

The Youngest Of Us: Experience and the Developing Brain

**Family Law CASA of
King County
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Knowledge of child development can be extremely helpful...

Children's development is not static

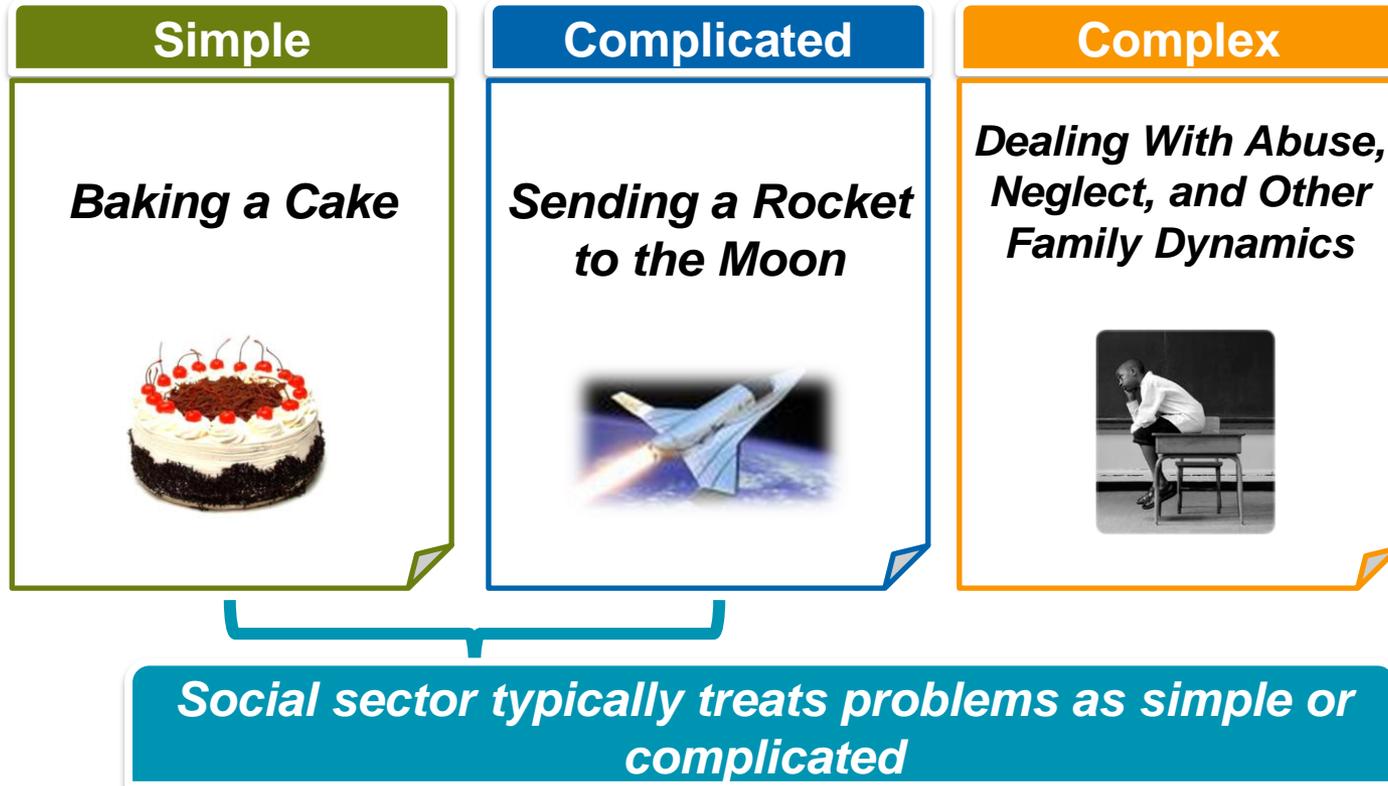
When we lack context for behavior, it is often interpreted as negative

How we define a problem can determine the chosen approach to solving it

Variation is the norm!



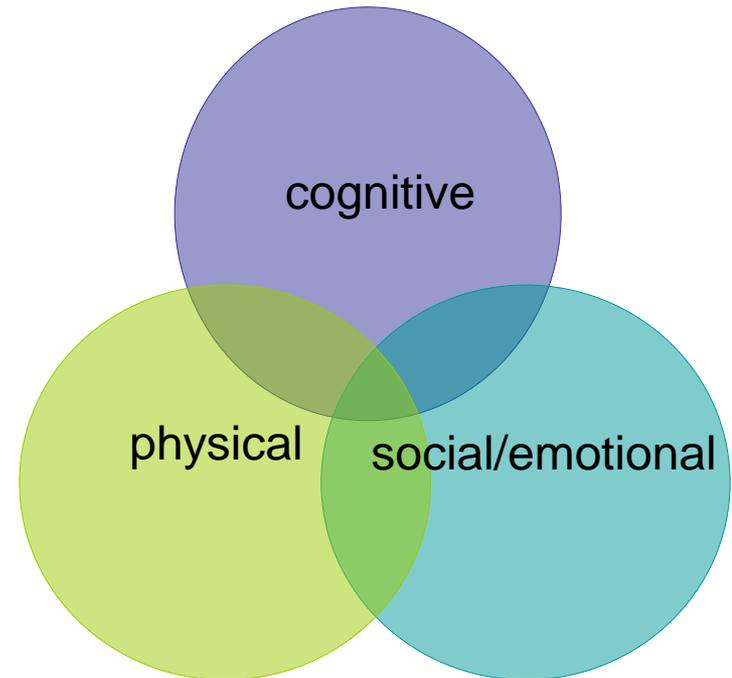
There Are Several Types of Problems





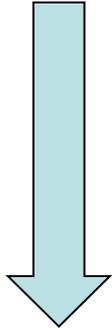
A Few Other Good Things to Know about Child Development

