



## RESEARCH BRIEF #3: EARLY HEAD START

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### WHAT IS EARLY HEAD START?

Early Head Start (EHS) provides child development services to low-income pregnant women and families with young children under age three. Begun in 1994 as an extension of Head Start, the program promotes healthy prenatal outcomes; the health, cognitive and language development and socio-emotional well-being of infants and toddlers; and family development and a supportive parent-child relationship. Local EHS agencies offer services in centers and through home visits, with some programs combining both center-based and home-based approaches. In 2006, the program served an estimated 61,647 children, at an estimated annual federal cost of about \$10,500 per child.<sup>1</sup>

### WHAT IS THE IMPACT OF EARLY HEAD START ON CHILDREN AND FAMILIES?

There has been a large-scale, random-assignment evaluation of Early Head Start that found the program had positive impacts on many dimensions of parenting and child development at ages two and three years. Overall, program impacts were mostly small, with larger impacts for some population subgroups.<sup>2</sup>

**Cognitive and School-Related Outcomes:** Early Head Start children scored higher on standardized assessments of cognitive development and language development than a control group of children not assigned to the program. Significantly fewer Early Head Start children scored in the at-risk range on these two measures of cognitive skills. Even with these gains, however, EHS children scored below national norms and many remained in the at-risk range of developmental functioning.

- *Improved cognitive development.* On average, Early Head Start children scored 91.4 on an assessment of cognitive development compared to a score of 89.9 for children in the control group (a score of 100 is the population average). Those receiving EHS services were less likely than those in the control group to fall in the “at-risk” range of developmental functioning (27 percent compared to 32 percent had a score of 85 or lower).<sup>3</sup>

This research brief is one in a series of research briefs on the impacts of early childhood programs. See the websites for First Focus ([www.firstfocus.net](http://www.firstfocus.net)) and the Brookings Center on Children and Families ([www.brookings.edu/ccf](http://www.brookings.edu/ccf)) for the full series including an overview and briefs on State Pre-K, Head Start, Early Head Start, Model Early Childhood Programs, and Nurse Home Visiting.

- *Better language skills.* The percentage of children with “at risk” scores on language development skills fell significantly but remained high: 51.1 percent after EHS participation compared to 57.1 percent without the intervention.<sup>4</sup>

**Behavioral and Socio-emotional Outcomes:** Early Head Start children engaged their parents more, were less negative to parents, and were more attentive to objects during play. EHS children were also less aggressive than the control group of children not assigned to the program. More positive impacts on socio-emotional development were observed at age three than at age two.

**Health and Safety Outcomes:** There were small but significant impacts on children’s health. More Early Head Start children visited a doctor for treatment of an illness or immunizations. Fewer children were hospitalized for an accident or injury.

- *Doctor visits.* The study found that 83 percent of EHS children visited a doctor for treatment of an illness, compared to 80 percent of children in the control group.

- *Hospitalizations.* Hospitalizations were relatively rare: 0.4 percent of EHS children and 1.6 percent of children not assigned to EHS were hospitalized for an accident or injury.

**Outcomes for Parents:** After participating in Early Head Start, parents were more emotionally supportive in play with the child and showed more warmth toward the child. They were also more likely to read daily to children and were less likely to engage in negative parenting behaviors. In addition, EHS parents were more likely to participate in education or job training, and some impacts on employment were observed later in the study.<sup>5</sup> However, there were no significant improvements in parental income.

- *Reading to children.* The study found that 56.8 percent of EHS parents compared to 52.0 percent of parents in the control group reported reading to their child every day.
- *Spanking children.* Early Head Start parents were less likely to spank their children: 46.7 percent of EHS parents and 53.8 percent of parents in the control group reported spanking their children in the past week.
- *School attendance.* Early Head Start increased school attendance among parents who were teens.
- *Subsequent births.* Early Head Start mothers were less likely to have subsequent births during the first two years after enrollment (22.9 percent of Early Head Start mothers compared to 27.1 percent of mothers in the control group).

Early Head Start had positive effects on fathers as well as mothers. Fathers were less intrusive when playing with children and children were better able to engage their fathers. In addition, EHS fathers were also more likely to participate in home visits and parenting classes than other fathers.

