

# *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

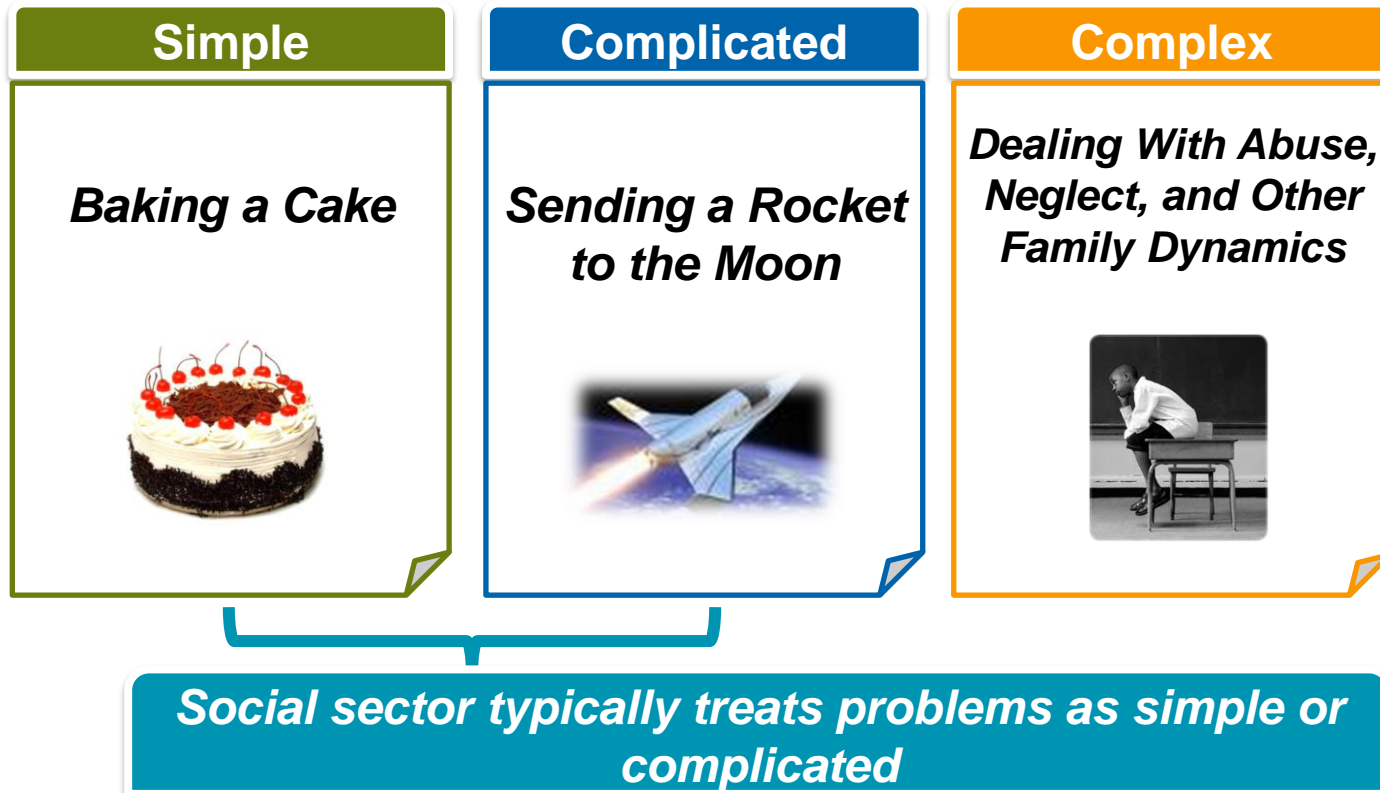
When we lack context for behavior, it is often interpreted as negative

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

Variation is the norm!



# There Are Several Types of Problems

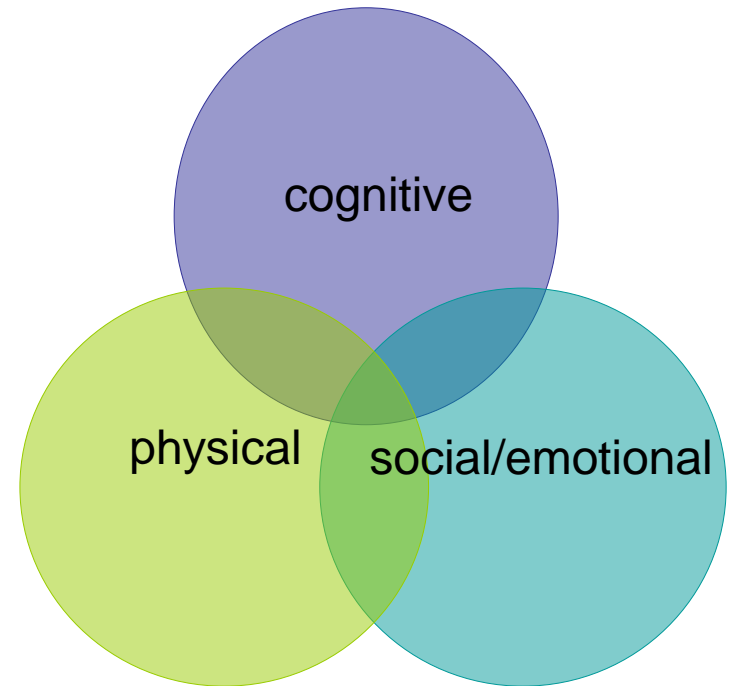






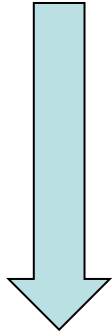
# *A Few Other Good Things to Know about Child Development*