**The child
develops as
a “whole”**



Physical development proceeds in two ways:

from top



down



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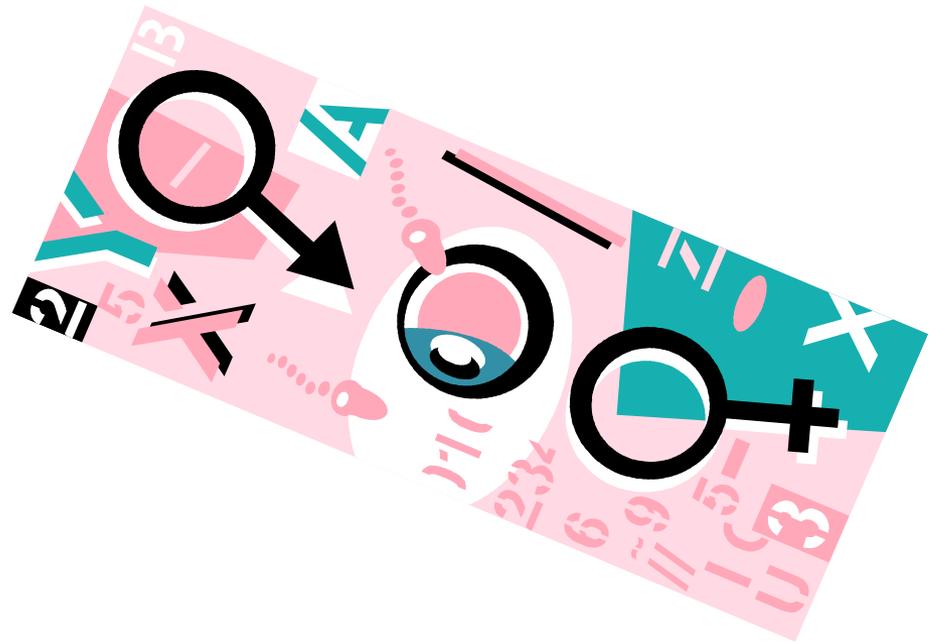
**and
near
to
far**



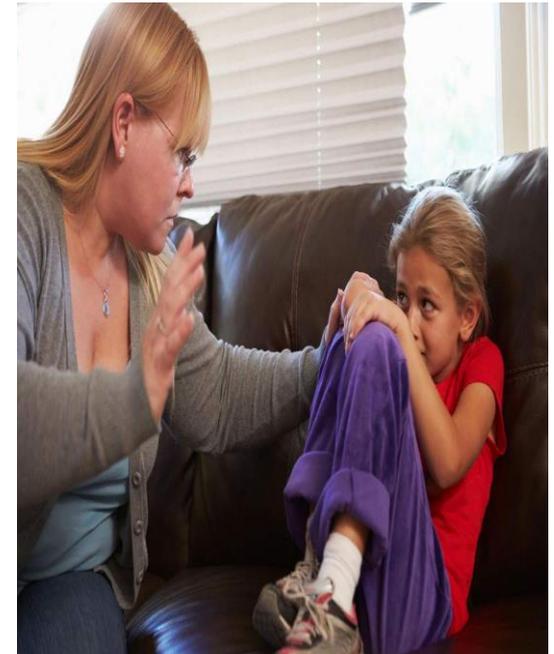
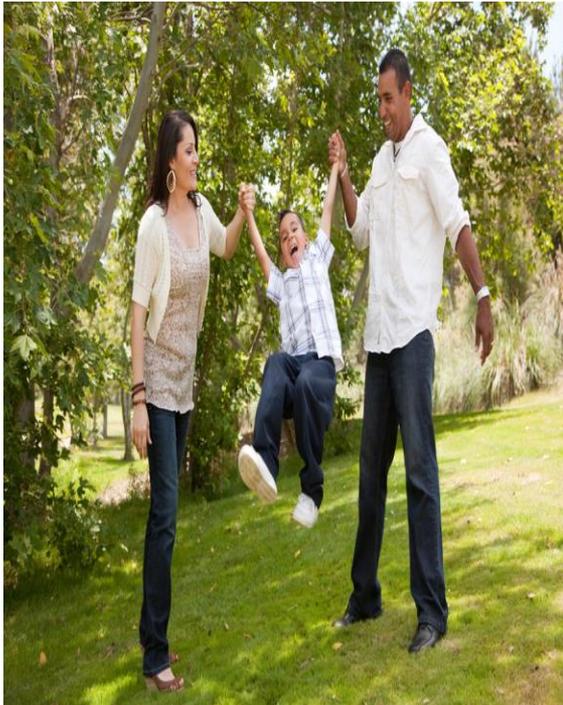
*Meanwhile,
the brain develops back to front
Simple—to more interconnected*

Development is influenced by
both:

Genetics
AND



experiences within the child's environment— both pleasant & stressful



Children, Grieving & Development

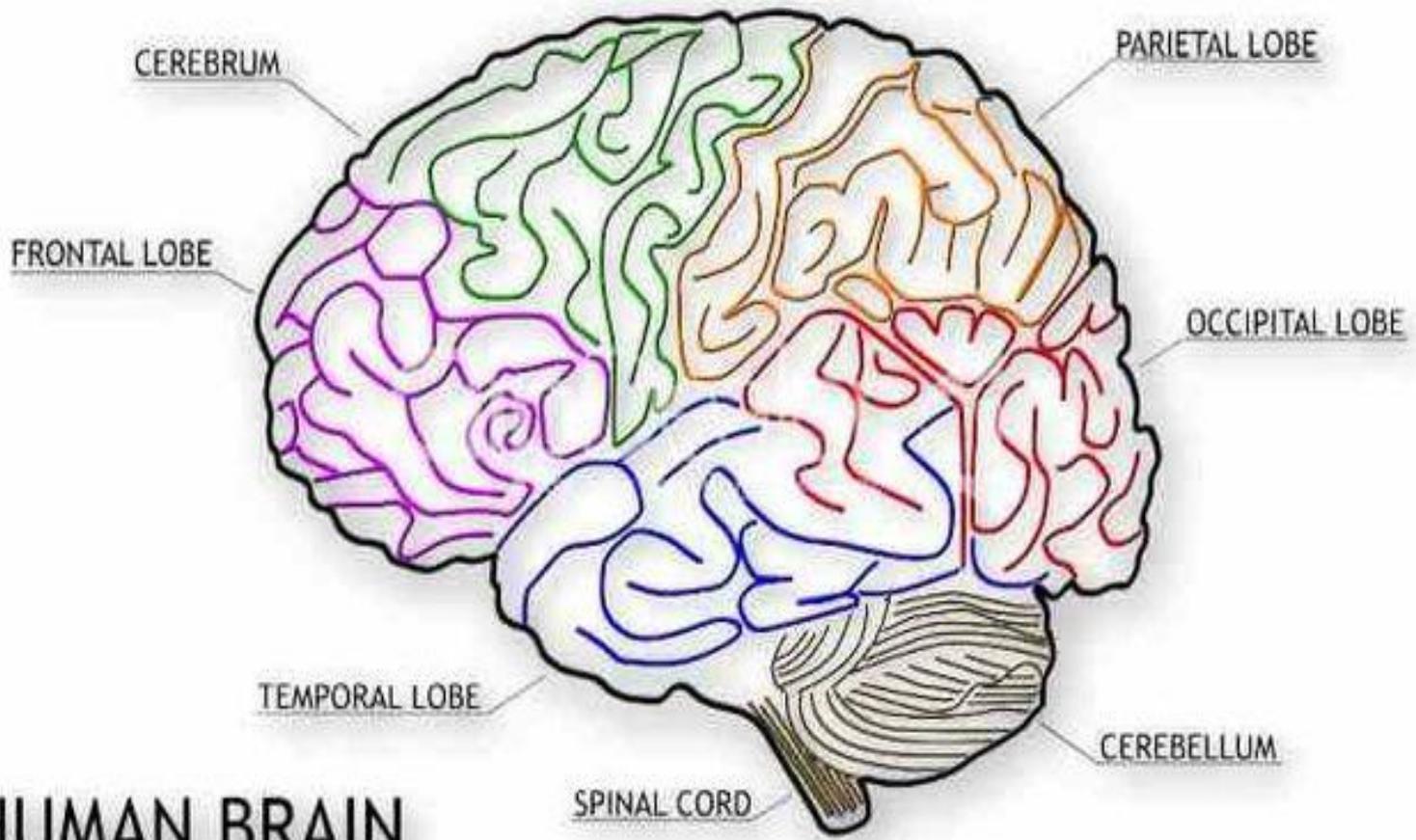
Family conflicts can cause children to experience grief and grief can cause **regression**.

