



Impact of Early Trauma on the Developing Brain

MODULE NOTEBOOK

Center for Advanced Studies
in **Child Welfare**

1 Early Experiences Build Brain Architecture

Synopsis: In this video you will learn about how early experiences shape the development of young brains.



NOTES FROM THE VIDEO:

KEY POINTS

- Early brain development impacts the course of later life.
- The brain works as a whole.
- To build solid foundations a child needs nurturing and responsive interactions, good nutrition and minimal exposure to stress.

1 Early Experiences Build Brain Architecture *Continued*

NOTES FROM THE RECAP AND REFLECTION QUESTIONS:

2 Serve and Return Interactions

Synopsis: You will learn that the most important experiences for the brain to develop a solid architecture are responsive and nurturing interactions between young children and their caregivers. These experiences are called serve and return.



NOTES FROM THE VIDEO:

KEY POINTS

- Parent engagement (serve and return) starting at birth is one of the most important things a parent can do to support the development of their child.
- In the first four years the brain experiences a large growth in the areas of hearing, vision, language, communication and movement. Through serve and return interactions pathways in the brain are confirmed allowing a child to develop a strong brain architecture.
- Children experiencing a lack of serve and return interactions is one of the causes of the education gap.

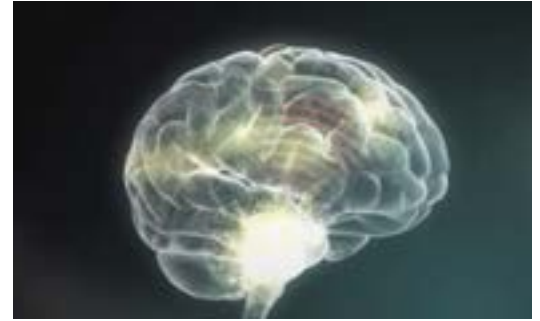
2 Serve and Return Interactions *Continued*

NOTES FROM THE RECAP AND REFLECTION QUESTIONS:

3

Impact of Stress on Brain Development

Synopsis: Stress is the result of a natural chemical reaction in the body. However, too much stress for too long can have negative consequences for the developing brain, and in the early years it can change the architecture of the brain. Additionally, you will learn about the Adverse Childhood Experiences (ACEs) Study. This study revealed a relationship between an individual's adverse experiences before age 18 and risk of health issues later in life.



NOTES FROM THE VIDEO:

KEY POINTS

- Adverse Childhood Experiences (ACEs) create toxic stress and are related to higher rates of health issues.



3 Impact of Stress on Brain Development *Continued*

NOTES FROM THE RECAP AND REFLECTION QUESTIONS:

4 Coping with Early Adversity and Mitigating Its Effects

Synopsis: You will learn about resilience using the image of a teeter-totter with healthy development on one side and disrupted development on the other side.



NOTES FROM THE VIDEO:

KEY POINTS

- Resilience is defined as a way of coping with the stress and mitigating its damaging effects.
- Nurturing and responsive relationships are a key to resilience.
- Resilience is a process.
- What can be observed from resilience varies from individual to individual.
- Human development is dynamic. The early childhood years are a period of major development. Positive experiences later in life can contribute to one's resilience.

4 Coping with Early Adversity and Mitigating Its Effects *Continued*

NOTES FROM THE RECAP AND REFLECTION QUESTIONS:

Conclusion Notes:

List of Links:

FROM THE MODULE

- Early Experiences Build Brain Architecture
z.umn.edu/corestory1
- Serve and Return Interactions
z.umn.edu/corestory2
- Serve and Return (five training videos)
z.umn.edu/serve-and-return
- Impact of Stress on Brain Development
z.umn.edu/corestory3
- To know more about ACEs (infographics)
z.umn.edu/aces-infographic
- Coping with Early Adversity and Mitigating Its Effects
z.umn.edu/corestory5

FROM THE RESOURCES SECTION

- Short video summary
z.umn.edu/building-brains
- CW360°: Using a Developmental Approach in Child Welfare Practice
z.umn.edu/cw360w2012
- CW360°: Trauma-Informed Child Welfare Practice
z.umn.edu/cw360trauma
- Pay Now or Pay Later
z.umn.edu/corestory4ace
- Impact of ACEs on Health Across the Life Course
z.umn.edu/aces-impact
- ACEs website
z.umn.edu/cdc-cestudy
- Executive summary on the ACE study in Minnesota
z.umn.edu/mdh-aces