

# *Community Engagement to Support Children's Brain Development*

Judy L. Cameron, PhD

Department of Psychiatry, University of Pittsburgh  
The National Scientific Council on the Developing Child  
Working For Kids: Building Skills™



# The Foundations of Lifelong Health are Built in Early Childhood



# Four Core Concepts of Development

1

Brain Architecture Is Established Early in Life and Supports Lifelong Learning, Behavior, and Health

2

Early Life Adversity Leads to Long-term Changes in the Brain, Behavior Regulation, Mental Health

3

Neural Circuits Can Be Strengthened To Improve Reasoning Skills, Planning, Problem-Solving & Inhibitory Control

4

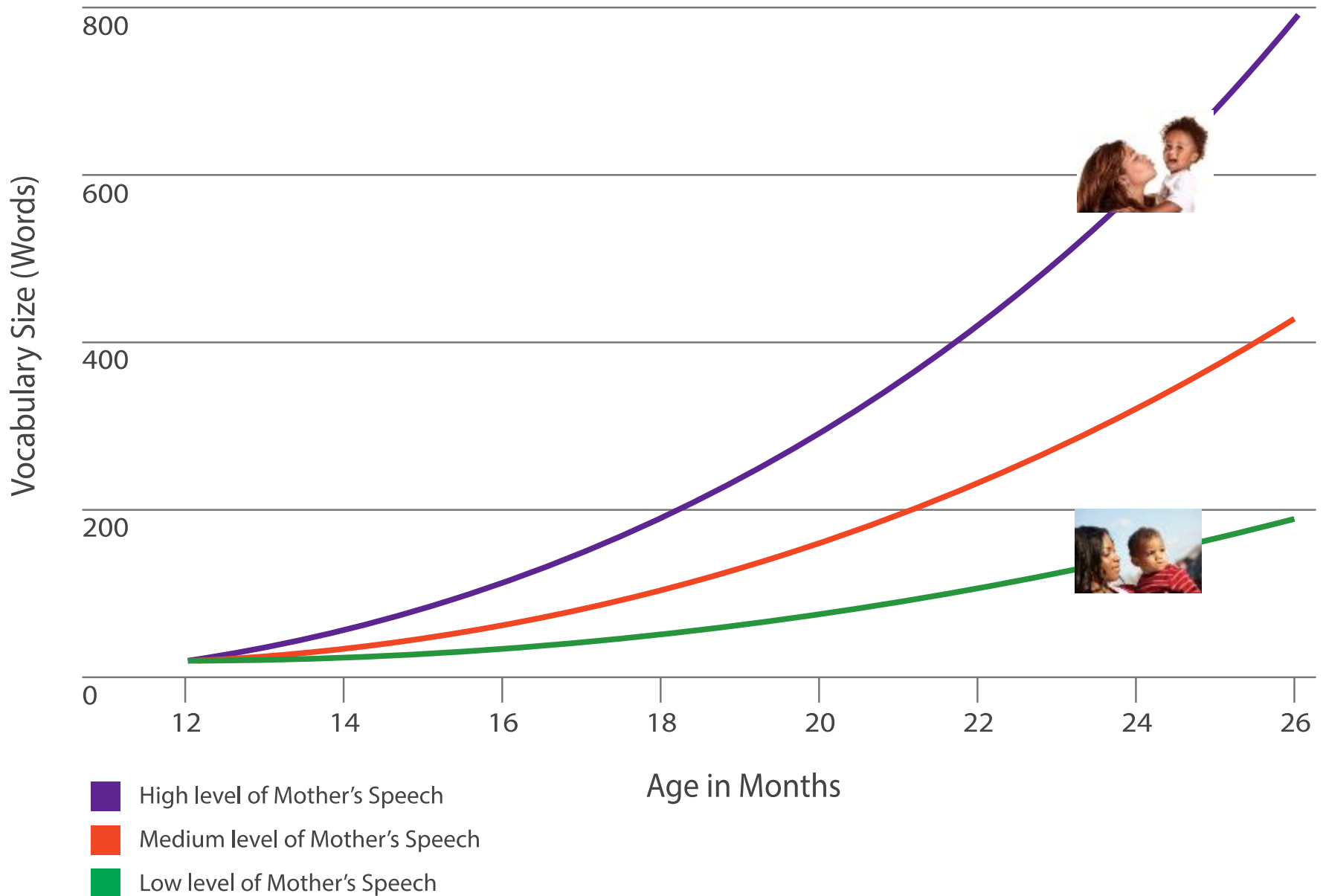
Social Support Systems Play an Important Role in Building Resilience to the Adverse Consequences of Early Life Stresses



