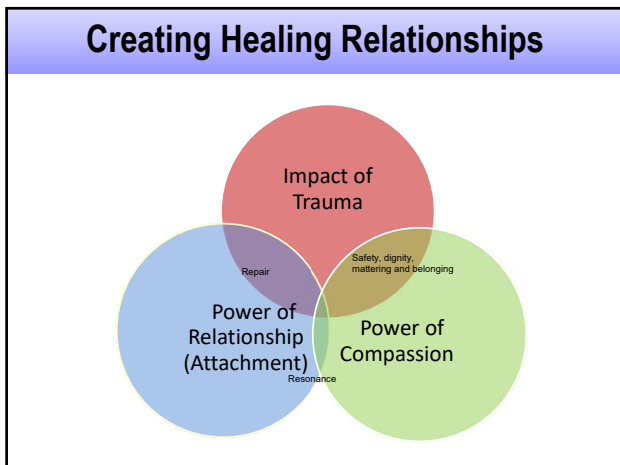
Creates Calm

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What is Attachment?


...the capacity to form and maintain healthy emotional relationships which generally begin to develop in early childhood

- Enduring bond with “special” person
- Security & safety within context of this relationship
- Includes soothing, comfort, & pleasure
- Loss or threat of loss of special person results in distress

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Attachment Styles in Action

Attachment styles




Secure

- Healthy communication style
- Able to ask for help when needed
- Can self-regulate emotions




Anxious

- Clinginess
- Fear of abandonment
- Needs constant reassurance



Avoidant

- Difficulty expressing emotions
- Tends to emotionally withdraw from others
- Unwilling to ask for help




Disorganized

- Incorporates characteristics of anxious and avoidant styles
- Fear of rejection but difficulty with intimacy
- Low self worth

INSIDER


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Attachment Styles in Adults




SECURE

"I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me."



ANXIOUS

"I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away."

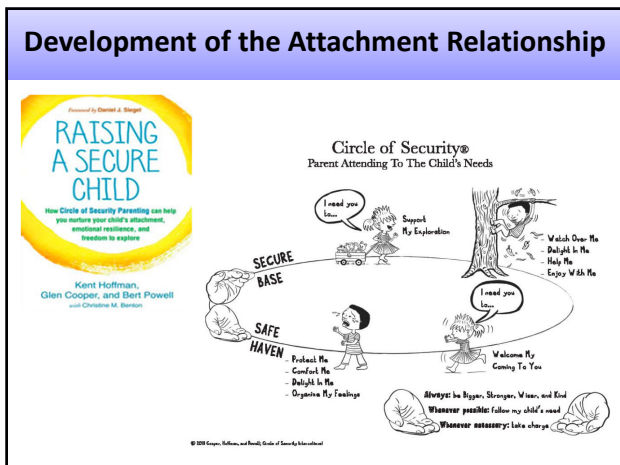


AVOIDANT

"I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being."

AttachmentProject.com

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Secure Base - Top of the Circle

- I need you to “Support My Exploration”
- How
 - Watch Over Me - being there, present, on standby, not doing anything more
 - Delight In Me - showing delight in someone, just as they are, whoever that is
 - Enjoy with Me - sharing in adventures and activities
 - Help Me - supporting an adventure, activity, or exploration

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Safe Haven - Bottom of the Circle

- I need you to “Welcome My Coming to You”
- How
 - Protect Me - protecting another person, with clear signals that that person can count on you (trust)
 - Comfort Me - Sooth and support through hardships (hungry, tired, hurt, scared, lonely, frustrated, confused, etc).
 - Delight In Me -Type 1: Provide a little emotional uplift; Type 2: Being filled with ease while a child is uncomfortable (unconditional love) “I love you even when you aren’t feeling OK.”
 - Organize My Feelings - Help someone experience, learn, and grow through their emotions

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Being with - Caregiving's "true north"

GOAL: Respond in line with needs

- **Exploration:** Watch over me, delight in me, enjoy with me, help me
- **Comfort:** Protect me, Comfort me, Delight in me, Organize my feelings

How: Being with

- **Tune in** to another's needs and emotions
- **Strive for resonance** between you and the other person, without losing yourself or overtaking over the other
- **Hold strong emotions and experiences** without being overwhelmed by them
- **Match the quality, intensity, and timing** of interactions with your child's needs