**The child  
develops as  
a “whole”**



# Physical development proceeds in two ways:

*from top*



*down*



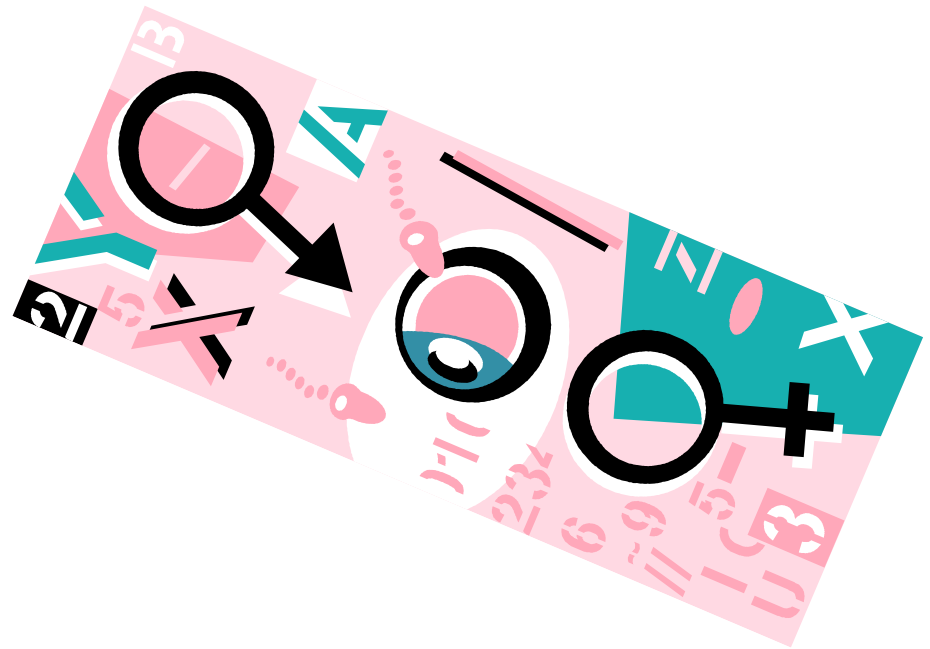
**and  
near  
to  
far**



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

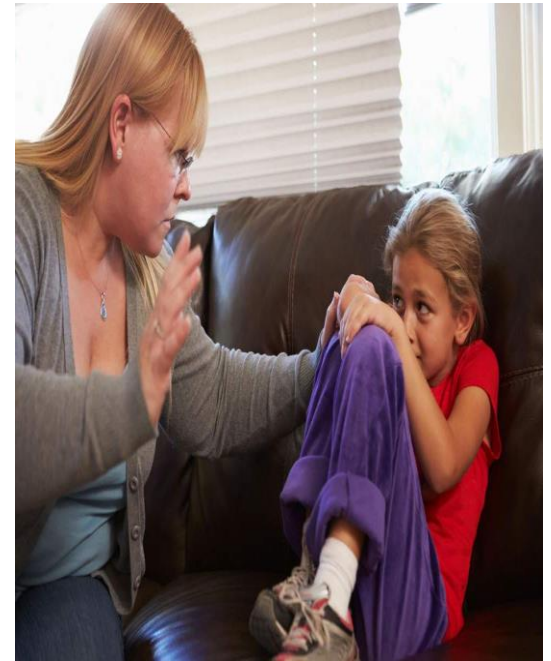
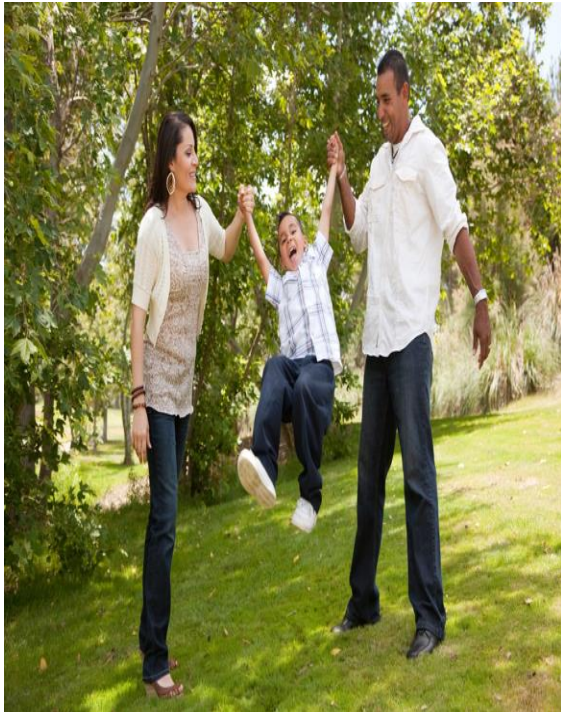
Development is influenced by  
both:

**Genetics**  
*AND*





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



# Children, Grieving & Development

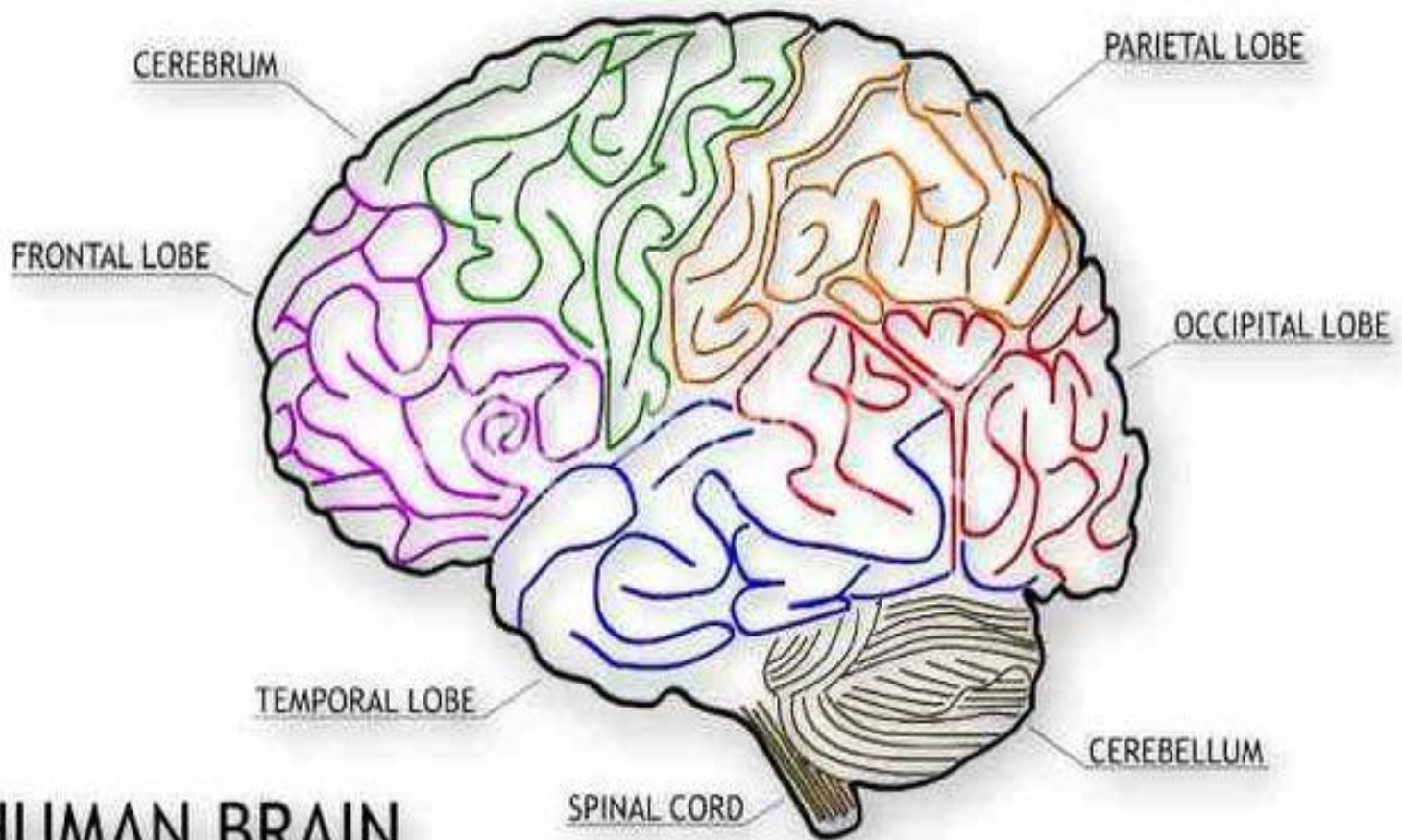
**Family conflicts can cause children to experience grief and grief can cause **regression**.**

**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





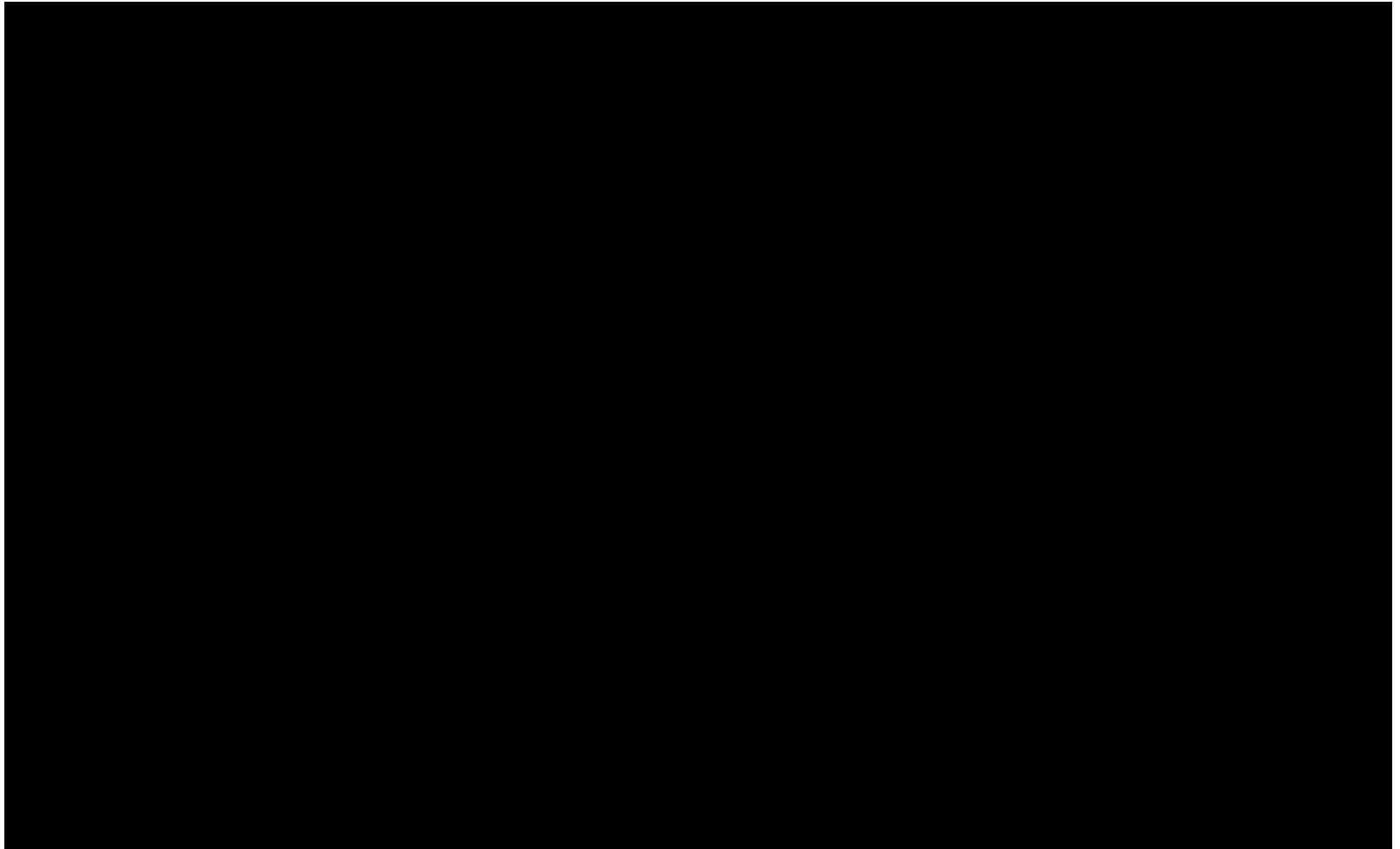






# *Brain Architecture*

## 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*



A woman with dark hair tied back, wearing a red top, is holding a young child with dark hair wearing a teal shirt. The child is looking towards the camera with their hand near their mouth. The background is a soft-focus outdoor setting.