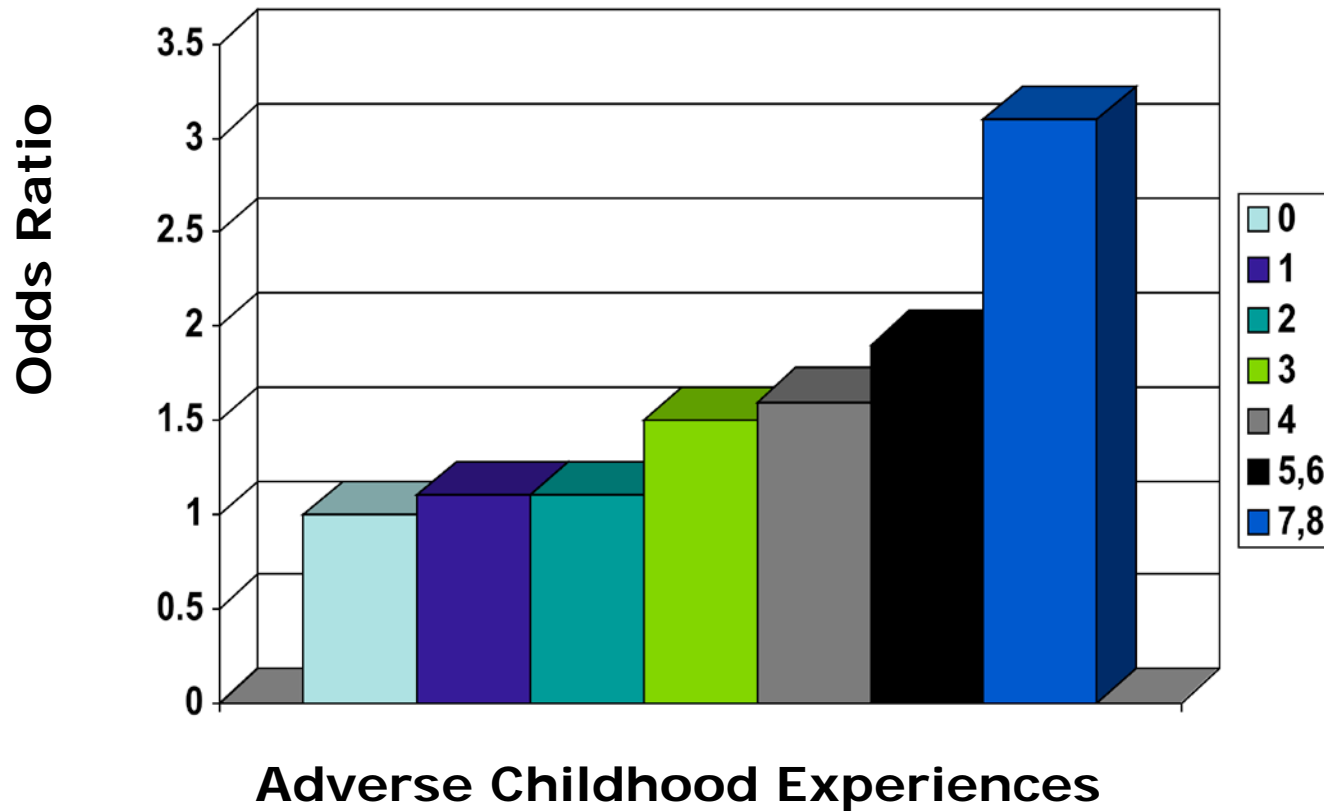
**HEALTHY CHILD DEVELOPMENT**

# MOTHER'S SPEECH AND CHILD VOCABULARY

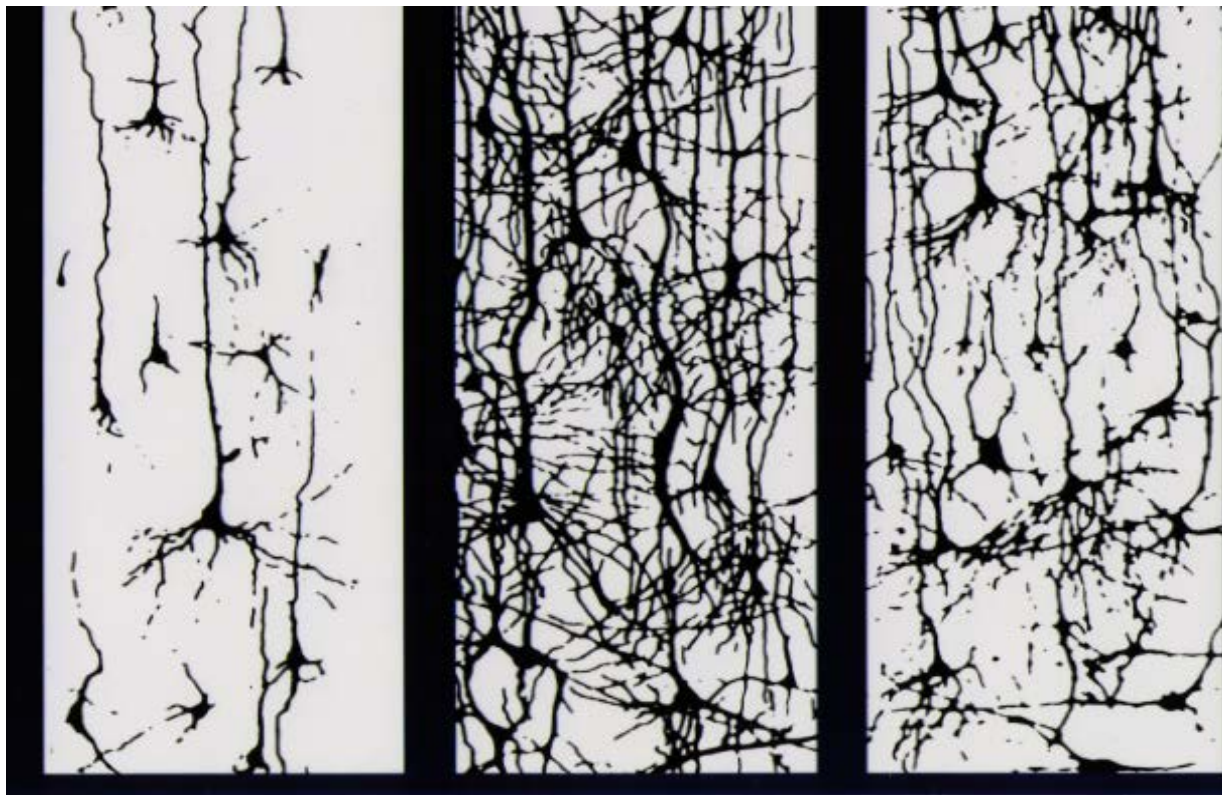
Source: Huttenlocher et al., Developmental Psychology 27: 236-248, 1991



