Head Start FACES:
Longitudinal Findings on Program Performance

Third Progress Report

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Administration for Children & Families
Administration on Children, Youth & Families
Commissioner's Office of Research & Evaluation
and the Head Start Bureau

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January 2001

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U.S. Department of Health and Human Services

This report is dedicated to the memory of

Helen Hollingshed Taylor
Associate Commissioner of Head Start
1994-2000

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Executive Summary

As the nation's premier early childhood education program, Head Start is leading the way in accountability for program outcomes and services to more than 800,000 young children and their families each year. New findings from a study of 3,200 children and families show that Head Start narrows the gap between disadvantaged students and all other children in key components of school readiness. Students in the Family and Child Experiences Survey (FACES), who entered Head Start in Fall 1997 in a national random sample of Head Start programs, began the year at a great disadvantage compared to other children. This was shown by their own scores on standard tests of cognitive skills, family poverty, and low levels of parental education.

The study results showed that Head Start:

- narrows the gaps between disadvantaged children and all children in vocabulary and writing skills during the Head Start year;
- improves the social skills of Head Start children; and
- leads to continued improvements in word knowledge, letter recognition, math skills and writing skills by Head Start children relative to other children during the kindergarten year.

For example, on an assessment of word knowledge, the percentage of children scoring close to or above the national mean increased from only one in four when they started the program in the fall to more than one in three in the spring—nearly a 40 percent increase.

The most disadvantaged children in Head Start, as measured by their cognitive skills when they enter, show even greater gains during the year than those who are less disadvantaged. Language-minority children in Head Start show gains in school readiness skills and their knowledge of English by the end of the Head Start year.

The FACES study also documented key aspects of Head Start efforts to involve and support parents. Parents of Head Start children reported extremely high levels of satisfaction with Head Start, consistent with findings from the 1999 American Customer Satisfaction Index in which Head Start parents gave the program the highest rating of any government program. Parents cited Head Start as an important source of support in rearing their child. They also reported slight increases in family activities with Head Start children over the course of the year, particularly in programs where teachers were most active in child development. Head Start parents reported a greater sense of control over their own lives at the end of Head Start than at the beginning.

The study also found that Head Start classrooms continue to be of high quality, that most Head Start teachers have good teaching qualifications, and that the observed quality of classrooms is positively related to child outcomes.

Areas for improvement identified in the study included letter recognition and book and print concepts, where the Fall 1997 cohort of Head Start children showed little progress during the Head Start year relative to national norms. Among the key steps already taken by the Head Start Bureau to address these areas are the launching of a new Family Literacy Initiative and the investment of more than $80 million annually to ensure further improvement in teacher credentials, consistent with the 1998 reauthorization of Head Start. A National Leadership Institute focusing on improving teaching, learning and assessment in the areas of language development, literacy, mathematics, science, and creative arts was held

in December 2000, and a new initiative for each local Head Start program to systematically track children's progress on key learning outcomes is beginning.

The Study

The Head Start Family and Child Experiences Survey (FACES) is an ongoing, national, longitudinal study of the cognitive, social, emotional and physical development of Head Start children; the characteristics, well-being and accomplishments of families; the observed quality of Head Start classrooms; and the characteristics and opinions of Head Start teachers and other program staff. FACES involves a nationally stratified random sample of 3,200 children and families in 40 Head Start programs, who were studied at entry into the program in Fall 1997, assessed in the Spring at the completion of one or two years of Head Start, and followed-up in the Spring of the kindergarten and first grade years. Because Head Start is committed to regular, ongoing accountability measurement and program improvement, a new national cohort of FACES was launched in Fall 2000.

The Fall 1997 and Spring 1998 waves of data collection in FACES provide important findings of change in children's development and school readiness, consistency of program quality, as well as information about family characteristics and families' accomplishments over the course of the year. The kindergarten follow-up reveals important information on Head Start graduates' performance in school. Through the full cooperation of the Head Start programs studied, FACES has been able to achieve high instrument completion rates, averaging at least an 80 percent response rate on all survey measures.

The Children and Families Studied

Head Start children are likely to face a variety of conditions that put them at risk. On entry into the program, only 43 percent lived with both parents, and changes in family configuration were common over the year. Seventy-two percent of mothers had at least a high school diploma or GED, with less than 9 percent having an Associate's or higher college degree. Forty-two percent of households reported having less than $1,000 in monthly income from all sources in Fall 1997, including Temporary Assistance to Needy Families (TANF). Over 85 percent of households received supplemental income from one or more of a range of sources, including WIC, food stamps, TANF (27 percent in Fall) or other sources. About one-fifth of children were reported to have been exposed to community or domestic violence in their lives.

Study Findings

FACES is designed to answer four central questions related to program performance objectives: Does Head Start enhance children's development and school readiness? Does Head Start strengthen families as the primary nurturers of their children? Does Head Start provide children with high quality educational, health and nutritional services? And, how is classroom quality related to child outcomes?

Does Head Start Enhance Children's Development and School Readiness?

- Head Start works to narrow the gaps between disadvantaged children and all children in vocabulary and writing skills during the program year. For example, the proportion of Head Start children scoring close to or above the national mean on an assessment of word

knowledge increased from 24 percent when they began Head Start in the fall to 34 percent in the spring—nearly a 40 percent increase. (A standard score of 95 or higher was used to define a score close to or above the national mean.) On average, children completing Head Start showed significant gains relative to national norms established for children of all income levels. Gains were approximately one-quarter of a standard deviation in standard scores, within the range deemed to be educationally meaningful.

- Head Start works to narrow the gaps between children who begin the program at differing levels of school readiness. Gains in cognitive skills from the fall to the spring of the Head Start year were larger (for example, more than two-thirds of a standard deviation in vocabulary standard scores) among children who were initially in the bottom quarter of the score distribution than among those in the middle or top quarter. Despite the larger gains in vocabulary knowledge and early writing and math skills achieved by children who come to Head Start with fewer accomplishments, these children are still substantially below national norms at the end of the Head Start year.

- Language-minority children in Head Start show gains in school readiness and in their knowledge of English by the end of the Head Start year. By the spring, most Spanish-speaking children in predominantly English-language programs are able to perform a number of school-related tasks better in English than they had in Spanish in the fall, or at least as well. Spanish-speaking children in predominantly English-speaking Head Start programs have similar fine motor and early writing skills as their English-speaking peers, but continue to trail other children on tasks that require English-language proficiency.

- Both parents and teachers noted significant improvement in social skills essential to successful functioning in school. Over the program year, Head Start children's play became more complex, with children becoming more involved in interactive play with peers, a key indicator of social development.

- Children leaving Head Start are indeed "ready to learn," because they have, in fact, learned a great deal by the end of kindergarten. By the spring of the kindergarten year, Head Start graduates made substantial gains in word knowledge, letter recognition, math skills and writing skills relative to national norms. For example, 83 percent of the Head Start graduates could identify most or all letters of the alphabet, and children demonstrated familiarity with key book and print concepts as well as phonemic awareness.

- FACES was also designed to identify priority areas for improvements in Head Start program quality and staff development. Head Start children showed little progress in letter recognition or book and print concepts over the course of the program year. The small number of Head Start children with problem behaviors showed minimal or no change in this area, with the exception of hyperactive behavior, which showed a small but significant decline. Future rounds of FACES will help determine whether these findings have changed as a result of technical assistance and increased teacher preparation since the study and the 1998 reauthorization of Head Start.

Does Head Start Strengthen Families as the Primary Nurturers of Their Children?

- Primary caregivers (usually parents) were equally as likely to be married as single. The typical caregiver was young (between 20 and 30 years of age), had at least a high school

diploma or GED, and was employed. Despite the high proportion of caregivers in the workforce, 85 percent of Head Start households received supplemental income from other sources.

- More than two-thirds of Head Start parents reported reading to their children at least three to five times a week. Frequency of parental reading, especially daily reading, was linked to higher child vocabulary development.

- Most parents were active in their Head Start program, and approximately 80 percent had visited with Head Start staff in their home, attended a parent-teacher conference, and observed in the classroom.

- Across all households, family activities with Head Start children increased slightly over the course of the year. In centers where teachers received more in-service training in child development and engaged children in academic activities more often, parents reported larger increases in educational and recreational activities at home.

- Over 85 percent of parents were very satisfied with the services their child received, including helping their child grow and develop, preparing their child for kindergarten, and identifying and providing services for their child. These findings reinforce the 1999 report of the American Customer Satisfaction Index, in which Head Start received the highest rating of any government program.

- Head Start parents cited many accomplishments during the Head Start year. More primary caregivers obtained a license, certificate or degree (a 9 percent increase from fall to spring); more caregivers were employed (an increase of 2 percent from fall to spring); and fewer received welfare assistance (a decline of 3.8 percentage points from fall to spring). The change in receipt of welfare assistance represents a 14 percent decline among Head Start parents.

- Head Start parents cited Head Start as an important source of support in rearing their children. In addition, Head Start parents reported a greater sense of control over their own lives at the end of Head Start than at the beginning.

- Fathers appeared to play an important and positive role in the lives of children. When the father was present in the home, there were more resources available to the family, both socially and financially. Families with fathers in the household were less likely to be exposed to crime and domestic violence.

Does Head Start Provide Children With High Quality Educational, Health and Nutritional Services?

- Quality in Head Start classrooms continues to be good across three points of measurement. In Fall 1997, the average Early Childhood Environment Rating Scale (ECERS) score across the 518 observed classrooms was good. Seventy-five percent of Head Start classrooms were rated as good or better, nearly one-fifth of the Head Start classrooms were rated as very good or excellent, and no classroom was of "inadequate" quality. These ratings compare favorably with other studies of preschool and child care.

- The average numbers from both class size and child:adult ratios were far better than those required by the Head Start Program Performance Standards and the National Association for the Education of Young Children (NAEYC) accreditation standards.

- Most Head Start teachers have good teaching qualifications. Nearly one-third of all Head Start teachers had a bachelor's or graduate degree, and teachers averaged nearly 12 years of teaching experience. The higher the teacher's educational level, the better the observed classroom quality.

How Is Classroom Quality Related to Child Outcomes?

- Children in classrooms rated higher in learning environment materials spent more time in simple interactive play or pretend play, and they spent less time in non-interactive play. Observed play behavior is a key indicator of social development.

- The observed quality of Head Start classrooms has been linked with child outcomes. For example, children in classrooms with richer teacher-child interaction and more language learning opportunities have higher vocabulary scores. And children in Head Start classrooms with lower child:adult ratios show greater gains in vocabulary scores over the Head Start year.

Chapter I

Introduction and Overview

A. Introduction

In 2000, Head Start marked the fifth year of implementing its system of Program Performance Measures. As the nation's premier early childhood education program, Head Start is leading the way in developing and reporting on its accountability for services to more than 800,000 children and their families each year. From initial planning in 1995 to the ongoing data collection of a second cohort of Head Start children that began in Fall 2000, Head Start has made dramatic progress in developing an outcome-oriented accountability system. This approach combines the best attributes of scientific research with program-level reporting and monitoring and is based on a consensus-driven set of criteria for program accountability.

The Head Start Program Performance Measures Initiative is a response to a specific legislative mandate, strategic planning for Head Start, and broader public emphasis on accountability and the general movement toward results-oriented evaluation. Specifically, the Program Performance Measures were developed in accordance with the recommendations of the Advisory Committee on Head Start Quality and Expansion, the mandate of Section 641A (b) of the Head Start Act (42 USC 9831 et seq.) as reauthorized in 1994 and the Government Performance and Results Act (GPRA) (Public Law 103-62).

The Head Start Act defines Program Performance Measures as "methods and procedures for measuring, annually and over longer periods, the quality and effectiveness of programs operated by Head Start agencies" that will be used to identify strengths and weaknesses in the Head Start program—both nationally and by region—and to pinpoint areas requiring additional training and technical assistance.

In 1995, Head Start undertook a consensus-building process to develop the Head Start Program Performance Measures that drew on the opinions of Head Start program staff and parents; early childhood organization representatives; researchers; experts in the education, child development and early intervention fields and Head Start Bureau officials. In 1996, Head Start launched the Family and Child Experiences Survey (FACES), a study with a nationally representative sample of 3,200 children and their families, to describe the characteristics, experiences, and outcomes for children and families served by Head Start. FACES also observes the relationships among family and program characteristics and outcomes.

FACES is breaking new ground for the Head Start Bureau on many fronts. It is the first time Head Start has the capacity to report on important aspects of outcomes and quality and practices beyond the aggregated, administrative data it traditionally collected. Indeed, FACES provides the ability for Head Start to examine all facets of key outcomes and children's school readiness on an ongoing basis. Prior to FACES, Head Start had little research capacity to answer important questions and the framework for accountability was the Performance Standards and monitoring, which provided process data on a third of Head Start grantees annually, but no national data on child or family outcomes.

By 1999, Head Start had extensive information on the Program Performance Measures, including data on Head Start children's performance at the end of the Head Start year, the kindergarten progress of Head Start graduates, the quality of programs and the characteristics, well-being and achievements of Head Start families. Data from the Performance Measures proved valuable during Head Start's 1998 Reauthorization. Head Start

officials were able to report to Congressional leaders on the quality of Head Start programs and the knowledge and skills of Head Start children as they completed the program.

Both the data and experiences from Program Performance Measures efforts, including FACES and the Head Start Quality Research Centers (QRCs), assisted the Advisory Committee on Head Start Research and Evaluation as it deliberated the design of a national impact study of Head Start as mandated by Congress. The Advisory Committee received in-depth briefings on findings from FACES. In addition, the Committee heard extensive reports on the FACES national study design (described later in this chapter) and the QRCs' local study designs. In particular, briefing topics included the instruments used, the QRCs' experiences with random assignment, and practical considerations of a national data collection of the scope of FACES. There were representatives from the FACES study team and the QRCs on the Advisory Committee.

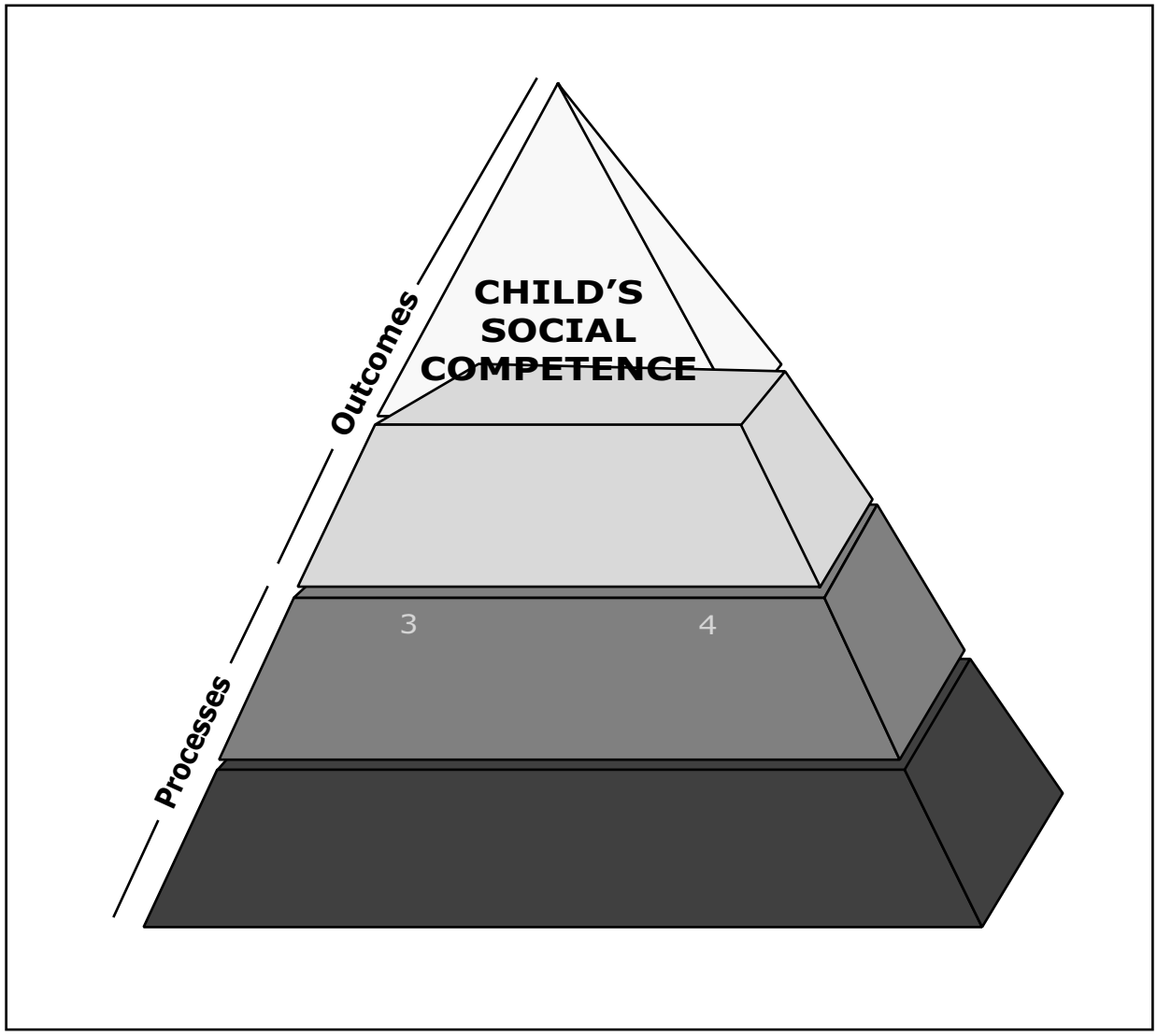
Data from the Performance Measures have been widely disseminated within the Head Start Bureau to assist with continuous efforts of program improvement and have guided training and technical assistance efforts. Team members also have presented findings at national research and practitioner conferences, such as the Society for Research in Child Development, the National Head Start Association and Head Start's National Research Conference.

The remainder of this introductory chapter discusses the conceptual framework for the Performance Measures, including the relationship of the measures to the ultimate goal of Head Start: promoting the social competence of children. The chapter also reviews the Program Performance Measures terminology and lists the measures; describes the research design of FACES, including the embedded case study of a longitudinal sample of families; provides FACES response rates through the Spring 1998 data collection; and closes with an overview of the report.

Conceptual Framework

In 1996-97, a conceptual framework for the Program Performance Measures was developed and the measures were revised and condensed. The conceptual framework unifies and organizes the Program Performance Measures to display the linkages between process and outcome measures for Head Start children and families. (See Figure 1.1 for the graphical representation of the framework.) The framework is based on the ultimate goal of Head Start, which is to promote the social competence of children. *Social competence* is the child's everyday effectiveness in dealing with his or her present environment and later responsibilities in school and life. For the 5-year-old child coming to the end of the preschool period and entering school, an important life challenge and

Figure 1.1
Head Start Program Performance Measures Conceptual Framework



key test of the child's social competence is whether he or she has acquired the skills, understandings, and behaviors that help insure successful functioning in this new environment, what is often called *school readiness*.

Head Start has adopted the "whole child" view of school readiness that was recommended by the Goal One Technical Planning Group of the National Education Goals Panel (Goal One Technical Planning Group, 1991, 1993). This view sees school readiness as a multi-faceted phenomenon comprising five developmental domains that are important to the child's readiness for school: physical well-being and motor development, social and emotional development, approaches to learning, language usage and emerging literacy, and cognition and general knowledge. Another recent report, *Neurons to Neighborhoods: The Science of Early Childhood Development* (Shonkoff & Phillips, 2000), also emphasizes the socio-emotional aspects of readiness. In fact, it states that "the elements of early intervention programs that enhance social and emotional development are just as important as the components that enhance linguistic and cognitive competence" (p. 11). Each of these domains is represented in the battery of measures being used to assess how well Head Start programs are performing. The battery takes into account the interrelatedness of cognitive, emotional, and social development; physical and mental health; and nutritional needs. Social competence is depicted at the top of the pyramid, with five objectives supporting it:

- Objective 1. Enhance children's healthy growth and development.
- Objective 2. Strengthen families as the primary nurturers of their children.
- Objective 3. Provide children with educational, health and nutritional services.
- Objective 4. Link children and families to needed community services.
- Objective 5. Ensure well-managed programs that involve parents in decision-making.

Each of these objectives is critical to helping children of low-income families attain their full potential. They also represent key cornerstones of the Head Start program. Objectives 1 and 2 represent outcomes or results that the program is designed to produce. Achieving both of these objectives is critical to the ultimate success of Head Start. As parent involvement and family support are key tenets of Head Start, both child and family-oriented outcome measures are included here. Objectives 3, 4, and 5 comprise the lower tiers of the pyramid and contain the process measures that are key to the attainment of Objectives 1 and 2 and the ultimate goal of enhancing children's social competence. An important aspect of the pyramid is the strong empirical connection between the provision of quality services (process measures) and improvements in child development (outcome measures).

Program Performance Measures

The 24 Head Start Program Performance Measures, grouped under the five program objectives, are presented in Figure 1.2.

Each Program Performance Measure has "Performance Indicators" that specify how the measure will be assessed. Figure 1.3 depicts a section of the Program Performance Measures Matrix that presents the Objective, Performance Measure, Performance Indicator, Data Source and Data reference for the first Performance Measure "Head Start children demonstrate improved emergent literacy, numeracy, and language skills." The Performance Indicator for this measure is the change in the Head Start children's

Figure 1.2
Head Start Program Performance Measures

OBJECTIVE 1: ENHANCE CHILDREN'S GROWTH AND DEVELOPMENT.

1. Head Start children demonstrate improved emergent literacy, numeracy, and language skills.
2. Head Start children demonstrate improved general cognitive skills.
3. Head Start children demonstrate improved gross and fine motor skills.
4. Head Start children demonstrate improved positive attitudes toward learning.
5. Head Start children demonstrate improved social behavior and emotional well-being.
6. Head Start children demonstrate improved physical health.

OBJECTIVE 2: STRENGTHEN FAMILIES AS THE PRIMARY NURTURERS OF THEIR CHILDREN.

7. Head Start parents demonstrate improved parenting skills.
8. Head Start parents improve their self-concept and emotional well-being.
9. Head Start parents make progress toward their educational, literacy, and employment goals.

OBJECTIVE 3: PROVIDE CHILDREN WITH EDUCATIONAL, HEALTH AND NUTRITIONAL SERVICES.

10. Head Start programs provide developmentally appropriate educational environments.
11. Head Start staff interact with children in a skilled and sensitive manner.
12. Head Start programs support and respect children's cultures.
13. Head Start assures children receive needed medical, dental, and mental health services.
14. Head Start children receive meals and snacks that meet their daily nutritional needs.
15. Head Start programs provide individualized services for children with disabilities.

OBJECTIVE 4: LINK CHILDREN AND FAMILIES TO NEEDED COMMUNITY SERVICES.

16. Head Start parents link with social service agencies to obtain needed services.
17. Head Start parents link with educational agencies to obtain needed services.
18. Head Start parents link with health care services to obtain needed care.
19. Head Start parents secure child care in order to work, go to school, or gain employment training.

OBJECTIVE 5: ENSURE WELL-MANAGED PROGRAMS THAT INVOLVE PARENTS IN DECISION-MAKING.

20. Head Start programs are well-managed.
21. Head Start parents are involved actively in decisions about program operations.
22. Head Start programs employ qualified staff.
23. Head Start programs support staff development and training.
24. Head Start programs comply with Head Start regulations.

emergent literacy, numeracy and language skills over the Head Start year, measured by individual child assessments and parent and teacher reports of the child's abilities. A more process-oriented measure (not shown) is "Head Start assures children receive needed medical, dental and mental health services" under Objective 3: Provide children with educational, health, and nutritional services. The Performance Indicator for this measure is the number and percent of Head Start children who received needed medical services as reported by the programs themselves.

In order to provide progress reports on the indicators supporting each of the objectives, data will be drawn from agency level sources, such as the Head Start Program Information Report (PIR), Regional Office Reports, as well as classroom, teacher, family and child level data. The outcome data are obtained from the Head Start Family and Child Experiences Survey (FACES), a national study of Head Start programs, classrooms, teachers, parents and children examining the quality and effects of Head Start.

Figure 1.3
Head Start Program Goals, Objectives, Measures, Indicators, and Data Sources

ULTIMATE GOAL:

To bring about a greater degree of social competence in preschool children from low-income families

OBJECTIVE 1: ENHANCE CHILDREN'S GROWTH AND DEVELOPMENT

PERFORMANCE MEASURES	PERFORMANCE INDICATOR	DATA SOURCE	1997-98 DATA
1. Head Start children demonstrate improved emergent literacy, numeracy, and language skills	Head Start children's emergent literacy	Child assessment (Woodcock-Johnson Letter-Word Identification)	HS children gained 1.6 points from fall to spring (no gain compared to norms). 4-year-old HS children finishing the program had median standard scores of 89.8 (compared to the national mean of 100).
		Woodcock-Johnson Dictation	In HS, children gained 1.5 points. In K, children gained 4.6 points. 4-year-old HS children finishing the program had median standard scores of 88.1 (compared to the national mean of 100).

B. The Head Start Family and Child Experiences Survey

The Head Start Family and Child Experiences Survey (FACES) is a central part of Head Start's Program Performance Measures Initiative. FACES is gathering comprehensive data on the cognitive, social, emotional and physical development of Head Start children; the characteristics, well-being and accomplishments of families; the quality of Head Start classrooms; and the characteristics, needs and opinions of Head Start teachers and other program staff.