Children who are having serious problems with grief and loss may show one or more of these signs depending on their age:

- an extended period of depression in which the child loses interest in daily activities and events or acts out
- inability to sleep, loss of appetite, prolonged fear of being alone
- acting much younger for an extended period (developmental regression)
- ***repeated statements of wanting to join the absent person***
- withdrawal from friends
- sharp drop in school performance or refusal to attend school

Source: American Academy for Children & Adolescent Psychiatry





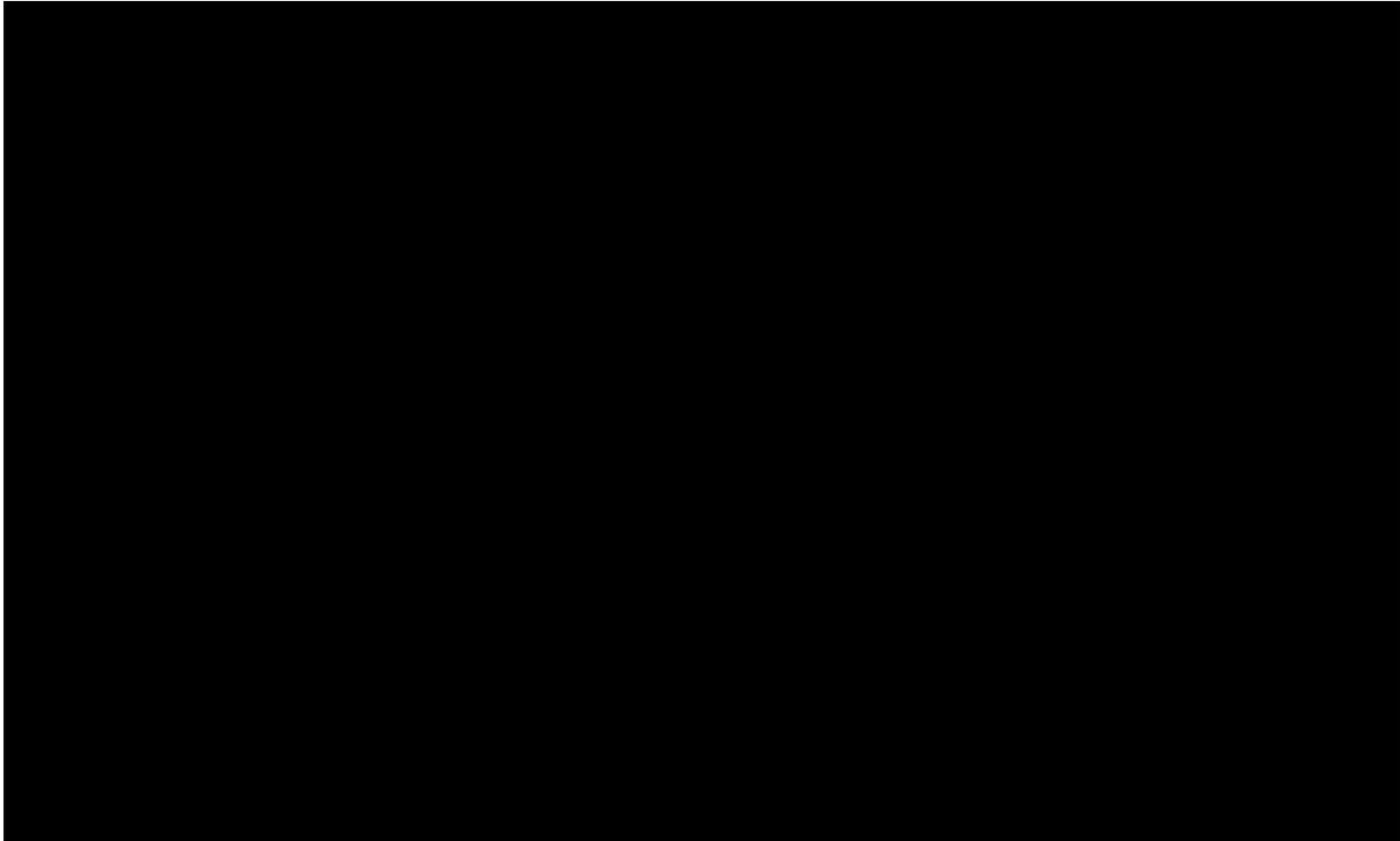
HUMAN BRAIN







Brain Architecture
Alberta Family Wellness Initiative





We Are Shaped By Our Experiences

Early experiences are built into our bodies.