# Adverse Childhood Experiences and Adult Cardiovascular Disease



# Experience Shapes Brain Architecture by Over-Production Followed by Pruning



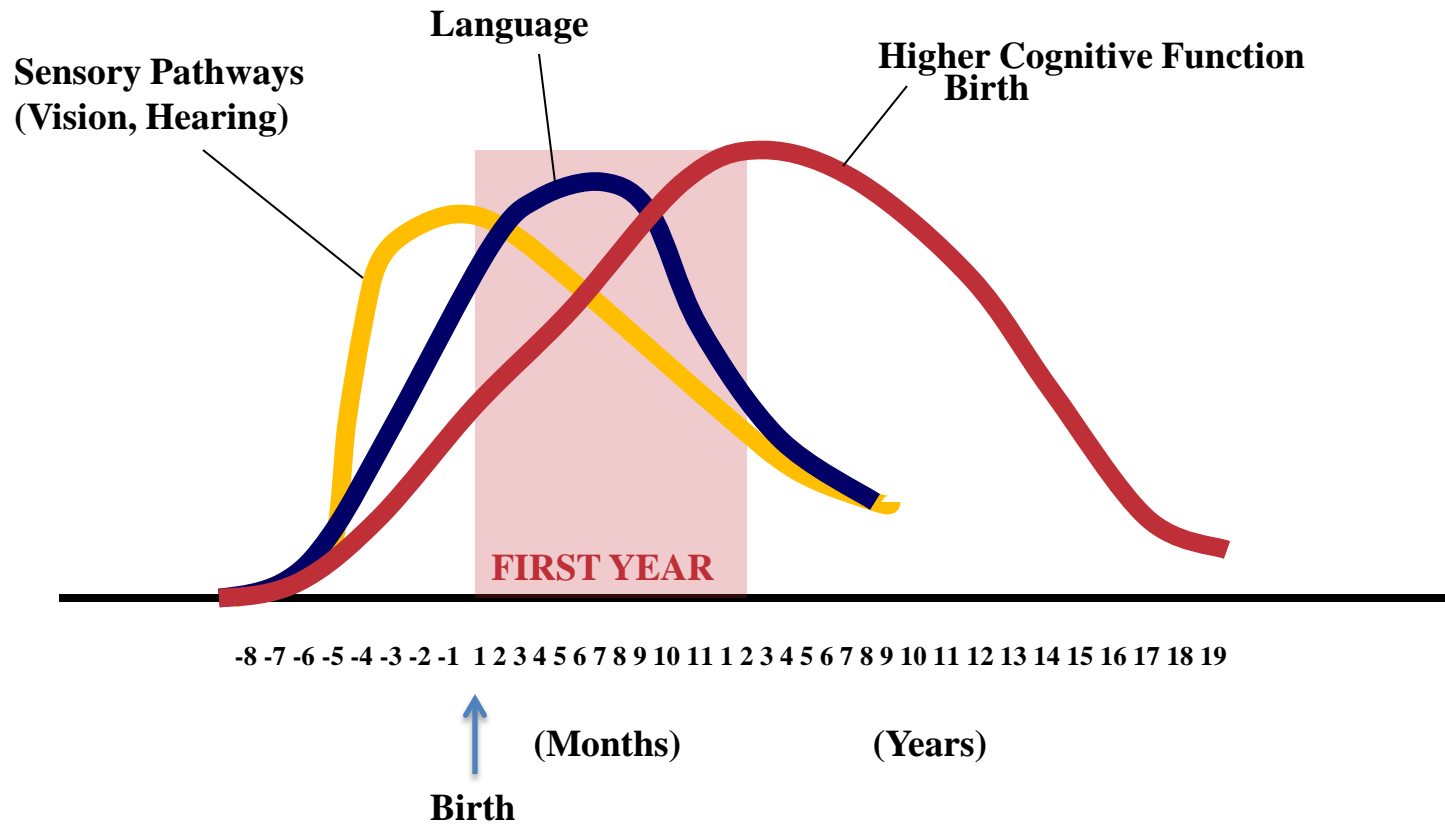
**birth**

**3 years**

**14 years**

# Neural Circuits are Wired in a Bottom-Up Sequence

(700 synapses formed per second in the early years)