**Medium- and Long-Term Outcomes:** EHS children were more likely to enroll in Head Start and other formal programs (prekindergarten or child care) than control group children.<sup>6</sup> Many impacts on children and parenting observed at age three are still present at age five, though overall impacts are still modest

in size.<sup>7</sup> A follow-up report with findings through the end of kindergarten for children enrolled in Early Head Start is due out in the second half of 2008.

## HOW DO EARLY HEAD START IMPACTS VARY?

**Race and Ethnicity.** There were more positive impacts for African American and Hispanic families than for White families. Early Head Start brought African American children and families closer to the levels of other racial groups in development outcomes.

**Parental Characteristics.** Impacts were greater for children whose mothers enrolled while they were pregnant. Among parents at risk of depression at the beginning of the program, EHS parents were less depressed than control group parents when children were age three.

**Program Type.** Impacts varied by program type, depending on whether services were offered through a center-based program, a series of home visits, or a mixed approach of center-based and home-based services. The impacts of center-based programs were concentrated in cognitive and socio-emotional development, with some favorable impacts on parenting as well. Home-based programs had impacts on socio-emotional development, and also reduced parenting stress.<sup>8</sup> Mixed-approach programs had the strongest impacts, with a wide range of impacts across cognitive and socio-emotional development, parenting behaviors, and participation in self-sufficiency activities. In addition, programs that were fully implemented early on had more significant impacts than programs that were not fully implemented by 1999.

## HOW STRONG IS THE EVIDENCE BASE FOR EARLY HEAD START?

Early Head Start has been subject to only one national evaluation, but it was sufficiently large and rigorous to provide a solid evidence base. A large sample of 3,000 children and families across seventeen sites were randomly assigned, with half assigned to receive EHS services and half assigned to a control group that did not receive Early Head Start

services.<sup>9</sup> Multiple methods, including direct child assessments, direct observations of children's behavior, videotaped parent-child interactions, and parent reports, were used for measuring outcomes. The seventeen programs themselves were not randomly selected, although their features (program approaches, family characteristics, and geographic distribution) were similar to those of all 143 programs initially funded in 1995 and 1996. Note that the program has continued to expand and evolve in the past ten years, and so its impacts may have changed as the program has matured.

### **IS EARLY HEAD START GENERALLY VIEWED AS EFFECTIVE?**

The EHS evaluation found positive impacts, although most are small.<sup>10</sup> The small size of the benefits, compared to relatively high costs, has led one team of analysts to extrapolate that the program's benefits will not exceed the program's costs.<sup>11</sup> However, the existence of positive impacts across a broad range of measures, and the fact that many impacts observed at age three were still present at age five, leads others to conclude that Early Head Start is working.<sup>12</sup>

### **WHAT FEDERAL LEGISLATIVE ACTION LIES AHEAD FOR EARLY HEAD START?**

As with Head Start, the major issue facing Early Head Start is the level of funding provided in annual appropriations. The recent reauthorization of Head Start in December 2007 included provisions to strengthen and expand Early Head Start, such as requiring half of all new funds to go towards Early Head Start, providing increased flexibility to Head Start programs to convert slots for preschool children into slots for infants and toddlers and requiring at least one infant and toddler specialist in every state.

## NOTES:

<sup>1</sup> U.S. Department of Health and Human Services, Administration for Children and Families, *Justification of Estimates for Appropriations Committees, FY2008*, page D-38. <http://www.acf.hhs.gov/programs/olab/budget/2008/cj2008.html>. The FY 2009 Congressional Justification reported that enrollment increased to 61,788 children in 2007 (annual cost data not provided for 2007).

<sup>2</sup> This review follows common convention in considering an effect size of 0.80 as “large,” 0.50 as “medium” and 0.20 as “small.” Unless noted otherwise, all impacts are from John M. Love, Ellen Eliasan Kisker, Christine M. Ross, and others, *Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start* (Washington, DC: Department of Health and Human Services, 2002).

<sup>3</sup> The effect size for average scores on the Bayley Scales of Infant Development Mental Development Index was 0.12, a small effect.