Sets the stage to be prepared for life in dangerous world—

Or sets the stage for a safe and nurturing world
Patterns of behavior/response established





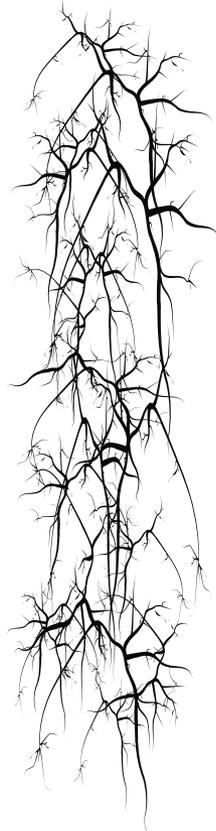
Serve and return relationships

Pruning & Tuning

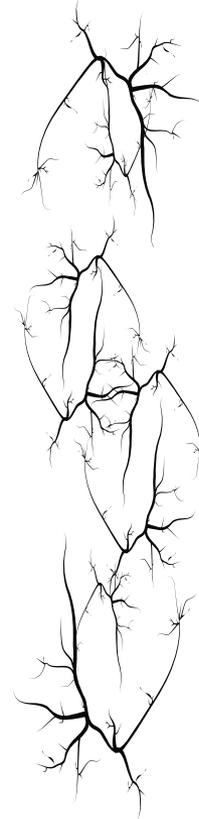
SYNAPTIC DENSITY



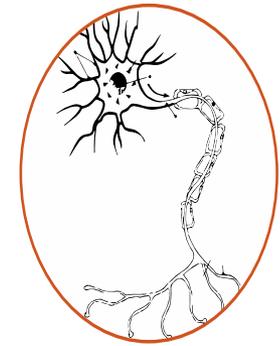
At Birth



Elementary Age

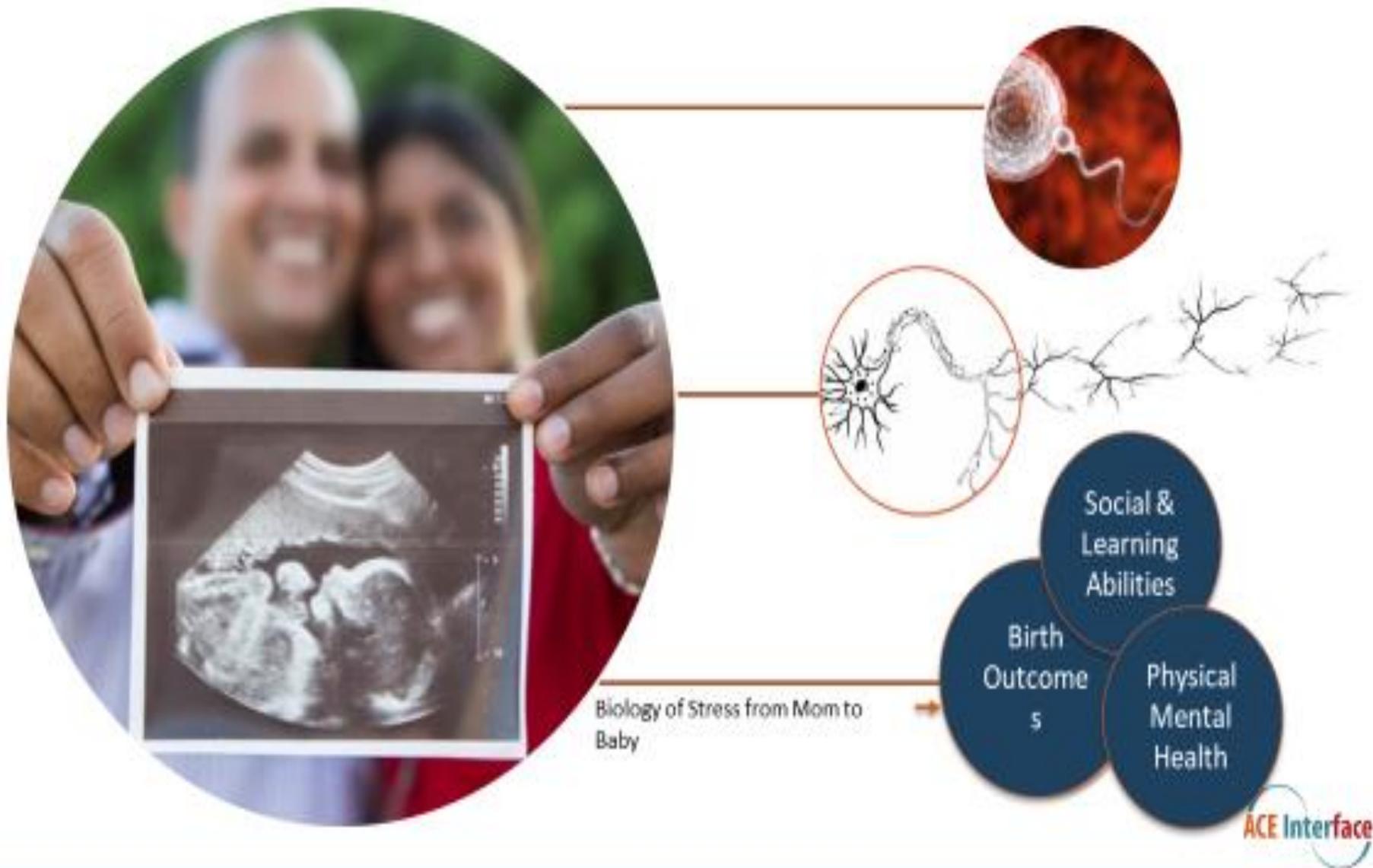


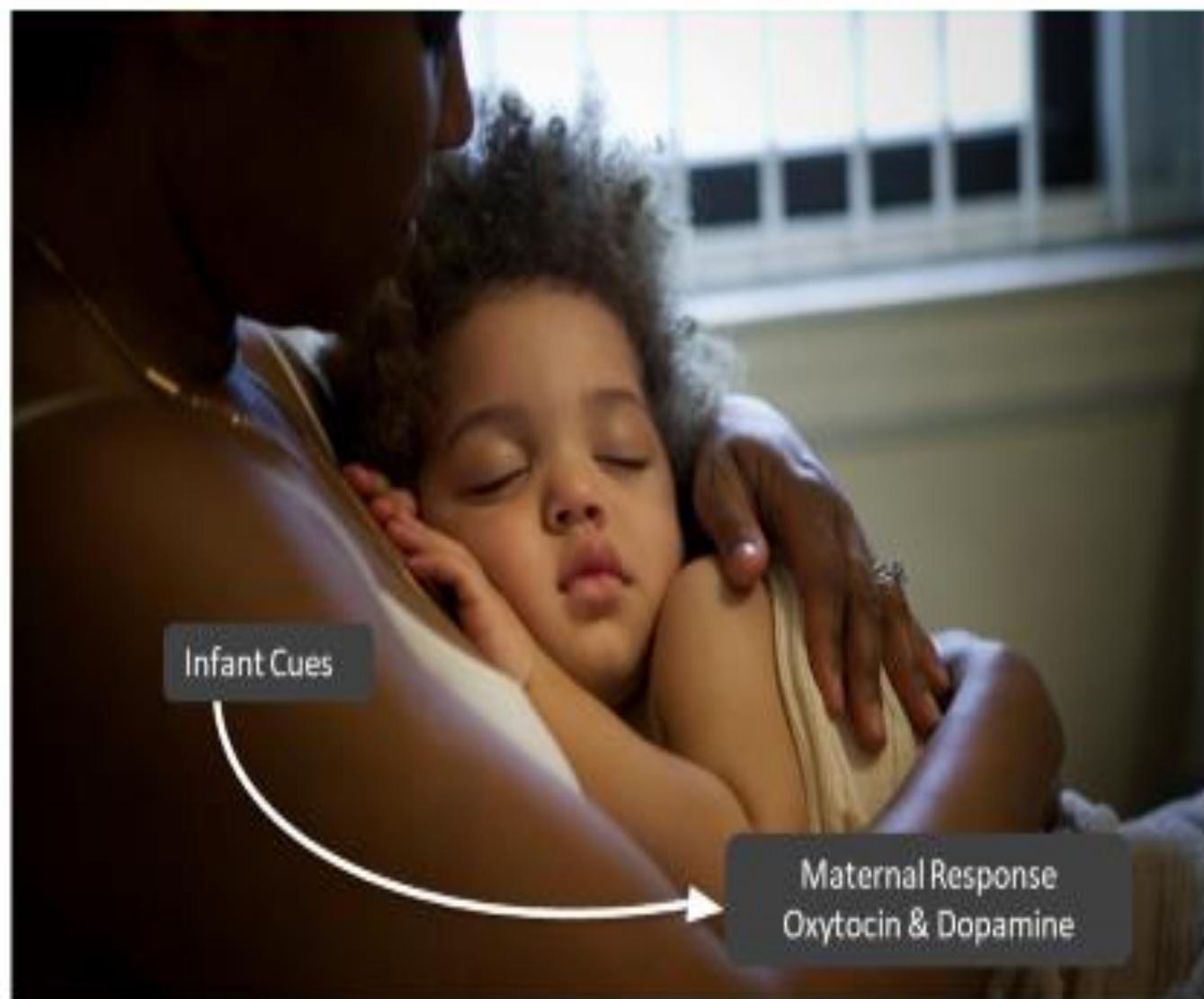
Puberty



Single
Neuron

Fetal Development and Maternal Safety and Support





Maternal Response to Infant Cues

Oxytocin: calm, generous, joy in relationship; Dopamine: anticipate pleasure



Infants & Toddlers

Attachment
Security
Trust

Regulate
Hormones
Heartbeat
Mood
Pleasure

Respond
to Threats:
Fight
Flight
Freeze

Navigate
New &
Routine
