



RESEARCH TO PRACTICE

Early Head Start Benefits Children and Families

EARLY HEAD START RESEARCH AND EVALUATION PROJECT

The national evaluation conducted by Mathematica Policy Research, Inc., and Columbia University's Center for Children and Families, in collaboration with the Early Head Start Research Consortium, found that 3-year-old Early Head Start children performed significantly better on a range of measures of cognitive, language, and social-emotional development than a randomly assigned control group. In addition, their parents scored significantly higher than control group parents on many aspects of the home environment and parenting behavior. Furthermore, Early Head Start programs had impacts on parents' progress toward self-sufficiency. Early Head Start fathers benefited as well.

Although these overall impacts were generally modest in size, the pattern of positive findings across a wide range of key domains is promising for this relatively new program. In addition, differential program effectiveness across subgroups, including relatively

large impacts in some subgroups of programs and families, suggests directions for programs' continuous improvement efforts.

The Early Head Start Research and Evaluation Project involved 3,001 children and families in 17 sites; half received Early Head Start services, while the other half were randomly assigned to a control group that did not receive Early Head Start, although they were free to use other services in the community. Parents and children were assessed when the children were 14, 24, and 36 months old. Families were also interviewed about their use of a wide range of services at 6, 15, and 26 months after enrollment and when they exited the program. The 17 sites were selected to reflect the array of all Early Head Start programs according to geographic region, racial-ethnic status, urban-rural location, program auspice, and program experience in serving infants and toddlers.

Overall Impacts

Early Head Start programs produced statistically significant, positive impacts on standardized measures of children's cognitive and language development. When children were age 3, program children scored 91.4 on the Bayley Mental Development Index, compared with 89.9 for control group children, and they scored 83.3 on the Peabody Picture Vocabulary Test, compared to 81.1 for the control group. Early Head Start children were significantly less likely than control group children

to score in the at-risk range of developmental functioning in these areas. By preventing children from scoring in the lowest-functioning group, Early Head Start may be reducing their risk of poor cognitive, language, and school outcomes later on.

The programs had favorable impacts on more aspects of social-emotional development at age 3 than at age 2. As determined from videotaped observations of children during a parent-child interaction play

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Early Head Start is a two-generation program designed to provide high-quality child and family development services to low-income pregnant women and families with infants and toddlers. Early Head Start began with 68 programs in 1995 and has grown to a nationwide effort of 708 community-based programs serving 61,500 children. As with Head Start, Early Head Start offers children and families comprehensive child development services through center-based, home-based, and combination program options. A rigorous evaluation of Early Head Start in 17 programs selected from the first program cohorts shows that the program had significant and positive impacts on a wide range of parent and child dimensions, some with implications for children's later school success. Findings from the study (*Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start*), using data gathered when children were age 3 and had completed the program, show that the program sustained and broadened the pattern of impacts reported when children were 2 years old (*Building Their Futures: How Early Head Start Programs are Enhancing the Lives of Infants and Toddlers in Low-Income Families*).



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task, Early Head Start children at age 3 engaged their parents more, were less negative toward their parents, and more attentive to objects during play. Furthermore, Early Head Start parents rated their children as lower in aggressive behavior than control parents did.

When children were 3 years old, Early Head Start programs continued to have significant favorable impacts on a wide range of parenting outcomes. Early Head Start parents were more emotionally supportive and less detached than control group parents. Early Head Start parents provided significantly more support for language and learning than control group parents. For instance, they were more likely to report reading to their child every day: 56.8% of Early Head Start parents compared to 52.0% of control group parents. Early Head Start parents were also less likely than control group parents to report having spanked their children in the past week (46.7% program parents vs. 53.8% control group parents). Early Head Start parents reported a greater repertoire of discipline strategies, including more mild and fewer punitive strategies.

Significant positive impacts on parents' participation in education and job training activities were found throughout the evaluation, and some impacts on employment began emerging late in the study period. These impacts did not result in significant improvements in income during this period, however.

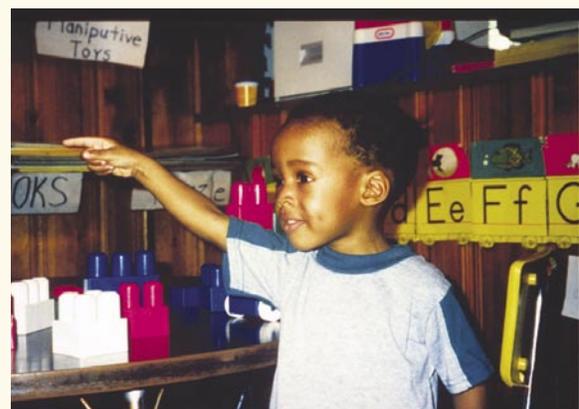
When compared with fathers and father figures in the control group, Early Head Start fathers were less likely to report spanking their children during the previous week; 25.4% of program fathers, compared to 35.6% of control fathers, reported spanking. Program fathers were observed to be less intrusive, and program children were observed to be more able to engage

their fathers and to be more attentive during play with their fathers than those in the control group.