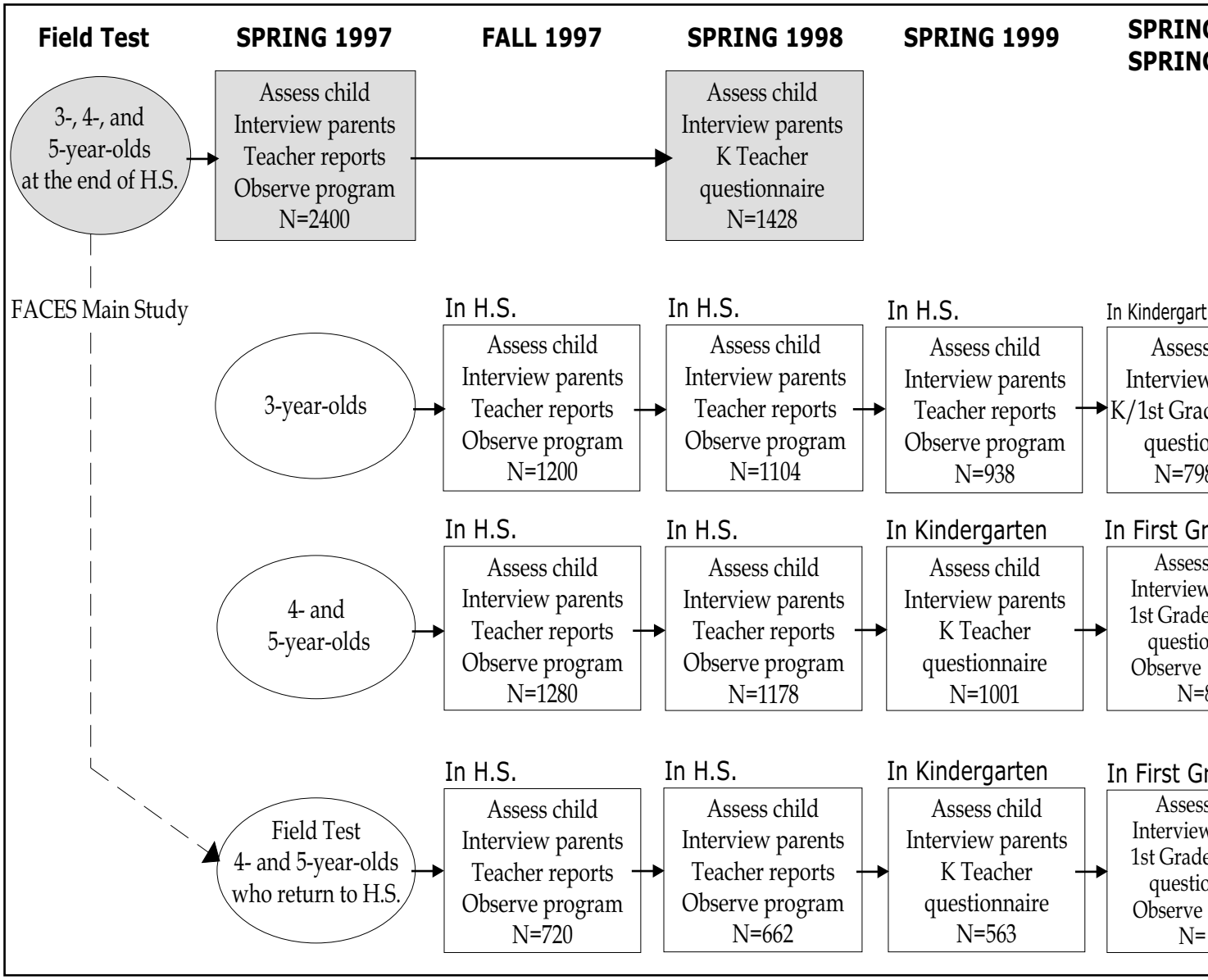
FACES employs a nationally representative sample of Head Start programs, centers, classrooms, children and parents. The sample is stratified by three variables: region of the country (northeast, midwest, south or west); urbanicity (urban versus rural); and percentage of minority families in the program (50 percent or more vs. less than 50 percent).

FACES has six phases of data collection. The first phase was a Spring 1997 field test in which approximately 2,400 children and parents were studied in a nationally stratified random sample of 40 Head Start programs. The field test was an opportunity to assess the feasibility of interviewing parents and assessing children on a large scale using the selected instruments. Although it was a field test, it provided valuable information on the status of Head Start programs, children and families. The second and third phases of FACES occurred in Fall 1997 and Spring 1998 when data were collected on a sample of 3,200 children and families in the same 40 Head Start programs. Spring 1998 data collection included assessments of both Head Start children completing the program and Head Start graduates completing kindergarten (kindergarten field test), as well as interviews with their parents and ratings by their kindergarten teachers. The fourth phase occurred in Spring 1999 with data collection in the 40 Head Start programs, plus a Kindergarten follow-up for former Head Start children. The fifth phase in Spring 2000 completed the Kindergarten follow-up for the children completing Head Start in Spring 1999 and first graders who completed Head Start in 1998. (Figure 1.4 presents the FACES study design.) The sixth phase in Spring 2001 will complete the first grade follow-up for the children completing Head Start in Spring 1999. These phases allow for pre-post comparisons, assessing the effects of Head Start by examining children and parents before their exposure to Head Start and determining their status at the end of the program.

The FACES battery has four main components: the child assessment, parent interview, teacher and staff interviews, and classroom observations. The child outcomes include the major components of social competence, and are collected through direct child assessments, rating scales completed by parents and teachers, and independent observations of children's play. Parent interviews are administered to the primary caregiver of the Head Start child, and tap parenting behaviors, the socioeconomic characteristics of the family, and parental mental health. Teachers and staff interviews are administered to classroom teachers, program directors, and component coordinators to collect data on staff experience, education and training as well as attitudes and activities with children and parents. Classroom observations collect data on both the structure of the classroom and classroom processes, such as teacher-child interactions. (See Appendix A for a description of the instruments and a listing of their publishers.)

Because Head Start is committed to regular, ongoing accountability measurement and program improvement, a new national cohort of FACES was launched in Fall 2000. Sampling 2,800

Figure 1.4
FACES Sample and Data Collection (1997-2001)



children and their families from 43 new Head Start programs across the nation, FACES will continue to examine child outcomes, the quality of Head Start programs, and the well-being and achievements of Head Start families. The FACES battery remained largely the same, with some minor revisions based on field experiences and newly released versions of instruments. This new wave of data collection also includes interviews with a subsample of Head Start fathers to learn directly about their role and influence in their children's lives.

The FACES Embedded Case Study

An additional feature of FACES is the embedded case study of a longitudinal sample of 120 randomly selected families from the larger FACES sample (three families from each of the 40 FACES sites were selected). The goal of the case study is to provide a more complete profile of Head Start families and children, their neighborhoods, and the nature of their interactions with Head Start. The FACES case study provides in-depth cross-sectional and longitudinal descriptive data, both qualitative and quantitative, over a two-year period. The case study consists of four primary data collection components: 1) home visit parent interviews, which are semi-structured, open-ended interviews conducted with Head Start parents regarding their families, their experiences with Head Start, and their neighborhoods at each of the three data collection points in the study (Spring 1997, Fall 1997, Spring 1998); 2) home and neighborhood observations reported by the interviewers and by the families during home visits; 3) monthly telephone contacts which started in June 1997 and continued until December 1998, providing family updates on changes in household composition, child care arrangements, employment status, health status, and Head Start participation; and 4) community agency telephone interviews regarding the amount and overall nature of collaboration between their agency and the Head Start program.

There were no statistically significant differences between the case study sample and the larger FACES sample of families on basic demographic information, including: household income, marital status, ethnicity, educational attainment, employment status, receipt of welfare, Medicaid or food stamps, and language spoken in the home. Overall the attrition rate for the case study was 12 percent (14 families). The representative nature of the case study sample allows the case study to support and expand on the findings from the larger FACES study, pursue research questions independent of the larger study, and generate hypotheses for future study.

FACES Response Rates

Through the full cooperation of the Head Start programs studied, as well as diligent field work by on-site research teams, FACES has been able to achieve high instrument completion rates. On most survey components, completion rates of 80 percent or better were attained. Response rates for the various components and waves of FACES are presented in Figure 1.5.

Figure 1.5
FACES Response Rates

Fall 1997

• Out of 40 programs participating, at least one classroom was observed in 180 out of 181 centers. A total of 506 classrooms were observed, providing classroom quality data for 2,560 of the 3,006 children selected for the main study sample (85 percent).

• Assessment, parent, or teacher data were obtained on 2,657 of the 3,006 sample children (88 percent).

• 2,424 parent interviews were completed out of 3,006 families selected for the sample (81 percent).

• 2,451 child assessments were completed out of 3,006, for a completion rate of 82 percent.

• 345 of these child assessments (14 percent) were completed in Spanish.

• Teacher report forms were obtained on 2,557 of the sample children (85 percent).

Spring 1998

• Assessment, parent, or teacher data were obtained for 2,352 children, or 78 percent of the original sample.

• A total of 480 classrooms were observed, providing classroom quality data for 2,116 of these children (90 percent).

• Spring parent interviews were obtained concerning 2,155 children. These represented 92 percent of the children who remained in the program, and 70 percent of the original sample of 3,006.

• Spring child assessments were completed for 2,183 children, representing 93 percent of the children remaining in the program, and 73 percent of the original sample.

• 299 children originally assessed in Spanish were reassessed in the Spring. 179 of these children were assessed in English, and 120 (40 percent) in Spanish.

• Teacher report forms were obtained for 2,234 children, representing 95 percent of the children remaining in the program and 74 percent of the original sample.

Spring 1999 Kindergarten Follow-up and Second Year of Head Start

• Assessment, parent, or teacher data were obtained on 2,068 children. These represented 81 percent of the children targeted for followup, and 69 percent of the original sample. Data were obtained on 1,067 kindergarten children (75 percent of those designated for followup) and 1,001 children in their second year of Head Start (88 percent of those designated for followup).

• Parent interviews were completed for 1,058 kindergarten children (75 percent) and 881 Head Start children (77 percent).

• Developmental assessments were completed for 989 kindergarten children (70 percent) and 965 Head Start children (84 percent).

• Teacher report forms were obtained concerning 786 kindergarten children (55 percent) and 851 Head Start children (74 percent).

C. Overview of the Report

This is the Third Progress Report for the Head Start Program Performance Measures effort. It provides outcome data for measures contained in Objectives 1 and 2, as well as process data for Objectives 3, 4 and 5. The data in this report are drawn from the FACES Fall 1997 and Spring 1998 data collections, as well as the Spring 1999 follow-up of Head Start graduates in kindergarten and children in a second year of Head Start. Additional data are derived from the Head Start Program Information Report, a national-level survey of the universe of Head Start programs; regional office reports; and Head Start Bureau reports.

The remainder of this report is organized by order of the objectives for Head Start's Program Performance Measures:

- Chapter II presents FACES data related to Objective 1: Does Head Start enhance children's healthy growth and development? It includes results from the national field test of Head Start children's progress in kindergarten.
- Chapter III presents findings related to Objective 2: Does Head Start strengthen families as the primary nurturers of their children?
- Chapter IV provides data related to Objective 3: Does Head Start provide children with educational, health and nutritional services?

A summary of the findings and a discussion of their implications are presented in Chapter V. In Chapter VI, data for all of the measures are provided in a Program Performance Measures matrix. Appendix A lists the instruments used in FACES along with a brief description and listing of the publishers.

Chapter II

Objective 1: Does Head Start Enhance Children's Growth and Development?

Since its inception, the ultimate goal of Head Start has been "to enhance the social competence of children from low-income families." Head Start's founders defined social competence as "a child's everyday effectiveness in dealing with both the present environment and later responsibilities in school and life." For the 5-year-old child coming to the end of the preschool period, a key test of social competence is how well he or she functions and adjusts to the demands of kindergarten and elementary school, what is often called *school readiness*. One of the primary objectives of the Head Start program supporting the goal of social competence and school readiness is "to enhance children's healthy growth and development."

The instruments used in FACES were designed to tap major components of school readiness. Children's cognitive development and early academic skills were measured through a *direct child assessment* administered to each of the sample children by specially trained assessors. Children's developing social skills were assessed by means of *standardized scales filled out by teachers and parents* and through *direct observation of the children's social play*, observations made during visits to Head Start centers. Children's approaches to learning and problem behaviors were also captured through standardized teacher and parent reports, as well as through *scales completed by the trained assessors* after they had conducted their one-on-one testing sessions with the children.

Research Questions That Can Be Addressed With FACES Child Assessment Data

1. What are the school readiness skills that Head Start children have as they prepare to enter kindergarten? What are the skills they lack?

2. How does the cognitive and social development of Head Start children compare with the development of the general population of preschool children in the United States?

3. To what extent do children's skills, knowledge and behavior change over the course of the Head Start year?

4. To what extent does the cognitive development of special subgroups of Head Start children, such as children with lower initial skills or Spanish-speaking children, change over the course of the Head Start year?

5. How much variation is there in children's cognitive and social development across Head Start programs?

6. What are the child-level, family-level, and program-level correlates of average differences in children's cognitive and social development?

7. How well do Head Start children perform in kindergarten? What skills and knowledge have they acquired by the end of the kindergarten year? What skills do they lack?

Composition of the Child Assessment

The FACES child assessment consisted of a series of tasks designed to appraise the children's cognitive and perceptual-motor development in areas such as word knowledge, letter recognition and phonemic awareness. These tasks have been shown to be predictive of later school achievement, especially of later reading proficiency and oral language skills (Horn & Packard, 1985; Snow et al., 1995; Pianta & McCoy, 1997). A complete listing of instruments is provided in Appendix A. Instruments included:

- *Peabody Picture Vocabulary Test, Third Edition* (PPVT-III), (Dunn & Dunn, 1997) a nationally-normed test which measures children's word

knowledge through asking children to show the meaning of spoken words by pointing to one of four pictures that best illustrates the meaning of the word;

- *Letter-Word Identification, Applied Problems, and Dictation Tasks* of the *Woodcock-Johnson Psycho-Educational Battery-Revised (WJ-R)*, (Woodcock & Mather, 1989). These nationally-normed scales ask children to identify letters and words, solve simple addition and subtraction problems, and trace letters and write their own name;

- *McCarthy Draw-A-Design from the McCarthy Scales of Children's Abilities* (McCarthy, 1972), a test with national norms in which children copy simple designs, such as a circle, a right angle, and a star;

- Teacher and parent ratings of children's social skills and approaches to learning, adapted from the *Social Skills Rating System* (Elliot, Gresham, Freeman & McCloskey, 1988), and the *Personal Maturity Scale* (Alexander & Entwisle, 1988);

- Teacher and parent ratings of children's problem behavior, adapted from the *Child Behavior Checklist for Preschool-Aged Children* (Achenbach, Edelbrock & Howell, 1987), the *Behavior Problems Index* (Zill, 1990), and the *Personal Maturity Scale* (Alexander & Entwisle, 1988);

- *Child Observation Record* (COR) (High/Scope Educational Research Foundation, 1992). Teacher rating of the child's progress in areas such as expression of feelings, social problem-solving, creative representation and music/movement; and

- Direct observation of children's play behavior, using an adaptation of the *Howes Peer Play Scales* (Howes, 1980, 1987), used to code the content and complexity of children's play behavior, a key indicator of social development.

The children were also asked to tell their own names, ages and birthdays; recognize colors by name; and show familiarity with story books, understanding of print conventions, and comprehension of a simple story. Spanish-speaking children in the FACES sample were assessed in Spanish unless their teachers reported they had sufficient command of English to be assessed in that language. In Spring 1998, language-minority children in most Head Start programs were assessed in English. All child assessors were well trained and monitored periodically by research staff. The assessment required 30 to 40 minutes per child.

A. What Head Start Children Know and Can Do as They Approach Kindergarten

The Spring 1998 assessment results provide a nationally representative picture of what Head Start children know and can do as they complete the program year and prepare to enter kindergarten. These descriptive results are based on the performance of 1,463 children in the FACES sample who were 4-years-old or older by the end of the previous calendar year (i.e., by December 31, 1997), and who would be of the prescribed age for entering kindergarten in the fall in most states.

Things they can do. FACES found that "typical" children (those at the median) completing Head Start could do the following things:

- Tell their full name and age;

- Identify ten basic colors by name;

- Show the meaning of basic shape and action words;
- Count four objects and solve simple addition and subtraction problems;
- Use a pencil to copy a circle or letters like "Z" and "E";
- Show the front cover of a story book and open it to start reading; and
- Answer simple factual questions about a story that was read to them.

Most children completing Head Start have also learned many of the social skills they will need in the kindergarten classroom. According to the Head Start teachers questioned in FACES, majorities of 4- and 5-year-old students showed the following positive social behaviors "very often" in Spring 1998, at the end of the Head Start year:

- Use free time in acceptable ways;
- Help put work materials away;
- Follow the teacher's directions;
- Join in activities without being told;
- Wait their turns in games; and
- Follow the rules when playing games.

Things they cannot yet do. There were a number of things that soon-to-be graduates of Head Start could *not* yet do. Among these are the following:

- Identify most letters of the alphabet;
- Write letters of the alphabet on request;
- Copy more complex geometric figures, like a star or parallelogram; and
- Show they know that you go from left to right and top to bottom when reading English text.

There were also social skills that most Head Start children had not yet mastered at the end of the year. Less than half of the older 4- and 5-year-olds accepted classmates' ideas for play or invited others to join in activities "very often." Only about a quarter gave compliments to classmates very often, and only about a fifth did not get upset when teased by other children.

B. How the Cognitive Development of Head Start Children Compares With That of the General Population of Preschoolers

Although there was no non-Head Start comparison group in FACES, the use of assessment measures with national norms allowed a comparison of the skills and progress of children in the Head Start sample to these norms.

Majority Enter Head Start With Literacy Skills Below National Norms

The majority of children who enter Head Start come into the program with early literacy skills that are less developed than those of most children of the same age. This is to be expected with a group of young children who come from families with low parent education and income levels. The association between family background and children's achievement has often been demonstrated in education research. FACES found that Head Start entrants had a mean standard score of 84.6 on the Peabody Picture Vocabulary Test (PPVT-III). They had a mean standard score of 83.8 on the Dictation task of the Woodcock-Johnson Revised (WJ-R) achievement battery; and a mean standard score of 90.8 on the Letter-Word Identification task of the WJ-R.[1] Standard scores are constructed to have an overall mean of 100 and a standard deviation of 15. Thus, the literacy skills that the average Head Start child brought to

[1]Data reported in this section include all 3- and 4-year-old children in the sample. However, data presented in the Chapter VI matrix include only 4-year-old Head Start children.

the program were from two-thirds of a standard deviation to a full standard deviation below national norms.

Another way of looking at this is to ask how many children come to Head Start with literacy skills that are clearly below the range of skills that most children possess as preschoolers. Taking a standard score of 95 as a cutoff for children whose skills are at or near the national norm, the FACES results show that 75 percent of Head Start children start the program with vocabulary skills that are below this low-average to average range. Likewise, 82 percent of Head Start children start out with early writing skills below the low-average to average range.

Diversity in Skills Brought to Program

Though most children had below-average literacy skills, FACES found considerable diversity in the Head Start population. For example, mean standard scores for the highest quarter of children entering Head Start were at national norms: 101.7 in vocabulary, 100.9 in letter recognition, and 101.2 in early writing skills. On the other hand, mean standard scores for the lowest quarter of Head Start children were more than two standard deviations below national averages: 64.8 in vocabulary and 64.4 in early writing skills.

C. Change in Knowledge, Skills and Behavior Over the Head Start Year

The Head Start Program Performance Measures framework focuses on the degree of change during the Head Start year in children's skills, knowledge and behavior as key indicators of the extent to which programs are enhancing children's school readiness. The Fall 1997 and Spring 1998 waves of data collection mark the first time these data are available from FACES. Change in cognitive skills, including vocabulary, writing, letter recognition, book knowledge, and mathematics, are reported. This chapter highlights the gains of two special groups of Head Start children—those who come to Head Start with lower skills, and those who primarily speak Spanish. Changes in children's social skills and problem behaviors are also reported in this section.

Gains in Vocabulary Knowledge and Early Writing Skills

Children in Head Start show significant expansion of their vocabularies between the beginning and end of the program year. By the spring of the Head Start year, Head Start children had average standard scores of almost 90 on the vocabulary and writing tasks for which normative data were available. The mean standard scores were 88.8 for the Peabody Picture Vocabulary Test—Third edition (PPVT-III) and 88.1 on the WJ-R Dictation writing task. The mean standard score on the vocabulary test went up by 4.3 points, or more than one-quarter of a standard deviation. The mean standard score on the dictation task also increased by 4.3 points (Figure 2.1).

The proportion of children with standard scores of 95 or above in vocabulary rose from 25 percent in the fall to 34 percent in the spring. The proportion with standard scores of 95 or above in writing skills rose from 18 percent in the fall to 31 percent in the spring.

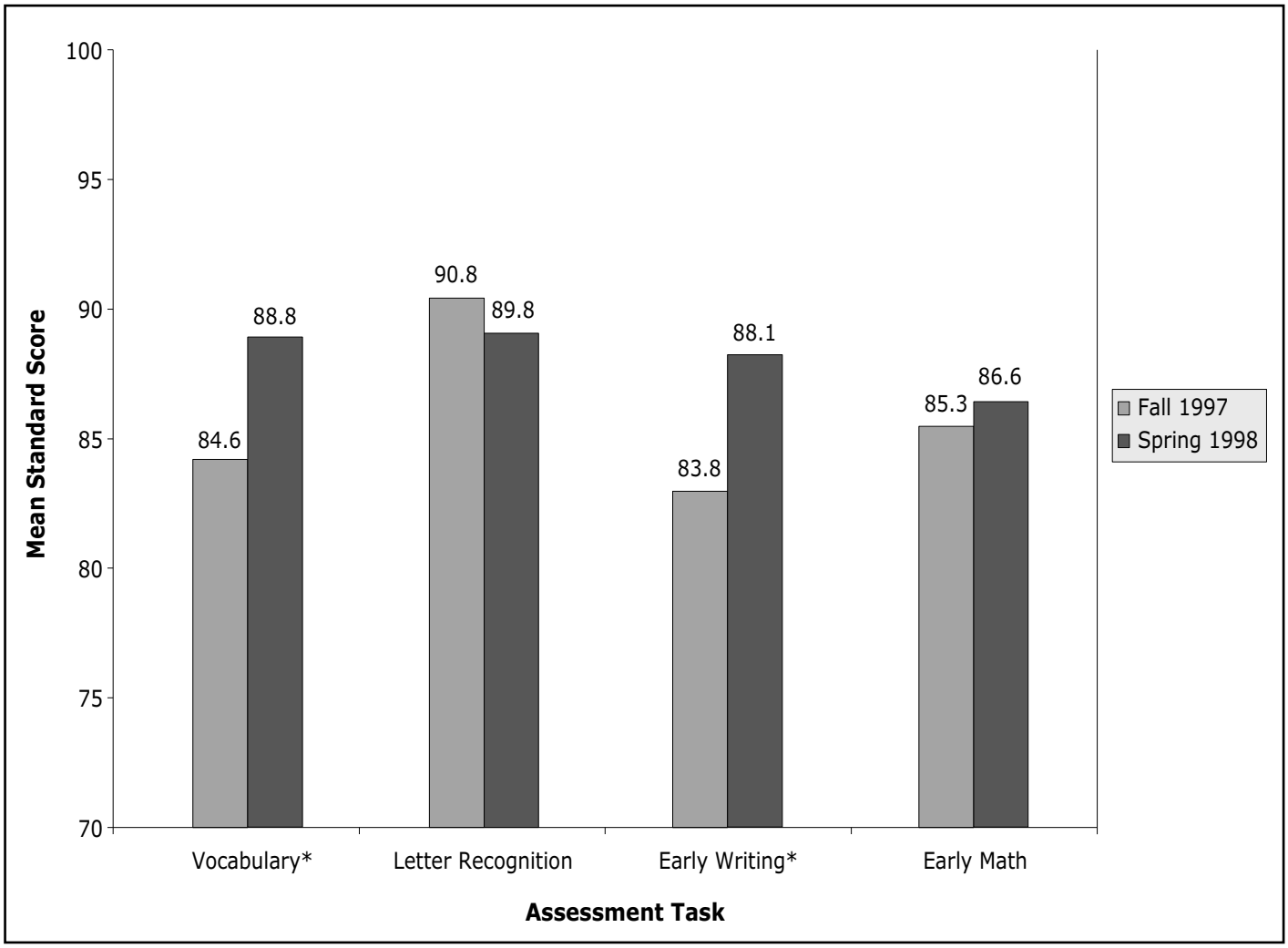
While these gains are relatively modest, they fall within the range that has been deemed "educationally meaningful" (Rosenthal & Rosnow, 1984), and are in line with earlier findings on the immediate effects of Head Start on children's

intellectual performance (Haskins, 1989; McKey et al., 1985).

Little Progress in Letter Recognition, Book Knowledge and Early Math

A different situation was obtained with respect to their learning to recognize letters of the alphabet. At the beginning of the year, a typical 4-year-old in Head Start achieved a raw score on the Woodcock-Johnson Letter-Word Identification task (4.9) signifying that he or she could not identify any of the letters presented in the test. By the end of the Head Start year, the same child could identify one or two of the letters in the test, but no more (mean raw score of 6.5). Even those in the upper quarter of the Head Start population could

Figure 2.1
Head Start Students Show Gains in Vocabulary and Writing During Program Year



*Significant at p<.001

SOURCE: Head Start Family and Child Experiences Survey (FACES), Fall 1997 and Spring 1998, children who received English-language assessments both times.

only identify about half of the letters in the assessment by the end of the program year.

When fall and spring raw scores were converted into standard scores, FACES found that Head Start students did not advance in comparison to national norms. In fact, they showed a slight but statistically significant decrease in average standard scores on letter identification (from 90.9 to 89.8), indicating that Head Start children were falling further behind their middle-class agemates.

Head Start children demonstrated that they had some knowledge of book and print conventions. When asked, they could show the assessor the front of a story book and open it to where the adult should start reading. But they showed no advance in this sort of book knowledge between the fall and the spring. Similarly, Head Start children showed minimal improvement in their ability to solve simple addition and subtraction problems. In the fall, their mean standard score on the WJ-R Applied Problems math task was 85.3, compared to 86.6 in the spring, an increase that was not statistically significant.

Head Start children may not be learning early reading skills such as letter recognition and print awareness or early math skills because many Head Start teachers are not emphasizing these skills. While more than two-thirds of teachers reported teaching letters of the alphabet or words on a daily basis, this activity occurred less frequently than other academic or play activities in Head Start classrooms (Table 2.1). In addition, interviews with lead teachers revealed that most did not give children's acquisition of these skills a particularly high priority in their curricular goals or daily activity plans. Less than 60 percent of Head Start teachers identified enhanced academic skills as a primary benefit of Head Start, compared to 78 percent who identified enhanced social skills as a primary benefit (Table 2.2). Notably, less than 4 percent of teachers specifically mentioned language and/or verbal skills as a main benefit of Head Start. Further, although 92 percent of Head Start teachers reported daily activities dealing with number concepts or counting, FACES observers found that Head Start classrooms were not particularly well-endowed with learning materials conducive to the acquisition of early math skills.

Table 2.1
Teacher Ratings of Frequency of Classroom Activities

How often are the following **concepts or activities** offered to the children in your class(es)? Would you say these activities are offered less or more than once a month, once a week, or almost daily or daily?

