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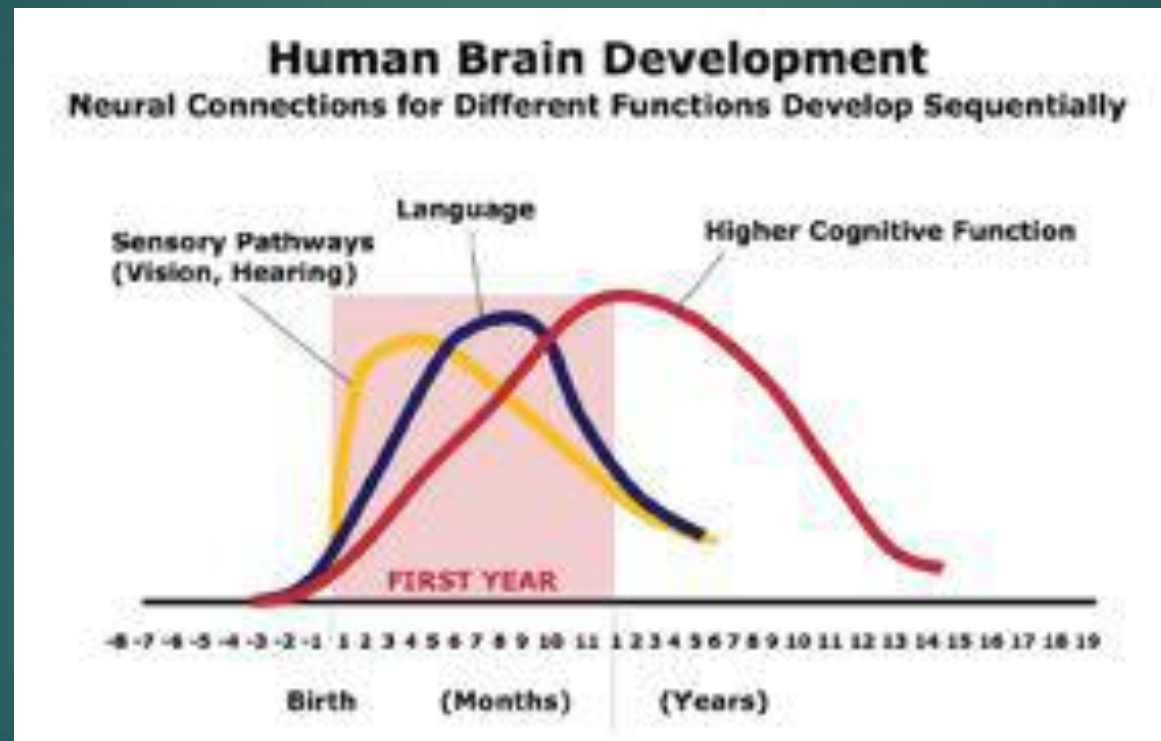
An equitable future for all: investing in early childhood development

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Why is early childhood important?

- ▶ Critical window of development
 - ▶ Brains built rapidly
 - ▶ Combination of genes and environment determine nature and quality of those neuronal connections
 - ▶ Birth to age 4, brain most susceptible to significant and irreversible modifications in neuronal connections

Neuronal connections formed early in life



Source: Nelson (2000) in Shonkoff & Phillips (eds), 2000

Why is early childhood important?

- ▶ Neurons that remain inactive or are rarely stimulated are eliminated



Why is early childhood important?

- ▶ Implications of suboptimal brain development
 - ▶ Lower IQ
 - ▶ Impaired learning
 - ▶ Decreased vocabulary and impaired language
 - ▶ Impaired mental and emotional health
 - ▶ Cognitive delays

Impact in Adulthood

- ▶ Mental health problems
- ▶ Physical health problems
- ▶ Behavioral problems
- ▶ Incarceration
- ▶ Unemployment
- ▶ Decreased educational attainment
- ▶ Difficulty maintaining relationships

Pathways that affect brain development

▶ **Prenatal**

- ▶ Nutrition
- ▶ Maternal Stress/Depression

▶ **Social**

- ▶ Parent-child relationship
 - ▶ Maternal Stress/Depression
 - ▶ Parenting (discipline, monitoring, warmth, acceptance, responsiveness, etc.)
 - ▶ Serve and return
- ▶ Adverse childhood experiences and toxic stress