Experience

Integrate
Details
within a Big
Picture

Early & Middle Childhood



Just Before Puberty
The Sixth Sense: Proprioception

- Balance,
- Movement,
- Navigation through space,
- Perception of peripheral details around us

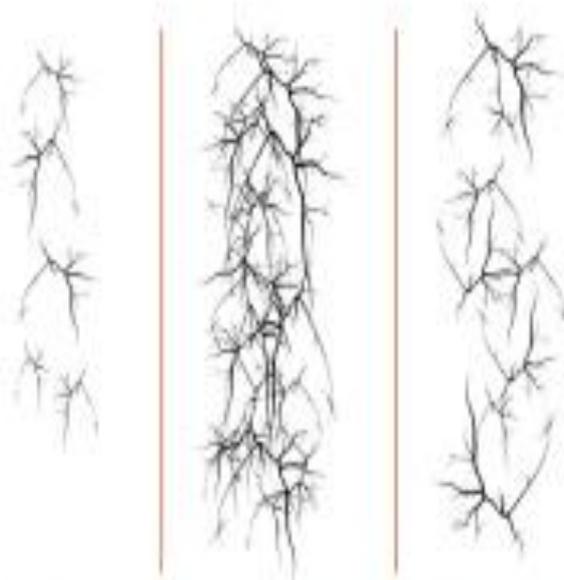
Prevent accidents & promote health.





Adolescence

Thinking, Judgment, Long-Term
Memory, Executive Function, Hope



At Birth

Elementary Age

Puberty

Pattern of
Stress

Unpredictable

Extreme

Prolonged

Sensitization
Vulnerability

Predictable

Moderate

Controllable

Tolerance
Resilience

CONCEPTION



Childhood Experience

Adaptation

Adult Functioning



*What
behaviors
might
arise?*



What Fires Together Wires Together



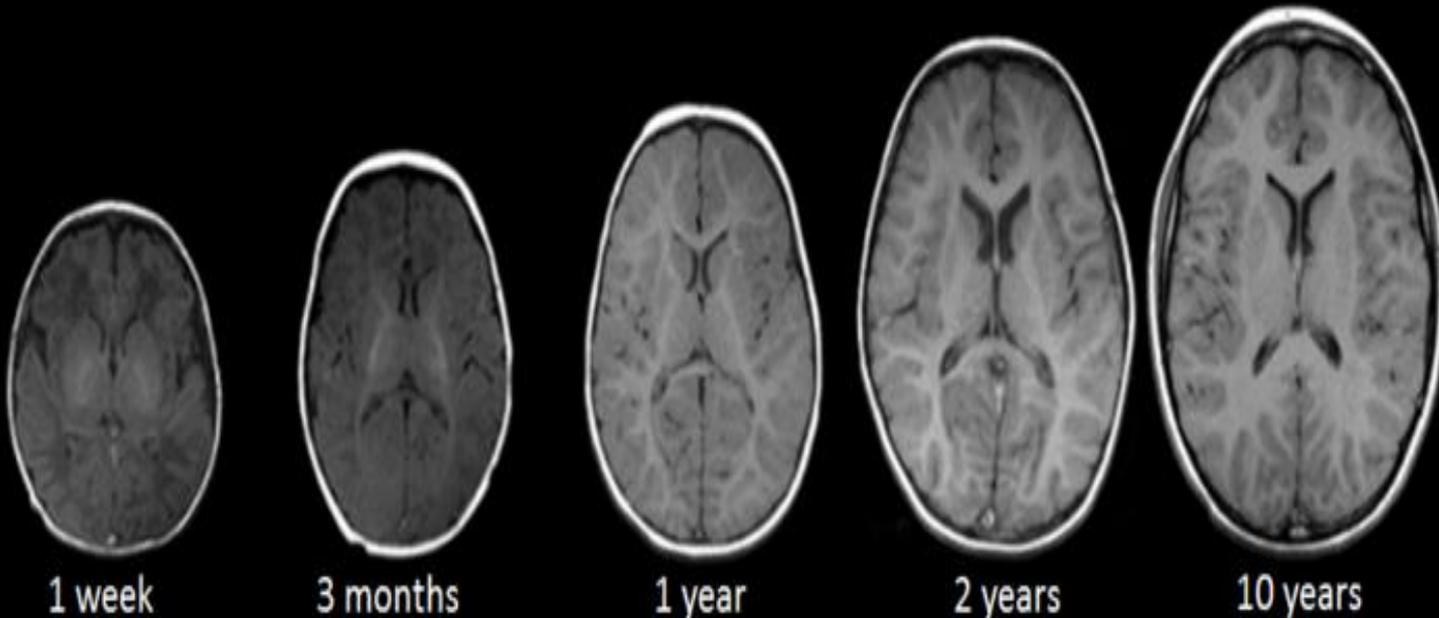
Experience connects about a
100b neurons into dense networks

