

# Early Education Commission

*A community leadership collaborative supporting the United Way's goal of ensuring children are ready for school*



United Way of  
Metropolitan Atlanta

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## Research Abstract

**Title:** “Starting Smart: How Early Experiences Affect Brain Development” (2<sup>nd</sup> Edition)

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For Ounce of Prevention Fund and Zero to Three

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### Abstract

In this article the authors overview the nature of brain development. They note that young children have “windows of opportunity” in which they develop an excess of synapses (connections among neurons), but the synapses that are not used are eliminated. “Infants and children who are rarely spoken to, who are exposed to few toys, and who have little opportunity to explore and experiment with their environment may fail to fully develop the neural connections and pathways that facilitate later learning.” They also note new research showing the impact of abuse and neglect on brain development; maltreated children with post-traumatic stress disorder have elevated stress hormones even when nothing stressful is happening; they also have smaller brain volumes.

Several recommendations are presented;

- Educate parents about the importance of early experiences for their children’s development – written materials, parenting classes, coaching, home visiting
- Prevent abuse and neglect – high quality home visiting programs that begin as soon as a child is born
- Provide accessible, quality mental health services for parents; if depression or mental illness is untreated the parents may fail to respond to their children’s needs
- Ensure adequate nutrition prenatally and in the first years after birth to prevent the “devastating effects on intelligence and brain development of a lack of basic nutrients”
- Promote high quality infant-toddler child care – licensing standards, pre-service and in-service training, low child-to-teacher ratios, small group sizes, child care reimbursement rates to fund well-trained teachers

The authors conclude that “high rates of child abuse and neglect across the country as well as persistently high rates of school failure in some communities indicate that far too many children do not receive what they need during their first few years for health brain growth and development.”