Activities Offered to Children and Frequency of Activities (Percentage)	Not Offered	Less than Once/ Month	Daily or Almost Daily
Block building or other construction work	0.0	0.0	97.1*
Reading stories	0.0	0.0	96.0*
Free play including dressing up or making believe, etc.	0.0	0.2	95.8
Visual arts such as drawing, painting, modeling, play dough, sandplay	0.0	0.2	95.6
Solving puzzles, playing with geometric forms	0.0	0.0	94.5*
Health, hygiene, or nutrition	0.3	0.0	93.0
Outdoor physical activities	0.2	1.1	92.8
Number concepts or counting	0.8	0.0	92.2*
Performing arts such as music, movement, dance, etc.	0.0	0.6	91.6
Indoor physical activities such as tumbling or dancing	0.2	0.6	89.9
Naming colors	0.8	0.0	88.7*
Science or nature	0.0	1.1	83.2*
Letters of the alphabet or words	9.5	4.5	68.8*

* Academic preparation activities

SOURCE: Analysis of data from the Head Start Family and Child Experiences Survey Teacher Interviews during 1997-98.

Table 2.2
Teacher Ratings of Main Benefits of Head Start

In your opinion, what are the **main benefits** that Head Start provides to children?

Main Benefits of Head Start (% of teachers indicating benefits in open-ended response)	Academic Skill	Social	Other
Enhancing children's social skills		69.6	
Improving children's school readiness	57.3		
Improving child health			32.3
Improving social interactions with adults		26.1	
Providing a safe haven from home/neighborhood			11.0
Improving self-esteem, role modeling, self-confidence		9.6	
Providing support services for basic needs (e.g., food, safety, hygiene, transportation)			7.6
Enhancing child's psychological development (special needs)		7.0	
Providing exposure to new experiences			6.0
Providing a comforting, stimulating environment			4.9
Parent involvement, interaction with teachers			4.1
Enhancing motor skills			4.2
Teaching cooperation, sharing, problem solving, decision making, conflict resolution		3.8	
Improving language, verbal skills	**3.6**		
Learning discipline, responsibility, structure, routine		3.4	
Learning independence, self-help skills		3.2	
Enhancing creativity, role-playing		2.3	
Summary by column*	59.2	77.9	46.9

* Columns are not additive due to multiple responses

SOURCE: Analysis of data from the Head Start Family and Child Experiences Survey Teacher Interviews during 1997-98.

Greater Gains for Those Who Enter With Lower Skills

FACES found evidence that Head Start works to narrow gaps between children who begin the program at differing levels of school readiness. Gains in cognitive skills from the fall to the spring of the Head Start year were larger among children who were initially in the bottom quarter of the score distribution than among those in the middle or top quarter.[2]

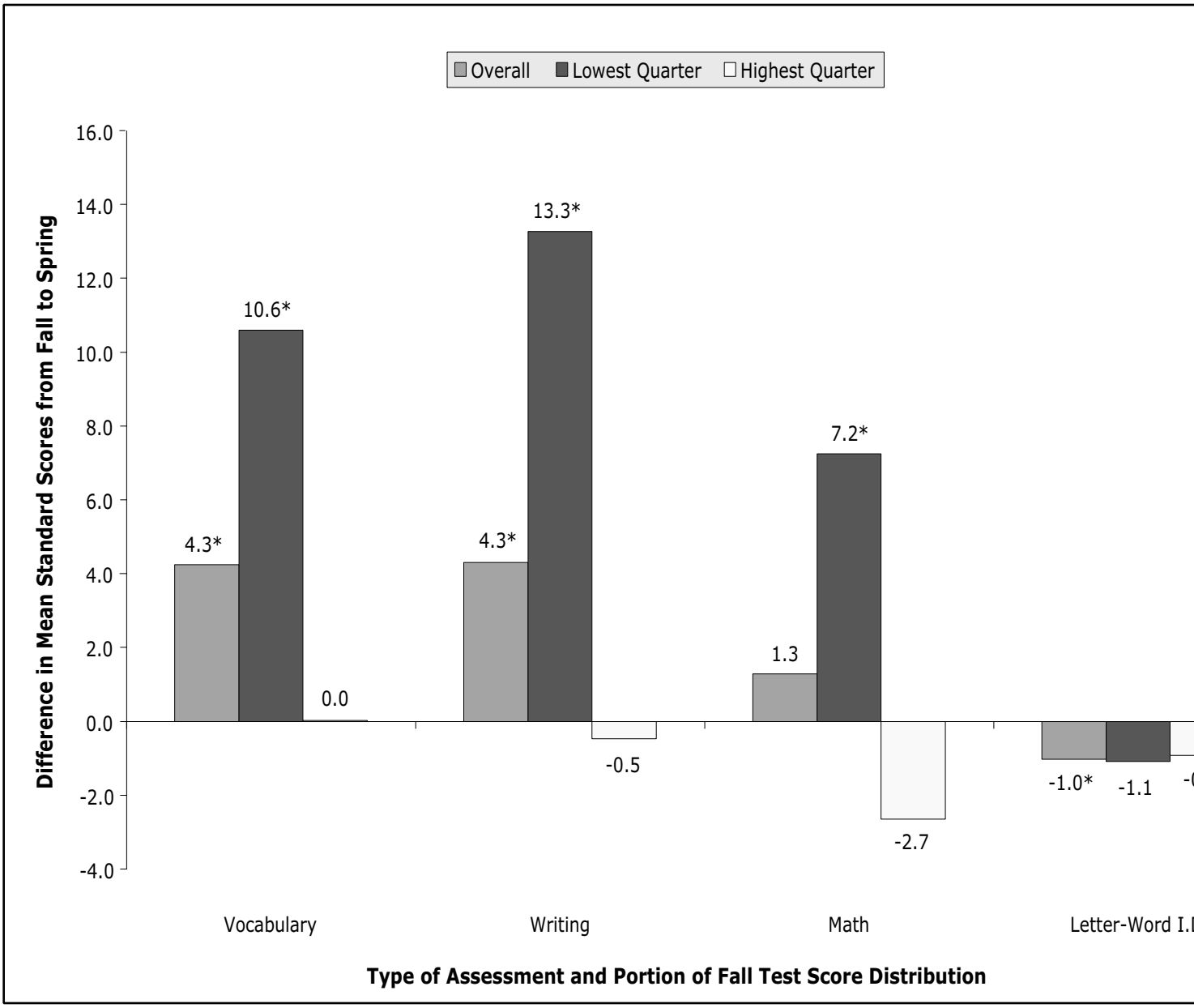
Larger gains among children who come to Head Start with less developed skills were also found when raw scores were converted to standard scores by calibrating them against national norms. In terms of performance on the PPVT, for example, children initially in the bottom quarter showed an increase in mean standard scores of 10.6 points, or more than two-thirds of a standard deviation. By contrast, children in the top quartile, who were already at the national average for their age group, showed no gain in standard score from the fall to the spring. The overall mean gain was 4.3 points, between a quarter and a third of a standard deviation. This was significantly less than the gain in the bottom quartile, but significantly greater than that in the top quartile (Figure 2.2).

Greater gains among children who have less knowledge initially were observed as well in standard scores on early writing and math tasks. In the early writing task, children in the bottom quarter gained 13.3 points, whereas children in the top quarter showed no significant change in their standard scores (a mean change of –0.5 points). The overall increase in standard scores was 4.3 points, significantly less than the increase for children in the bottom quarter, and significantly greater than the change (or lack of change) in standard scores in the top quarter of children. In the early math task, the overall change in standard scores from fall to spring (1.3 points) was not statistically reliable. The increase in mean standard scores among children in the bottom quartile (7.2 points, or nearly half a standard deviation) was reliably greater than zero, however. It was also greater than the overall change, and the change among children in the top quartile (a decline of 2.7 points, not significantly different from zero change) (Figure 2.2).

Once again, a different pattern of change was observed with respect to letter recognition skills. Compared to national norms, the overall change in mean scores was a slight but significant decline (1 point). Differences obtained for children in the bottom and top quartiles were not significantly different from the overall change, nor were they different from each other.

[2]These statistics and others cited in this section apply to Head Start children in the FACES sample who were assessed in English in both the Fall of 1998 and the Spring of 1999. The figures do not include language-minority children who were initially assessed in Spanish.

Figure 2.2
Children Who Come to Head Start With Lower Skills Show Larger Gains During Program Year



*Significant at p<.05

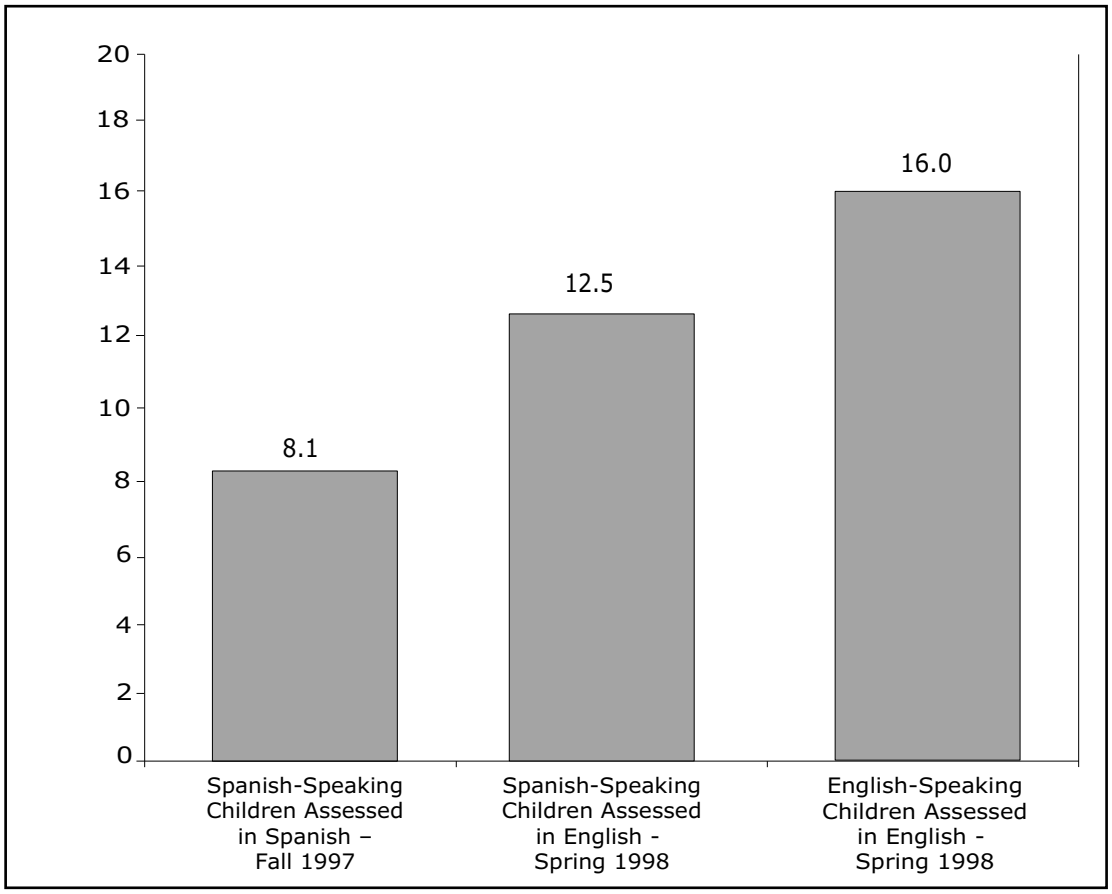
SOURCE: Head Start Family and Child Experiences Survey (FACES), Fall 1997 and Spring 1998, children who received English-language a
both times.

Despite the larger gains in vocabulary knowledge and early writing and math skills achieved by children who come to Head Start with fewer accomplishments, these children are still substantially below national norms at the end of the Head Start year. Recall that standard scores are computed such that the overall population mean for children of all income groups in the same age groups is 100 with a standard deviation of 15. In vocabulary, Head Start children in the lower quartile go from a mean standard score of 65 at the start of the year to a mean of 75 at the end of the year. In early writing skills, the lower quarter of Head Start children begin with a mean standard score of 65 and wind up the year with a mean of 78. And in early math skills, the change is from a mean standard score of 64 to one of 71. Head Start narrows the skills gap between children who are initially in the bottom and top quarters, but it does not close the gap.

Gains of Spanish-Speaking Children

Language-minority children in Head Start show gains in school readiness skills and in their knowledge of English over the course of the Head Start year. By the spring, most Spanish-speaking

Figure 2.3
Primarily Spanish-Speaking Children in Head Start Name More Colors in English in Spring Than They Named in Spanish in Fall, But Still Trail English-Speaking Children



SOURCE: Head Start Family and Child Experiences Survey (FACES), Fall 1997 and Spring 1998.

children in English-language programs were able to perform a number of school-related tasks better in English than they had in Spanish in the fall, or at least as well. They were able to name more colors in English, for example, than they had been able to name in Spanish. They are able to do a better job (though not yet a perfect job) of counting 10 objects. And they gave personal information about themselves (such as name and address) about as well in English as they had done in Spanish. Spanish-speaking children also made significant gains in perceptual-motor and early writing skills. Despite these gains, Spanish-speaking children in English-language Head Start programs continued to trail other children on tasks that require English-language proficiency.

In Fall 1997, Spanish-speaking children in the FACES sample were assessed in Spanish unless their teachers reported they had sufficient command of English to be assessed in that language. Children who spoke languages other than Spanish (e.g., Vietnamese, Hmong, or Cantonese) were not assessed directly, though teachers were asked to report on their learning and behavior. In Spring 1998, language-minority children in most Head Start programs were assessed in English. Children in Head Start programs conducted in Spanish (primarily programs in Puerto Rico) were again assessed in Spanish.

The following are illustrative assessment results for the nearly 200 children in FACES who were assessed in Spanish in Fall 1997 and then in English in Spring 1998:

- In the spring, the mean score on a color-naming task for this group of children was 12.5 out of a maximum possible score of 20. Their average score was 8.1 in the fall.[3]
- Their mean rating on a counting task was 2.7 in the spring (out of a maximum possible rating of 5), compared with a mean of 2.0 in the fall.
- Their mean scores on a social awareness task that required them to tell their name, age, birthday, and address were 2.2 in the spring and 2.4 in the fall. These means are not significantly different.

Spanish-speaking children in English-language programs also made significant gains in the perceptual-motor task of copying designs and in an early writing task:

- The mean score on the design-drawing task was 4.4 in the spring, compared with 3.3 in the fall.
- The mean score on the early writing task was 6.2 in the spring, compared with 4.6 in the fall.

Despite these gains, Spanish-speaking children lagged behind English-speaking children on assessment tasks requiring English-language skills. For example:

- On the color-naming task, the mean score in Spring 1998 was 16.0 for children assessed in English both times, compared with 12.5 for those assessed in Spanish in the fall and English in the spring.
- In the task of telling name, age, and address, the English-English group had a mean score of 4.1 in Spring 1998, compared with a mean of 2.2 for the Spanish-English group.

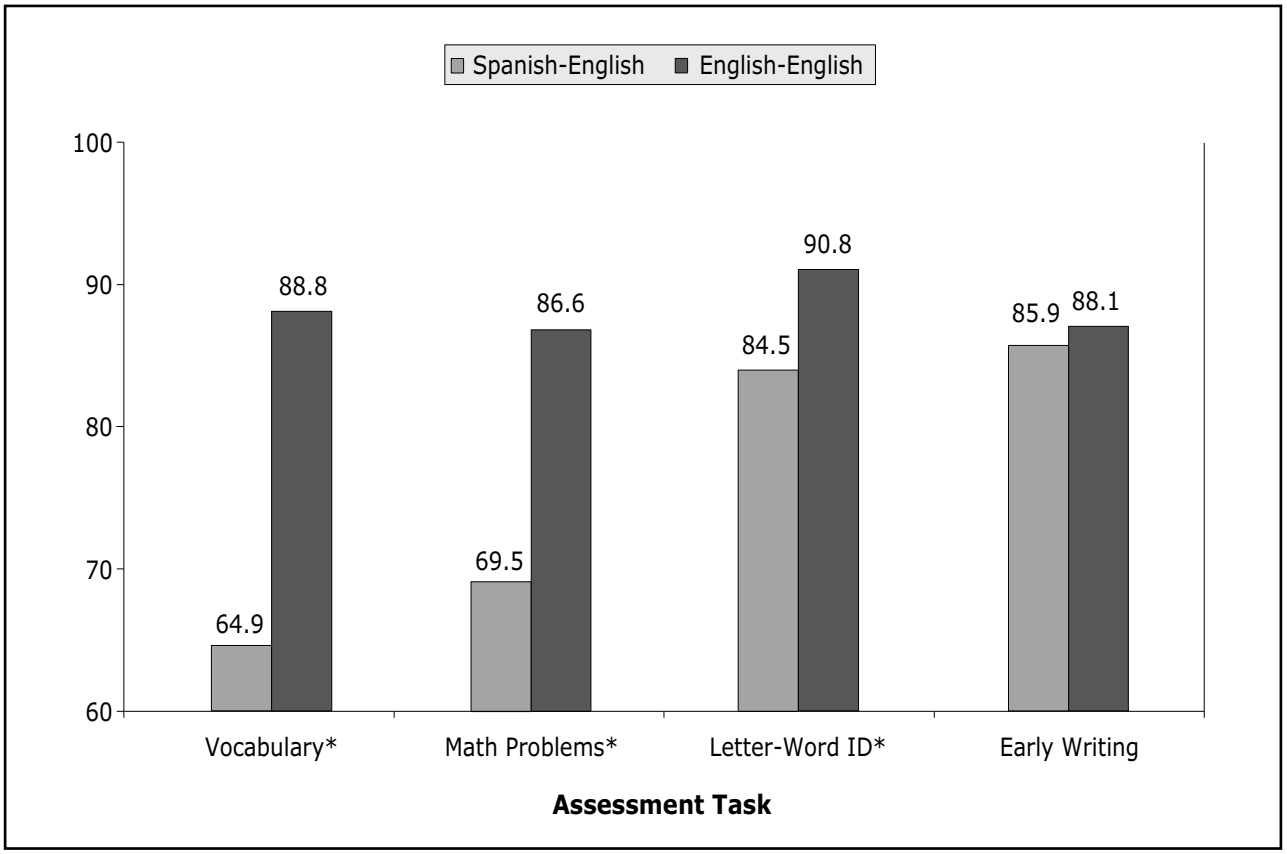
At least partly because of differences in English proficiency, Spanish-speaking children in

[3]Although the tasks in these cross-language comparisons seem equivalent, it is possible there are differences in the difficulties of the component items when they are administered in Spanish as opposed to English.

English-language Head Start programs are considerably behind the average U.S. preschooler in some tasks for which national norms are available. Specifically:

- On the PPVT, Spanish-speaking children assessed in English in Spring 1998 had a mean standard score of 64.9 (Figure 2.4). This compares with a mean of 100 for the general population of preschoolers, and a mean of 88.8 for Head Start children whose home language is English.
- On the Woodcock-Johnson Applied Problems task, the Spanish group had a mean standard score of 69.5, compared with 100 for the general population and 86.6 for Head Start children assessed in English on both occasions. Although the Applied Problems test requires counting and doing simple arithmetic, the problems are stated in English.
- There was a significant though lesser difference in performance on the Woodcock-Johnson Letter-Word Identification task. Here the mean was 84.5 for Spanish-speaking chil-

Figure 2.4
Primarily Spanish-Speaking Children Trail in Tasks Requiring English-Language Skills



*Significant at p<.05

SOURCE: Head Start Family and Child Experiences Survey (FACES), Spring 1998.

dren assessed in English in Spring 1998, compared with 90.8 for Head Start children assessed in English in both Fall 1997 and Spring 1998.

Spanish-speaking children in English-language Head Start programs are more like their English-speaking counterparts with respect to fine motor and early writing skills. In Spring 1998, for example:

- Spanish-speaking children had a slightly higher average score on the design-copying task than did children assessed in English on both occasions (4.4 versus 3.9).
- Spanish-speaking and English-speaking children did not differ significantly in their performance on the Woodcock-Johnson Dictation task, which assesses early writing skills. The average standard score for the Spanish-English group was 85.9, whereas that for the English-English group was 88.1.

Children in Spanish-language programs. Spanish-speaking children in Spanish-language Head Start programs seem to show gains in vocabulary and fine motor skills comparable to those shown by English-speaking children in English-language programs. However, a relatively small number of these children from a limited set of such programs fell into the FACES sample.[4] As a consequence, the standard errors of the estimates for these children were quite large, and apparent differences in children's performance from Fall 1997 to Spring 1998 could not be declared statistically reliable.

Two gains shown by Spanish-speaking children in Spanish-language programs were statistically significant, however. They were:

- A gain of 5.2 points in the color naming task. In the spring, the mean score for this group of children was 13.9 out of a maximum possible score of 20. Their average score was 8.7 in the fall.
- A gain of 1.2 points in the design copying task. The mean score on the task was 4.5 in the spring, compared with 3.3 in the fall. These figures are practically identical to those shown by Spanish-speaking children in English-language Head Start programs. (See above.)

Spanish-language versions of the PPVT (the TVIP) and the Woodcock-Johnson Applied Problems, Letter-Word Identification, and Dictation tasks were administered to children in Head Start programs conducted in Spanish. There are population norms for these tests, but they are not directly comparable to norms for the English-language versions of the same tests. Thus, the standard scores for children in Spanish-language and English-language Head Start programs cannot be directly compared. It is possible to say, however, that where Head Start children in Spanish-language programs stand with respect to their population norms is roughly comparable to where Head Start children in English-language programs stand with respect to their norms. For example, in Spring 1998, the mean standard scores on the three Woodcock-Johnson tasks for children in the Spanish-language programs ranged from 84 to 90, with each mean having a confidence interval of plus or minus 2.5 to 3 points.

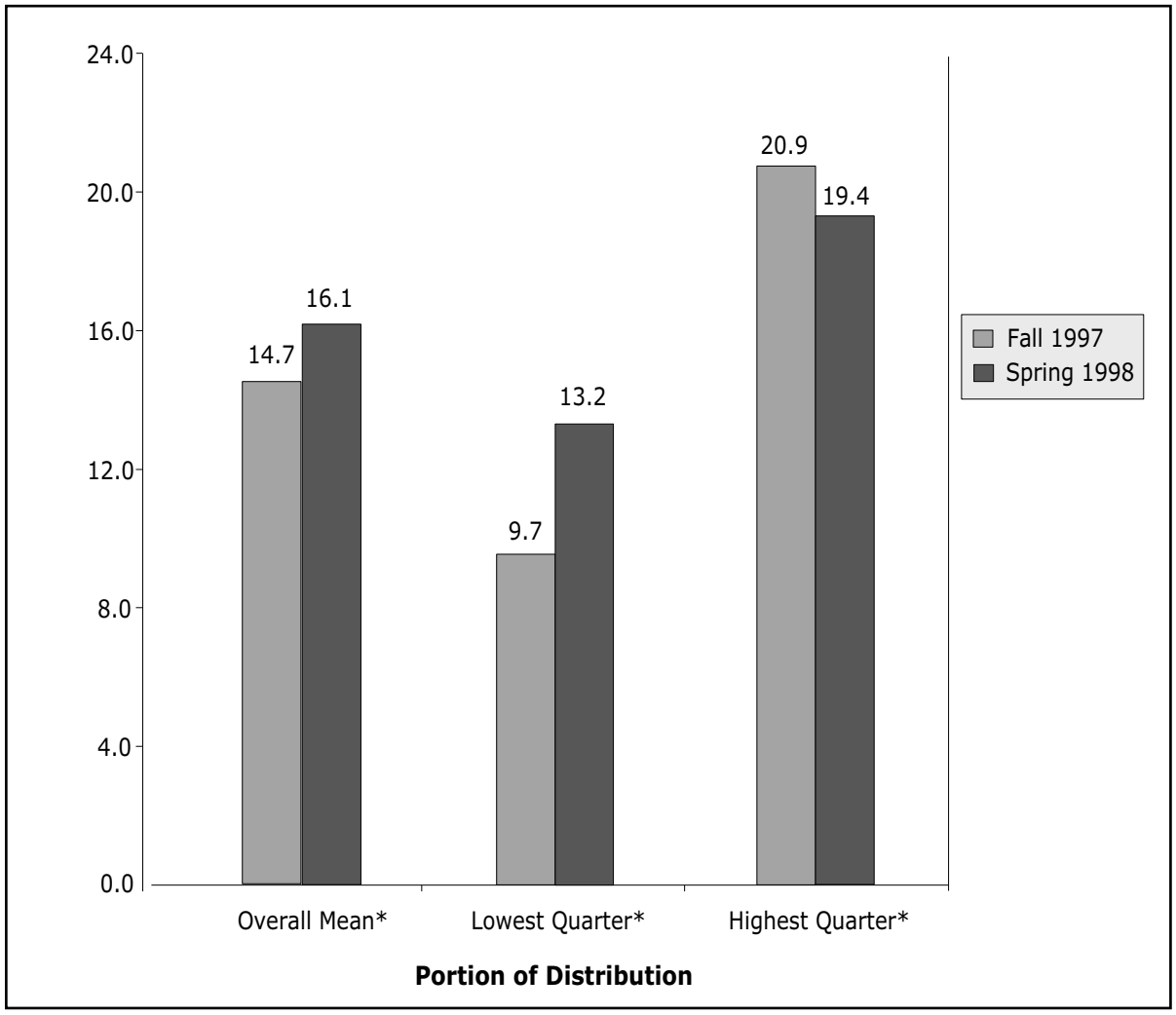
Gains in Social Skills

Head Start teachers were asked to rate individual children in the FACES sample on cooperative

[4]There were 114 children in Spanish-language Head Start programs who were assessed in Spanish in both Fall 1997 and Spring 1998. The Woodcock-Johnson tasks were only administered to children aged 4 and above, however. Thus, fall and spring measures on these tasks were obtained for fewer children (79 to 83).

behavior and social skills, such as following directions, joining in activities, and waiting turns in games, using the same rating scales in the fall and spring. The average student showed a significant gain in a social skills summary index based on 12 such items, with the mean score going from 14.7 to 16.1 out of a possible 24 points (Figure 2.5). Similar to the pattern in cognitive skills, the children in the lowest quarter of social skills demonstrated a significantly larger gain than those at the mean, with an increase from 9.7 to 13.2. Children in the highest quarter showed a small but significant decline in their average rating. Nonetheless, children in this group continued to receive higher ratings from teachers than children who were at the overall mean or in the lowest quarter in the fall.

