

EVALUATION SCIENCE BRIEF

Understanding the Head Start Impact Study

Head Start Impact Study: Final Report, January 2010¹

U.S. Department of Health and Human Services, Administration for Children and Families,
Office of Planning, Research and Evaluation

Each Evaluation Science Brief summarizes the findings and implications of one recent study evaluating the effects of an early childhood program or environment. Studies are selected for review based on their contributions to understanding what works in improving the lives of children and their families. Clearly, no single study is definitive, and findings that are replicated across a number of studies offer more conclusive evidence. The National Forum on Early Childhood Policy and Programs rests its conclusions on cumulative research evidence that meets rigorous scientific standards and has been amassed over several years. Briefs offer concise descriptions of selected studies, in the context of other research, and include a discussion of what conclusions may be appropriately drawn (or not drawn) from them. For more information, go to <http://developingchild.harvard.edu/initiatives/forum/>

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As the largest federally-funded early childhood program in the United States, Head Start has been an important part of the nation's child policy for over 45 years. The Head Start model offers a comprehensive set of services, primarily preschool education but also family support, health and dental services, and social and mental health services, to low-income families with young children across the country.

The 2010 report of the Head Start Impact Study is an important follow-up evaluation of the only national investigation that attempts to answer the question: *What are the program's impacts as measured at the end of first grade for children who received Head Start services when they were 3 or 4 years of age?* The Impact Study took advantage of the fact that most Head Start centers across the nation have waiting lists of parents wishing to enroll their children in the program. Three-year-olds and 4-year-olds on the waiting list were assigned in a random, lottery-like process to the chance to enroll. This resulted in two groups (or experimental "conditions") – children who were offered the chance to enroll in Head Start and those who were not. Both groups were followed to the end of first grade. Overall, the study was sound scientifically, but there has been considerable debate over what its findings mean. Further analysis of the data will undoubtedly support additional conclusions, but this brief offers a research-based interpretation of the findings presented in the Impact Study itself.

What the Study Shows

Evidence suggests that the achievement of children who applied but were not randomly assigned to a spot in a Head Start classroom had caught up to Head Start students' achievement levels by first grade. An earlier Impact Study report, based on children's achievement and behavior at the end of their first Head Start year, showed a range of modest, but potentially important, beneficial effects on school readiness as well as several measures of family processes. However, the new report shows that by the end of first grade, children assigned to the Head Start group had very similar levels of achievement as children assigned to the comparison group. It appears that this was because the comparison children were able to catch up to their peers in the Head Start treatment group during the first two years of school.

Child care and early education experiences of the Head Start and comparison group children were much more similar than the treatment and control conditions in most randomized trials. About half of 4-year-old and 40% of 3-year-old comparison-group children were enrolled in center-based care shortly after

the experiment began. A year later, the 3-year-old comparison-group children experienced very similar types of program settings, including enrollment in the Head Start program itself, as children who had won their Head Start lotteries.² The Impact Study report does not specify what types of preschool or center-based care were experienced by the control group, but they were likely diverse, including state and local prekindergarten programs as well as private for-profit and non-profit preschools. The difference in measures of classroom quality between children assigned to attend Head Start and comparison group children who attended other center-based programs was also not as large as one might expect. The more similar the experiences of the control and treatment groups in a randomized study like this, the less likely it is that the two groups of children will differ in terms of their outcomes.

Head Start children received a broader range of health, parent, and family social services. Few children in the control group had access to these services in their center-based care and education programs. Children who received the offer of Head Start participation, for example, had higher rates of health insurance coverage into first grade if they received Head Start as 4-year-olds and into kindergarten if they received the program as 3-year-olds. Four-year-old children in the Head Start group were 15 percentage points more likely than comparison-group children to receive dental care. Dental care advantages for 3-year-old children were 13 percentage points in the first year and 10 points in the second. The study did not evaluate the long-term health impacts of receiving dental care and health insurance coverage.