**Serve and return  
relationships**

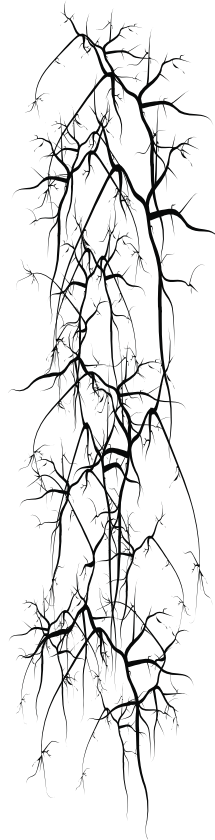
A close-up of a woman's face as she looks through a rusty chain-link fence. Her hand is visible, with fingers touching the mesh. She is wearing a ring on her finger. The image has a somber and contemplative mood.

**Pruning & Tuning**

# SYNAPTIC DENSITY



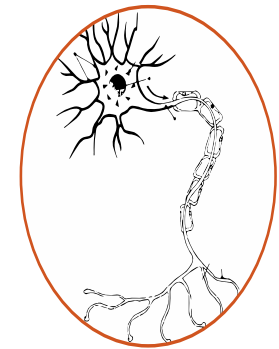
At Birth



Elementary Age



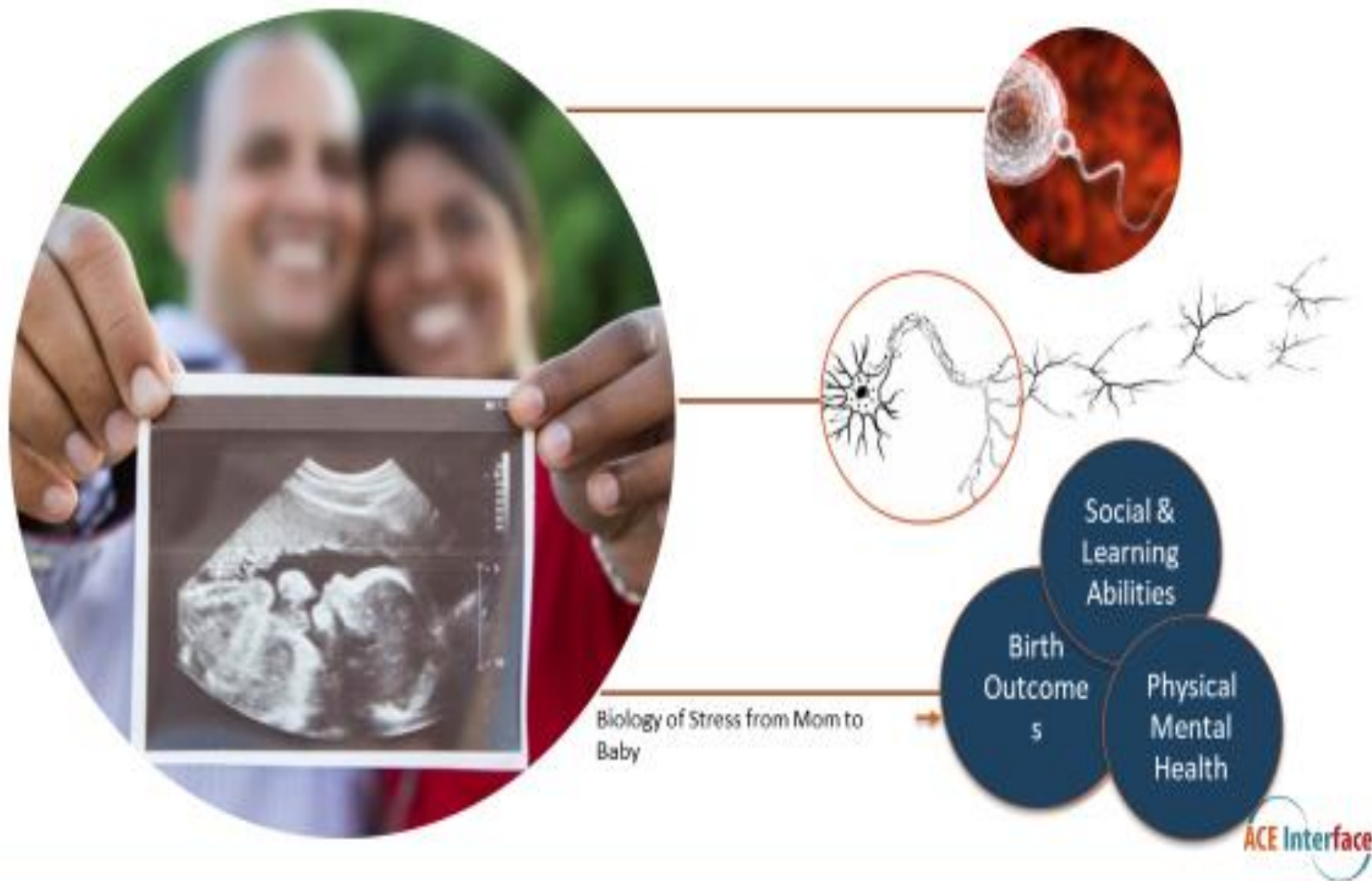
Puberty

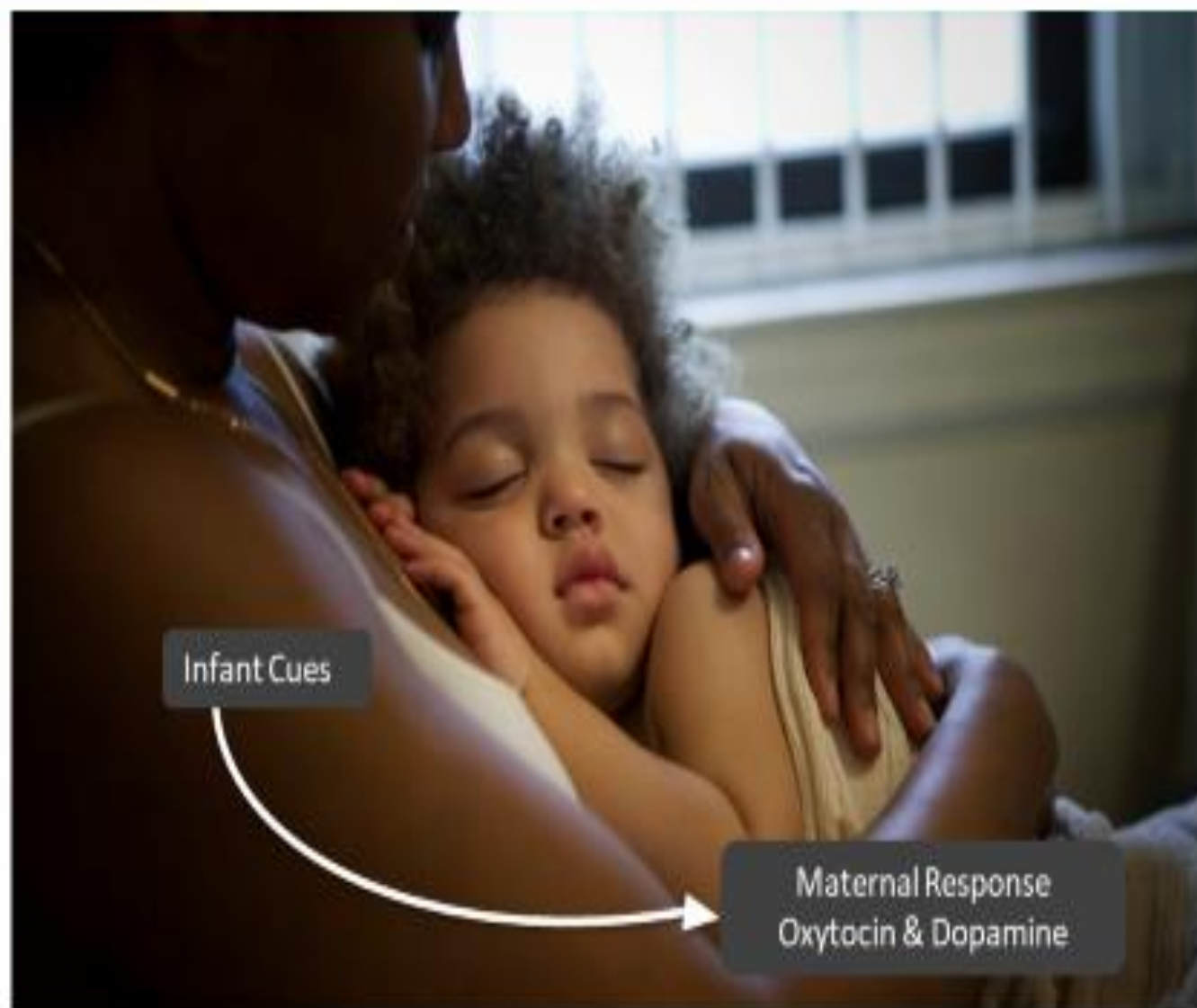


Single  
Neuron