Stress-Induced Executive Dysfunction

Influences:

- **Processing loads** (how much the brain can handle until it gets “full”)
- **Verbal memory** (retaining information given verbally)
- **Working memory** (the brain’s short-term memory chalkboard)
- **Generalizing ability** (applying information from one situation to another)
- **Initiating** (“getting going” or “when to start”)
- **Organizing and Planning**

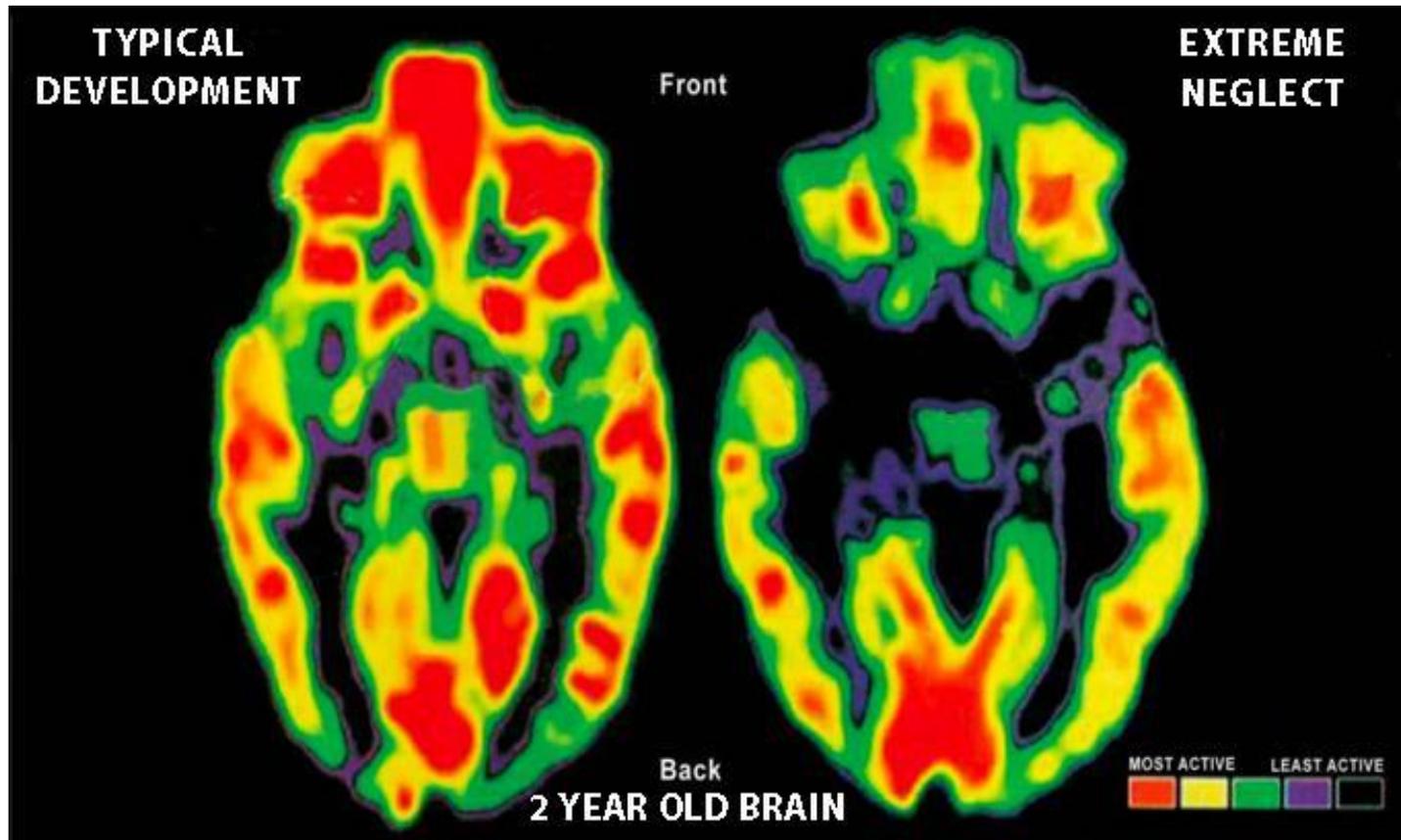
Brains Develop in Size & Complexity



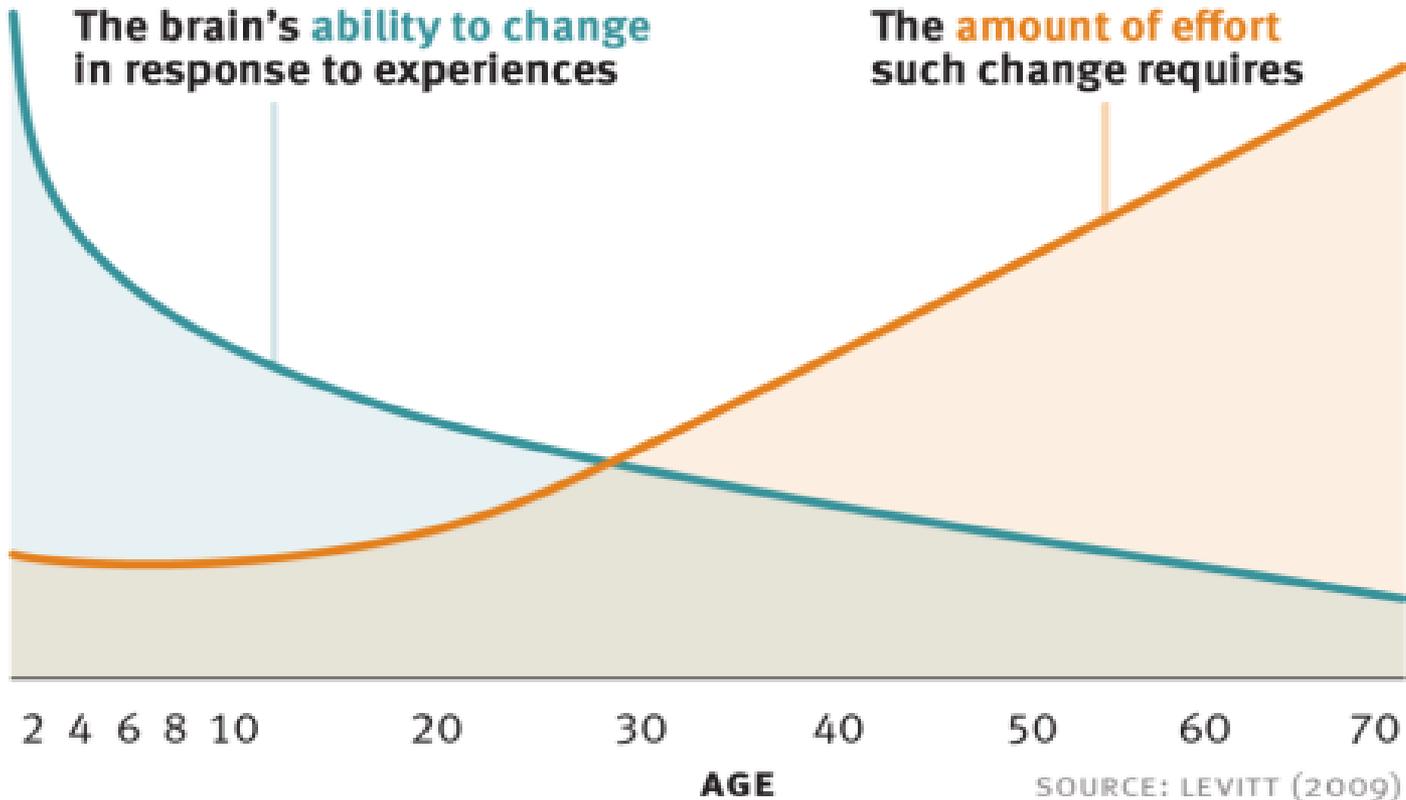
MRI scans of human brain development