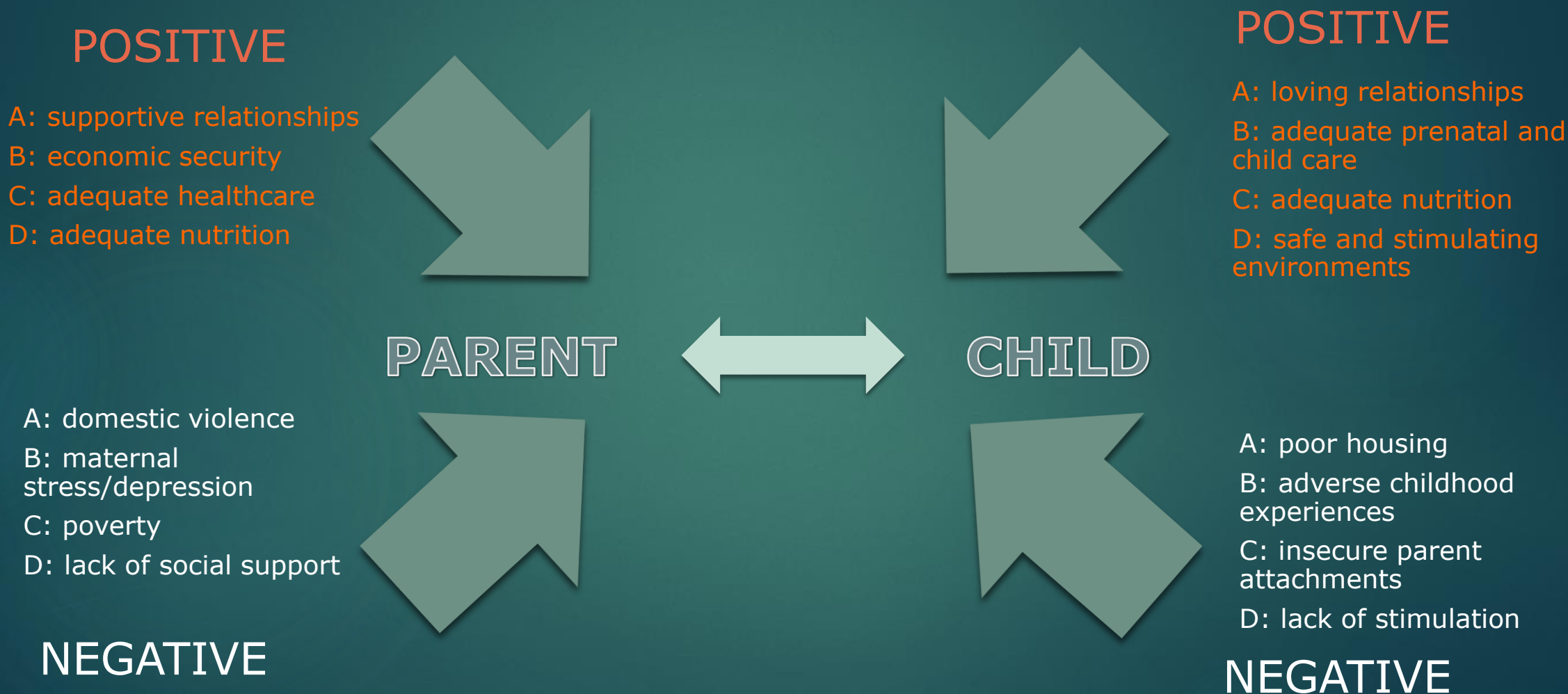
Pathways that affect brain development

▶ **Environmental**

- ▶ Lead Poisoning
- ▶ Crowding/housing/chaos
- ▶ Nutrition



MODEL FOR EARLY CHILDHOOD BRAIN DEVELOPMENT



Proposed/Possible Goals

- ▶ Every child has access to a stimulating, engaging environment
 - ▶ Two-generation interventions
 - ▶ Housing
 - ▶ Economic security
 - ▶ Quality childcare from birth to school age
 - ▶ Parenting programs
- ▶ Want to learn more? Attend our early childhood development conference on Oct. 18th at 9am.