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Be the Hands

- **Bigger & Stronger:**
 - Why - Trust & predictability: to provide structure, routines, and safety; No nonsense tenderness
 - How - "I'm always going to be there for you, but that doesn't mean that I always have to be overly nice, because sometimes it is about really letting you know that that is a boundary, you've crossed it, and we need to step back."
- **Kinder:**
 - Why - Cultivates attunement and resonance for your child's needs; to provide compassion, love, care, and empathic understanding as a pathway to growth and learning
 - How - "I love you and will be here for you to work through this, even when its tough. We will figure this out together and I will guide you through this."
- **Wiser:**
 - Why - Learning how to live into this: "**Whenever possible, follow your child's needs. Whenever necessary, take charge.**"
 - How - Learn what you favor (bigger/stronger vs. kinder) and develop the other.

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Donald Winnicott Rupture and Repair

- Babies and children actually benefit when their mothers "fail" them in **manageable ways**
 - Not major failures, such as child abuse/neglect
 - Being connected 100% of time and it would prevent developing an independent self
- Ruptures are inevitable and even important for positive growth but only when ruptures are short-lived
- When we become aware of rupture, we repair by re-connecting being empathic, warm, loving, accepting, curious, and playful

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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."*

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Attunement Examples

- A caregiver seeing a baby crying, recognizing that the baby is hungry, and then picking up the baby to feed her.
- A mother comforting her toddler, after he falls and skins his knee
- 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

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Self-regulation

- Is foundational in promoting wellbeing across the lifespan, including educational achievement and physical, emotional, social and economic health.
- Self-regulation can be defined as the act of managing thoughts and feelings to enable goal-directed actions, and includes a variety of behaviors necessary for success in school, relationships, and the workplace

Murray, Rosanbalm, Christopoulos, & Hamoudi, 2015; Foundations for Understanding Self-Regulation from an Applied Developmental Perspective. <http://www.acf.hhs.gov/programs/oprre/resource/self-regulation-and-toxic-stress-foundations-for-understanding-self-regulation-from-an-applieddevelopmental-perspective>

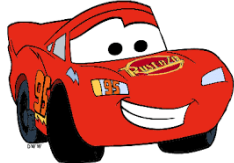
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Self-regulation

- Although it may sound like something internal to an individual, self-regulation develops through interaction with caregivers such as parents, teachers, coaches, and other mentors.
- Further, self-regulation development is dependent on predictable, responsive, and supportive environments.
- Because caregivers are vital to self-regulation development, teaching adults in caregiving roles to promote self-regulation can be powerful.

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Self-Regulation Metaphor



Accelerator
Brakes

Needs to consider
Engine
Gas Tank
Speedometer
Gauges
Tires

Needs to consider
Roads
Weather
Traffic

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Co-Regulation

- *Co-regulation* is defined as warm and responsive interactions that provide the support, coaching, and modeling children need to “understand, express, and modulate their thoughts, feelings, and behaviors” (Murray et al. 2015, 14)
- Co-regulating requires caregivers to pay close attention to the cues children send and consistently and sensitively respond with just the right amount of support
- Instead of...
 - dismissing (going away or putting the child away/in time-out)
 - threatening (yelling, hitting, shaming)
 - or rescuing (moving in to solve the frustration instead of allowing her child her experience)

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Co-Regulation Models Self-Regulation

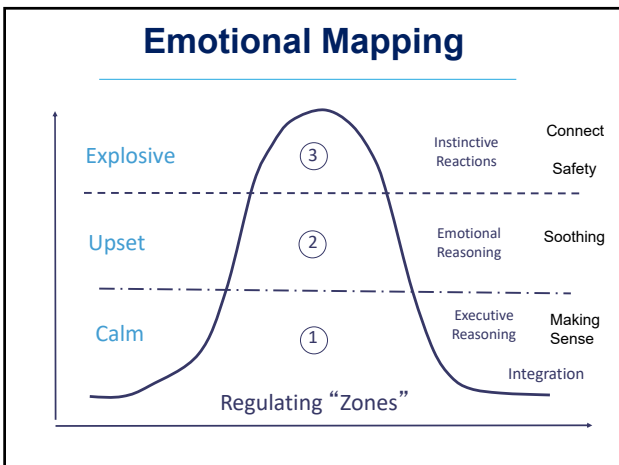
- Parents and primary caregivers can help infants and young children know that they are “felt with” and “attuned to” by using their voice, movements, affects, gestures, and intonations
- They helps babies and children become calmer and regulate at the time of distress like when they are struggling with strong feelings
- Babies and young children begin to internalize and conceptualize strategies for self-regulation and self-soothing—in their brains and in their minds