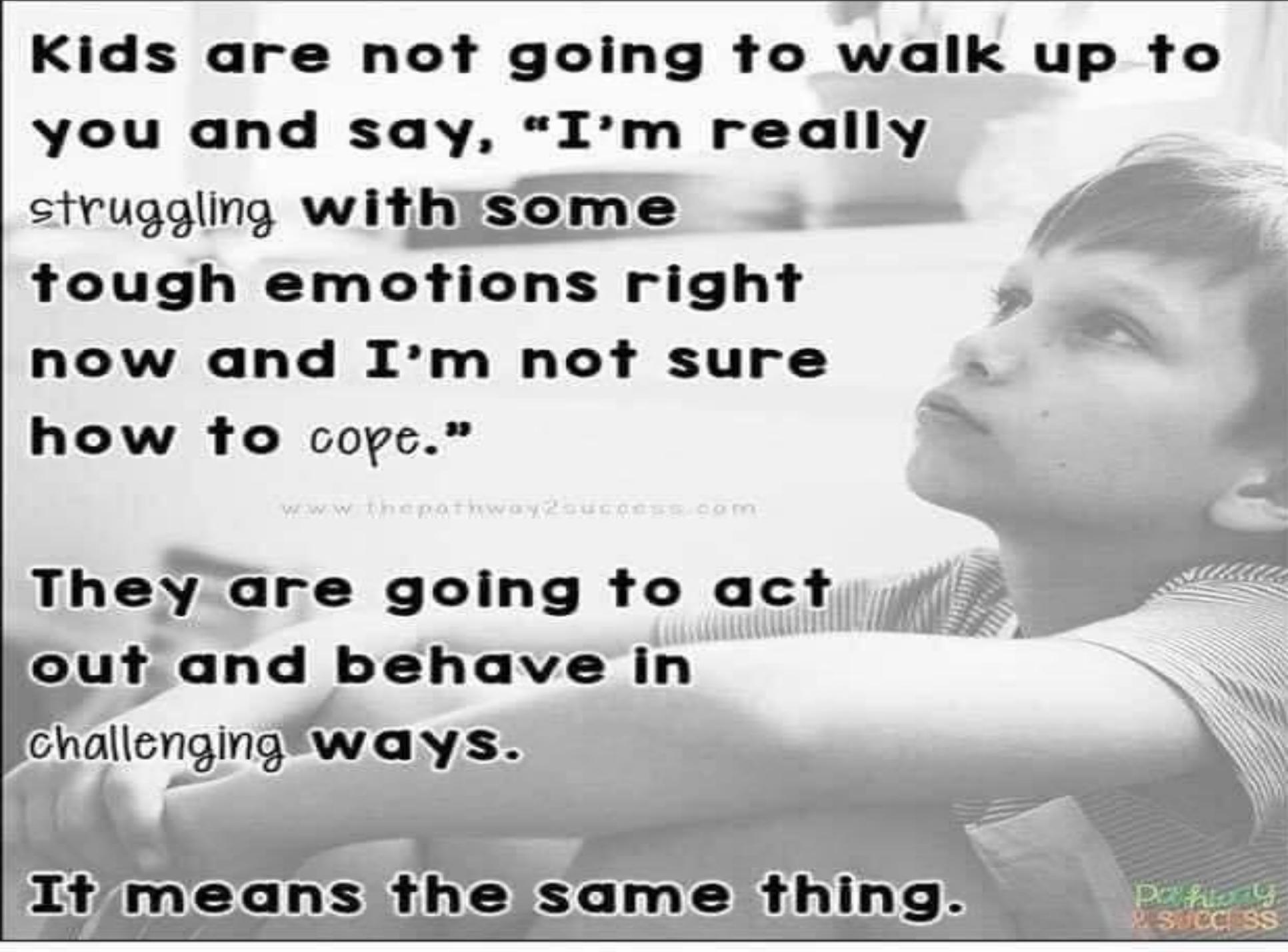
Brain Architecture

How Quickly It Is Set



Opportunity for Change



A young boy with dark hair is shown in profile, looking upwards and to the left with a thoughtful expression. He is wearing a striped short-sleeved shirt. The background is a blurred classroom with desks and chairs.

Kids are not going to walk up to you and say, "I'm really struggling with some tough emotions right now and I'm not sure how to cope."

www.thepathway2success.com

They are going to act out and behave in challenging ways.

It means the same thing.