Across the country, the populations served by Early Head Start are highly diverse. The research found significant impacts in most of the subgroups of families examined, for example, across different racial/ethnic groups, levels of parental education, types of family living arrangements, and among families with first- and later-born children, although patterns of impacts varied. Impacts were particularly large for families that enrolled during pregnancy, African American families, and those with a moderate number of demographic risk factors. The program also had positive impacts on two groups that other studies have reported as difficult to serve and have an impact on: teen parents and parents who were depressed at baseline. In the Early Head Start study, positive impacts were not found among families who had extremely high numbers of demographic risk factors (i.e., with four or five of the following factors: lacked a high school education, was a single parent, was a teen parent, received public assistance, and was not employed or in school).

Importance of Implementation

The impacts on children and parents are consistent with the substantial difference the program made for families' receipt of services. Early Head Start families were, during the first 2 years after enrollment, significantly more likely than control families to receive a wide variety of services, much more likely to receive intensive services, and more likely to receive intensive services that focused on child development and parenting.



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Early Head Start programs must adhere to the Head Start Program Performance Standards. In the implementation study phase of the evaluation (reported in two reports, *Pathways to Quality* and *Leading the Way*), programs were systematically rated on the extent to which they implemented the performance standards. Early Head Start programs that implemented the standards early (by 1997 site visits) or later (by 1999) demonstrated a broader pattern of significant impacts than was true for the several programs that were not rated as fully implemented in 1999. This finding underscores the importance of adherence to the performance standards for producing a breadth of impacts for children and parents.

Impacts Differ by Approach

Programs choosing different approaches to serving families achieved different patterns of success. Programs were characterized according to the options they offer families as (1) center-based (providing all services to families through center-based child care and education, parent education, and a minimum of two home visits per year to each family); (2) home-based (serving families through weekly home visits and at least two group socializations per month for each family); or (3) mixed (providing center-based services to some families, home-based services to other families, or a mixture of center-based and home-based

services, either at the same or at different times). By fall 1997, seven programs were home-based, four were center-based, and six were mixed programs.

Impacts among center-based programs centered on enhancing children's cognitive and social-emotional development; these programs had some favorable impacts on aspects of parenting, but few on parents' self-sufficiency.

Home-based programs in general had some impact on children's social-emotional development and reduced parenting stress, relative to the control group parents. The home-based programs that were fully implemented, however, had impacts on cognitive and language development at age 3 that have not generally been found in evaluations of home visiting programs.

Mixed-approach programs demonstrated the strongest pattern of impacts for the families they served. The mixed-approach programs consistently enhanced children's language development and aspects of social-emotional development. These programs also enhanced a wide range of parenting behaviors and participation in self-sufficiency-oriented activities. The mixed-approach programs that became fully implemented early had a particularly strong pattern of impacts.

ward their parents, and were more attentive to objects during play.



The Early Head Start Research and Evaluation Project included studies of the implementation and impacts of Early Head Start. The research was conducted in 17 sites representing diverse program models, racial/ethnic makeup, auspice, and region. In 1996, 3,001 children and families in these sites were randomly assigned to receive Early Head Start services or to be in a control group who could utilize any community services except Early Head Start. Children, families, and children's child care arrangements were assessed when children were 14, 24, and 36 months old, and families were interviewed about services at 7, 16, and 28 months after random assignment. Child assessments included a wide array of child cognitive, language, and social-emotional measures using direct assessment and parent report. Parent assessments included observation (videotaped and by interviewers) and self-report. Families in the program and control groups were demographically comparable at baseline and assessment points. Several research briefs have been published based on findings from this study. A prekindergarten followup was completed and a 5th grade followup is currently underway.

Implications for Program Improvement

Implementing the Head Start Program Performance Standards early and fully is important for maximizing impacts on children and families.

Programs should continue to consider program options carefully. All program options can have impacts on children and families; however, programs that combine the features of home-based and center-based programs have the strongest impacts. Center-based programs can benefit by placing greater emphasis on parenting, parent-child relationships, and family support. Home-based programs can benefit by emphasizing child cognitive and language development together with parenting and family support.

Programs will need to explore new or alternative strategies for serving families who have large numbers of demographic risk factors.

Programs that enroll families during pregnancy, or very early in the child's life, have the greatest chance to effect change.

The study showed that Early Head Start programs can be successful with families that other intervention programs have not often affected. The program can build on these successes—with teen parents, parents showing depressive symptoms at baseline, fathers, later-born children and their parents, as well as children who are first-borns and their parents—to expand program services.

The findings show that the program is able to have an impact across a wide range of child and parenting outcomes that bode well for children's future school success.

The broad impacts on child development, combined with changes in parents' support for language and literacy (such as daily reading and enhanced literacy environments), provide a foundation that subsequent programs can build on to continue the Early Head Start gains.