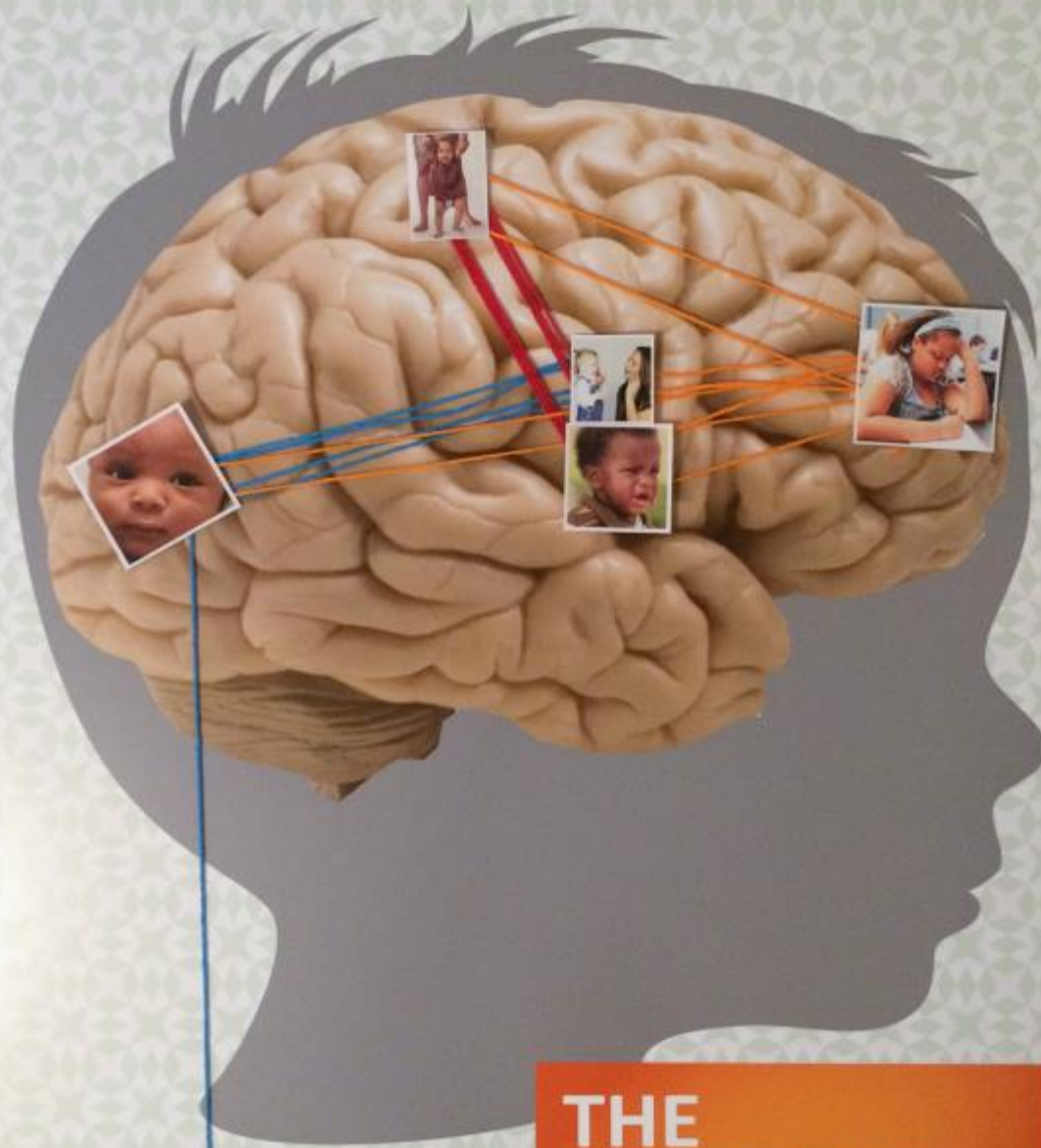


# Experiences Build Brain Architecture

Video: <https://developingchild.harvard.edu/resources/experiences-build-brain-architecture/>