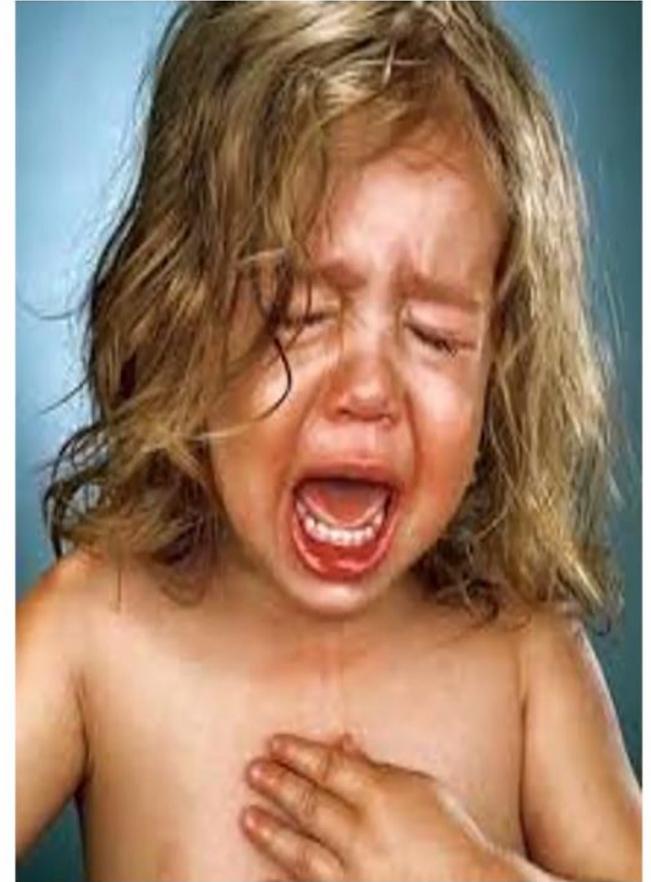
Co-Regulation as
a path

. . . to Self Regulation



Childhood Adversity and Self-Regulation

Early adversity impacts the development of pathways in the brain that control how we respond and react to stress.



The architecture of
self-regulation is
attunement

*not teaching young children about
how to calm themselves down.*

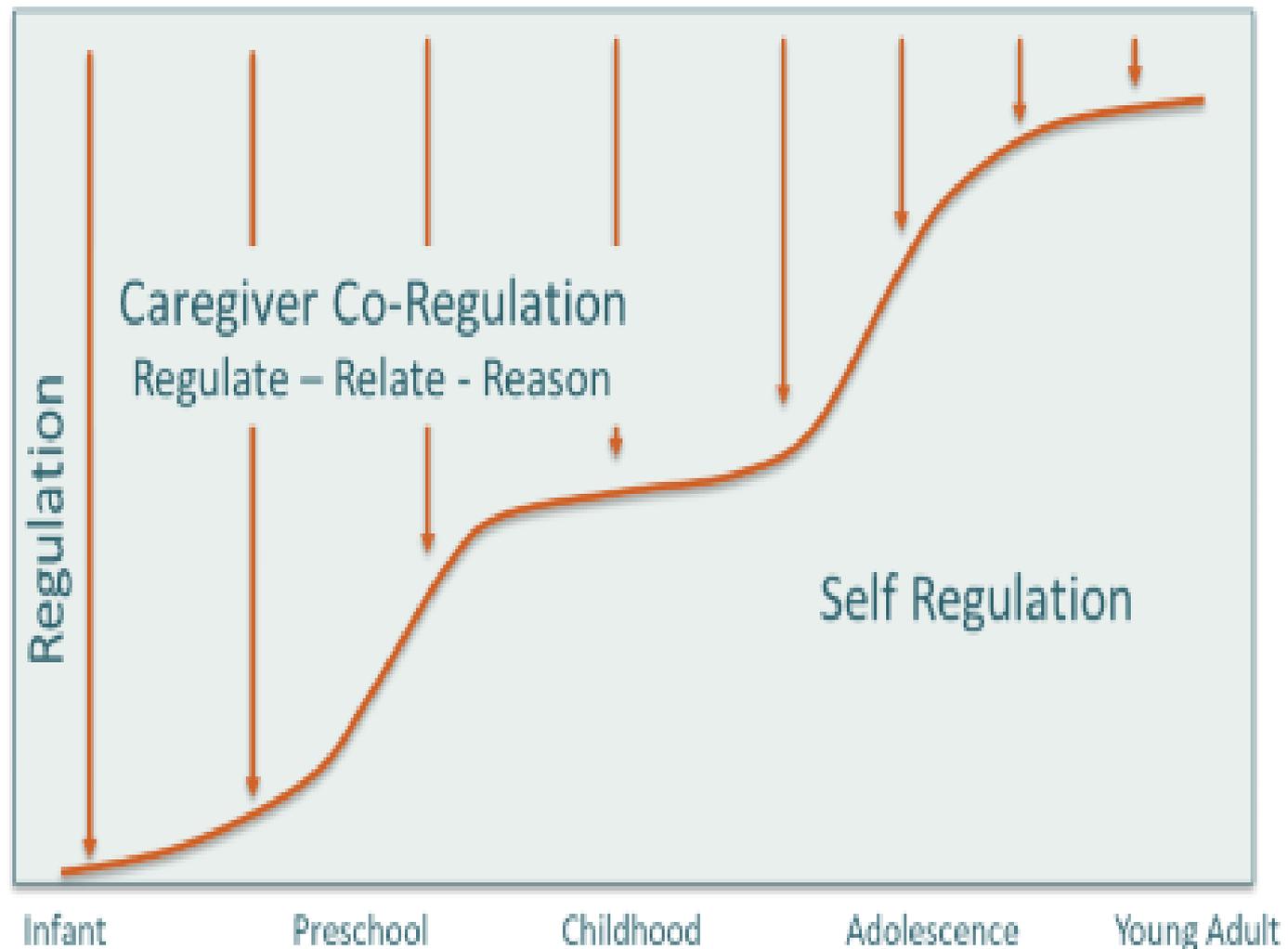
*Dr. Mona
Delahooke*

Co-Regulation, then Self-Regulation

Warm
Responsive
Relationship

NEAR-
Informed
Environment

Model &
Coach Self-
Regulation
Skills



We need
healthy
relationships
to have
healthy
development

Safe, Stable, Attuned Relationships

Safe = free from harm

Stable = a high degree of consistency

Attuned = compassionate, responsive caregiver(s)

“BIGGER, STRONGER, WISER & KIND—and committed”

●●● *Circle of Security intervention*

What?

So What?

**Now
What?**



Thank you for your attention



**The problems of today can only be solved at a higher level
of thinking than that which created them.**

Albert Einstein