# 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.

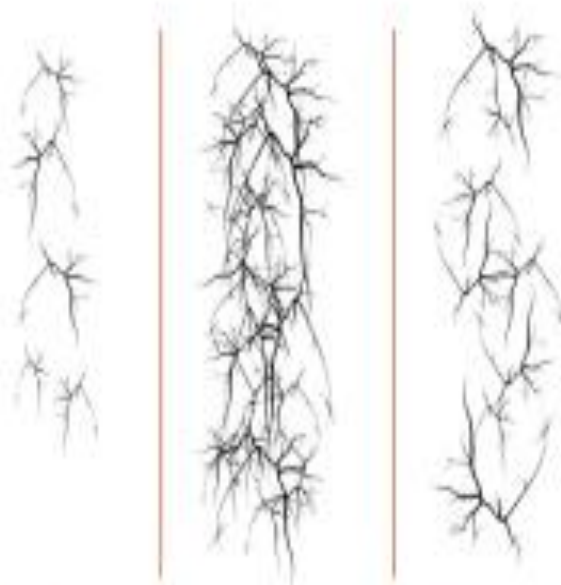






# Adolescence

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



Danger

Fight  
Flight  
Freeze

Survive  
Worst  
Conditions

Childhood Experience

Adaptation

Adult Functioning



Safety

People  
Process  
Possibility

Survive Best  
Conditions -  
*Vulnerable in  
Worst*



*What  
behaviors  
might  
arise?*



# What Fires Together Wires Together



Experience connects about a  
100b neurons into dense networks

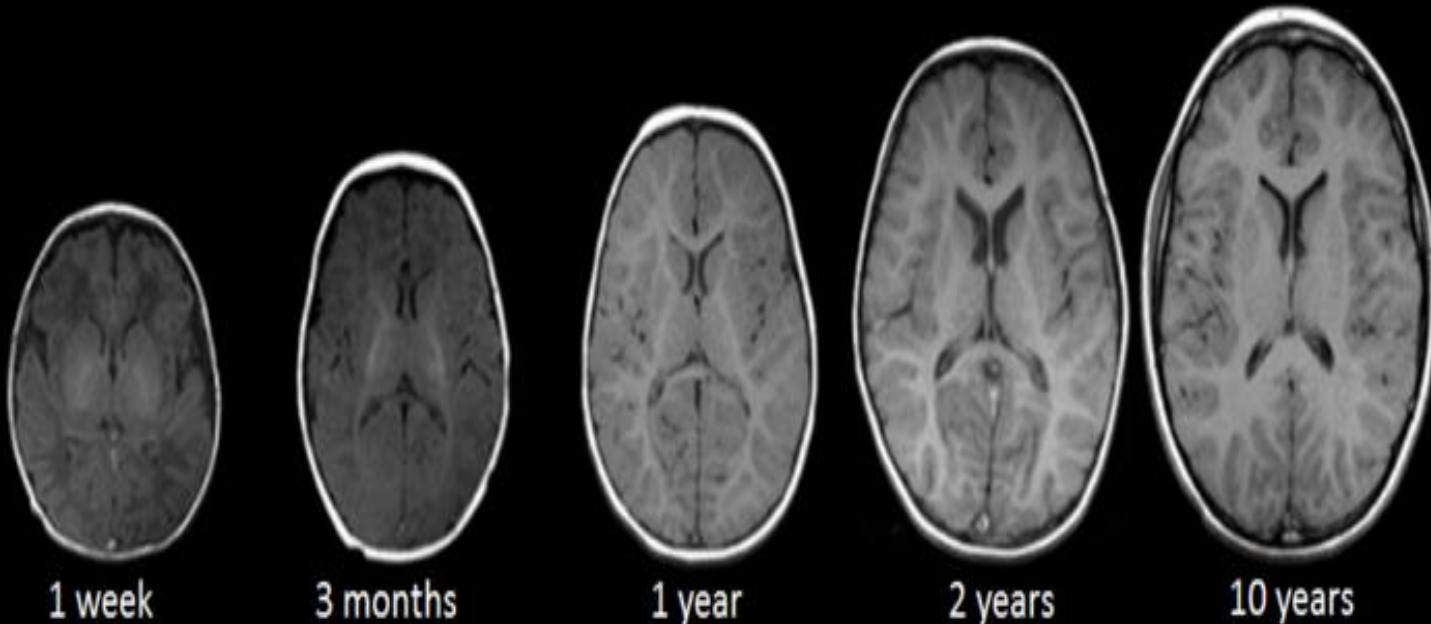
# **Stress-Induced Executive Dysfunction**