Figure 2.5
Teacher Ratings of Head Start Children Show Growth in Social Skills Across Program Year



*Significant at p<.05

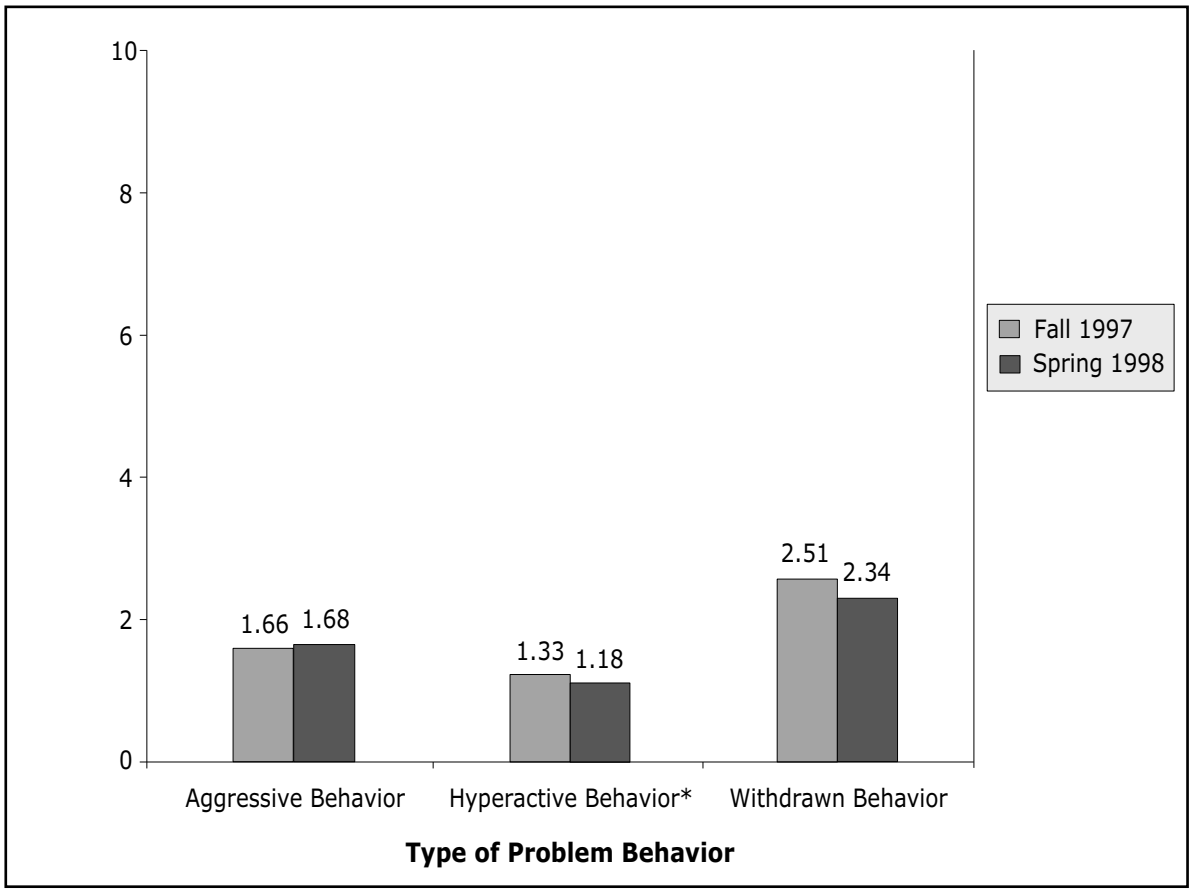
SOURCE: Head Start Family and Child Experiences Survey (FACES), Fall 1997 and Spring 1998.

Teachers also rated the quality of each child's social relationships, including relating to peers and social problem solving, in the fall and spring, using three criterion-referenced rating items from the Child Observation Record (COR) (High/Scope Educational Research Foundation, 1992). The mean change in ratings from fall to spring was a statistically significant increase of 0.6 on a scale of 1 to 5, with the mean ratings going from 2.9 in the fall to 3.5 in the spring. These results are similar to those found in the COR validation study (Schweinhart, McNair, Barnes, & Larner, 1993), where Head Start teachers rated children's social relations an average of 2.8 in the fall and 3.7 in the spring.

Little Change in Problem Behavior

In contrast to the improvement in social skills, the average Head Start child shows little or no change from the beginning to the end of the program year in the frequency of emotional and conduct problems. Although only a minority of children showed such problem behavior with any frequency, the size of that minority did not diminish between fall and spring, with the exception of

Figure 2.6
Hyperactive Behavior Declines Slightly During the Head Start Year



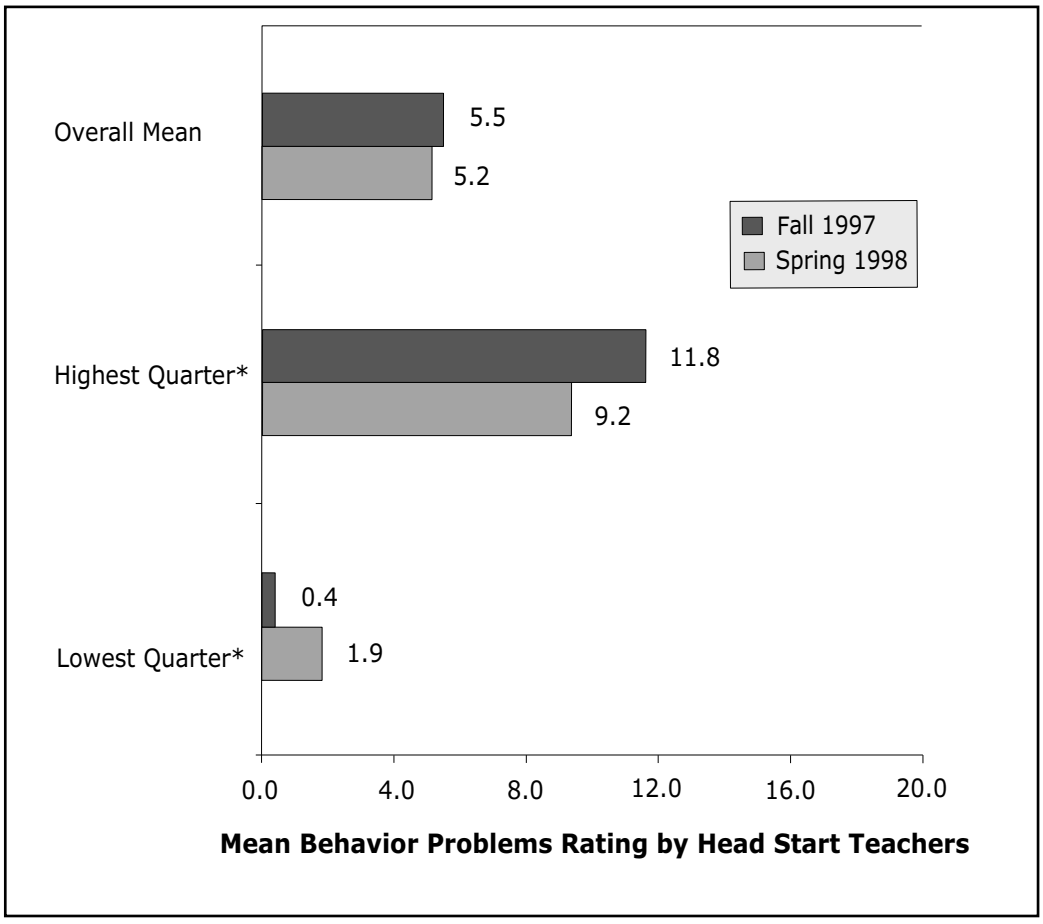
*Significant at p<.05

SOURCE: Head Start Family and Child Experiences Survey (FACES), Fall 1997 and Spring 1998.

hyperactive behavior, which showed a small but significant decline. Teachers and parents were asked to rate individual children in the FACES sample on a set of negative behaviors that are relatively common among preschool children and that are associated with adjustment problems in elementary school and receipt of psychological help. The items covered three domains: inattentive-hyperactive behavior; aggressive-disruptive behavior; and anxious, depressed or withdrawn behavior.

The teacher ratings of behavior problems contained 14 items and a summary index based on these items could range from zero to 28. The mean rating went from 5.5 in the fall to 5.2 in the spring. This difference was not statistically significant. The aggressive behavior subscale had a mean of 1.7 in both the fall and spring (Figure 2.6). The withdrawn behavior subscale had a mean of 2.5 in the fall and 2.4 in the spring. The hyperactive behavior subscale showed a slight

Figure 2.7
Overall Frequency of Problem Behavior Does Not Change, But Students Showing Most Misbehavior in Fall Show Some Improvement by Spring



*Significant at p<.001

SOURCE: Head Start Family and Child Experiences Survey (FACES), Fall 1997 and Spring 1998.

but statistically significant decline, going from slightly more than 1.3 in the fall to just under 1.2 in the spring. While the mean rating did not significantly decline, the children with the most misbehavior, those in the highest quarter, did show a significant decrease in problem behaviors over the course of the year, from 11.8 in the fall to 9.2 in the spring (Figure 2.7). In contrast, children initially in the lowest quarter showed a small but significant increase in their average problem behavior ratings. Nonetheless, children in this group continued to receive lower problem behavior ratings than children who were at the overall mean or in the highest quarter in the fall.

The parent ratings of behavior problems contained 12 items and a summary index based on these items could range from zero to 24. The mean rating went from 6.1 in the fall to 5.9 in the spring, which was not a statistically significant decline. As in the teacher ratings, parent ratings of hyperactive behavior did show a slight but statistically significant decline. They went from a mean of 1.9 in the fall to 1.7 in the spring. Parent ratings of aggressive behavior did not change (mean of 3.0 in fall and spring), nor did their ratings of depressed-withdrawn behavior (mean of 1.2 in fall and spring).

D. Relationship of Program Quality and Center Characteristics to Children's Emergent Literacy

The national Head Start program strives to ensure that local programs and centers are of good quality. In seeking to improve program performance, leaders of the national program sought to discover whether some local centers bolstered the early academic skills of children more than others did. Thus, FACES addressed the following questions: How much variation was there from center to center in children's emergent literacy skills? And, if there was substantial variation in children's skills, was it associated with differences in program quality or other characteristics?

As our previous analyses have found, there is variation in the quality of programs at the center, classroom and program levels. These analyses were conducted by center because of the sampling design used. In the first round of FACES, programs were selected and then children were randomly selected. While this approach provided an adequate number of children for analysis at the program and center level, it did not provide enough children for classroom-level analysis. In the next round of FACES, FACES 2000, we are selecting classrooms randomly and studying all 3- and 4-year-old children new to Head Start in those classes. This will provide adequate samples to study classroom-level variation.

Analysis Method

In order to study the relations between program quality, center-level demographics, and child outcomes in Head Start, multilevel linear regression modeling was employed, using the SAS PROC MIXED computer program (Singer, 1998; Bryk & Raudenbush, 1992). This method allowed examination of how the average achievement scores of Head Start centers related to measures of center demographics and program quality. Simultaneously, we examined how the achievement scores of individual children in each center relate to a set of child-level characteristics, such as child demographics and home literacy activities. The method provided an estimate of the variation within and between Head Start centers.

The analytic models had two levels. The first level involved variation in average assessment scores across the 159 centers in the FACES national sample. The second level involved variation in individual children's scores around the center means, that is, how the children in each center differed

from that center's average score. The dependent variables in the models included the assessment scores of Head Start children in Fall 1997 and Spring 1998, and the gains each child made between the fall and spring.[5] While the FACES battery was comprehensive, the analyses reported here focus on vocabulary and letter recognition, two major facets of emergent literacy.

Two levels of independent variables were used to predict the assessment scores: the center level and child level. At the center level, the independent variables included the average demographic and socioeconomic characteristics of the children and their families (minority racial or ethnic status, parent education level, and family income). Three indicators of program and classroom quality were also included at the center level: 1) the Early Childhood Environment Rating Scale (ECERS) Language Subscale, averaged across all classes observed in a given center; 2) the child:adult ratio, again with ratios averaged over all classes visited in a given center; and 3) the average score for the center on the Arnett scale of teacher-child interaction. (See Chapter IV for details on the classroom observation instruments and procedures.)

For the modeling of the spring assessment scores and the fall-spring gain scores, an additional center-level predictor variable was the average baseline assessment score for the center on the same skill, vocabulary or letter recognition, in the fall.

At the child level, the independent variables included the demographic characteristics of the child (age, gender, race and ethnicity, language-minority family, and family structure); socioeconomic characteristics of the family (parent education level and family income); health characteristics of the child (parent report of a disability); and family literacy activities (frequency of parent reported reading to child and parent report of having any fiction or non-fiction books in the home). For the prediction of spring assessment scores and the fall-spring gain scores, the child's baseline score on the same assessment in the fall was also included as a child-level independent variable.

A classroom level was not included in the models because the number of sample children in classes was small and some showed no variation across major demographic variables (e.g., the sample children in some classes were all boys).

Variation in Children's Emergent Literacy Across Head Start Programs

The following summary of results first discusses the extent of center-to-center variation in children's emergent literacy skills. We examined this both at program entry and at the end of the Head Start year. Next, findings on the extent to which program quality seemed to play a role in accounting for the within-center variation in children's achievement are presented.

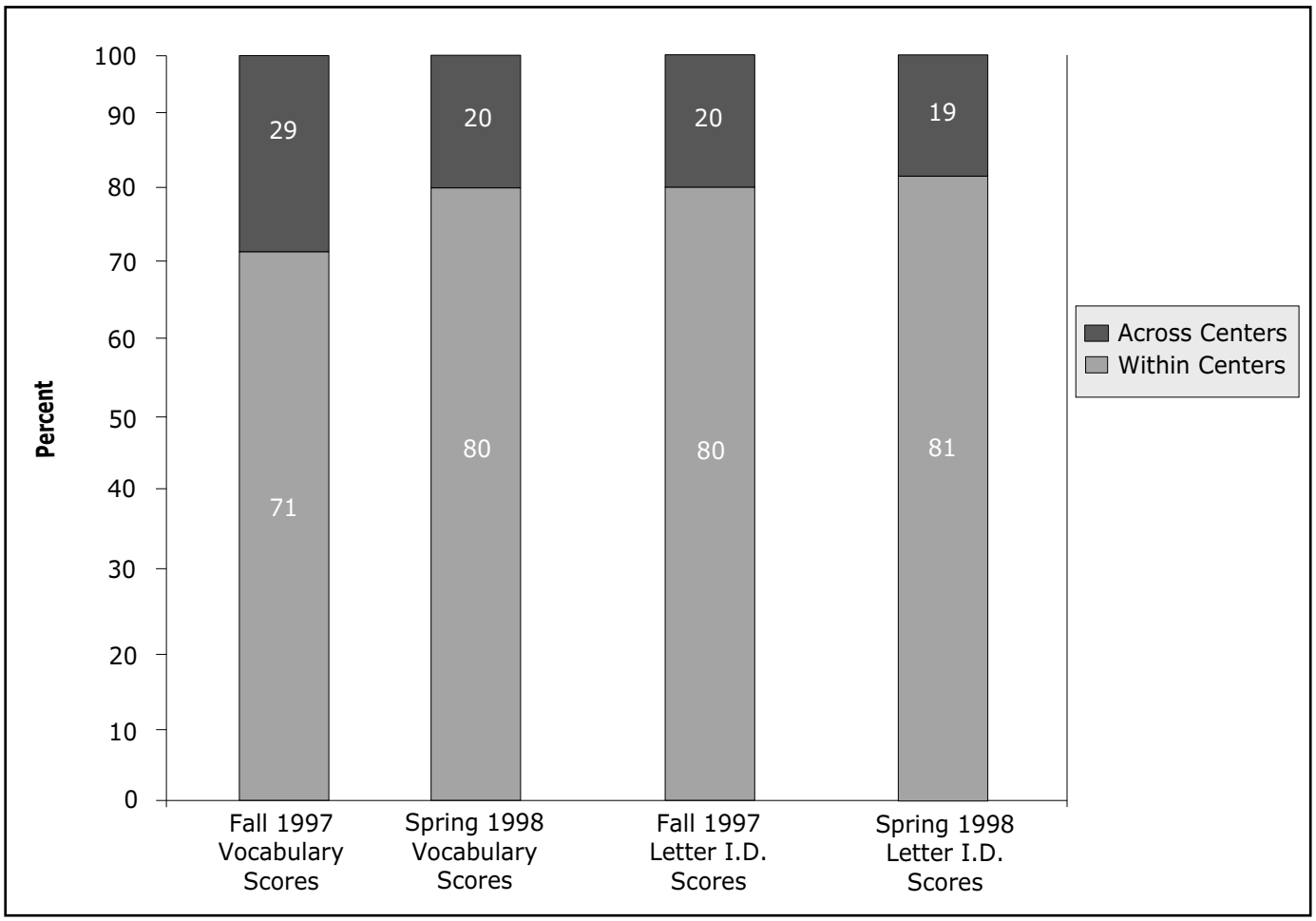
Center-to-center variation in average assessment scores. A majority of the variation of children's scores on the vocabulary and letter-identification assessments (between 71 and 81 percent, depending on the type of assessment and time period) fell into the within-centers component (Figure 2.8). This indicated that there was a substantial random element in the way children of different achievement levels were distributed across Head Start centers. It also indicated that Head Start

[5]In the multilevel regression modeling, assessment scores were converted to "W-ability scores," based on IRT scaling of item difficulties carried out by the test developers. These scale scores are purported to have equal-interval properties that are desirable in regression modeling, particularly of gain scores. In other analyses, standard score versions of the assessment scores were used. These scores show how Head Start children performed compared to national norms, but they do not have as strong equal-interval properties as the W-ability scores.

teachers faced a wide range of achievement levels in the groups of children they taught each year.

At the same time, the results revealed significant and substantial differences in average achievement levels across Head Start centers, both at the time that children entered and at the end of the Head Start program year. The proportion of the variation that fell into the between-centers component ranged from 19 to 29 percent, depending on the type of assessment and time period (Figure 2.8). This indicates that some process was systematically sorting children into different centers according to their initial achievement levels, or that centers differed substantially in the efficacy of their instructional activities. These proportions are comparable to the between-schools variations in achievement that have been found in studies

Figure 2.8
Percent Distribution of Variance in Child Assessment Scores
Across and Within Head Start Centers, By Type of Assessment and Time Period



SOURCE: Head Start Family and Child Experiences Survey (FACES), Fall 1997 and Spring 1998, children assessed in English on both occasions, W-ability scores.

conducted at the high-school level. According to Bryk and Raudenbush (1992), "...results typically encountered in cross-sectional studies of school effects...[are that] 10% to 30% of the achievement variability is between schools" (p. 188).

The results also showed a difference between vocabulary knowledge and letter recognition skills in the amount of center-to-center variability in initial achievement. The proportion of cross-center variation was greater for fall vocabulary assessment scores (29 percent) than for fall letter identification scores (20 percent). By the spring assessments, however, the between-centers components for vocabulary and letter identification were essentially equivalent (20 percent and 19 percent, respectively).

The decline in the relative size of the between-centers component for vocabulary knowledge (from 29 percent in the fall to 20 percent in the spring) suggests that participation in Head Start was having a leveling effect on children's receptive vocabulary knowledge, or that Head Start was narrowing the gap between lower- and higher-skilled children. By the end of the program year, centers serving many children who were behind in their vocabulary knowledge at the start of the year seem to have caught up to some extent with centers serving many children whose vocabulary skills were close to national norms. Other aspects of the regression results supported this interpretation, as discussed below.

On the other hand, the extent of center-to-center variability in average letter identification scores did not change significantly between fall and spring. It comprised 20 percent of the variance in the fall, and 19 percent in the spring. This suggests that participation in Head Start did not reduce differences between centers in the average level of children's letter recognition skills. Neither did it increase differences between centers.

In education research using multilevel modeling on student achievement at the high-school level, investigators have sometimes found that between-school differences are larger with respect to gain scores than with respect to achievement levels (Bryk & Raudenbush, 1992). This was not the case for Head Start. There was less cross-center variation in fall to spring gains than in achievement levels. For gains in both vocabulary scores and letter identification scores, 13 percent of the variation was between centers, whereas 87 percent was within centers. This seems to indicate that while Head Start centers did differ in the sizes of the average gains that their children exhibited from fall or spring, the differences were not dramatic.

Socioeconomic characteristics of centers are linked to variation in initial vocabulary. Having shown that there is substantial variation across Head Start centers in children's emergent literacy skills, both at program entry and at the end of the program year, we tried to determine what characteristics of centers could help account for the variation. Was it largely a matter of the varying demographic and socioeconomic composition of the Head Start population in different centers? Or did differences in program quality also play a role, at least as far as skills at the end of the program year were concerned?

Variations in children's initial vocabulary knowledge were clearly linked to the socioeconomic characteristics of the centers. Centers with more children of non-minority racial and ethnic background, with more parents who had some college education, and with more families whose incomes were at the upper end of the poverty range had higher average vocabulary scores. For example, let us compare a Head Start center in which all the children are from non-minority families, have parents with some college education, and have monthly incomes of $1,500 or more, to one in which all the children are from minority

racial or ethnic backgrounds, and none has parents with some college, nor incomes of $1,500 or more. The regression analysis indicated that the former center would have an average vocabulary assessment score in the fall that was 10.7 points higher than the latter center. This was a difference of nearly a full standard deviation.

The two-level regression model did a relatively good job of explaining the variation from center to center in initial vocabulary scores, accounting for nearly half of the cross-center variation (48 percent). The model also accounted for 35 percent of the overall variance (across centers and within centers) in children's initial vocabulary scores. Of the individual variables, the proportion of non-minority children in the center was significant, whereas average parent education and average family income were not. Two of the program quality measures were also significant: the average ECERS language score and the average child:adult ratio. However, the assessments were done early in the year, presumably before program activities would have had a chance to have much effect. Either the beneficial effects of program language activities were relatively fast acting, or the relationship was actually a reverse one. That is, centers with children who had more developed vocabulary skills also tended to have better quality language activities and smaller child:adult ratios.

The same socioeconomic factors that largely accounted for variations from center to center in average child vocabulary scores in the fall also helped account for variations in vocabulary knowledge from child to child within centers. Parent education level and family income level were significantly related to vocabulary scores in a positive direction. Coming from an African American or language-minority family were associated with lower vocabulary scores. Other child-level factors associated with higher scores were older child age, books in the home, and more frequent parental reading to the child. Other factors negatively related to initial vocabulary scores were disability status and coming from a two-parent low-income family. The two-level regression model accounted for 29 percent of the within-center variance.

Children's initial knowledge and program quality are linked to end-of-year vocabulary skills. Variations from center to center in average spring vocabulary scores were associated with the average vocabulary score for the center in the fall. Centers that had higher average scores in the fall tended to have higher scores in the spring. However, differences were diminished, as centers with lower initial scores tended to make larger gains from fall to spring than centers with higher initial scores. For example, let us compare two centers, one with an average vocabulary score of 70 in the fall (half a standard deviation above the mean), and one with an average vocabulary score of 58 in the fall (half a standard deviation below the mean). The former center would have an average vocabulary score of 75 in the spring, whereas the latter would have an average spring score of 68.4. The former center is still above average and ahead of the latter center, but the difference between them has decreased from a full standard deviation to two-thirds of a standard deviation (6.6 points). The average score gain in the former center was 5.5 points, whereas the average gain in the latter was 10.2 points from fall to spring.

At the center level, socioeconomic characteristics were no longer significant predictors of average vocabulary score in the spring. Their effects seemed to be captured in the baseline vocabulary score. Two measures of program quality were significant predictors of spring vocabulary scores: the average ECERS language score and the child:adult ratio. Both were modestly but significantly associated with average center scores. A higher ECERS language score and a lower

child:adult ratio were related to higher average center scores. To illustrate the magnitude of the relationship between ECERS score and spring vocabulary score, let us compare two centers, one of which has an ECERS score of "3," signifying that language activities are of "minimal" quality. Contrast this with a center with an ECERS score of "6," signifying that language activities are of "good" to "excellent" quality. This three-point difference in ECERS scores would, according to the regression model, translate into a 2.3-point difference in average vocabulary W scores in the spring. This amounts to nearly one-quarter of a standard deviation.

With respect to the child:adult ratio, the regression model indicated that a difference between two centers of three more children per adult would translate into a 1.2-point lower average vocabulary score in the spring, all other things being equal. This amounts to a difference of one-tenth of a standard deviation.

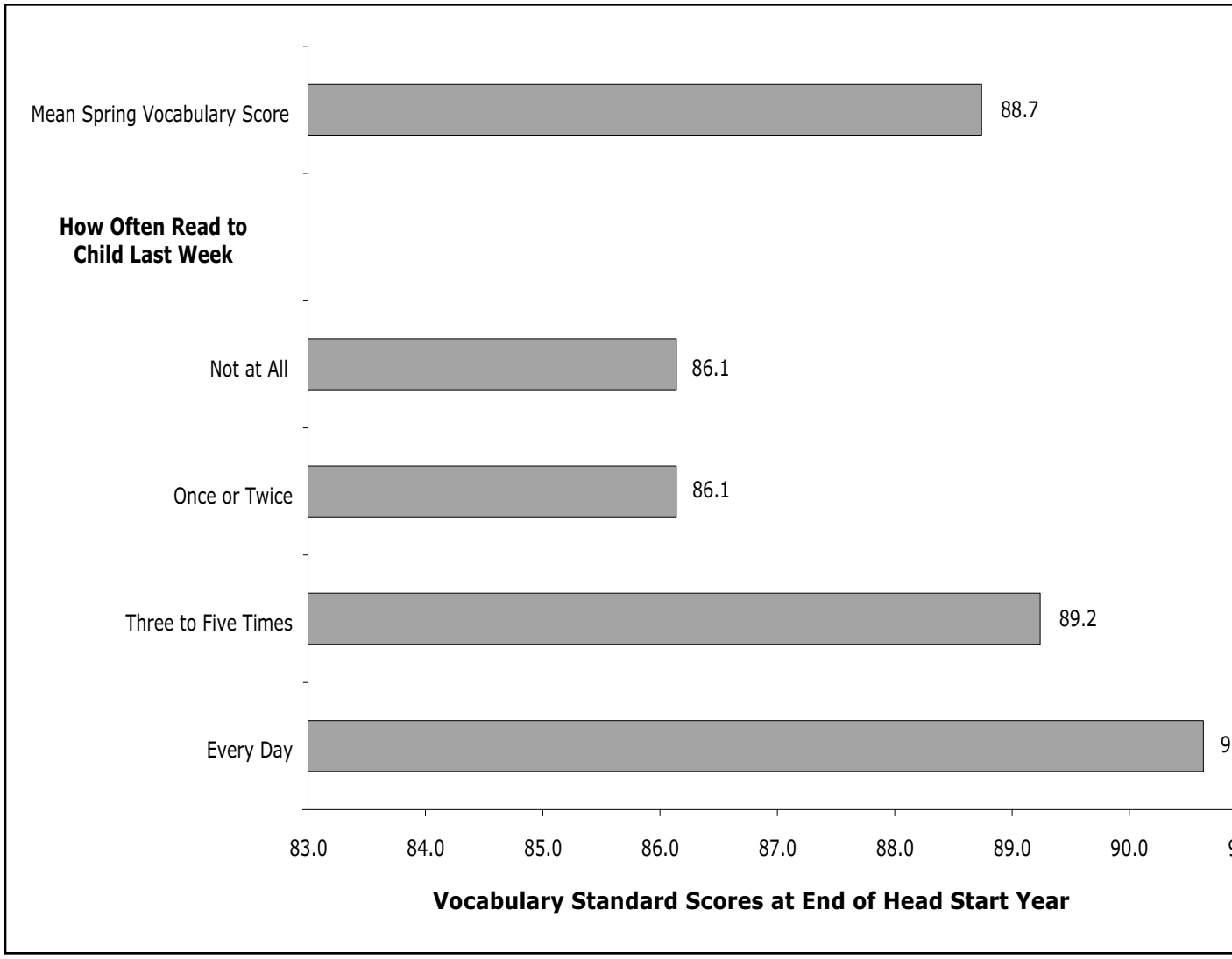
The two-level regression model did a good job of explaining variation from center to center in average spring vocabulary scores. The model accounted for 75 percent of the cross-center variance. The model also accounted for 63 percent of the overall variance in spring scores.

