

4-year-old children who were randomly assigned to either: (1) a Head Start group that had access to Head Start program services or (2) a control group that did not have access to Head Start, but could enroll in other early childhood programs or non-Head Start services selected by their parents. Data collection began in fall 2002 and continued through 2008, following children from program application through the spring of their 3<sup>rd</sup> grade year.

The study was designed to separately examine two cohorts of children, newly entering 3-and 4-year-olds. This design reflects the hypothesis that different program impacts may be associated with different age of entry into Head Start. Differential impacts are of particular interest in light of a trend of increased enrollment of the 3-year-olds in some grantee/delegate agencies presumably due to the growing availability of preschool options for 4-year-olds. Consequently, the study included two separate samples: a newly entering 3-year-old group<sup>3</sup> (to be studied through two years of possible Head Start participation, kindergarten 1<sup>st</sup> grade, and 3<sup>rd</sup> grade), and a newly entering 4-year-old group (to be studied through one year of Head Start participation, kindergarten, 1<sup>st</sup> grade, and 3<sup>rd</sup> grade).

The study showed that the two age cohorts varied in demographic characteristics. The racial/ethnic characteristics of newly entering children in the 3-year-old cohort were substantially different from the characteristics of children in the newly entering 4-year-old cohort. While the newly entering 3-year-olds were relatively evenly distributed between Black children and Hispanic children about half of newly entering 4-year-olds were Hispanic children (see Exhibit 1). The ethnic difference was also reflected in the age-group differences in child and parent language.

**Exhibit 1. Percentage of Children by Racial/Ethnic Characteristics and By Age Cohort**

<b>Child Race/Ethnicity</b>	<b>3-Year-Old Cohort</b>	<b>4-Year-Old Cohort</b>
<b>Hispanic</b>	37.4%	51.6%
<b>Black</b>	32.8%	17.5%
<b>White/Other</b>	29.8%	30.8%

This study is unique in its design and differs from prior evaluations of early childhood programs:

- **Randomized Control.** The Congressional mandate for this study had a clearly stated goal of producing causal findings, i.e., the purpose was to determine if access to Head Start caused better developmental and parenting outcomes for participating children and families. To do this, the study randomly assigned Head Start applicants either to a Head Start group that was allowed to enroll, or to a “control” group that could not. This procedure ensured comparability between the two groups at program entry, so that later differences can be causally attributed to Head Start.
- **Representative Sample of Programs and Children.** Most random assignment studies are conducted in small demonstration programs or in a small number of operating sites, usually those that volunteer to be included in the research. In

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<sup>3</sup> The study design allowed 3-year-old cohort control group children to reapply to Head Start after the first year.

contrast, the Head Start Impact Study is based on a nationally representative sample of Head Start programs and children, with a few exceptions for programs serving particular populations. This makes the study results generalizable to the vast majority of programs nationwide at the time the study was fielded in 2002, not just the selected study sample. Unlike most studies, it examines the average impact of programs that represent the full range of intensity and quality and adherence to the established Head Start program standards (i.e., the best, the worst, and those in the middle of a fully implemented program).

- **Examination of a Comprehensive Set of Outcomes Over Time.** The study quantifies the overall impact of Head Start separately for 3- and 4-year-old children in four key program domains—cognitive development, social-emotional development, health status and services, and parenting practices—following them through early elementary school. These impacts are measured by examining the difference in outcomes between children assigned to the Head Start group and those assigned to the control group.