Dual-language learners and children with special needs benefited more from Head Start participation than other groups. Although few impacts persisted through first grade for the study sample as a whole, children with special needs and those who were dual-language learners who were offered the chance to enroll in Head Start showed important long-run benefits. Specifically, children reported by their parents to have special needs showed benefits in math and social behaviors through the end of first grade, while children who were dual-language learners benefited across multiple assessments of language development and math skills into kindergarten.

There is room for improvement. The quality of Head Start centers was variable. For the 4-year-olds who won their Head Start lottery, fewer than one in 20 were in centers with an “excellent” quality rating, although virtually none were in centers rated “poor.” Only about half were in centers with recommended pupil/staff ratios. It is important to better understand which features of classroom and program quality are important for improving children’s outcomes, and to determine what types of initiatives are likely to be effective mechanisms to improve classroom quality in these ways.

What the Study Does Not Show

The role of quality in elementary school. Most children in both the Head Start and comparison groups enrolled in schools that serve low-income children. Two-thirds of their classmates, on average, qualified for free or reduced-price lunches and about one-third were not proficient in reading or math. Whether and how school experiences in kindergarten and first grade affect the likelihood that comparison-group students were able to catch up to the Head Start group is unknown.

How Head Start compares to state-funded pre-kindergarten. The Head Start Impact Study cannot answer the question of how the effects of Head Start and public pre-K programs compare by the end of first grade. No comparable national study of the effects of public pre-K has been conducted, and no state or city studies of public pre-K have followed up children to the end of first grade. Moreover, the two programs typically do not serve identical populations. Head Start eligibility is based on family income below the federal poverty threshold or a child’s special needs. State and local prekindergarten programs also serve poor children, but often also enroll a broader population of children who are considered “at risk” based on other family and child characteristics. Typically, Head Start programs serve children from families that are more disadvantaged than those who are enrolled in state and local prekindergarten programs. It would be necessary to randomly assign Head Start eligible children to either Head Start or pre-K programs in order to directly compare effects.

Whether Head Start is worth the money. The Impact Study did not follow children long enough to answer whether Head Start generates more benefits than costs. Previous studies of children who attended Head Start in earlier decades suggest that the program indeed produced long-run benefits, although none conducted a formal cost/benefit study. Given the large increases in the availability of center-based programs for low-income preschoolers, questions persist about the generalizability of those studies to the more crowded early childhood and preschool field that exists today.

Implications for Head Start's Role in Early Childhood Care and Education

This Impact Study indicates that there is room for improvement of Head Start. In addition to efforts currently underway to enhance the program's quality, such as revisions to the program's performance standards, training, and technical assistance system, the following could be considered:

Successful early-childhood interventions have boosted preschool children's language, numeracy, socio-emotional, attention, and executive function skills. Some have been evaluated in Head Start programs (Foundations of Learning, Incredible Years, Building Blocks, Head Start REDI, and dialogic reading, to name a few). These could be tested further and scaled up in Head Start's professional development systems.

States would likely profit from adopting a system-wide lens to their early childhood programs, and many are combining, blending, or braiding early childhood funding streams. Some of these states are raising overall quality standards to meet the highest requirements of the merged programs. For example, Pre-K and Head Start funds may be used together to create highest quality programs, reap economies of scale, and in other ways best help families and children needing services within that community. Future research should be conducted to determine if this systemic alignment of services for children proves to be an effective mechanism to improve the quality and cost-effectiveness of delivering the appropriate range of services to those who need them most.

Neither Head Start nor any other preschool program can be expected by itself to eliminate our nation's large race- and income-based disparities in school readiness and early achievement. The fact that achievement levels of both groups of children in this study, as measured by standardized national assessments, fall significantly short of national averages raises questions about what more can be done to improve life outcomes for disadvantaged children. Research shows that a range of policies and programs in early childhood can enhance children's early development.⁷ However, much work remains to identify and implement programs and policies to improve children's cognitive and socio-emotional development in kindergarten and the early elementary grades.

Endnotes

1. U.S. Department of Health and Human Services. (2010). *Head Start Impact Study: Final Report, January 2010*. Washington, DC: Administration for Children and Families, Office of Planning, Research and Evaluation. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/impact_study/
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