The baseline vocabulary score was also a significant predictor of spring vocabulary scores at the individual child level, within Head Start centers. As at the center level, fall vocabulary scores were positively associated with the *level* of the child's vocabulary score in the spring, but negatively related to the amount of *gain* in vocabulary from fall to spring. Other positive factors at the child level were parent education level, age, books in the home, and frequency of parental reading to child. Negative factors at the child-level were having an African American or language-minority family, and having a health or learning disability. The regression model accounted for 60 percent of the within-center variance in spring vocabulary scores.

As discussed in Chapter IV, program quality is also related to teacher background and experience. Preliminary analyses of the bivariate relationships between teacher backgrounds and children's vocabulary scores revealed several modest but significant findings. Head Start teachers with more years of teaching experience tended to have children who scored slightly higher on spring assessments of social awareness, vocabulary knowledge, and early math skills (r's ranged from .12 to .15, p's < .02). They also tended to have children who showed more positive behavior in the assessment situation ($r = .15$, $p < .001$), and less problem behavior in the classroom ($r = -.09$, $p < .05$). Head Start teachers with higher educational attainments tended to have children who scored slightly higher on spring assessments of vocabulary knowledge and story and print concepts (r's ranged from .09 to .14, p's < .05). The relationships with teacher experience and education were weak, however, and multilevel analyses controlling for socioeconomic characteristics of the programs and center-level factors have not yet been completed. More definitive findings must await the results of these multivariate analyses.

Parental reading to children. The frequency with which parents reported reading to their children made a difference in children's word knowledge, even when other family factors were taken into account (Figure 2.9). Children whose parents reported reading to them on a daily basis had an adjusted vocabulary standard score of 90.6 at the end of the Head Start year. By contrast, children whose parents reported reading to them not at all or only once or twice in the previous week had an adjusted vocabulary score of 86.1. This difference in word knowledge incorporates controls for related differences among the groups in parent

Figure 2.9
Head Start Children Whose Parents Read to Them More Often Have Higher Vocabulary Scores at End of Year



Differences between "Every Day" and other categories significant at p<.001.

SOURCE: Analysis of data from Fall 1997 and Spring 1998 Head Start Family and Child Experiences Survey. Vocabulary scores adjusted for parent education, income, race/ethnicity, language, minority status, and child's disability status.

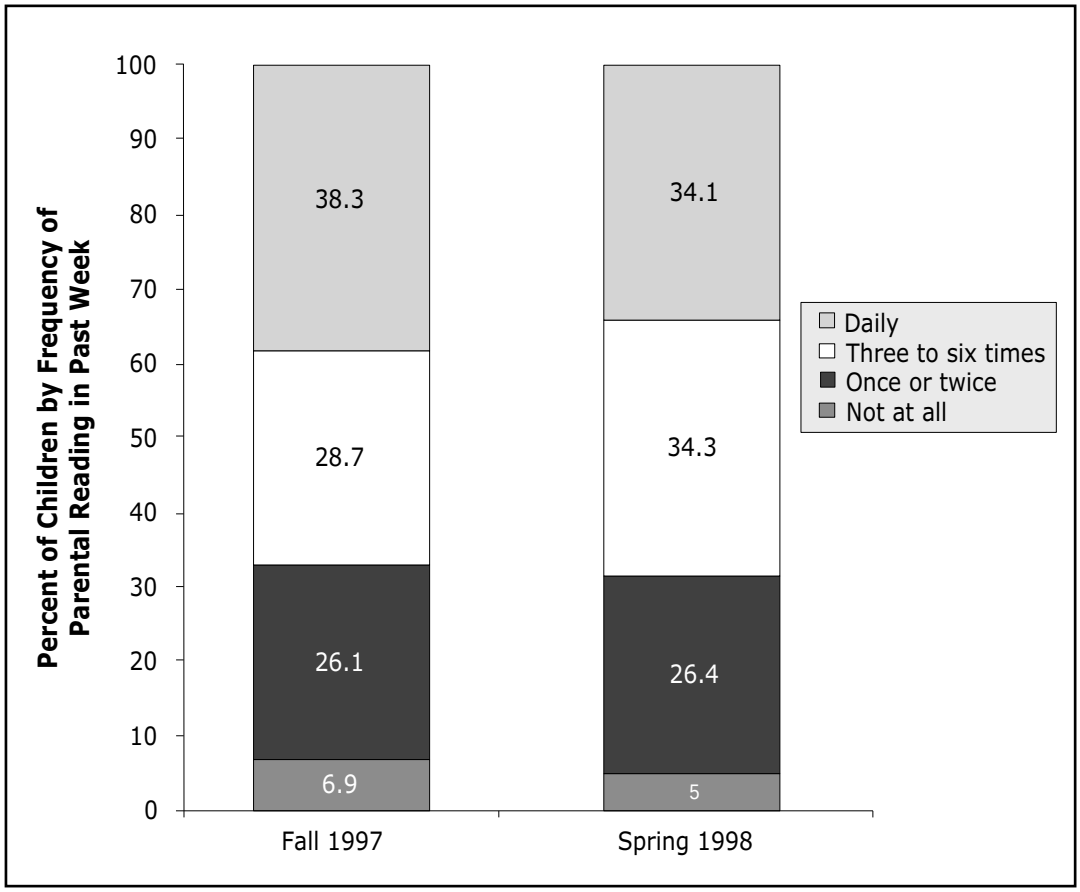
education levels, family income levels, race and ethnicity, language minority status, and child's disability status.

Level of parental reading. Given the link between parental reading and children's vocabulary knowledge, interview findings regarding the frequency of parental reading to children in fall and spring were somewhat troubling.

Compared with data from the National Household Education Survey (NHES)[6], at entrance to the program, Head Start parents are comparable to other low-income families in their frequency of reading to their children. According to the Fall 1997 parent interview, 38.3 percent of Head Start parents read to their children every day, 28.7 percent of parents read to their children at least three times per week, and 26.1 percent of

[6]The National Household Education Survey is a periodic data collection effort. In 1999, NHES collected data on Parent and Family Involvement in Education with a randomized sample of over 20,000 interviews.

Figure 2.10
Frequency of Reading to Children by Head Start Parents Shows Little Change From Fall to Spring of Program Year



SOURCE: Head Start Family and Child Experiences Survey (FACES), children whose parents were interviewed in both Fall 1997 and Spring 1998.

parents read to their children once or twice per week, while 6.9 percent of parents did not read to their children at all. While these numbers are similar to other low-income families, they vary significantly from the general population of U.S. preschoolers. Among all preschoolers, over half (52.8 percent) were read to on a daily basis, and 28.2 percent were read to at least three times a week. Only 15.6 percent were read to once or twice a week, and 3.4 percent not at all.

Overall, the frequency of reading to children by Head Start parents showed little change over the course of the program year. The proportion of parents who did not read to their children at all in the previous week did decline from fall to spring, and more than two-thirds of Head Start parents reported reading to their children at least three to five times a week. But the proportion who said they read to their children every day did not increase (Figure 2.10). It would appear that Head Start programs could be doing more to encourage regular reading by parents.

Summary of Variation in Children's Emergent Literacy

Findings revealed substantial variation across and within Head Start centers in children's emergent literacy skills, both at program entry and at the end of the program year. Variations in children's initial knowledge were clearly linked to the socioeconomic characteristics of the parents. Specifically, centers with more children of non-minority racial and ethnic background, with parents who had some college education, and with more families whose incomes were at the upper end of the poverty range had higher vocabulary scores. At the end of the Head Start year, centers with children who demonstrated higher levels of knowledge in the fall still tended to have higher scores in the spring. However, these differences were reduced, indicating that Head Start worked to narrow the gap between children of different skill levels. Two aspects of program quality were significant predictors of spring vocabulary scores. Centers with higher average scores on the ECERS language scale and lower child:adult ratios had higher average center scores. In addition, children whose parents read to them more frequently and had more books in the home had higher vocabulary scores. Thus, even though parental socioeconomic status has important effects on children's abilities, program quality can still significantly affect children's development.

E. Observing Children's Social Play in Head Start Classrooms

To complement measures of cognitive and language development and expand the assessment of children's school readiness, FACES employed an innovative method to measure children's social development: observations of individual study children engaged in play with peers.

A preschool child's ability to initiate play with peers, to enter ongoing play groups, to resolve conflicts with peers, and to engage in complex pretend or dramatic play with other children are critical indicators of social development (Howes, Unger, & Seidner, 1989; Howes & Matheson, 1992). In fact, social pretend play is considered the highest form of play in which a child can engage because it requires a host of both cognitive and social skills. The child must be adept at using symbols by transforming ordinary objects into pretend objects, and the child must be able to communicate these "shared meanings" to a partner. In addition, the child must be able to cooperate with this partner in an interaction that involves identifiable and mutually acknowledged themes or scripts (Howes, 1985).

In FACES, the observational measure chosen to assess children's social play was an adaptation of

the Howes Peer Play Scales. These scales have a relatively long history of use in studies involving toddlers and preschoolers in child care, home-based and Head Start settings (Howes, 1980; Howes & Stewart, 1987; Howes, Unger, & Seidner, 1989; Lamb et al, 1988). The Howes Peer Play Scales have also been used previously in several national studies of early child care including the National Child Care Staffing Study (Whitebook, Howes, & Phillips, 1989; Howes & Matheson, 1992) and the Cost, Quality and Outcomes Study (Cost, Quality and Outcomes Study Team, 1995).

Procedure for Administering the Howes Peer Play Scales

Observations of children's play with other children in the classroom were conducted by the same observer who was assessing classroom quality. The Howes Peer Play Scales were completed during specific periods in the Head Start day, such as free play, free choice, learning centers, and outdoor play, when the children were not engaged in teacher-directed or routine activities. Up to six children in each classroom were observed for alternating 20-second intervals until that particular free play session ended. Whenever unstructured play resumed, the observer would pick up where she left off, observing each child in turn. A minimum of 30 twenty-second intervals for each study child was required; otherwise the observers returned a second day to collect additional intervals.

There were 2,288 children from 308 classrooms in the fall of 1997 who were observed using the Howes Peer Play Scales with an average of 41.2 twenty-second intervals collected per child. Reliability in the field was checked by research staff conducting parallel but independent coding of the same children during the same intervals as the field observer. Fall 1997 data indicate that reliability was good, ranging from 69 percent agreement to 93 percent agreement for all Howes Peer Play Scales.

There are four levels of social play assessed by these observations, representing children's social abilities in play with peers. A child who spends more of his/her free play time in higher levels of play with peers has been found, in prior research, to show higher levels of social development including secure attachment (Howes & Rodning, 1992) and higher prosocial ratings from teachers. These children were rated as being less hesitant, more sociable, and as having less difficulty with peers (Howes & Matheson, 1992). The levels of social play are described below, ordered from lowest to highest level of social play:

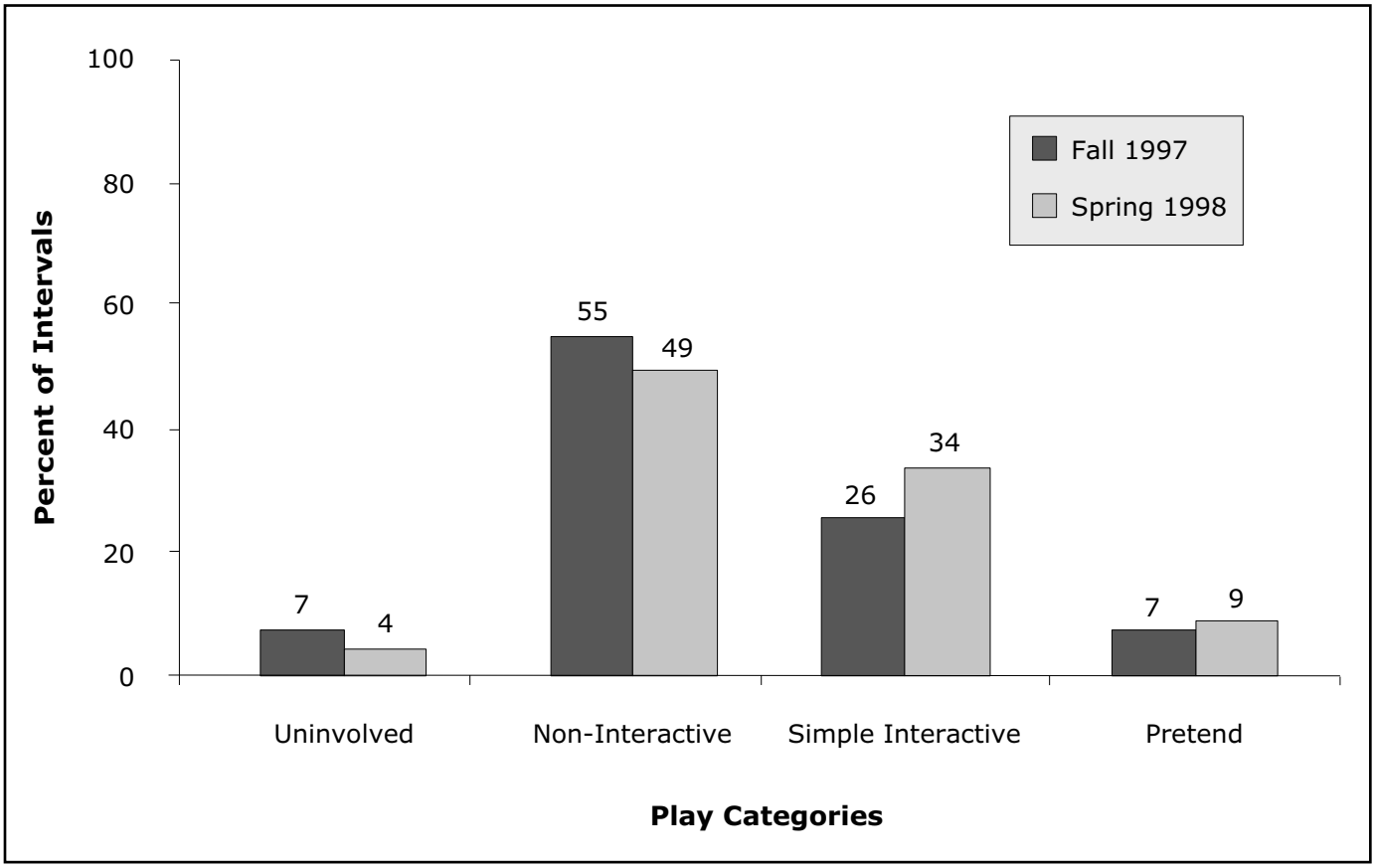
- *Uninvolvement* is assigned when the child is not engaged in play either by him/herself or with others. The child who is given this code is either not playing, is not focused on any activity, or is watching other children play without participating directly in the play;
- *Non-Interactive* play indicates lower levels of social play that consist of the target child playing alone or in the company of one or more peers in the same area (i.e., the block area), but there are no interactions between children;
- *Simple Interactive* play is assigned when a child is interacting with one or more peers as part of their play by taking turns in a game, showing non-verbal interactions or through playful conversation; and
- *Pretend* play is scored when a child is in a pretend or dramatic play situation with at least one peer, where each child takes on an implicit or explicit role within the dramatic situation, such as pretending to be at a tea party or in a post office.

Descriptions of Head Start Children's Play With Peers

Figure 2.11 displays the average percentage of time that children in the sample spent in each form of social play, in the fall and the spring of their Head Start year (Fall 1997 and Spring 1998). This analysis was conducted for the 1,674 children for whom data were available at both time periods. This figure shows that, at the beginning of their Head Start year, children spent approximately 88 percent of their play time engaged in play behaviors rather than looking at others play, or being unoccupied.[7] The children spent the bulk of their play time involved in non-interactive forms of play, such as playing by themselves or playing in

[7]There was also a small percentage of time that children were coded as engaging in routine caregiving activities or where they were out of the classroom during the observation periods that is not included in the four play categories. As a result, the percentages in Figure 2.11 do not sum exactly to 100 percent.

Figure 2.11
Howes Peer Play Scales,
Change from Fall 1997 to Spring 1998, Percent of Time Spent in Play, N=1,674



Notes:
a. All comparisons were significant at p<.05 or better, using repeated measures ANOVA.
b. Percentages do not sum to 100 because some intervals when children were engaged in routine caretaking activities or were out of the classroom were not included in this analysis.

the presence of peers (in parallel) but not interacting with them. About a third of the children's play was spent interacting with peers, either in simple interactive or pretend play. Head Start children were observed for 7 percent of their play time in pretend or dramatic play.

These peer play data were compared to those reported in previous research to assess the validity of this measure for Head Start children. In one study involving 87 3- and 4-year-old children from the National Child Care Staffing Study sample (Howes & Matheson, 1992), the scores on the Howes Peer Play Scales are comparable in some ways to the FACES data.

Compared with the Howes and Matheson data, the Head Start FACES children spent about the same amount of time in non-interactive and simple interactive play, but less time in pretend play. Pretend or dramatic play relies heavily on language ability. The children in the FACES sample are behind the national norms for language, particularly in the fall of their Head Start year. Thus, it is not surprising that the children in the FACES sample spent somewhat less time engaging in this type of play.

Overall, the comparison with prior research supports the validity and feasibility of using the Howes Peer Play Scales in national studies such as FACES. Observations of individual children in "real time" are a useful adjunct to the quality observations and the direct child assessments, thereby extending the variety and richness of the FACES dataset.

Changes in Play From Fall to Spring

Figure 2.11 shows the changes in Head Start children's play from the fall to spring, primarily in the amounts of uninvolved or solitary play, for the 1,674 children observed at both time periods. The percentage of time that children spent uninvolved significantly decreased from 7 percent to 4 percent. The children significantly increased the percentage of time spent in simple play interactions with peers from 26 percent in the fall to 34 percent of their time in the spring.

Children's Social Play Is Correlated With Classroom Quality

Children who spent more time in uninvolved, non-play tended to be in lower quality classrooms. These classrooms were marked by lower quality of language-related activities and fewer stimulating learning materials present in the classrooms. The classes were larger and had teachers who were rated as being less sensitive and responsive. Children in classrooms rated higher in learning environment materials spent more time in simple interactive play or pretend play, and less time in non-interactive play.

These results suggest that higher quality in Head Start classrooms is related to more highly-developed social play. The strongest relationships occurred for the lowest level of play (uninvolvement). This points to the possibility that classroom quality below a certain threshold has an effect on children's choices during free play situations—whether to play or not. Above this threshold, varying levels of quality may not translate into more complex forms of play.

Ratings of Children's Play Are Related to Other Measures of Children's Skills

Children who were rated by the teacher as having more behavior problems spent more time in non-interactive play. Children who were rated by the teacher as having few behavior problems spent a greater proportion of their play time in interactive and pretend play. Children who were rated high-

er in social skills by the teacher spent significantly more time in simple interactive and pretend play. Children who were rated lower in positive social behavior spent significantly more time in non-interactive play. These findings support the utility of the Howes Peer Play Scales for providing independent and corroborative evidence concerning the children's social development in Head Start.

Summary of the Howes Peer Play Data

The use of an observational measure of children's play behavior with peers in the classroom has provided information about the forms and complexity of play in Head Start classrooms. The data from the Peer Play Scales reveal how classroom processes interact with children's social development, and provide a window into their social development that parallels reports from teachers. Quality appears to make a difference in whether children are engaged in any form of play. Classrooms that do not have sufficient and diverse learning materials, that have lower quality of language-related activities, and that have teachers who are not sensitive and responsive are more likely to have children who are uninvolved during their free play time. The effects of Head Start on children's play are still under investigation but the change in the levels of play complexity from the fall to the spring of the children's Head Start year appears indicative of a promising avenue for the measurement of program performance.

F. Head Start Graduates Show Substantial Progress in Kindergarten

One indication of how well Head Start prepares children for school is the amount of progress graduates of the program make during their kindergarten year. There were 989 children who were assessed both in the Spring 1998, while they were in Head Start, and in the Spring 1999 kindergarten follow-up. Some 611 of these children were assessed in English on both occasions. (The remainder were assessed in Spanish on one or both occasions.) By comparing their assessment results in Spring 1998, at the end of their Head Start participation, with those in Spring 1999, toward the end of their kindergarten year, an indication of how much they learned in the interim is obtained. Results of the FACES kindergarten follow-up suggest that children leaving Head Start are indeed "ready to learn," because they have, in fact, learned a great deal by the end of kindergarten.

In the Spring 1999 assessment, Head Start graduates in kindergarten showed an increase of nearly 20 points on the Peabody Picture Vocabulary Test over their performance on the test a year earlier (Figure 2.12). In comparison to national norms, they showed a further gain, with an average increase in standard scores of 3.3 points, to a mean standard score of 93.5 in the spring of kindergarten.

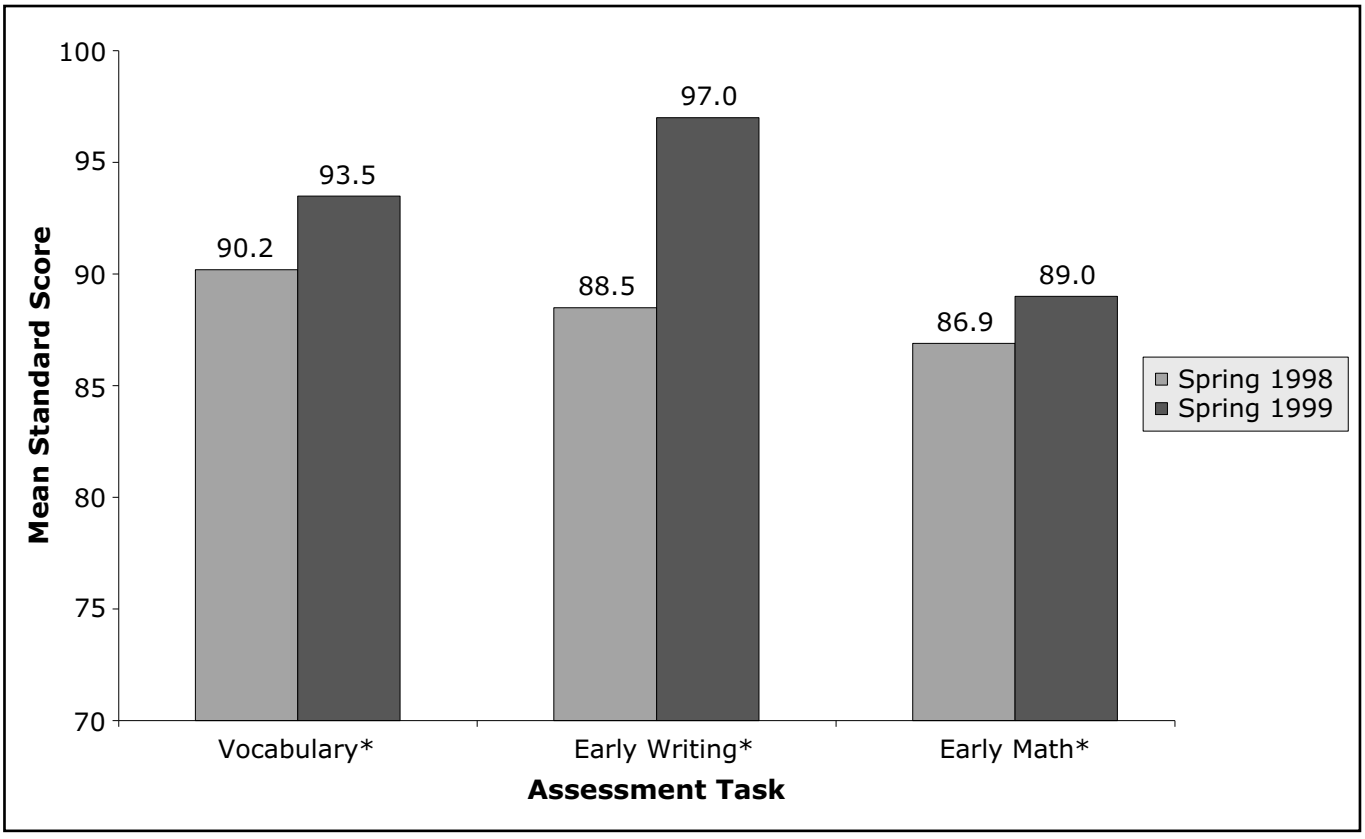
A typical Head Start child could only recognize one or two letters in the Woodcock-Johnson Letter-Word Identification task in the spring of the Head Start year. In the spring of kindergarten, they were assessed with the Reading Assessment used in the Department of Education's Early Childhood Longitudinal Study of the Kindergarten Class of 1998-99 (ECLS-K) (Figure 2.13). Their performance on this task indicated that 83 percent of the Head Start graduates could identify most or all letters of the alphabet, both in upper-case and lower-case form. More than half could also associate letters with the beginning sounds of simple words. They were able to write letters on request in the Woodcock-Johnson Dictation task, whereas they were not able to do

this while in Head Start. In a related task, virtually all the graduates could write their first names by the end of kindergarten.

The standard scores of the Head Start graduates showed significant increases on the Dictation task (early writing) and on the Applied Problems (early math) task, which required children to solve simple addition and subtraction problems. Children showed an 8.5-point gain in the writing task, to a mean standard score of nearly 97. They showed a 2-point gain in the math task, to a standard score of 89.