Other study features that must be considered in interpreting the study findings include:

- **Control Group Children Did Not All Stay at Home.** Children who were placed in the control or comparison group were allowed to enroll in other non-parental care or non-Head Start child care or programs selected by their parents. They could remain at home in parent care, or enroll in a child care or preschool program. Consequently, the impact of Head Start was determined by a comparison to a mixture of alternative care settings rather than against a situation in which children were artificially prevented from obtaining child care or early education programs outside of their home. Approximately 60 percent of the control group children participated in child care or early education programs during the first year of the study, with 13.8 percent of the 4-year-olds in the control group and 17.8 percent of the 3-year-olds in the control group finding their way into Head Start during this year. Preventing families from seeking out alternative care or programs for their children is both infeasible and unethical. The design used here answers the policy question, how well does Head Start do when compared against the other types of services or care that low-income children could receive in fall 2002.
- **Impacts Represent the Effects of One Year of Head Start.** For children in the 4-year-old cohort, the study provides the impact of Head Start for a single year, i.e., the year before they are eligible to enter kindergarten. The impacts for the 3-year-old cohort reflect the benefits of being provided an earlier year of Head Start (as compared to the control group, which received access to Head Start at age 4.) At the end of one year of Head Start participation, the 3-year-old cohort—but not the 4-year-old cohort—had another year to go before they started kindergarten. It was not feasible or desirable for this study to prevent 3-year-olds from participating in Head Start for two years. Thus, the study could not directly assess the receipt of one year versus two years of Head Start. Rather, it addresses the receipt of an earlier year—whether having Head Start available at age three is helpful to children brought to the program at that age, or whether those children would be just as well off, if the program did not enroll them until age four. This is not only important to individual families; it also answers an important policy question. To answer this question, the

best approach is to preclude program entry at age three while allowing it at age four and contrast outcomes after that point with statistically equivalent children never excluded from the program. By design, the study did not attempt to control children's experiences after their first Head Start year.

The Head Start Impact Study is a comprehensive, carefully designed study of a large-scale early childhood program that has existed for more than 40 years. It is designed to address the overall average impact of the Head Start program as it existed in 2002. The findings cannot be directly compared to more narrowly focused studies of other early childhood programs. The Advisory Committee on Head Start Research and Evaluation, which developed the blueprint for this study, recommended that "the research and findings should be used in combination with the rest of the Head Start research effort to improve the effectiveness of Head Start programs for children and families" (Advisory Committee on Head Start Research and Evaluation, 1999, p. 44). The Third Grade Follow-up to the Head Start Impact Study builds upon the existing randomized control design in the HSIS in order to determine the longer term impact of the Head Start program on the well-being of children and families through the end of 3<sup>rd</sup> grade.

## ***Key Findings***

Looking across the full study period, from the beginning of Head Start through 3<sup>rd</sup> grade, the evidence is clear that access to Head Start improved children's preschool outcomes across developmental domains, but had few impacts on children in kindergarten through 3<sup>rd</sup> grade. Providing access to Head Start was found to have a positive impact on the types and quality of preschool programs that children attended, with the study finding statistically significant differences between the Head Start group and the control group on every measure of children's preschool experiences in the first year of the study. In contrast, there was little evidence of systematic differences in children's elementary school experiences through 3<sup>rd</sup> grade, between children provided access to Head Start and their counterparts in the control group.

In terms of children's well-being, there is also clear evidence that access to Head Start had an impact on children's language and literacy development while children were in Head Start. These effects, albeit modest in magnitude, were found for both age cohorts during their first year of admission to the Head Start program. However, these early effects rapidly dissipated in elementary school, with only a single impact remaining at the end of 3<sup>rd</sup> grade for children in each age cohort.

With regard to children's social-emotional development, the results differed by age cohort and by the person describing the child's behavior. For children in the 4-year-old cohort, there were no observed impacts through the end of kindergarten but favorable impacts reported by parents and unfavorable impacts reported by teachers emerged at the end of 1<sup>st</sup> and 3<sup>rd</sup> grades. One unfavorable impact on the children's self-report emerged at the end of 3<sup>rd</sup> grade. In contrast to the 4-year-old cohort, for the 3-year-old cohort there were favorable impacts on parent-reported social emotional outcomes in the early years of the study that continued into early elementary school. However, there were no impacts on teacher-reported measures of social-emotional development for the 3-year-old cohort at any data collection point or on the children's self-reports in 3<sup>rd</sup> grade.