## **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**



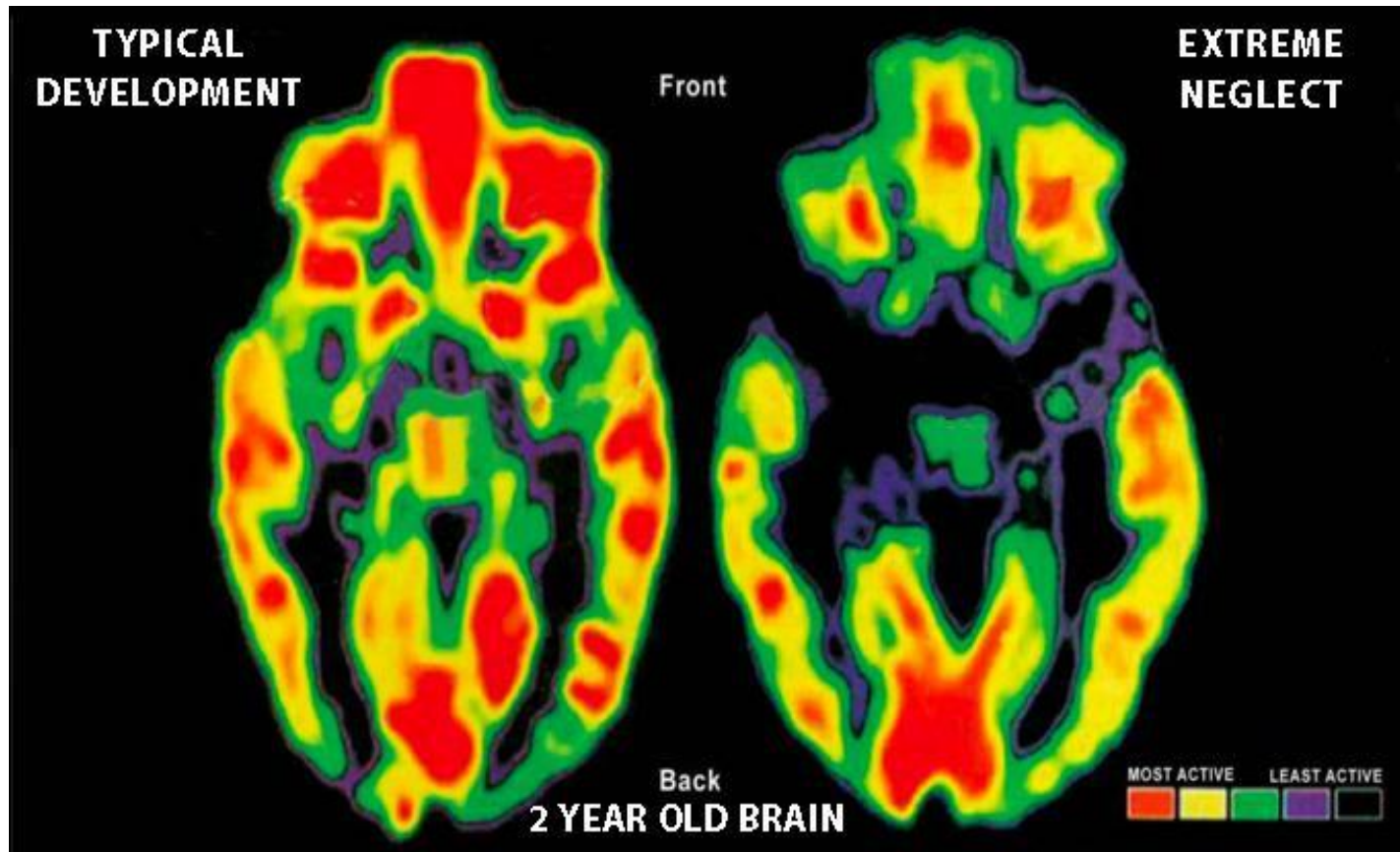
# Brains Develop in Size & Complexity



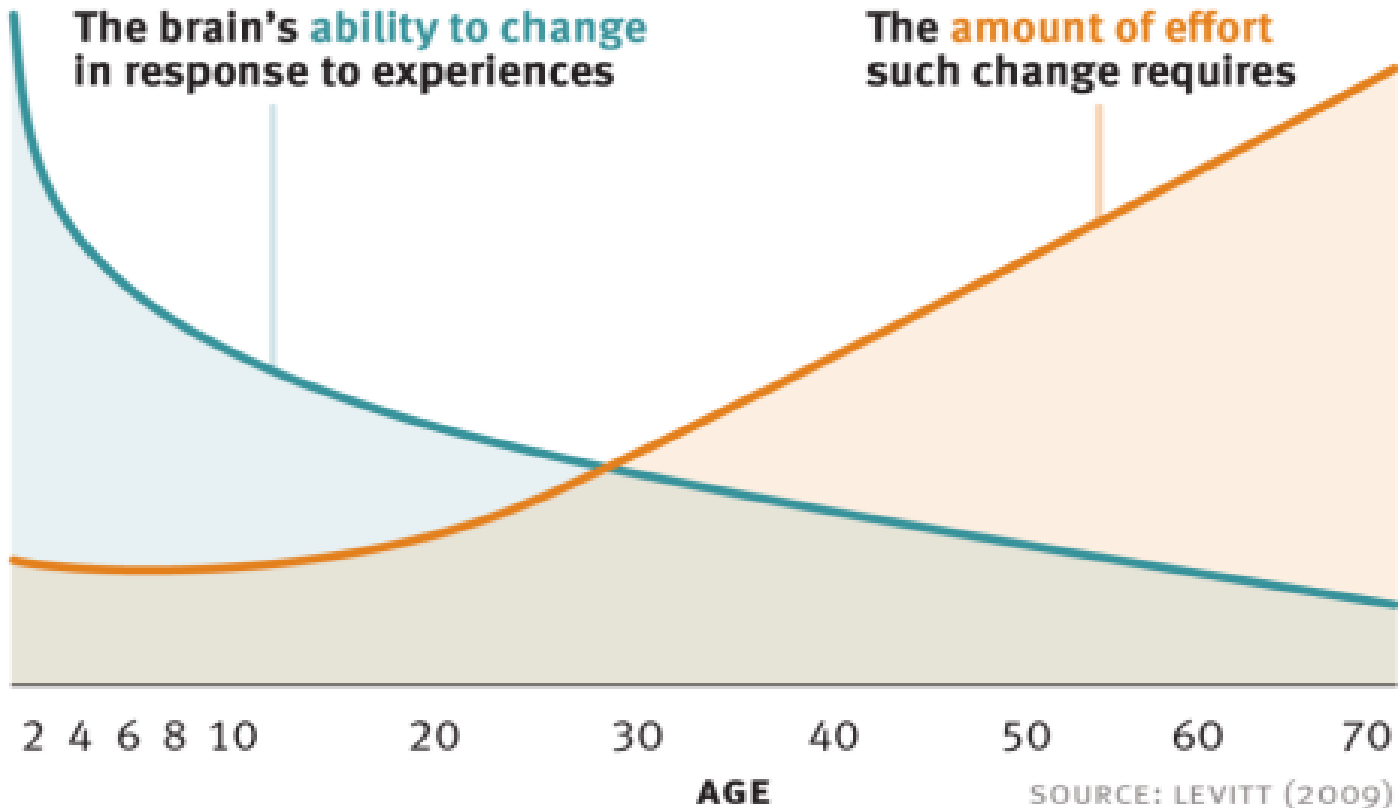
MRI scans of human brain development

# Brain Architecture

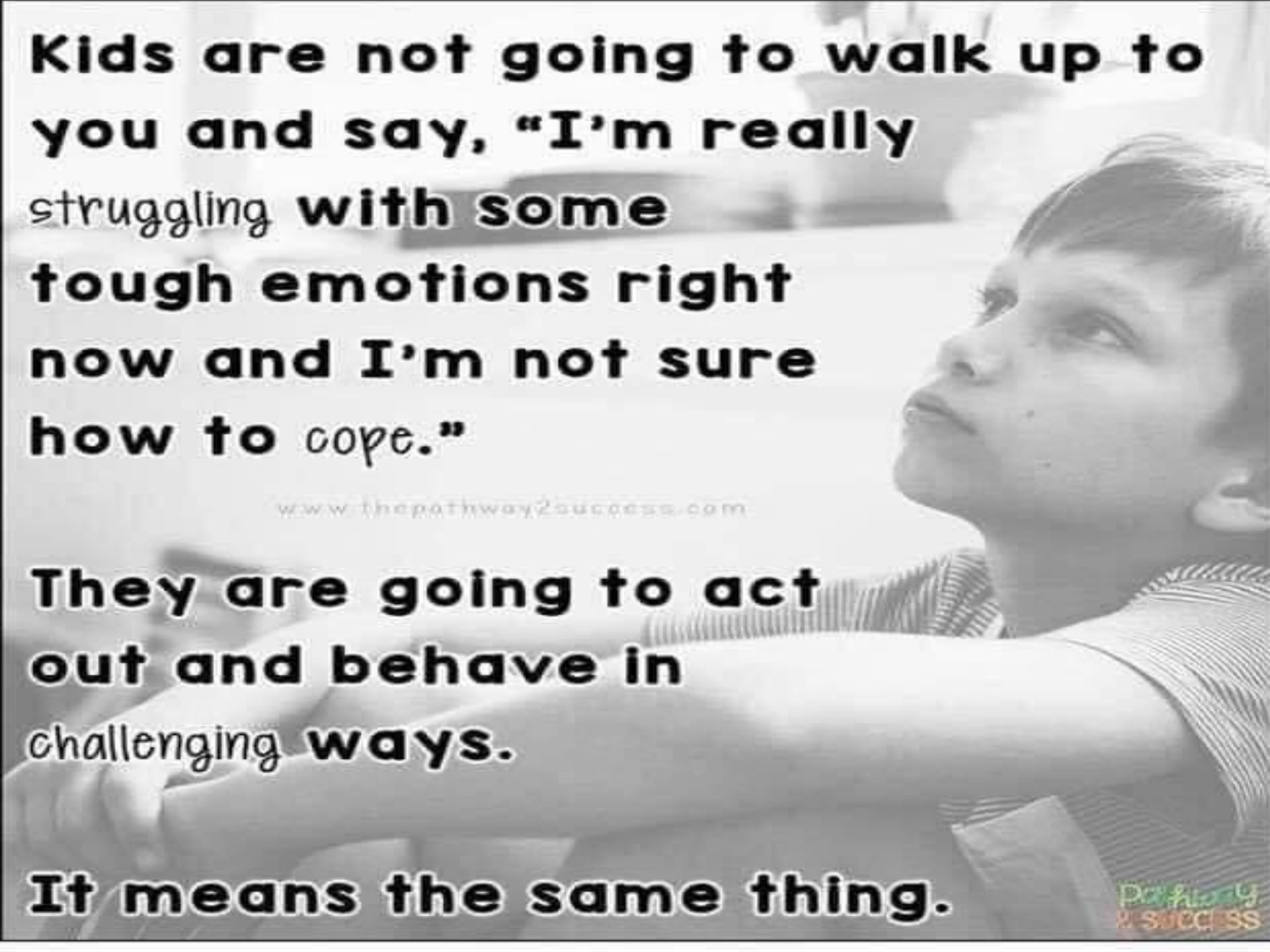
How Quickly It Is Set