Head Start graduates showed gains as well in a phonemic analysis task, which tested children's awareness of word sounds by requiring them to say one part of a compound word without the other part (e.g., "Say 'mailbox;' ...Now say it without 'mail'"). The graduates also showed significant progress in familiarity with book and print conventions, listening comprehension, and ability

Figure 2.12
By End of Kindergarten, Head Start Graduates Show Gains in Word Knowledge, Writing, and Math Skills Compared to National Norms



*Significant at p<.05 or better.

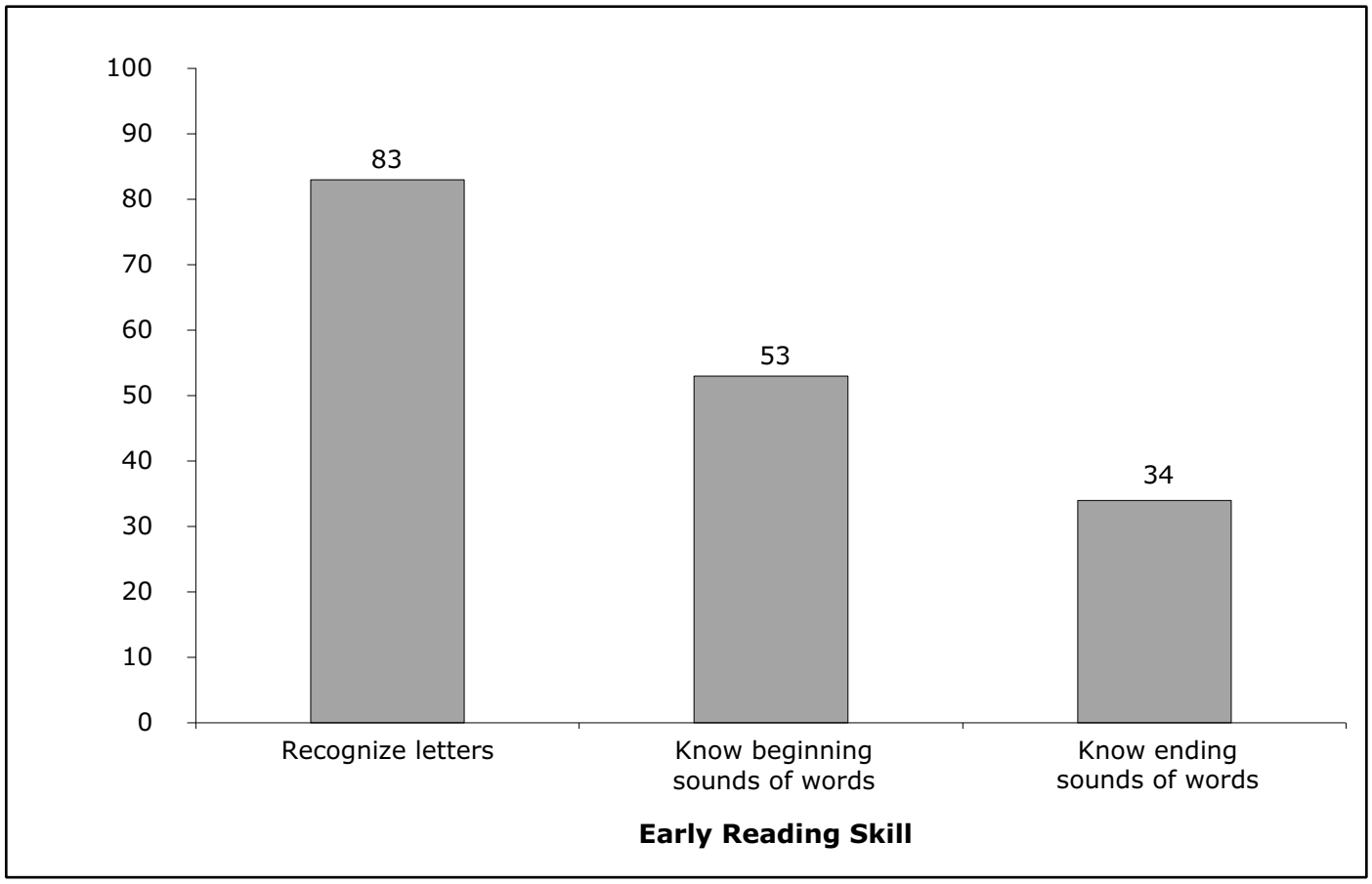
SOURCE: Head Start Family and Child Experiences Survey (FACES), Spring 1998 and Spring 1999 kindergarten followup, children who were in kindergarten in Spring 1999 and received English-language assessments both times.

to recite basic facts about themselves such as first and last name, age and birthday.

The skills that typical Head Start graduates could demonstrate, such as letter recognition, expanded word knowledge, phonemic awareness, and knowledge of book and print conventions, have been shown to be positive predictors of learning to read. The signs are that most Head Start graduates at the end of kindergarten are well on their way to becoming readers in first or second grade.

However, despite the substantial progress they made in kindergarten, Head Start graduates continued to score below national norms on most tasks for which norms were available. The gaps were smaller than in Head Start, but they were still there. For example, whereas typical Head Start graduates could recognize most letters and associate letters with the beginning sounds of words, their performance on the ECLS-K reading assessment indicated that they could not yet identify letters with sounds at the end of words. A

Figure 2.13
By End of Kindergarten, Majority of Head Start Graduates Can Recognize Letters and Associate Letters With Beginning Sounds of Words



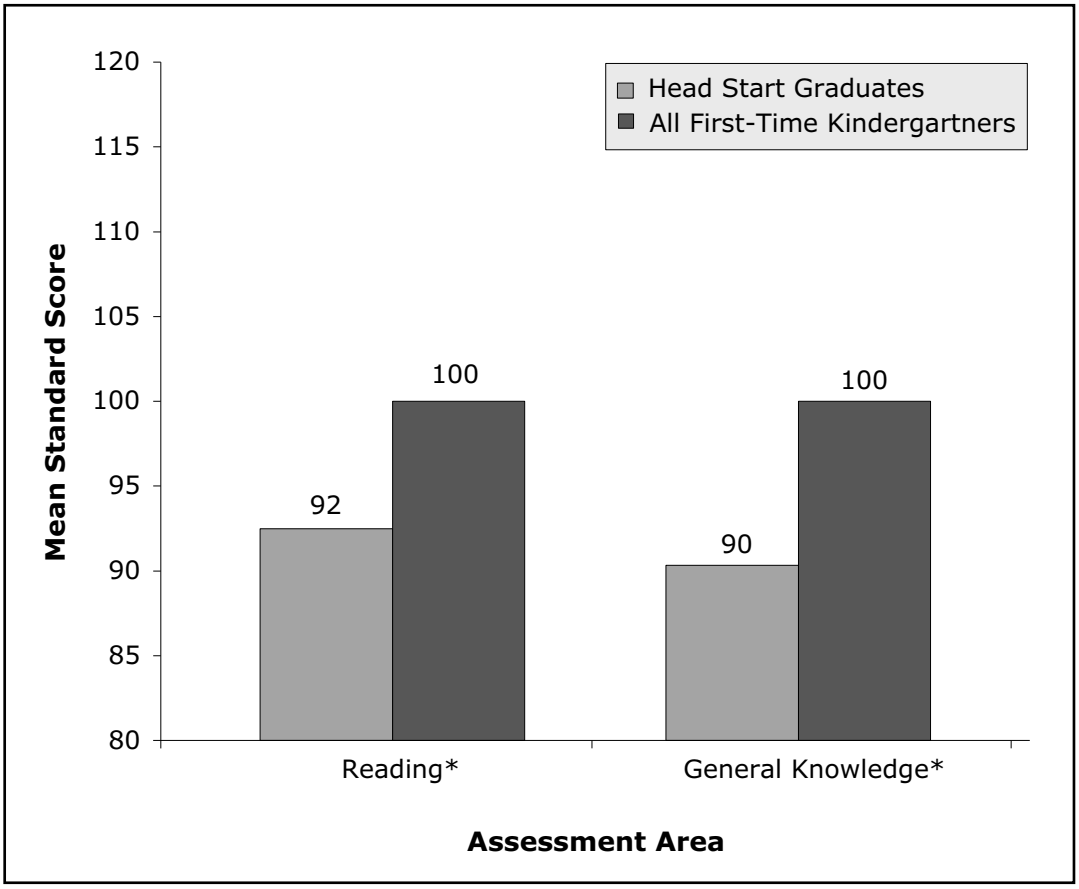
SOURCE: Head Start Family and Child Experiences Survey (FACES), Spring 1999 kindergarten follow-up study.

majority of all kindergartners could do this by the end of the year, according to the ECLS-K data (Figure 2.14).

G. Conclusions

Assessments of a national sample of Head Start children in the fall and spring of the program year showed that, by the end of the year, Head Start children possessed academic knowledge and social skills that indicate a readiness to learn when the children reached kindergarten and first grade. Notably, FACES found evidence that Head Start works to narrow gaps between children who begin the program at differing levels of school readiness. Assessments of a national sample of Head Start graduates at the end of kindergarten showed further that children had made substantial gains in word knowledge, letter recognition,

Figure 2.14
Head Start Graduates Are Somewhat Behind Average Kindergartner in Reading and General Knowledge at End of School Year



*Significant at p<.05.

SOURCE: Head Start FACES, Spring 1999 Kindergarten Followup and Early Childhood Longitudinal Study, Spring 1999 assessments.

writing skills, and phonemic awareness during the course of kindergarten.

Language-minority children in Head Start showed gains in school readiness and in their knowledge of English. By spring, most Spanish-speaking children in predominantly English-language programs were able to perform a number of school-related tasks better in English than they had in Spanish in the fall, or at least as well. Spanish-speaking children in predominantly English-language programs had similar fine motor and early writing skills as their English-speaking peers, but continued to trail other children on tasks that require English-language proficiency.

Findings revealed substantial variation across and within Head Start centers in children's emergent literacy skills, both at program entry and at the end of the program year. Variations in children's initial knowledge were linked to the socioeconomic characteristics of the parents. Two aspects of program quality were significant predictors of spring vocabulary scores: the quality of language activities and child:adult ratios. In addition, children whose parents read to them more frequently and had more books in the home had higher vocabulary scores. Thus, even though parental socioeconomic characteristics have important effects on children's abilities, program quality can still significantly affect children's progress.

The data from the Howes Peer Play Scales revealed that children's play became more complex over the course of the Head Start year. Further, quality appeared to make a difference in whether children were engaged in any form of play. Classrooms that did not have sufficient and diverse learning materials, that had lower quality of language-related activities, and that had teachers who were not sensitive and responsive were more likely to have children who were uninvolved during their free play time.

The FACES child assessments suggest several areas in which the Head Start program might be strengthened. Children in Head Start showed significant gains in vocabulary and writing skills over the Head Start year, but no gains in letter recognition or book knowledge. They showed significant gains in social skills, but little or no change in problem behavior, with the exception of hyperactive behavior. Further, while children entering the program with lower skills showed significant gains, children with higher skills showed little or no gains.

Children's word knowledge was related to the frequency of parental reading to their children, but parent interviews showed no increase from fall to spring in the proportion of parents who reported reading to their children every day. The FACES findings suggest that Head Start children and families might benefit from more classroom activities aimed at nurturing early literacy skills, and more support for parents on the importance of reading to children and other literacy activities at home. Programs should also focus more on services for children with behavior problems.

Chapter III

Objective 2: Does Head Start Strengthen Families as the Primary Nurturers of Their Children?

"Strengthening families as the primary nurturers of their children" is the second of Head Start's performance objectives. Head Start engages parents (or primary caregivers) in classroom and program support activities, program governance, parent education, and family assessments and goal setting. This chapter provides a description of Head Start family and child characteristics and the environments in which the children are raised.

A. Introduction to the Parent Interview

Face-to-face interviews were completed with the primary caregivers for 3,156[8] children in Fall 1997 and 2,688 in Spring 1998. Nearly all the respondents (94 percent) were the parents of children enrolled in Head Start, and most interviews (88 percent) were conducted with the mothers of the Head Start children. The information presented in this chapter is drawn from these interviews, except where noted that the findings are drawn from the embedded case study. Interviews were generally conducted at the local Head Start centers (80 percent) or in the children's home (14 percent). Over 17 percent of the interviews were conducted in Spanish (16.9 percent) or another non-English language (0.5 percent).

Typical interviews lasted about one hour, with Spanish language interviews taking about 15-30 minutes longer. The FACES Parent Interview was designed to collect basic descriptive information about the respondent, the child, and each child's household. Data about the family's perspective about their local Head Start program were also collected. In addition to basic demographic data, the categories of information on which data were

[8] 3,156 interviews represent the number interviewed in Fall 1997 plus supplemental baseline information gathered in Spring 1998 from families not interviewed the previous fall.

Table 3.1
The FACES Parent Interview Instrument

The FACES Parent Interview was designed to collect basic, descriptive information about the respondent, the child and each child's household. In addition to demographics, information was collected on the following topics:

- Satisfaction and Activities With Head Start
- Family Activities With the Child
- Disabilities
- The Primary Caregiver's Assessment of Child Skills and Social Behavior
- Household Rules
- Employment, Income and Housing
- Use of Community Services
- Child Care
- Family Health Care
- Home Safety Practices
- Home and Neighborhood Characteristics
- Ratings of Social Support
- Feelings of the Primary Caregiver About Herself/Himself

collected are listed in Table 3.1. The nature of the FACES interview allows it to identify changes in household and family characteristics that can assist in understanding factors among this population that might correlate with child development outcomes. However, it does not allow for an assessment of Head Start's impact on families.

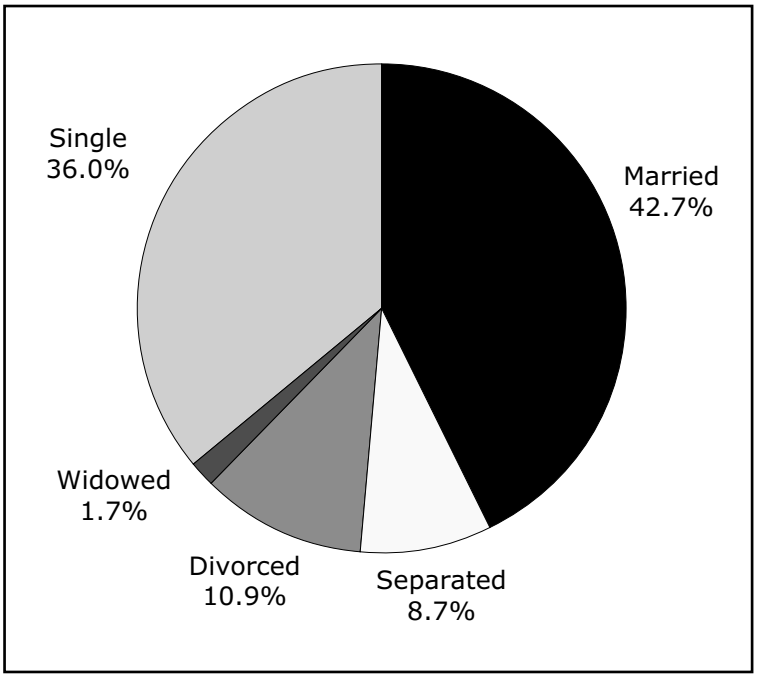
B. Family and Household Description

Family Descriptors

Head Start children. The representative sample of Head Start children presents a picture of a very diverse national group. Approximately 40 percent of the children represented in the sample were 3-years-old at the time of the Fall 1997 interview, while the remainder were four or five years of age at that time. Just over 50 percent of the children were males, and over 98 percent of the children were born in the United States (including Puerto Rico). Among the children, 37 percent were African American, 28 percent were White, and 24 percent were Hispanic.

Over 16 percent of the children were reported by their primary caregiver to have one or more disabilities. Twelve percent of the overall sample were identified as having a speech or language impairment, by far the largest category of disabilities. The other main categories included children who were reported to have emotional/behavioral disorders (2 percent) and learning disabilites (1 percent each). The frequencies based on caregiver reports are, in general, slightly higher than the reports for the program as a whole, which are taken from the Program Information Report (PIR), the annual report of local program data for all Head Start programs. PIR data include only children who have been determined by a multi-

Figure 3.1
Primary Caregivers Were
Equally as Likely to be Married as Single



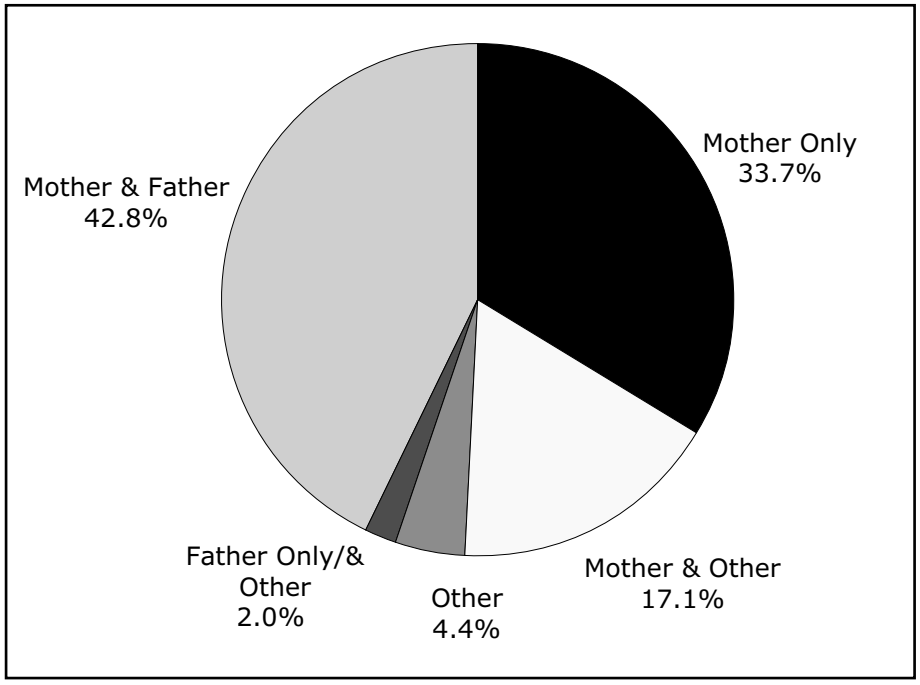
disciplinary team to have one or more disabilities. Detailed information on the identification of disabilities and services provided to children with disabilities is provided in Chapter IV, Highlight on Head Start's Services to Children With Disabilities and Health Problems: A Special Case of Head Start Quality.

Primary caregivers. The respondents, required to be primary caregivers, were mostly mothers (88 percent). Most respondents were in their twenties (59 percent), with an additional 29 percent in their thirties. About 9 percent were 40 or older (most of these were grandparents or foster parents) and a small group (2 percent) was under 20 at the time of the interview. On average, Head Start households consisted of approximately 4.6 individuals, with a range of 2 to 15. Just over 51 percent of the primary caregivers were married, including 9 percent who were separated at the time of the interview (Figure 3.1). About 36 percent of caregivers were single, never married, while an additional 11 percent were divorced.

Household structures. Household configurations are another example of variation among Head Start families. One or both parents were present in about 96 percent of households, but both parents were present in only 43 percent (Figure 3.2). Mothers were the sole adults in the household for one-third of Head Start children; in 2 percent of households, fathers were present but the mother was not.

A large percentage of Head Start children lived in homes in which close family members left or

Figure 3.2
Mothers Were Present in 93 Percent of the Households; Fathers Were Present in 45 Percent of the Households

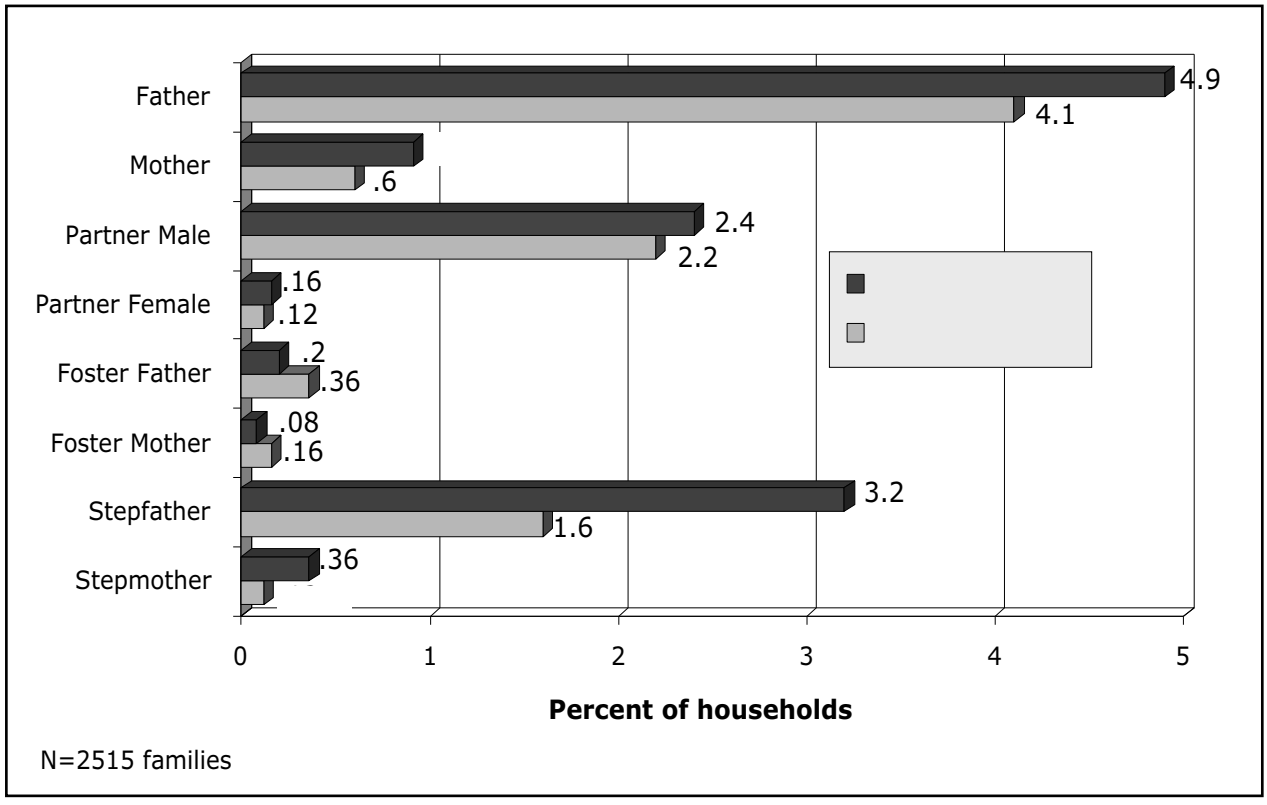


moved into the home over the year. While in some cases these changes were due to the birth of a new sibling, most frequently it was the arrival or departure of a father or a father-figure. For the 2,515 households reporting in both Fall 1997 and Spring 1998, about 43 percent of the households reported some change in household composition. Twenty-eight percent experienced someone leaving the home, while 32 percent experienced someone joining the household. In about 19 percent of households, fathers or father-surrogates (male partners, stepfathers, foster fathers) joined (11 percent) or departed (8 percent) from the family (Figure 3.3). In contrast, only 2.5 percent of mothers or mother-surrogates (female partners, stepmothers, foster mothers) entered (1.5 percent) or left (1 percent). Head Start children gained brothers (6.5 percent) and sisters (6 percent) at about the same rate (mostly newborns), but a significant number of children had brothers (3.5 percent) or sisters (over 4 percent) leave the household as well. Finally, households were more likely to lose grandparents, particularly grandmothers, than gain them. Significant increases in monthly income occurred when fathers, stepfathers, or grandparents joined a household, while the household income decreased significantly when a female non-relative left the household.

Family Financial Resources

Income and employment. The household income as collected by FACES includes income sources that are not accounted for in the Head Start eligibility criteria. About 42 percent of households

Figure 3.3
Males Made the Largest Contribution to Change in Household Composition From Fall 1997 to Spring 1998



reported that during the month prior to the Fall 1997 interview, they had less than $1,000 income from all sources, including Temporary Assistance to Needy Families (TANF) (Figure 3.4). An additional 41 percent of the households were reported to have between $1,000 and $2,000 as their income during the previous month. Over 85 percent of households reported supplemental sources of income from such sources as Medicaid, WIC, food stamps, child support SSI/SSDI, energy assistance and social security retirement funds. Over the Head Start year, monthly family income increased significantly from $1,242 in the fall to $1,339 in the spring.

Consistent with recent national trends, 27.2 percent of primary caregivers reported receiving TANF in Fall 1997, but only 23.5 percent were recipients in Spring 1998. This change represents a 14 percent decline of receipt of welfare assistance by Head Start parents. More than 53 percent of the primary caregivers were employed in Fall 1997 (full or part-time/seasonal), and that percentage increased to 55 percent by Spring 1998. This increase was entirely accounted for by primary caregivers entering full-time work (Figure 3.5).