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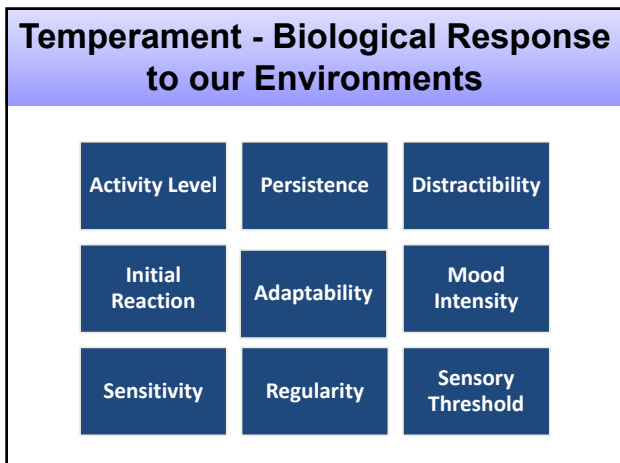
Co-Regulation Example

- Giant meltdown. Katie, 4, began screaming and hanging on to her mom’s body while simultaneously pushing her away.
- Her mom has learned that when Katie is upset, she wants to be close, but she does not want to be held. Her mom moved away a bit and sat on a step close by, suggested a calming strategy (counting and blowing on her finger), and told her she would be available when she was ready.
- She continued to cry for a couple of minutes longer, then began to count.
- As she counted, Katie’s voice gradually get calmer. She counted all the way to 30, then lifted her finger to “blow out a candle”
- Her mom asked if she was ready for a hug, and she climbed into my lap to accept the connection.

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Winnicott's "Good Enough Parenting"

- Winnicott believed - 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.

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Making Sense - Coherent Narratives

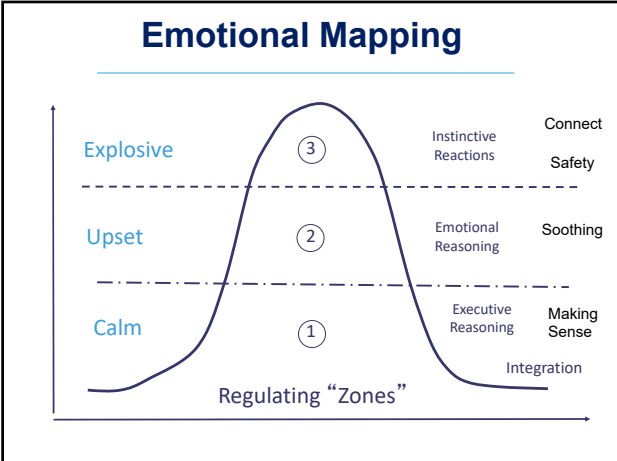
- Use of language to weave together thoughts, feelings, sensations and actions as a means of organizing and making sense of internal and external worlds
- Connection of the past and present in the creation of an autobiographical sense of self-awareness
- Provides the developing brain with fundamental means of integrating data from disparate sources
- Storytelling requires sustained attention, memory, emotional responsiveness, non-verbal cues and responses, collaborative meaning making, attunement to the listener's expectations (resonance)

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Making Sense - Coherent Narratives


- Provides an ability for self-reflection and self-identity
- A way for explaining behavior—emotionally meaningful, causally-linked, serving as a means of education, understanding and change
 - Map that may be continually redefined to create new meaning and behavior
- Stories and storytelling are pervasive in society as a means of conveying symbolic activity, history, communication and teaching

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Name, Validate, Suggest




- I see you are feeling jealous because I am holding your baby sister, must be hard to be a big brother, what about if you grab a book and I read it to you.”
- “I see you are frustrated because your tower keeps falling down, what about if you try this way or maybe play with something else. Remember to be patient.”