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**THE  
GROWING  
BRAIN**

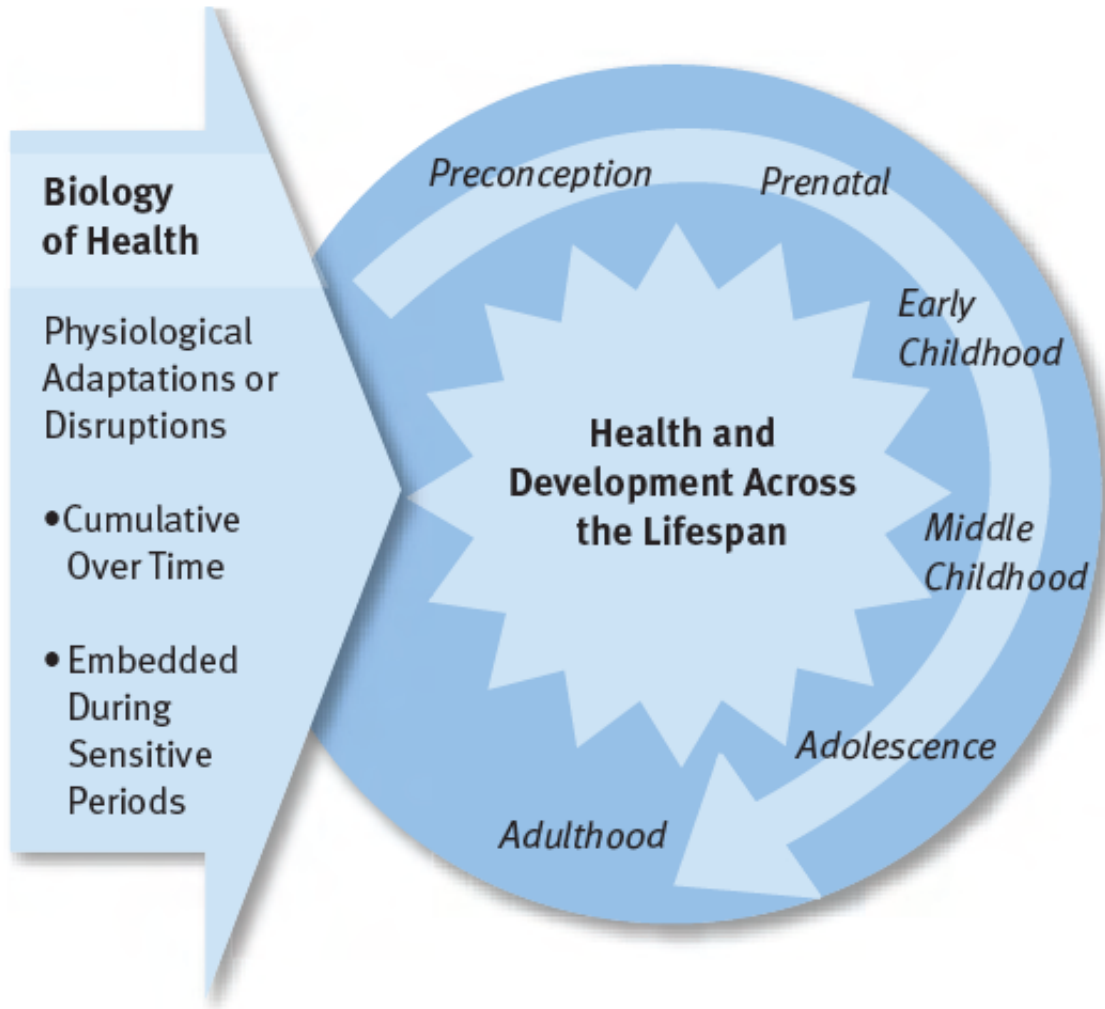
# Stable, caring relationships play a key role in building brains



# Serve & Return Interaction Shapes Brain Circuitry

Video: <https://developingchild.harvard.edu/resources/serve-return-interaction-shapes-brain-circuitry/>