Education. About 72 percent of primary caregivers reported having at least a high school diploma or GED (Figure 3.6). Across the entire sample, about 35 percent had attended some college, including almost 9 percent who had achieved an Associate's degree (6 percent) or a more advanced degree. Further, 9 percent of primary caregivers reported having obtained a license, certificate, or degree between Fall 1997 and Spring 1998. Focusing on the parents of the

Figure 3.4
Income of Head Start Families
The Prior Month Income Was Less Than $1500
for Over Two-thirds of the Head Start Households

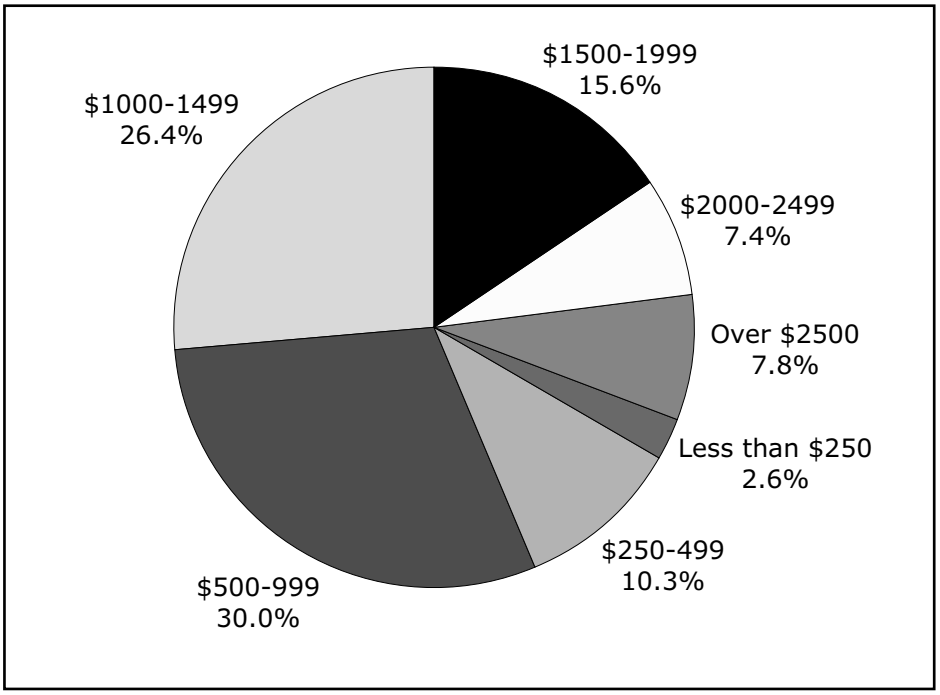
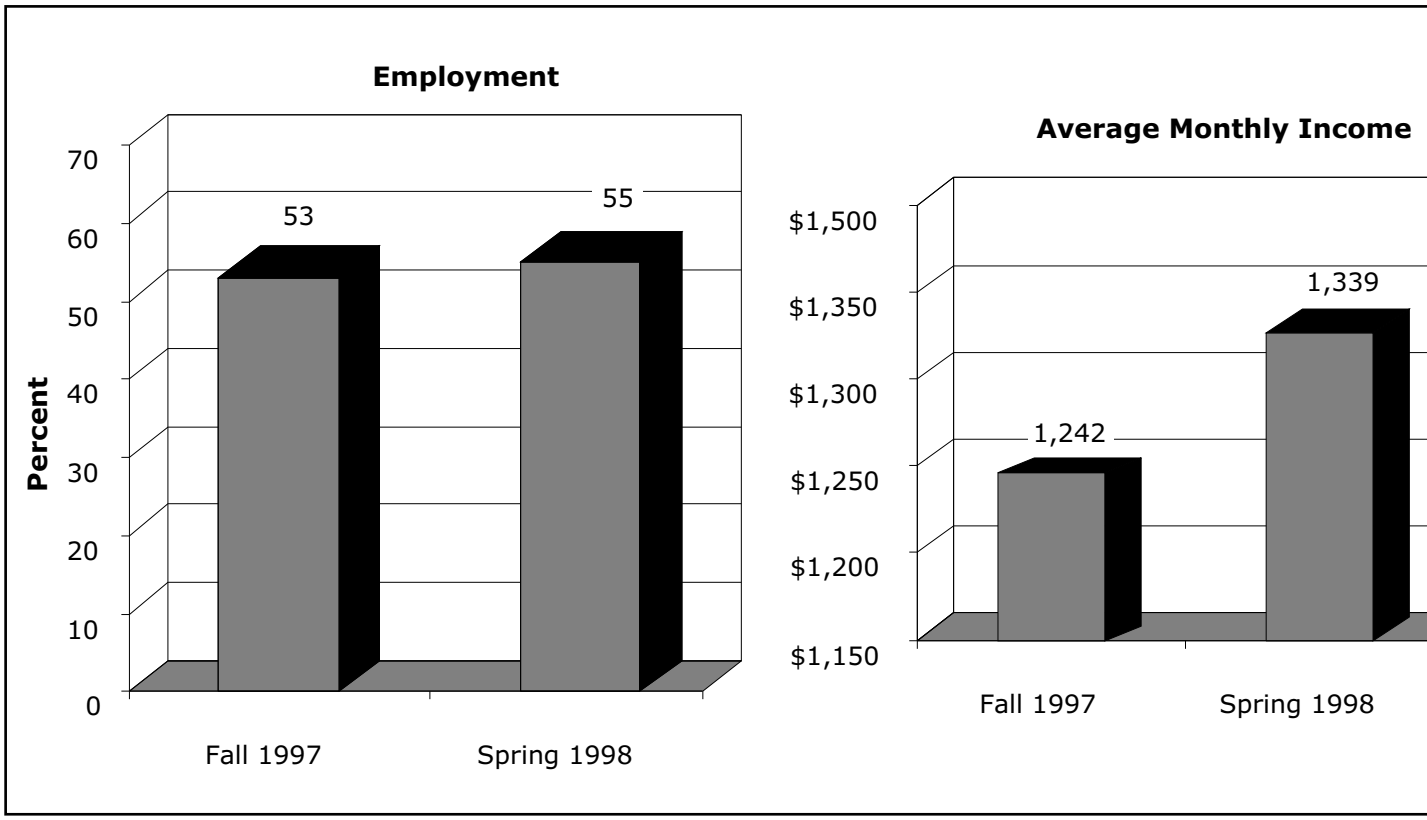


Figure 3.5
Percent of Parents Employed and Average Monthly Income



Head Start children, 70 percent of the mothers had at least a high school diploma or GED, while 63 percent of the fathers had at least a high school diploma or GED.

Family Emotional Resources

Families need outside sources of support in raising a family with young children. By Spring 1998, over 94 percent of primary caregivers reported that Head Start was helpful (27 percent) or very helpful (67 percent) as a source of support for raising their child (Figure 3.7). Overall, Head Start was considered slightly more helpful than relatives, and much more helpful than friends, other parents, co-workers, people from religious/social groups, professional helpgivers, or child care staff. Even at the beginning of the 1997-98 program year, local Head Start program staff were most often rated as a helpful or very helpful (91 percent) source of support.

The status of parental mental health is an issue of concern to Head Start because of its relevance to parental well-being and to parents' interactions with their children. Therefore, two psychosocial measures were administered to the primary caregivers as part of the interview—the Pearlin

Figure 3.6
Most Primary Caregivers Had at Least a High School Diploma or a GED

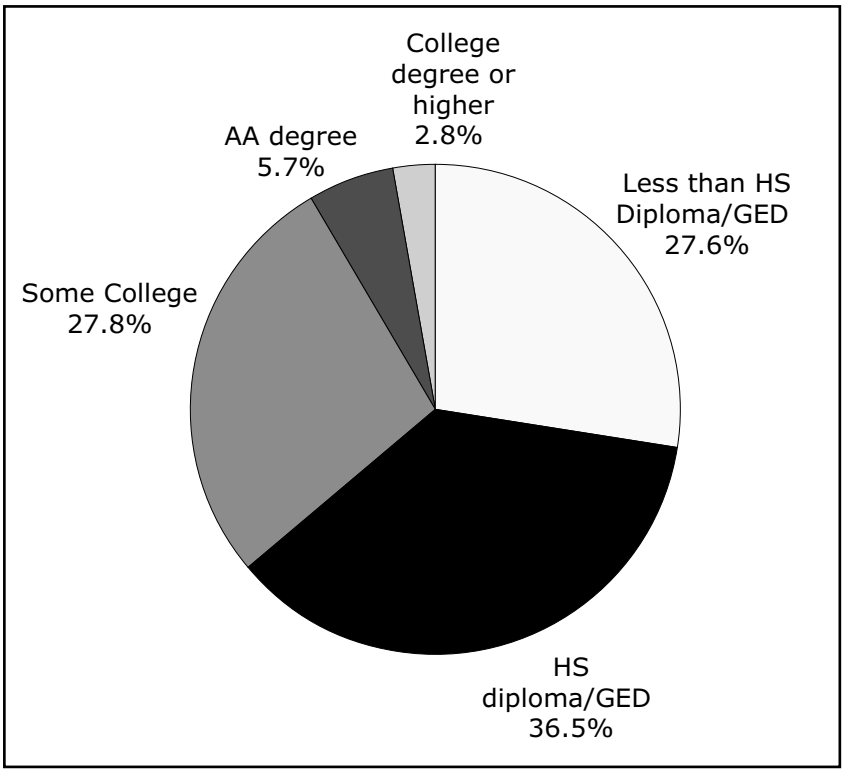
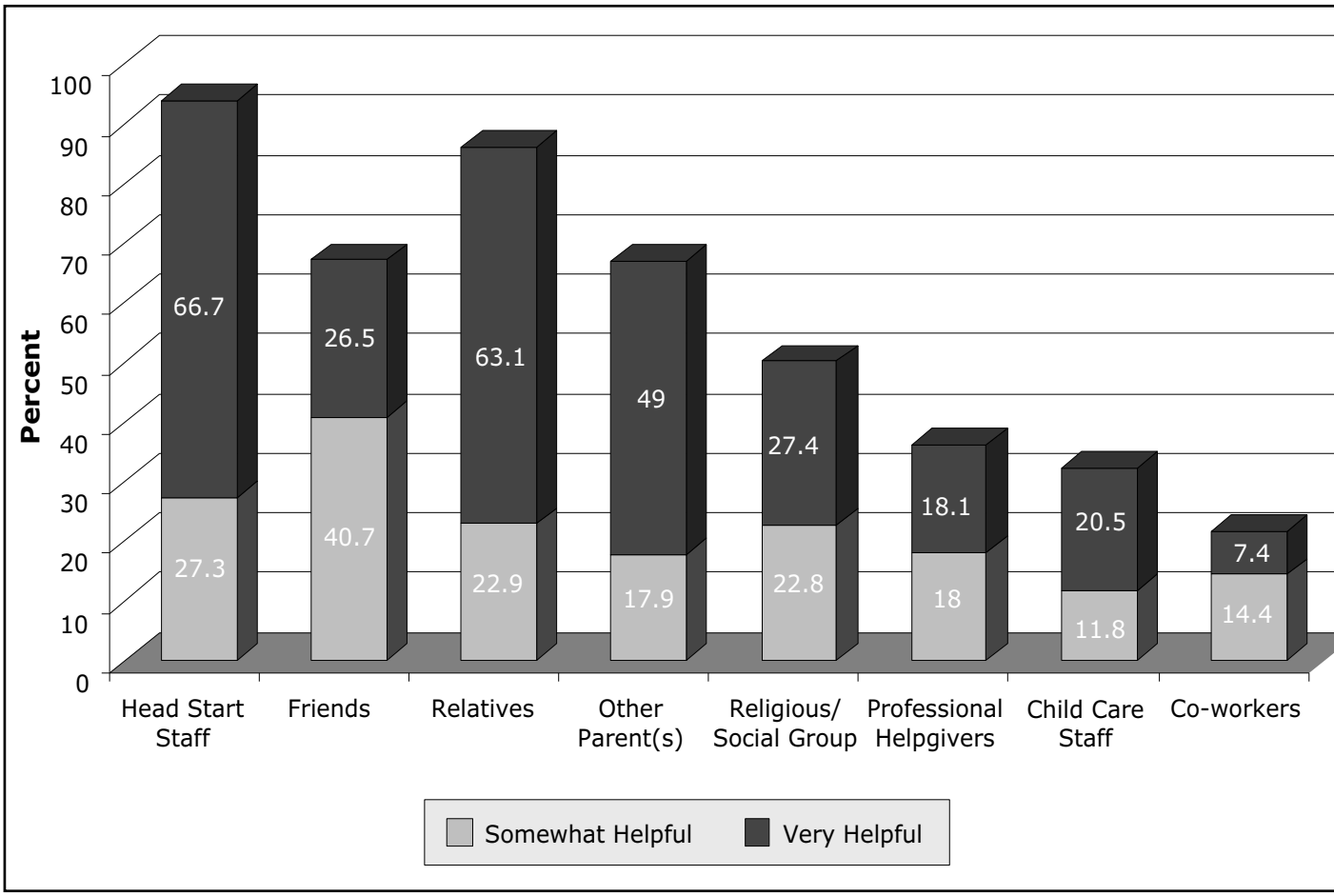


Figure 3.7
In Spring 1998, Primary Caregivers Reported That
Head Start Was Important as a Source of Support for Raising Their Child



Mastery Scale and the Center for Epidemiologic Studies-Depression Scale (CES-D). The Pearlin Mastery Scale (Pearlin & Schooler, 1978) measures the degree to which parents feel they have control over their own lives and their self-confidence in their abilities to solve life's problems. Analysis of the weighted means showed that primary caregivers reported a slight but statistically significant greater sense of control over their lives in the spring (15.58) compared to the start of the Head Start program year in the fall of 1997 (15.04).

Depression is a frequent phenomenon in low-income families with young children such as those families in the Head Start population. Women are more likely to be depressed than men, and mothers of young children are especially vulnerable (Belle,1982; Weissman & Klerman, 1977; Radloff, 1975). The CES-D Depression Scale (Radloff, 1975) measured levels of depression among primary caregivers. Overall, primary caregivers in FACES had a mean score of 7.37 in the fall, which is in the mildly depressed range. From fall to spring, there was a small decline in weighted mean depression scores (spring score of 6.94), but the difference was not statistically significant.

C. Family Environmental Description

Community Context of Head Start Families (Embedded Case Study)

Based on the Spring 1998 home visits conducted as part of the embedded case study (see Chapter I), content analyses of primary caregivers' open-ended descriptions of their neighborhoods indicate that most caregivers seemed to use the same set of criteria in judging whether their neighborhood was a good or bad place to raise their children. These criteria included: 1) safety, particularly the presence of crime and/or drugs in their neighborhood; 2) the quality of interactions with their neighbors or whether they can trust their neighbors; and 3) the presence of social and physical indicators in their neighborhoods, such as abandoned or vandalized buildings and groups of people loitering (Vaden-Kiernan, D'Elio, & Sprague, 1999).

"Quiet, really friendly neighborhood. Everyone knows everyone else. When someone moves in, we go and introduce (ourselves). It's a nice place and everyone looks after the kids and makes sure they don't get into trouble. The kids get along really well and don't fight."

Primary caregivers' assessments of their neighborhoods as a place to raise children. When primary caregivers were asked how they would describe their neighborhood in terms of the kind of place it is to raise a child, most (75 percent) responded that it was a good place to raise a child or that it had several strengths. Of these caregivers, 66 percent mentioned good neighbors and positive interactions as a positive feature, 62 percent said the neighborhood was quiet or peaceful, and 53 percent reported that the neighborhood was safe and free of crime and drugs. Less than half (42 percent) mentioned they liked the physical aspects of their neighborhood, 28 percent mentioned using neighborhood resources and 25 percent liked the social and cultural makeup of the neighborhood.

However, 25 percent of primary caregivers said that their neighborhood was not a good place to raise a child or reported several problems or weaknesses. Of these caregivers, 68 percent mentioned safety, crime, or drugs as a concern, 52 percent mentioned bad neighbors or negative interactions, 24 percent disliked the social and cultural makeup of the neighborhood, 20 percent mentioned a lack of neighborhood resources and activities and 20 percent disliked the physical aspects of their neighborhood.

"This neighborhood has deteriorated... before there were no drugs nearby, but now they are even in my building. My neighbors are smoking them everywhere, even in the hallways. Now I have to be even more careful when allowing my children to play out in the street. I have to take them elsewhere to play but there isn't a good place to take them nearby."

"This neighborhood is definitely not a good place to raise children because children learn (from) what they see and I don't want my children to learn some of the things that one sees around here."

Things primary caregivers really like about their neighborhoods. When asked about some of the things they really like about their neighborhood, primary caregivers' most frequent response was their neighbors (53 percent). Nearly one-third (32 percent) liked the quiet and peacefulness of their neighborhood; 24 percent liked the neighborhood resources and activities; 20 percent liked the convenience or proximity to schools, businesses and transportation; and 15 percent liked the safety and lack of crime and drugs. Other positive attributes mentioned included physical aspects of the neighborhood (13 percent) and neighborhood demographics (9 percent). Ten percent of respondents felt that there were no or very few good things about their neighborhood.

"I like my neighbors. My neighbors never bother me and they are helpful."

Things primary caregivers would change about their neighborhoods. Primary caregivers also were asked to identify three things they would change about their neighborhood. Nearly half answered that they would improve the physical aspects of their neighborhood. One-third would change their neighbors or their interactions with their neighbors and 27 percent would improve the availability and access to neighborhood resources and activities. Twenty percent felt that safety should be improved and crime and drugs decreased, while 11 percent would change the social and cultural makeup of the neighborhood. Twenty-two percent would not change anything or very little about their neighborhood.

"I would like to see the neighborhood be better taken care of. I would want to see houses painted, more trees and cleaner streets."

Neighborhood resources. Figure 3.8 presents the percent of primary caregivers who indicated that they had certain resources in their neighborhoods. Less than half of the primary caregivers reported they had a neighborhood watch program, a neighborhood organization, or a public library. More than half of the caregivers indicated they had access to public transportation, a recreation center, park, doctor's office and day care center as well as commercial businesses such as grocery stores and pharmacies. More than three-quarters of respondents indicated that they had a convenience store and a church in their neighborhood.

Social and physical neighborhood quality indicators. Primary caregivers were also asked about the presence of several social and physical quality indicators in their neighborhood (Figure 3.9). Less than half of all respondents indicated that they had abandoned or boarded up buildings or adolescents loitering in their neighborhood. Less than one-third of all caregivers reported graffiti, vandalism, or abandoned vehicles in their neighborhood. Primary caregivers who indicated that their neighborhood was not a good place to raise a child were more than twice as likely to report the presence of these indicators.

Context as Assessed by the Parent Interview

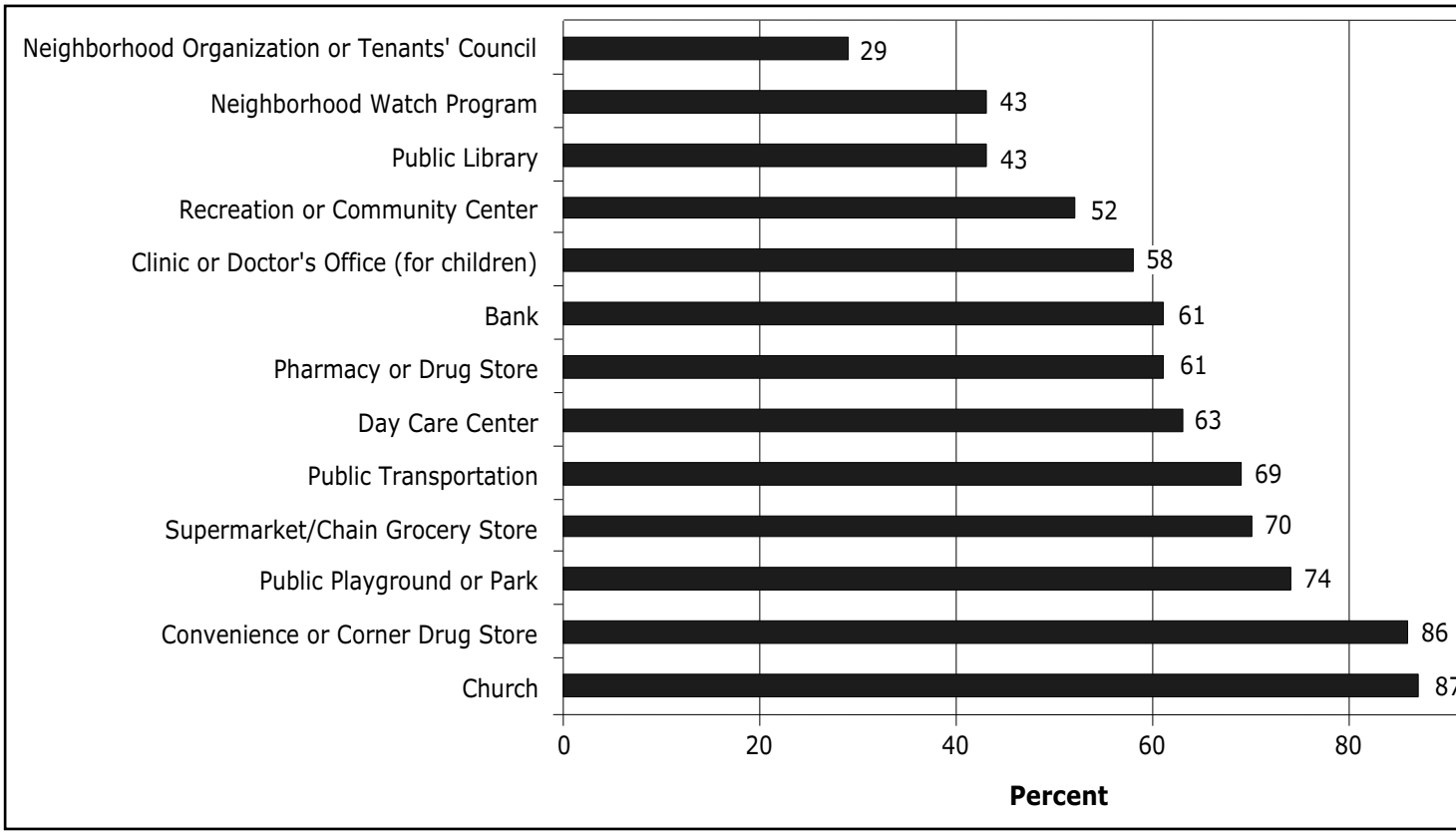
While the case study reports provide insights into perceptions of the individual neighborhoods, the full sample of primary caregivers reported on additional aspects of their homes and neighborhoods that impact the daily functioning of the family.

Neighborhood/home violence. Focusing on the stressors Head Start families face every day, primary caregivers reported on the violence they know has occurred in their own neighborhood, with additional questions about their own personal exposure to violence. Covering the year the child was in Head Start, 28 percent of the primary caregivers reported seeing nonviolent crime in their neighborhood, while 32 percent reported seeing a violent crime in the same area (Figure 3.10). Almost one-quarter of the respondents knew someone who was the victim of a violent crime in their neighborhood, bringing the reality of violence very close to a large segment of the sample. Victimization was reported by about 6 percent of the respondents, for either home or neighborhood settings.

As for the children, about one-fifth were reported to have been exposed to some form of violence in their lives. Seventeen percent of the children were reported to have witnessed a crime or domestic violence prior to Head Start. In the Spring 1998 interview, it was reported that 7 percent of the children had witnessed domestic violence in the past year, while 4 percent had witnessed violent crime during the same year. In Fall 1997, it was reported that 3 percent of the children had actually been victims of domestic violence or violent crime. In the year prior to the Spring 1998 interview, less than 1 percent of the children had been victims of domestic violence or victims of violent crime.

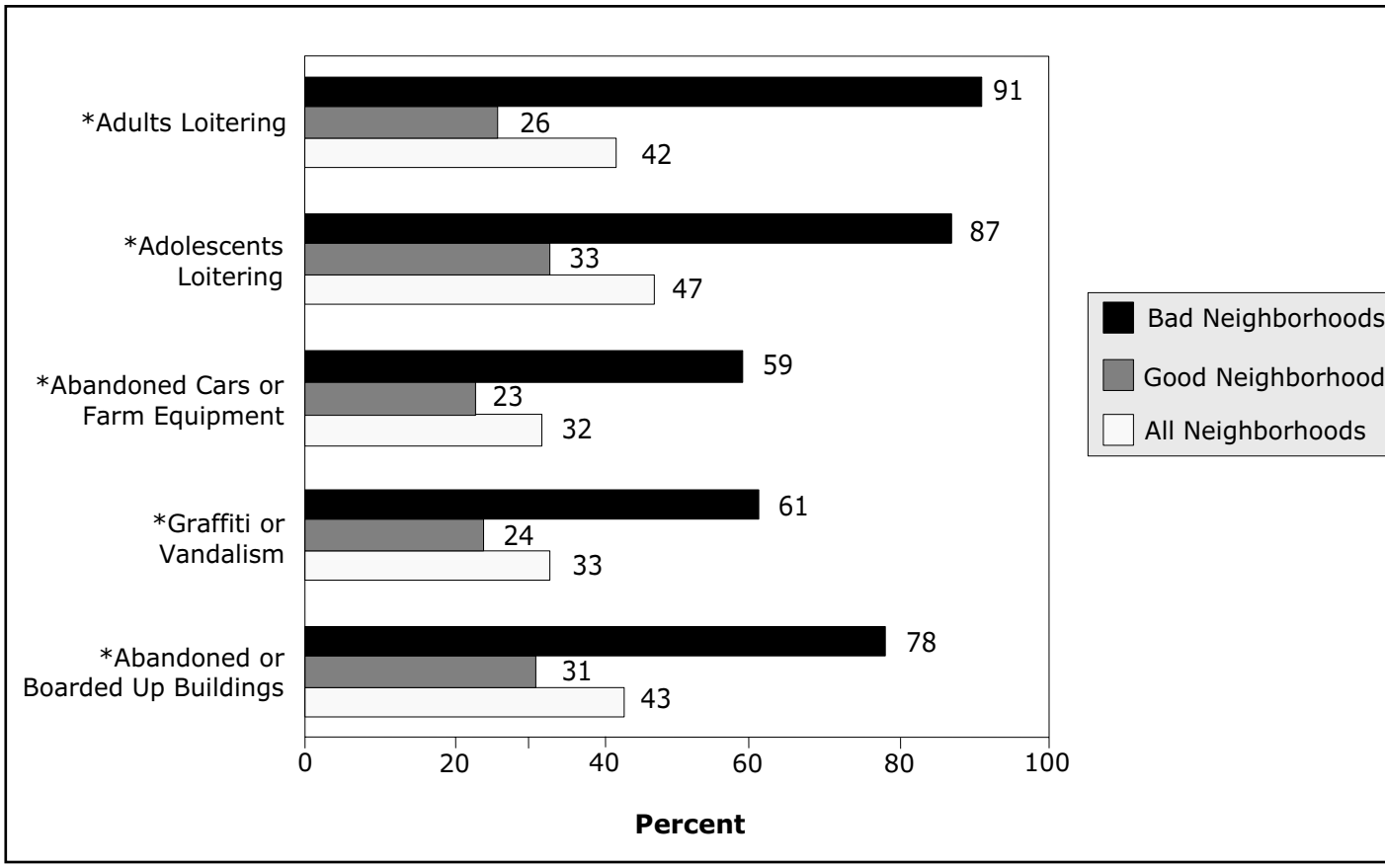
Housing. While the styles of individual housing varied greatly, 87 percent of the families lived in a house, apartment, or trailer of their own. This does not necessarily mean that they owned their own housing, only that they were not sharing living space with another family. Subsidies toward their housing costs were received by 22 percent of the families. Sometimes, financial situations or logistical concerns require that families share housing with another family or with a non-family member. This was the case for 12 percent of the families, who shared a house, apartment, or trailer. Only 1 percent of the families reported that they were living in transitional housing, and one family reported living in a shelter. In Fall 1997, it was reported that 7 percent of the children had

Figure 3.8
More Than One-Half of Head Start Families Report Having Neighborhood Resources



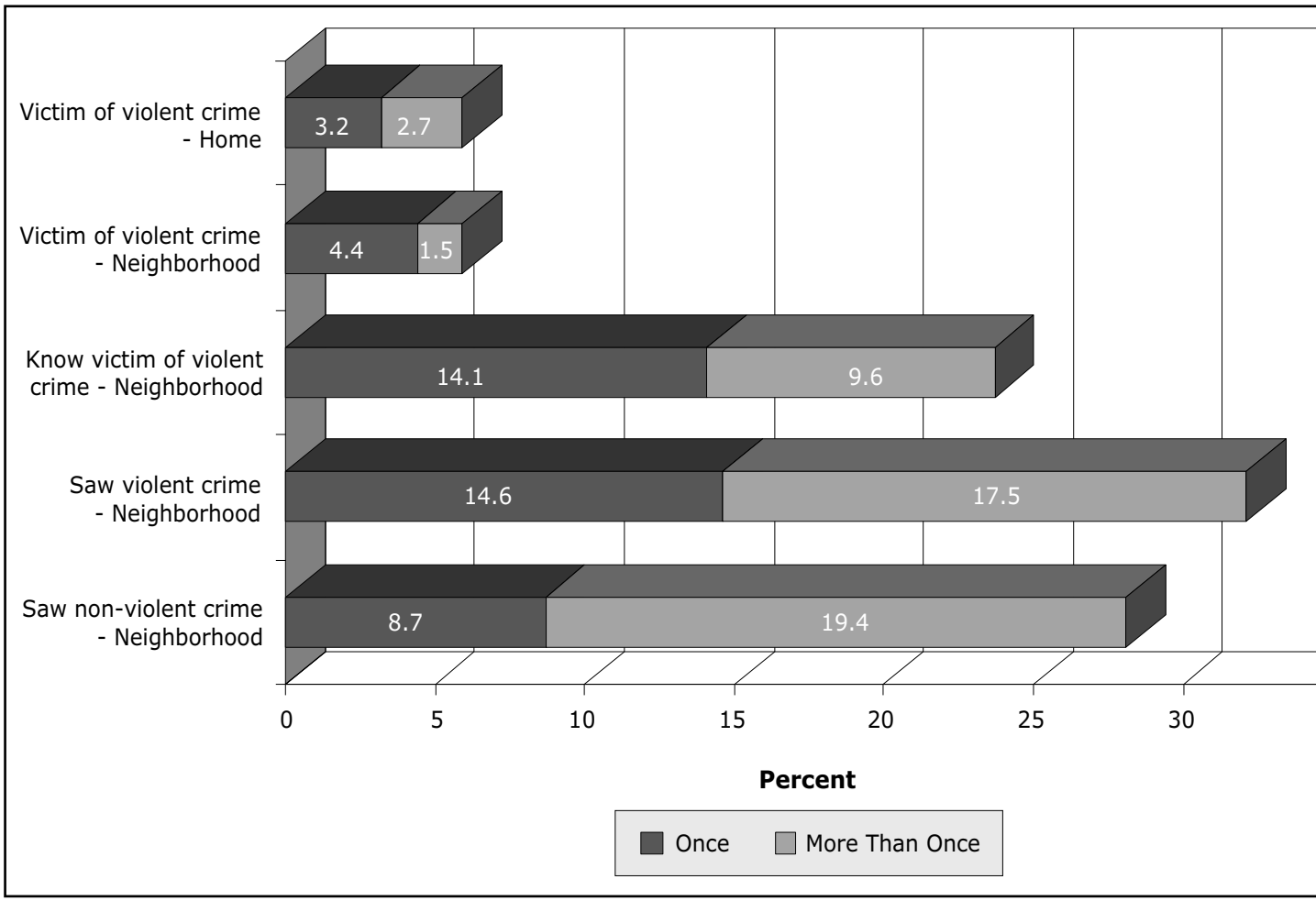
*Neighborhood is defined as within six blocks or a one-half mile radius.