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The "ABCDE"s of Co-Regulation




Attune




Be Reflective



Calm, Coregulate



Describe and Repair



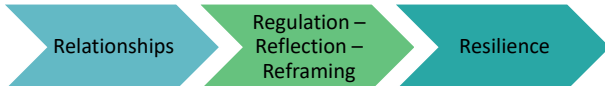
Explore Options

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Resilience Can Be Developed

Resiliency is developed in the context of relationships



Calm, Consider and Create a New Way to See Things

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Understanding of Mental Health Problems in the Past

<ul style="list-style-type: none"> • Genetic or heritable vulnerability • Congenital <ul style="list-style-type: none"> • Physical malformation • Exposure to chemicals or infection • Birth Trauma • Learned Maladaptive Behavior • Psychological Conflict • Social relations problems 	<ul style="list-style-type: none"> • Caregiver/child relationship <ul style="list-style-type: none"> • Attachment and Loss • Temperamental mismatch • Medical problems <ul style="list-style-type: none"> • In child • In caregiver • Physical trauma <ul style="list-style-type: none"> • Head injury • Broken bones, burned skin • Dog bites
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Jeff Rowe, MD

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Now we must add 2 more

1. Psychological Trauma
 - Physical abuse
 - Sexual abuse
 - Emotional abuse
 - Neglect
2. Interruptions of development

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Interruptions of Development

<ol style="list-style-type: none"> 1. Inexperienced caregiver <ul style="list-style-type: none"> • Lack of support for caregiver • Lack of capacity of caregiver 2. Loss of Continuity of Affectionate care <ul style="list-style-type: none"> • Removal from home; change of placement • Loss of parent, nanny, sibling 3. Problems of Sensitive Responsiveness and Mutually Confirming interactions <ul style="list-style-type: none"> • Inability to <u>attune</u> to child's states 	<ol style="list-style-type: none"> 4. Challenges that are not overcome early <ul style="list-style-type: none"> • Sleeping • Eating • Speech and language • Fine and gross motor development • Social development • Behavioral problems (aggression, emotional dyscontrol, anxiety, depression, attention)
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Jeff Rowe, MD

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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

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Developing Child is at Greater Risk

- 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
- Immature alert/alarm systems

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The ACE study* revealed the following estimates:

Category	Sub-category	Percentage
ABUSE	Physical Abuse	28.3%
	Sexual Abuse	24.7%
	Emotional Abuse	16.8%
NEGLECT	Emotional/Neglect	19.1%
	Physical Neglect	7.3%
HOUSEHOLD DYSFUNCTION	Household Substance Abuse	26.3%
	Parental Divorce	21.3%
	Mother's Mental Illness	18.3%
	Mother's Substance Abuse	10.7%
	Interparental Conflict/Disorder	9.1%

As the number of ACEs increases, so does the risk for negative health outcomes

0 ACEs | 1 ACE | 2 ACEs | 3 ACEs | 4+ ACEs

Possible Risk Outcomes:

Behavior	Physical & Mental Health
Alcohol use	Heart disease
Illicit drug use	Cancer
Tobacco use	Stroke
Depression	EDS
Substance abuse	Diabetes
Obesity	Brain health
PTSD	

Of 11,000 ACE study participants:

- 38% had at least 1 ACE
- 21% had 2 or more ACEs
- 10% had 4 or more ACEs

*Source: www.acesstudy.com

ACEs are strongly related to the development and prevalence of a wide range of health problems throughout a person's lifespan, but they are not destiny – relationships can mitigate trauma

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Toxic Stress Physiology

Dose Response Relationship associated with ACEs in childhood/adolescence

EARLY LIFE ADVERSITY

Protective factors → → Predisposed vulnerability

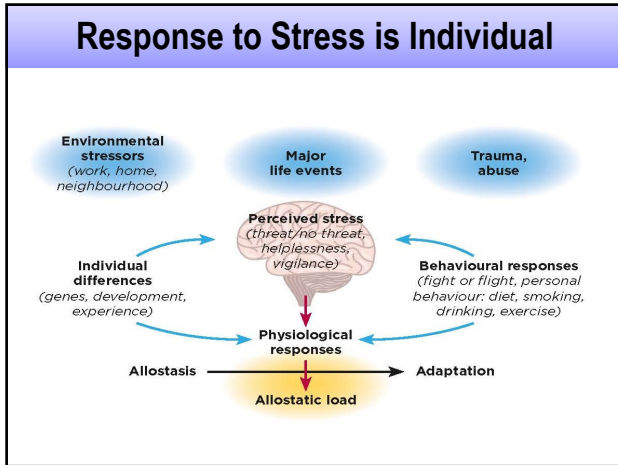
TOXIC STRESS

CLINICAL IMPLICATIONS

Endocrine	Neurologic	Immune
Metabolic	Psychologic	Inflammatory
Reproductive	Behavioral	Cardiovascular