# Early Life Stress Impacts Life-long Health



# How do stress and neglect impact the brain?

1

***Brain Architecture*** Is Shaped by Early Life Stresses

2

***Gene Expression in the Brain*** Changes in Response to Stress Exposure

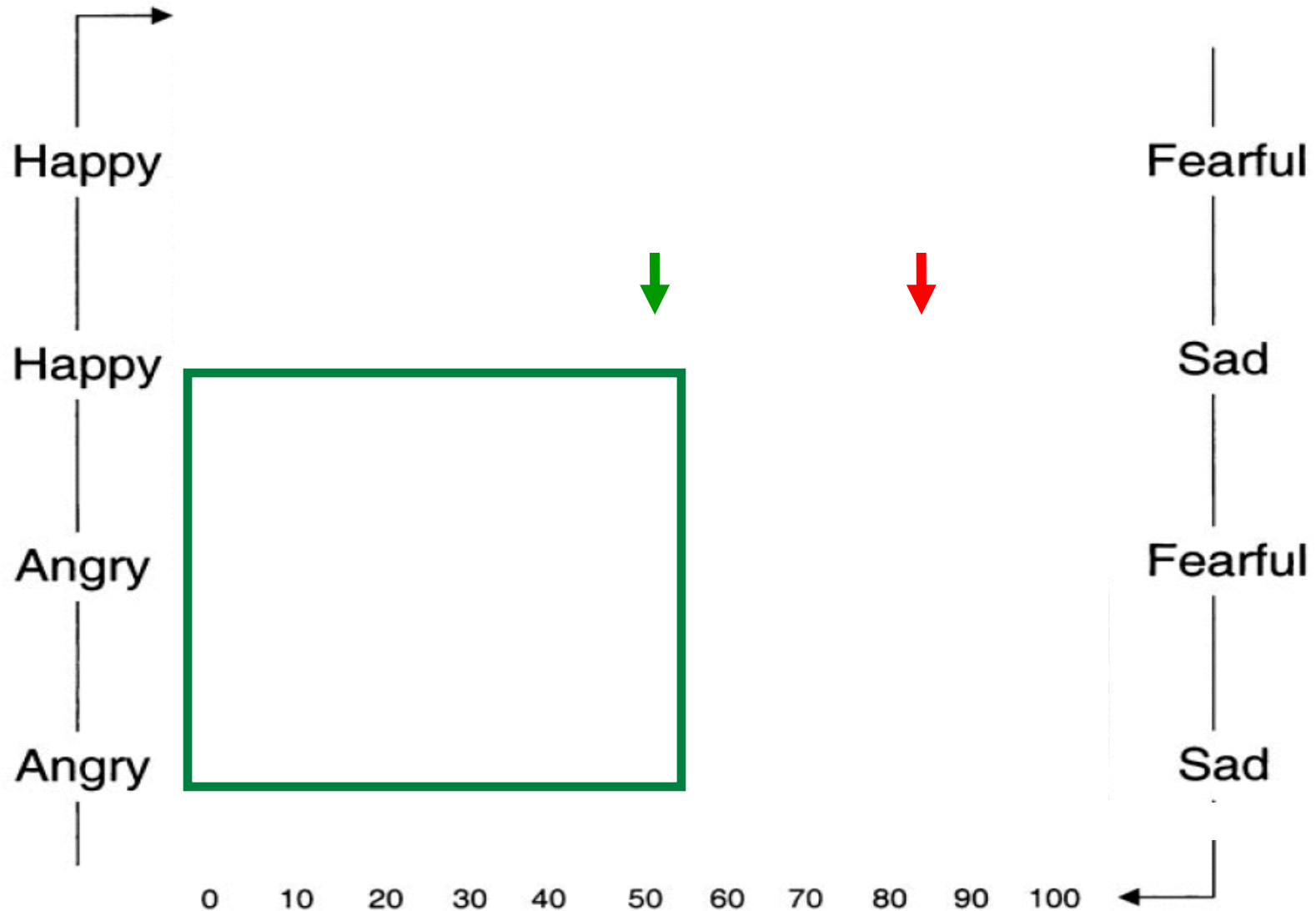
3

***Hormone Secretion*** Changes in Response to Stress Exposure

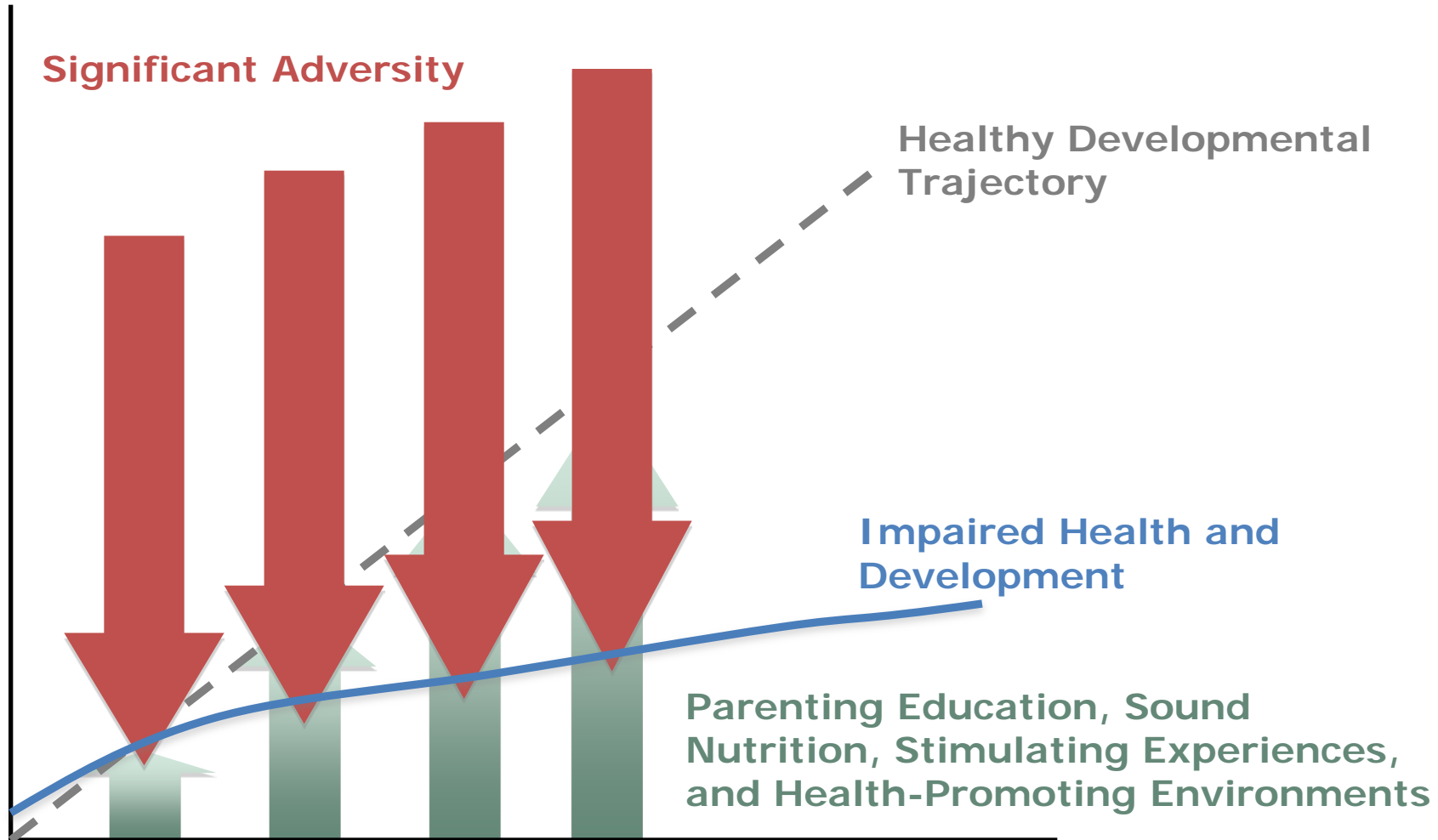
