



## How Early Child Care Affects Later Development

### NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD

is a multi-disciplinary collaboration of leading scholars in neuroscience, early childhood development, pediatrics, and economics. Housed at the Center on the Developing Child at Harvard University, the Council works to bring sound and accurate science to bear on public decision-making affecting the lives of young children.

For more information on the Council and the science of early childhood, go to [www.developingchild.net](http://www.developingchild.net).

**A review of the most recent findings of a long-term study of the effects of child care on children's outcomes later in life.**

**Why was the study done?** What are the enduring effects of early child care? In response to longstanding public interest, the National Institute of Child Health and Human Development (NICHD) inaugurated a \$200 million study in 1991 to discover the immediate and long-term effects of early child care experiences on cognitive and social-emotional development. How important is the quality of the child care experience? How do the effects of child care compare with the quality of parenting at home? This most recent report of this important study, released in March 2007, extends the findings to the effects of child care experience on school achievement and conduct at fifth and sixth grade.

**How was the study conducted?** Developmental scientists at 10 locations in the United States recruited mothers during hospital visits shortly after their baby's birth. Starting with 1,364 children and their families, participants were studied throughout infancy and childhood. Based on maternal interviews, questionnaires, and laboratory, home, and child care observations, investigators studied the nature, quantity, and quality of child care arrangements, and children's cognitive, language, social-emotional, and physical health outcomes were assessed. The study continued as children entered and progressed through school, when teacher reports and academic achievement were included, to evaluate the long-term effects of early child care experience.

**What did the study find?** First, the quality of child care is important. Whether children were at a child care center, family day care home, or other setting, higher quality care (based on comprehensive observations in the settings) was associated with higher vocabulary scores in fifth grade. Second, parenting quality is a far stronger influence on children's cognitive and social-emotional development than is child care experience, irrespective of how much time children spend in child care. Children whose mothers were more sensitive, supportive, and responsive had higher scores on reading, math, and vocabulary achievement in fifth grade, and in sixth grade teachers rated them higher on work habits and social skills, and lower on problem behavior in the classroom. Third, children with more experience in child-care centers were rated by their teachers as showing



## SCIENCE BRIEFS

summarize the findings and implications of a recent study in basic science or clinical research. Studies are selected for review based on their scientific merit and contributions to understanding early development. No single study is definitive, of course. Understanding of early development is based on many studies that, taken together, permit broad conclusions and human applications. Generalizing to human children the results of studies with animals, for example, must be done cautiously and confirmed by research with children and their families. The National Scientific Council rests its work on a rigorous discussion of the validity of many studies like these conducted over many years and using different methodologies and samples.

somewhat more disruptive behavior in sixth grade. Such behaviors (such as being argumentative or uncooperative) were slightly elevated—although still within the normal range—for children with center-based early experience, but were not elevated for children in other types of care.

**What do the findings mean?** Parents are the most important influence on their children's development, and programs that support parents' ability to provide responsive care are likely to benefit children. Nevertheless, attention to the quality of child care and to classroom and playground dynamics when children spend extensive time in care with large groups of other children is important for ensuring positive language and behavioral development. This is important because the average quality of child care in the United States is mediocre, and much improvement is needed. The findings concerning disruptive behavior suggest that greater attention to early social and emotional skills in preschool and school classrooms, including teacher training focused on these issues, is important to helping children get along with others and benefit from learning opportunities. However, contrary to widespread media reports of this study, the effects of early child care experience on disruptive behavior in sixth grade—and, in fact, all aspects of behavior and academic performance—were small.

Title and Authors: Belsky, J., Vandell, D. L., Burchinal, M., Clarke-Stewart, K. A., McCartney, K., Owen, M. T., & The NICHD Early Child Care Research Network (2007). Are there long-term effects of early child care? *Child Development*, 78: 681-701.