

Love Shapes the Brain

Parenting style and brain development



Responsive relationships and positive experiences build strong brain architecture

It is more effective to shape a baby's developing brain than to rewire its circuitry in adult years. Through consistent, predictable, and responsive nurturing, the primary caregiver provides the essential neural stimulation for the infant's developing brain. On the contrary, children's brain development may be disrupted by unreliable, hostile, or simply absence of adult responses.



Chronic exposure to violence leads to long lasting wear and tear on children's body and brain



Tolerable stress refers to moderate and short-lived stress from which the brain is able to recover. The presence of a supportive caregiver helps children to learn to cope with stressful event and recover from it, which is an essential feature of healthy development. Toxic stress refers to intense, frequent, or prolonged activation of the body's stress management system. Children who are exposed to chronic abusive parenting but have no support will elicit toxic stress. Prolonged high level of stress hormones has been shown to affect hippocampus and amygdala. It also impairs the development of prefrontal cortex, thereby hindering cognitive functioning and impulse control.

When feelings are not well-managed, children's ability to learn and interact with others will be impaired

Young children who have been exposed to traumatic circumstances show heightened sensitivity to potential physical and psychological threats. Their increasing tendency to stay hypervigilant and assign malevolent intent to others (e.g. teachers, schoolmates, and friends) in neutral social settings (e.g. school) lead to a vicious cycle of interpersonal problems. If children invest most of their energy in self-protection, their ability to learn and interact socially with people will be impaired.



Human brain is plastic: can be reshaped by positive relationships



Fears cannot be passively forgotten over time. Nonetheless, human brain is plastic. Children who have been traumatized but end up doing well have at least one stable, responsive relationship with a trustworthy adult caretaker. It is crucial for children to actively 'unlearn' the fearful memory by accumulating positive memory. They can also benefit from evidence-based psychotherapy to reduce fear and anxiety, and rebuild their mental health.

If you would like to know more about parenting and brain development, please view:
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