4

Early Stresses Change the ***Way You See the World***

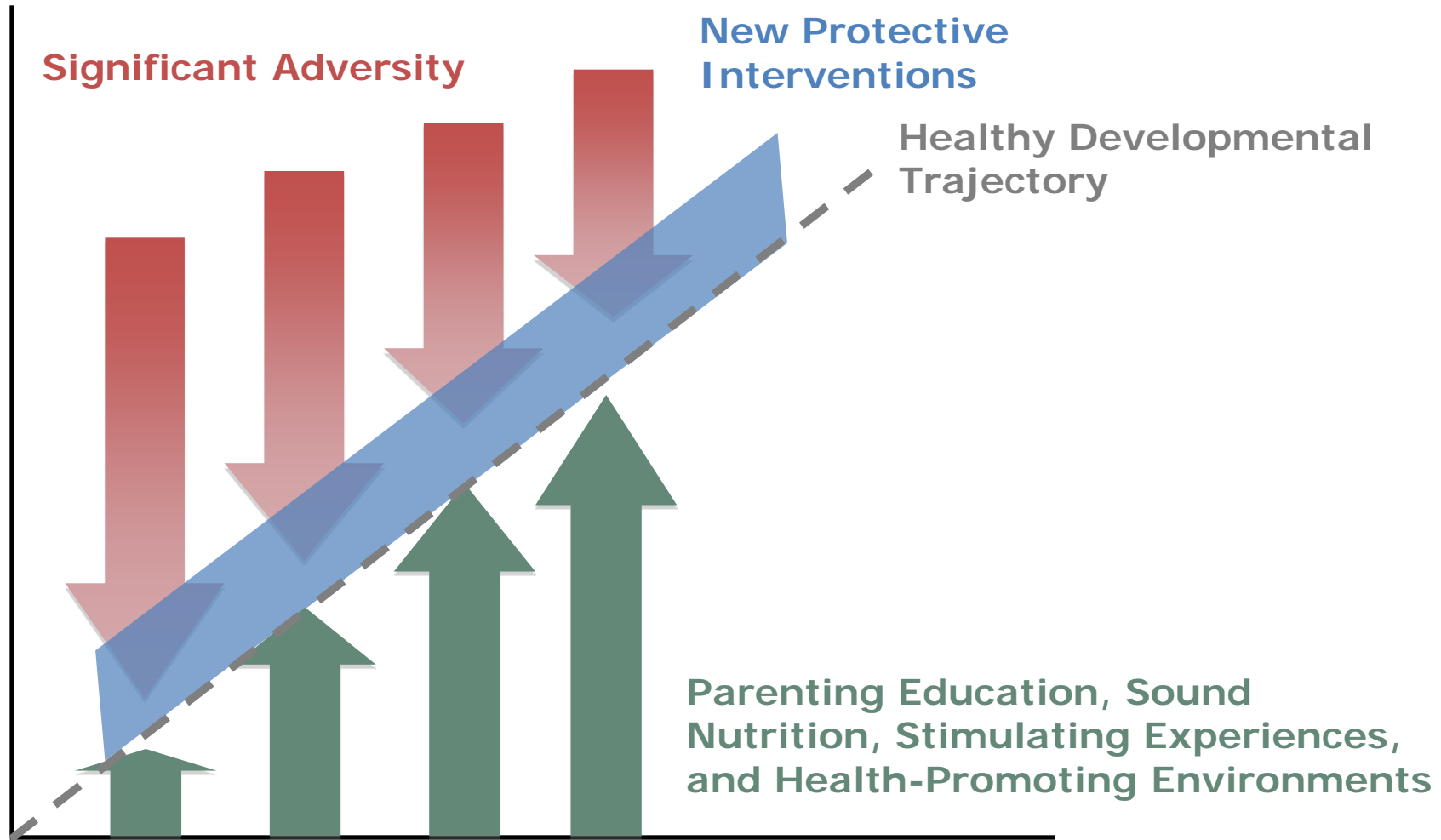
# Adverse Early Life Experiences Change How You See the World



# Current Conceptual Framework



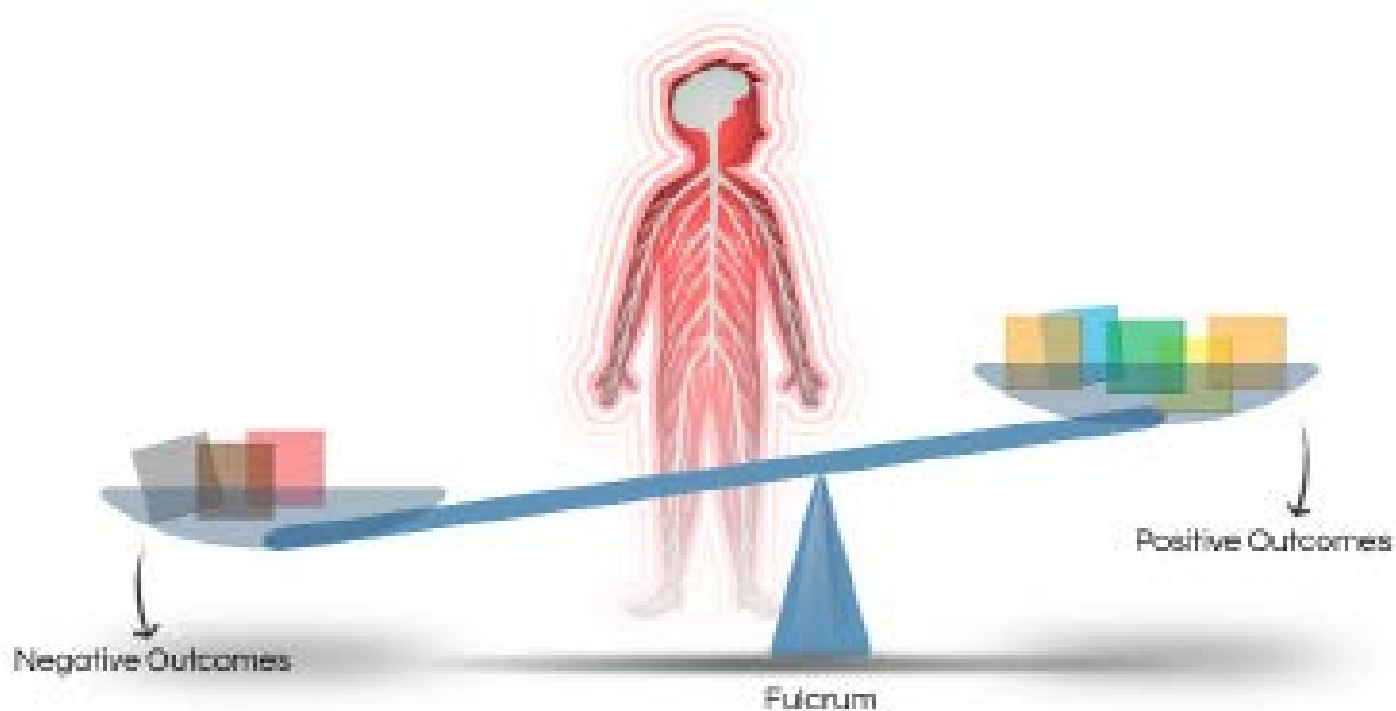
# Protective Interventions Can Improve Life-long Health