Oh et al. in press. Matheson 2016, Keane 2016, Shen 2016, Ryan 2015, Gordon 2014, Phelan 2012, Thompson 2011, Boyce/Stein 2015
Bucci et al., 2016

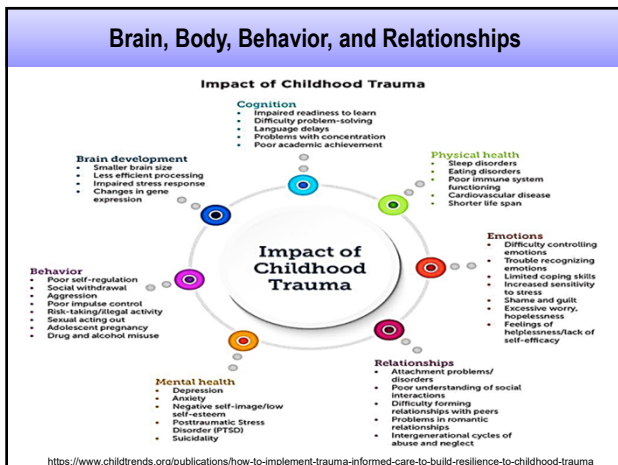
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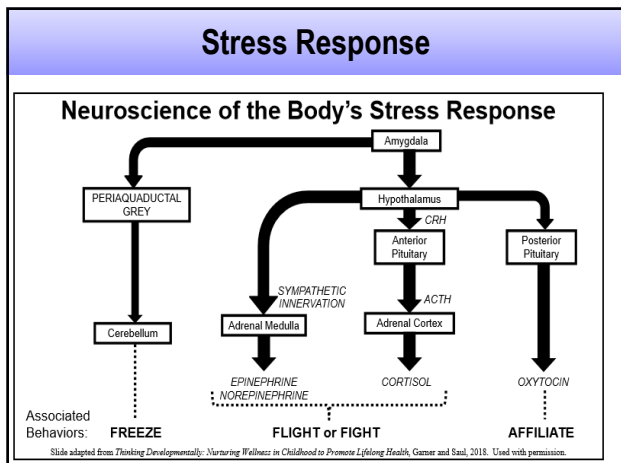
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When distressed, we all need someone to respond to us (Safe Haven)

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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.

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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

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Children's Experience



Decreased
Social
Interaction



Increased
Parental
Stress

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*"If children haven't had (social) experience when they enter into preschool, they need some **extra scaffolding** from their teachers and peers to learn.... about taking turns and sharing and solving conflicts for children who have interacted very little with others, **it may take a little more time.**"*

- Nancy Close, Yale Child Study Center

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Impact of the Pandemic on Parents and Caregivers



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Parent's Experience

Economic Impacts

- Food
- Housing
- Utilities
- Childcare
- Medical Care
- Responsible for Education
- Job Loss

Mental Health Impacts

- Stress
- Depression
- Anxiety
- Loneliness
- Grief

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What Else is Stressing Families?

- COVID
- Social Media
- Active Shooter Drills/ School Shooting
- Racial Reckoning
- Economic – Inflation
- Political Conflicts/Book Banning

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What Help is Needed?

Policy Changes

Economic Supports
Childcare

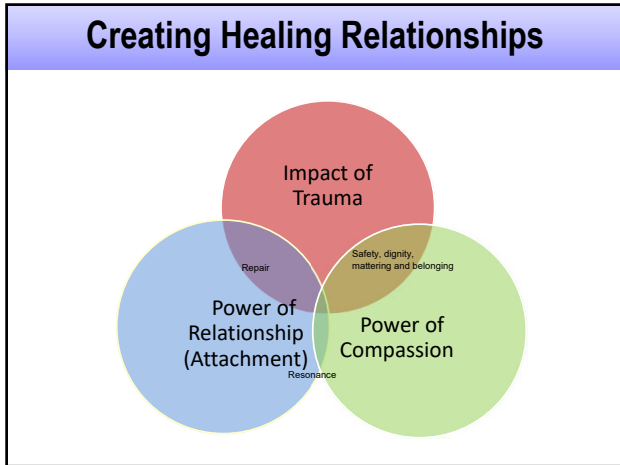
Skill Building

Education
Build Parent Resilience

Support

Protective Factors
Care Coordination

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- ### 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

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