<sup>4</sup> Overall scores on the Peabody Picture Vocabulary Test increased from 81.1 to 83.3 on a scale of 100. This increase has an effect size of 0.13.

<sup>5</sup> Note that 60.0 percent of Early Head Start parents participated in job training or education, compared to 51.4 percent of control group parents (an impact with an effect size of 0.17). Also, 86.8 percent of Early Head Start parents were employed at some point during the first 26 months, compared to 83.4 percent of control group parents (an effect size of 0.09 and significant at 90 but not 95 percent confidence).

<sup>6</sup> Forty-seven percent of Early Head Start children and 42 percent of control group children were in formal programs at ages three and four.

<sup>7</sup> U.S. Department of Health and Human Services, Administration for Children and Families, *Research to Practice: Preliminary Findings from the Early Head Start Prekindergarten Followup* (Washington, D.C.: U.S. Department of Health and Human Services, 2006), [http://www.acf.hhs.gov/programs/opre/ehs/ehs\\_resrch/reports/prekindergarten\\_followup/prekindergarten\\_followup.pdf](http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/reports/prekindergarten_followup/prekindergarten_followup.pdf).

<sup>8</sup> Home-based programs that were fully implemented had favorable impacts on cognitive and language development at age three that have not been found in evaluations of home-visiting programs.

<sup>9</sup> The control group children could have received services other than Early Head Start, and about 0.7 percent of the control group actually did enroll in Early Head Start.

<sup>10</sup> Effect sizes ranged from 0.10 to 0.20.

<sup>11</sup> Steve Aos, Roxanne Lieb, Jim Mayfield, and others, *Benefits and Costs of Prevention and Early Intervention Programs for Youth* (Olympia, WA: Washington State Institute for Public Policy, 2004).

<sup>12</sup> See for example, Zero to Three Policy Center, Early Head Start Research and Evaluation Project: Early Head Start Works, Policy Brief, January 2007, [http://www.zerotothree.org/site/DocServer/Jan\\_07\\_EHS\\_Policy\\_Brief.pdf?docID=2623](http://www.zerotothree.org/site/DocServer/Jan_07_EHS_Policy_Brief.pdf?docID=2623).

## ACKNOWLEDGEMENTS:

The authors thank Phillip Lovell and Melissa Lazarín of First Focus for their comments and guidance.

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## ABOUT THE CENTER ON CHILDREN & FAMILIES AT THE BROOKINGS INSTITUTION

The Brookings Center on Children and Families studies policies that affect the well-being of America's children and their parents, especially children in less advantaged families. The Center addresses the issues of poverty, inequality, and lack of opportunity in the United States and seeks to find more effective means of addressing these problems. The Center includes a partnership with Princeton University and joint publication of the journal *The Future of Children*. Over the next several years the Center will give particular attention to the following issues:

- Low-income working families and policies designed to improve their economic prospects;
- Economic mobility and opportunity in the United States and investments in children, such as preschool programs, that could improve their chances to get ahead;
- The key role of education at all levels in creating the skills needed to promote opportunity and reduce poverty;
- The growth of single-parent families caused by early unwed childbearing and the decline of marriage; and
- The growing fiscal problems at the federal and state levels and steps that might be taken to ensure fiscal responsibility while minimizing cuts in effective programs targeted to this low-income families and children.

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## ABOUT FIRST FOCUS

First Focus is a bipartisan advocacy organization that is committed to making children and families a priority in federal policy and budget decisions. First Focus brings both traditional and non-traditional leaders together to advocate for federal policies that will improve the lives of America's children. Child health, education, family economics, child welfare, and child safety are the core issue areas in which First Focus promotes bipartisan policy solutions.

While not the only organization working to improve public policies that impact kids, First Focus approaches advocacy in a unique way, bridging the partisan divide to make children a primary focus in federal policymaking. First Focus engages a new generation of academic experts to examine issues affecting children from multiple points of view in an effort to create innovative policy proposals. First Focus convenes cross-sector leaders in key states to influence federal policy and budget debates, and to advocate for federal policies that will ensure a brighter future for the next generation of America's leaders.

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