# Opportunity for Change





A black and white photograph of a young boy with short hair, looking upwards and to the left with a thoughtful expression. He is wearing a striped shirt. The background is blurred, showing what appears to be a desk or table.

**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](http://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 background of the slide is a soft, abstract watercolor wash in shades of light blue and teal, with a torn-paper edge effect at the top and bottom.

# The architecture of self-regulation is **attunement**

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

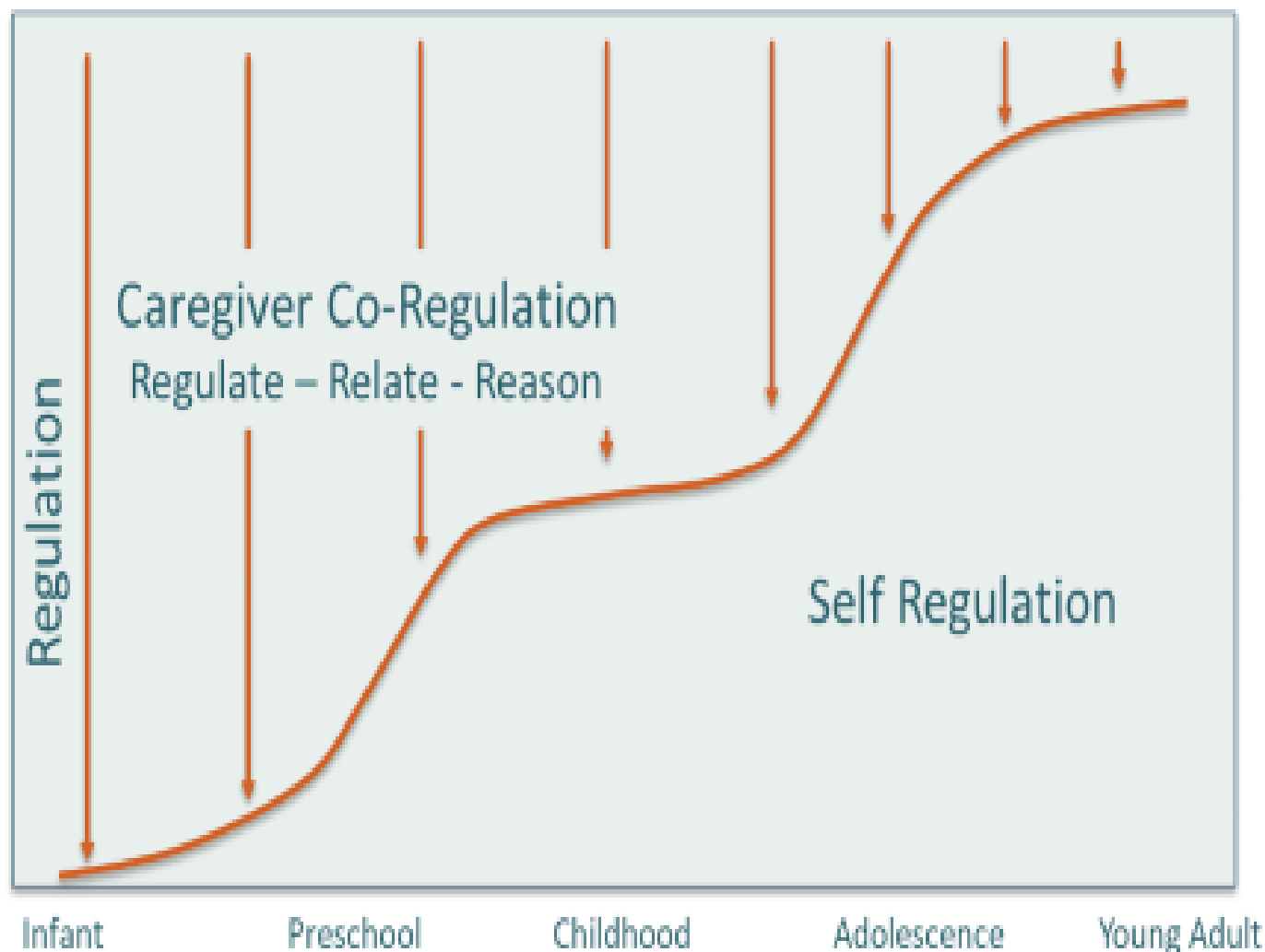
*Dr. Mona  
Delahooke*

# 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**