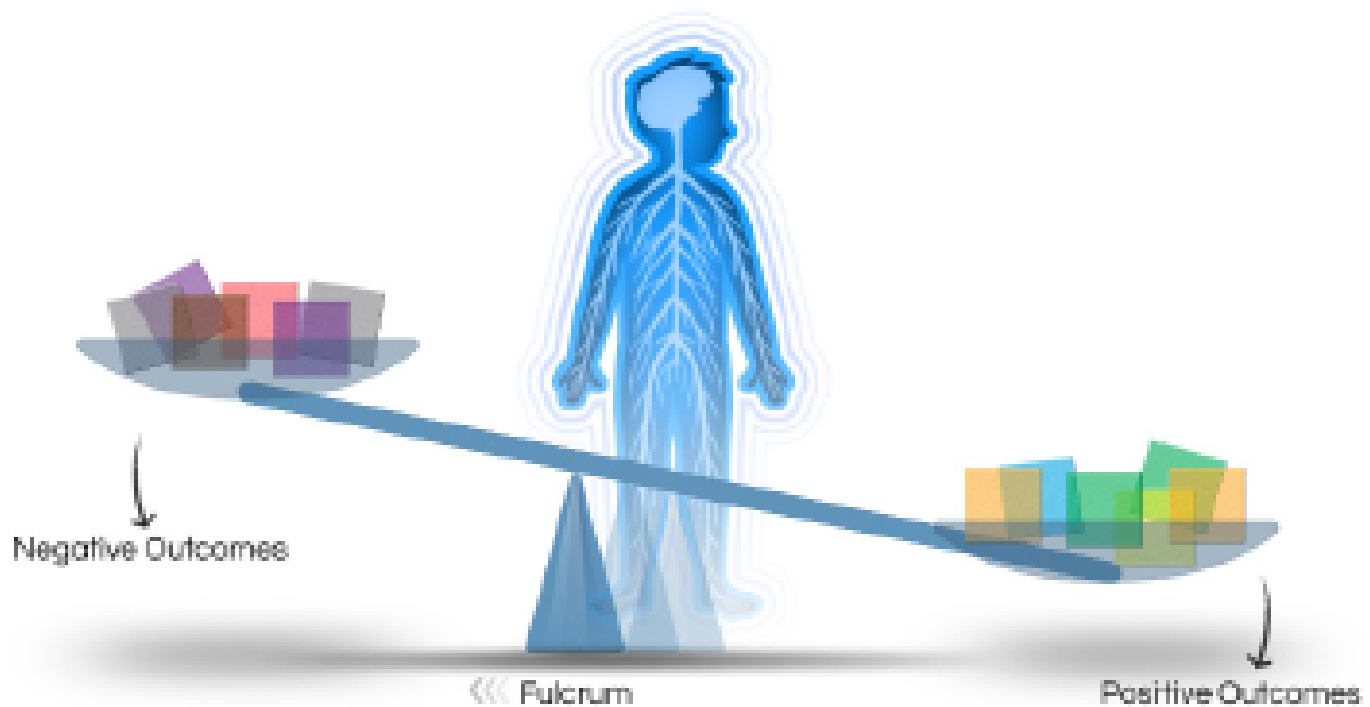




**When positive experiences outweigh negative experiences, a child's "scale" tips toward positive outcomes.**



**The initial placement of the fulcrum affects how easily the scale tips toward positive or negative outcomes.**



**Over time, the cumulative impact of positive life experiences and coping skills can shift the fulcrum's position, making it easier to achieve positive outcomes.**

# Capabilities that help with stress management

Focusing Attention

Problem Solving

Planning Ahead

Behavior Regulation

Controlling Impulses

Adjusting to New Circumstances

*Executive Function and Self Regulation*

# Working For Kids: Building Skills™



## *Addressing Community Issues:*

- How can communities provide children with stable, caring relationships?
  - *Strengthening family relationships*
  - *Providing other relationships*
- How can interventions be provided early?
- How to get the community involved?

# WORKING FOR KIDS

building skills

## *Working from Within Communities*