Figure 3.9
Head Start Families Who Report Living in Good Neighborhoods
Also Report Fewer Negative Physical and Social Quality Indicators



*Chi-square significant at p≤.01

Figure 3.10
Over 30 Percent of Primary Caregivers Had Some Exposure to Violence During the Past Year



been homeless at some point in their lives, prior to enrolling in Head Start.

Child care. While Head Start was not established to be a child care program, the need for and use of child care by families is critical in determining future policies for Head Start. The use of regular child care (defined as 10 or more hours a week) prior to entry into Head Start was reported for 49 percent of the children. Once enrolled in Head Start, this number dropped to 28 percent of the children in child care.

For the children who were in care in addition to Head Start, 69 percent were in a setting where they were cared for by a friend or a relative. Only 14 percent of the children receiving care were placed in a child care center, 9 percent were in family day care, and 8 percent received care at the Head Start center, separate from the regular Head Start activities. Children receiving care did so for a mean of 19.2 hours per week, beyond their hours spent in Head Start. Of the respondents reporting that their child was receiving care, 85 percent also reported in the same interview that they were employed.

Home environment. For many families, the primary language spoken in the home was not English. In fact, 30 percent of the respondents noted that their families spoke a language other than English in the home. Of these families, 85 percent spoke Spanish.

One way to assess the nature of the home learning environment is to ask respondents what books or magazines the child has access to in the home. In Fall 1997, the most common pieces of reading material were children's books (98 percent), religious books (87 percent), and newspapers (79 percent). Many homes were reported to have catalogs (70 percent), dictionaries and encyclopedias (63 percent), children's magazines (59 percent), and magazines for adults (59 percent). The least reported piece of reading material was comic books (37 percent).

In order to assess how primary caregivers managed safety issues in the home environment, respondents were asked in Fall 1997 if they followed each of nine different safety practices. Of these nine possible safety practices, the respondents followed a mean of seven or a median of eight behaviors. There was a strong ceiling effect, in that 82 percent of the respondents reported that they followed at least seven of the nine behaviors. Use of the individual behaviors ranged from 69 percent for having first aid kits at home to 99 percent for supervising the child in the street.

Given there was such a high set of scores for the baseline data collection, the scale was changed for the Spring 1998 interview. Now responding on a four-point scale, respondents had a mean of 7 behaviors that they reported doing "all the time," and 8 behaviors they reported doing at least "most of the time." Not having a smoke detector (11 percent), not having a first aid kit (20 percent), and not having the poison control number by the phone (20 percent) were the only behaviors not engaged in at all by 5 percent or more of the respondents.

D. Families' Involvement With Their Children

Reading to children at home. As noted in Chapter II, almost all children were read to at least once or twice during the week prior to the interview. In Spring 1998, about one-third of the children (34 percent) were reported to have been read to every day, and more than two-thirds (68 percent) were read to three or more times during that week. Mothers were the family members most likely to read to their children, with 75 percent having done so in the week prior to the inter-

view. Other household family members (30 percent), often siblings or grandparents, and fathers (23 percent) were the next most cited family members to have read to the Head Start children in that week.

Family activities with children. Primary caregivers were also asked to report on two levels of activities undertaken with the children. The activities are listed as part of Figure 3.11. First, respondents indicated which activities from a set of seven common, routine activities were undertaken by the family with the child during the previous week. Mean scores showed that families engaged in 4.1 activities out of seven. As noted in Figure 3.11, most of these activities were done with mothers. Similarly, respondents also indicated which activities from a list of less routine activities were done with the child during the month prior to the interview. This time, families were reported to engage in a mean of 1.9 activities with the child, and again, as noted in Figure 3.11, mothers were far more likely to engage in these activities than other family members. Interviews with teachers in the FACES classrooms (Barnes, Guevara, Garcia, Levin, & Connell, 1999) suggest that program and classroom environments, along with educational emphases, are related to parent-reported increases in activities with children at home as well as parent involvement and satisfaction with the Head Start program.

Separate analyses examined the weekly and monthly parent activities as intellectually or socially stimulating. The intellectually stimulating category included activities such as telling a story; teaching letters, words or numbers; or going to a museum. Socially stimulating activities included activities such as doing household chores, running errands, or attending a sporting event. Head Start parents showed significant increases in the participation of both types of activities. Parents reported increases in both weekly (from 3.88 in the fall to 4.05 in the spring) and monthly (5.01 fall to 5.23 spring) intellectually stimulating activities. A similar pattern of growth was found in socially stimulating activities. Weekly socially stimulating activities increased from .66 in the fall to .80 in the spring, and monthly activities increased from 3.14 in the fall to 3.31 in the spring.

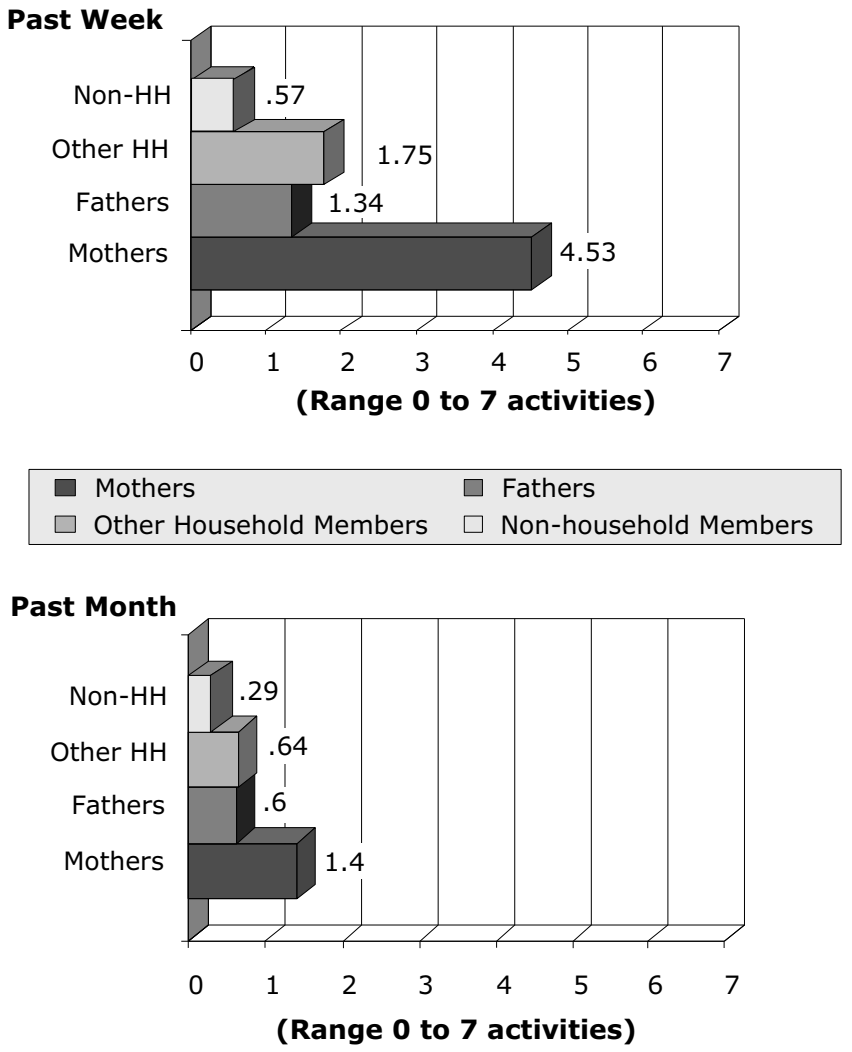
Changes in family-child activities. The frequencies of weekly activities were combined to create a composite scale that ranged from 0 to 33.[9] A standardized change score in weekly activities was computed to investigate how the frequency of these activities increased or decreased from fall to spring of the Head Start year. On average, parent activities at home with children showed a small increase over the course of the year. Parents' activities with children increased more in centers in urban areas, in classrooms in which teachers reported more frequent academic activities with children and in classrooms in which teachers reported greater numbers of in-service training hours in child development. However, no measure of family demographics and characteristics (i.e., parents' education, family income, number of parents present in the home) was significantly related to the standardized change score.

A composite score was also calculated for monthly activities as the sum of "yes" responses.[10] As with the weekly activities, a standardized change in monthly activities was computed as spring score/standard deviation minus fall score/standard deviation. These family activities with chil-

[9]The internal consistency (Cronbach's alpha) of these scales is .84 for the fall and .72 for the spring scale, indicating that these composites are a reliable index of the individual items.

[10]The internal consistency of these scales is .48 for the fall and .54 for the spring. The consistency of these composites would tend to be lower than for the weekly activities because the monthly scale includes fewer items each comprised of a dichotomous rather than three-point scale.

Figure 3.11
Most Activities With the Children Were Undertaken by the Mother



- Past Week Activities:

— Telling a story; Teaching letters words, or numbers; Teaching sc or music; Arts and crafts; Playin games (indoors or outdoors); Household chores; Doing errand

- Past Month Activities:

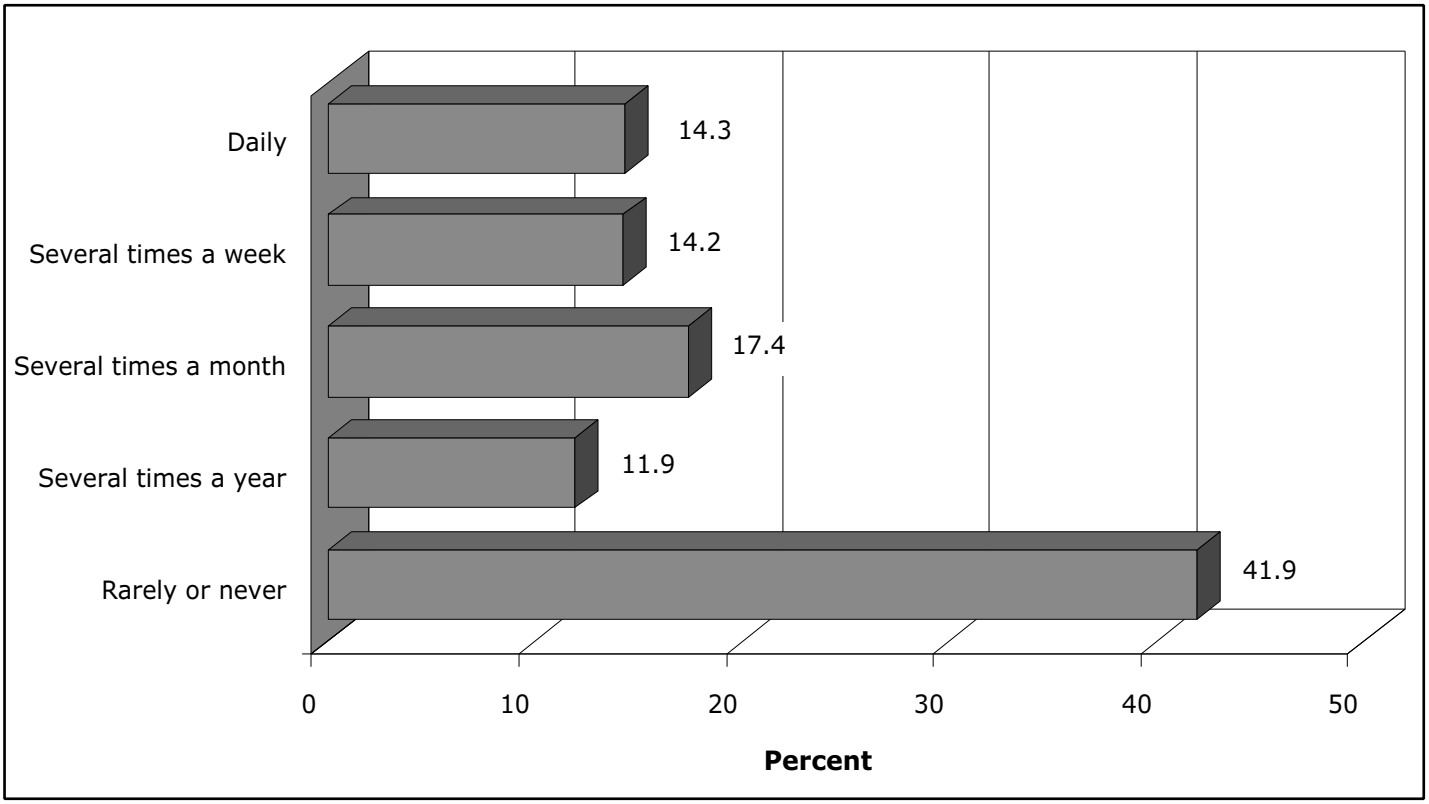
— Visiting a library; Going to a live show; Going to an art gallery or museum; Discussing family heritage; Visiting a zoo or aquar Attending a community, ethnic, religious event; Attending a sporting event

dren increased more in centers where teachers reported more frequent academic activities with children in the classroom. Family characteristics were not related to a change in the frequency of these activities with children.

Fathers' involvement with their children. An issue of increasing interest to Head Start is that of father involvement in the lives of children (O'Brien, D'Elio, Connell, Hailey, & Swartz, 1999). Less than half of Head Start children (45 percent) lived with their biological fathers. For the children living without their father in the home, 61 percent were reported to have a father figure available to them, most often the mother's spouse or partner (50 percent) or a relative (39 percent). As shown in Figure 3.12, 42 percent of the non-household fathers never or rarely saw their children, while almost 30 percent saw their children at least several times a week. Of the children without a father in their household, 8 percent (or 5 percent of the overall sample) had no reported father figures and never or rarely saw their biological fathers.

In a comparison of fathers who lived in- and out-of-home, a greater percentage of fathers living in the household were reported to be working (83 percent to 74 percent) and have at least a high school diploma or GED (68 percent to 45 percent). In families where a father was present, mothers were less likely to work (48 percent to 56 percent) and monthly household incomes were greater by almost $400. Respondents (typically mothers) reported that 45 percent of the non-household

Figure 3.12
Almost One-Half of the Non-Household Fathers See Their Children Several Times a Month or More



fathers contributed to the financial support of their children, and that 55 percent lived within an hour's drive of their children.

Fathers' residential status was also related to their children's level of exposure to violence. In households where fathers were not present, primary caregivers were more likely to have seen violent and non-violent crimes in the neighborhood, and to have been the victim of violent crime in their home. Of the 518 children who were witness to a violent crime or domestic violence prior to the Fall 1997 interview, 73 percent did not have a father present in their home. Similarly, of the 87 children who were reported victims of a violent crime or domestic violence as of the Fall 1997 interview, 82 percent did not have their father living in their home. It is unlikely that FACES will be able to determine if the fathers' absence was a likely cause of the exposure to violence, or if the violence was in fact a factor related to the father leaving the home. In either case, the picture for this subset of Head Start children is unsettling.

Findings also reveal that the level of involvement of both resident and nonresident fathers was related to children's behavior ratings. Regardless of whether fathers were present in the home, when mothers rated the fathers as more supportive in raising their children, the children had significantly higher positive social behavior ratings and lower problem behavior ratings, including aggression and hyperactive behavior (Figure 3.13).

Figure 3.13
Relationship of Father's Level of Social Support for the Mother in Raising the Child With Child Behavior Ratings

	Positive Social Behavior	Behavior Problem Index	Aggressive Behavior Subscale	Hyperactive Behavior Subscale
Level of Support from a Father Present in the Home	r=.06 p=.0194 n=1306	r=-.08 p=.0028 n=1303	r=-.06 p=.0361 n=1316	r=-.07 p=.0157 n=1316
Level of Support from a Father not Present in the Home	r=.07 p=.0039 n=1587	r=-.08 p=.0016 n=1587	r=-.11 p=.0001 n=1600	r=-.08 p=.0019 n=1599

Household rules and discipline. Primary caregivers' interactions with their children at home set the stage for socializing children as they prepare for school. One measure of family socialization practices is the rules or routines that primary caregivers establish for their children. Using a list of five rules/routines, respondents reported that they used a mean of 3.9 rules/routines. The most frequently reported rules or routines were having a set bedtime (91 percent) and limiting what their children could watch on television (86 percent). Most caregivers responded that their children were involved with household chores (76 percent), were restricted on what types of foods they could eat (65 percent), and were restricted on how much television they were allowed to watch (63 percent).

In terms of how primary caregivers discipline their children, primary caregivers were asked about their use of spanking and time out with their children. In Fall 1997, using weighted means, 46 percent of the respondents reported having spanked their children during the previous week, a figure that dipped slightly to 43 percent in the Spring 1998 interview. Although small, this was a statistically significant difference ($p<.05$) in the percent who spanked their children. Time outs were reportedly used in the week prior to the interview by 69 percent of the respondents in Fall 1997 and 71 percent in Spring 1998.

Primary caregivers have the opportunity to learn parenting skills as part of the Head Start program. In Spring 1998, 41 percent reported that Head Start taught them a new way to discipline during the year. Methods they reported learning include time out (22 percent), talking with their child (17 percent), and positive reinforcement (5 percent).

Primary Caregivers' Hopes and Goals for Their Children (Embedded Case Study)

Content analyses of primary caregivers' hopes and goals for their children indicate that they generally held optimistic expectations for their child's early schooling experiences and future educational attainment. Most primary caregivers' hopes and goals for their child were focused on general education goals, such as learning basic skills and doing well in school. Most respondents had specific long-term educational goals for their child, such as graduating from high school and also attending college.

Short-term general education goals. Three-quarters of the primary caregivers reported hopes and goals related to general educational goals. Caregivers hoped their children completed age appropriate tasks or were developmentally on target (34 percent), hoped their child did well in school and received a good education (29 percent), or hoped their child had a positive attitude toward school and school personnel (20 percent).

> *"For her to learn how to enjoy learning so that when she's in school she enjoys it and she can build her dreams."*

Goals related to the qualities of the child. Nearly half of the primary caregivers (47 percent) reported hopes and goals related to qualities of the child. They hoped their child had positive qualities or positive social interactions (36 percent) or hoped their child lacked negative qualities and/or would be able to overcome potentially negative social situations (10 percent).

> *"To learn to be a better kid. To learn how to respect other kids and to do the best you can."*

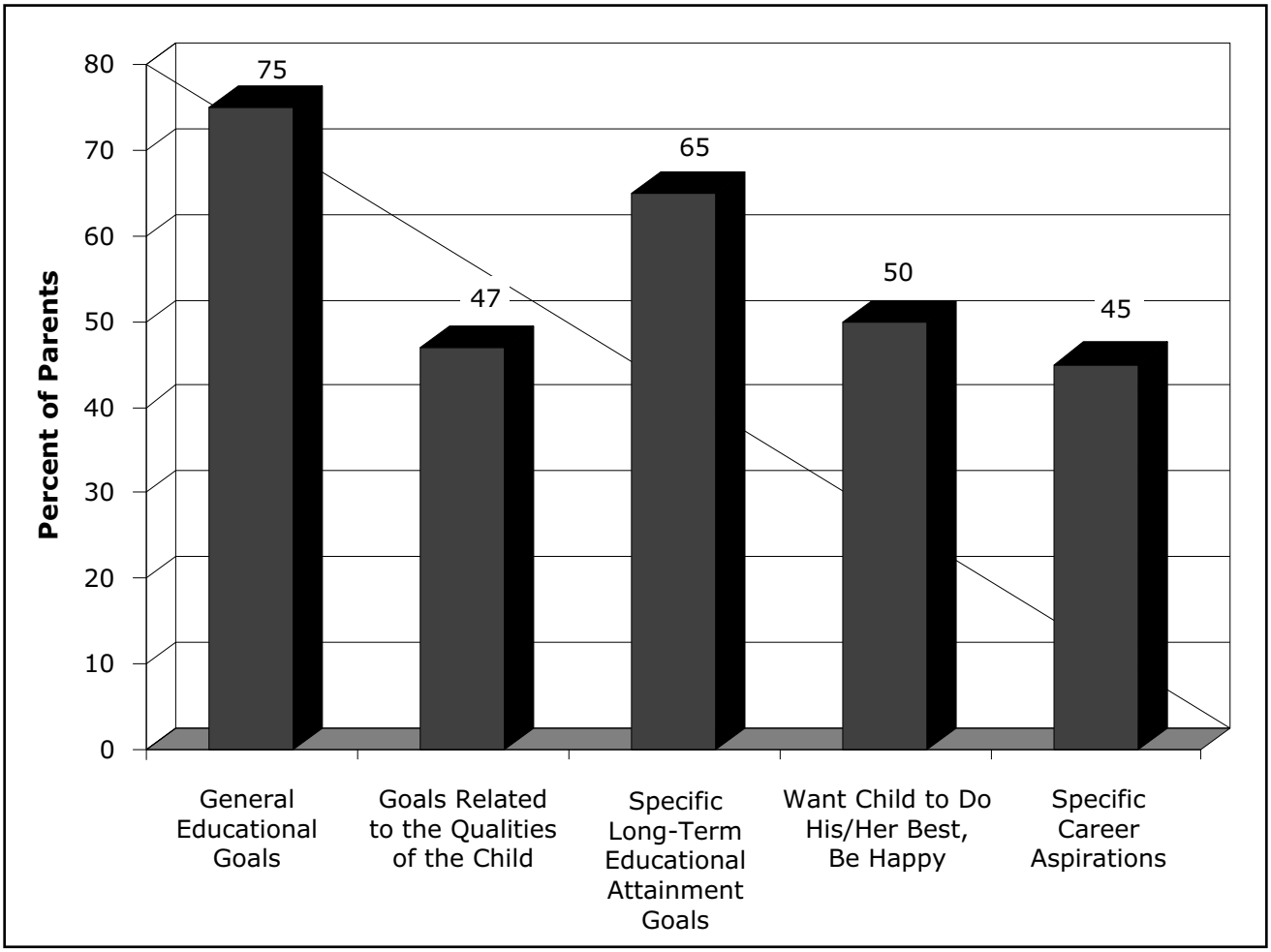
Long-term educational attainment goals. When asked, 65 percent of primary caregivers reported specific long-term educational attainment goals

for their children. Nearly half (49 percent) hoped their child would continue their education after high school and attend or graduate from college while slightly more than one-quarter (26 percent) hoped their child would graduate from high school. Four percent of respondents had no specific educational goals for their child.

> *"...education means a lot to me. I really want them to go to college."*

Other hopes for the future. When asked if they had other hopes for their child's future, primary caregivers reported a range of aspirations. Half wanted their child to do his or her best and have a "good life" or be happy, including the pursuit of their own goals. Slightly less (45 percent) had specific career aspirations for their child, and 14 percent of the primary caregivers felt that family involvement was important to their child's success, while 9 percent wanted their child to do as

Figure 3.14
Head Start Parents' Hopes and Goals for Their Children



well as or better than the child's parents had done in life. Figure 3.14 summarizes primary caregivers' hopes and goals for their children.

> *"I'm hoping he'll be a lawyer because he is smart."*
>
> *"Finish school, go to college, have every opportunity Mom did not have."*

E. Families' Experiences With the Local Head Start Program

Primary caregivers' satisfaction with Head Start. The FACES parent interview included eight questions about parents' satisfaction with the Head Start program on issues such as helping their child grow and develop, preparing the child for kindergarten, and supporting the family's culture and background. A composite score of these items was created, with an internal consistency of .84, suggesting a high degree of reliability.

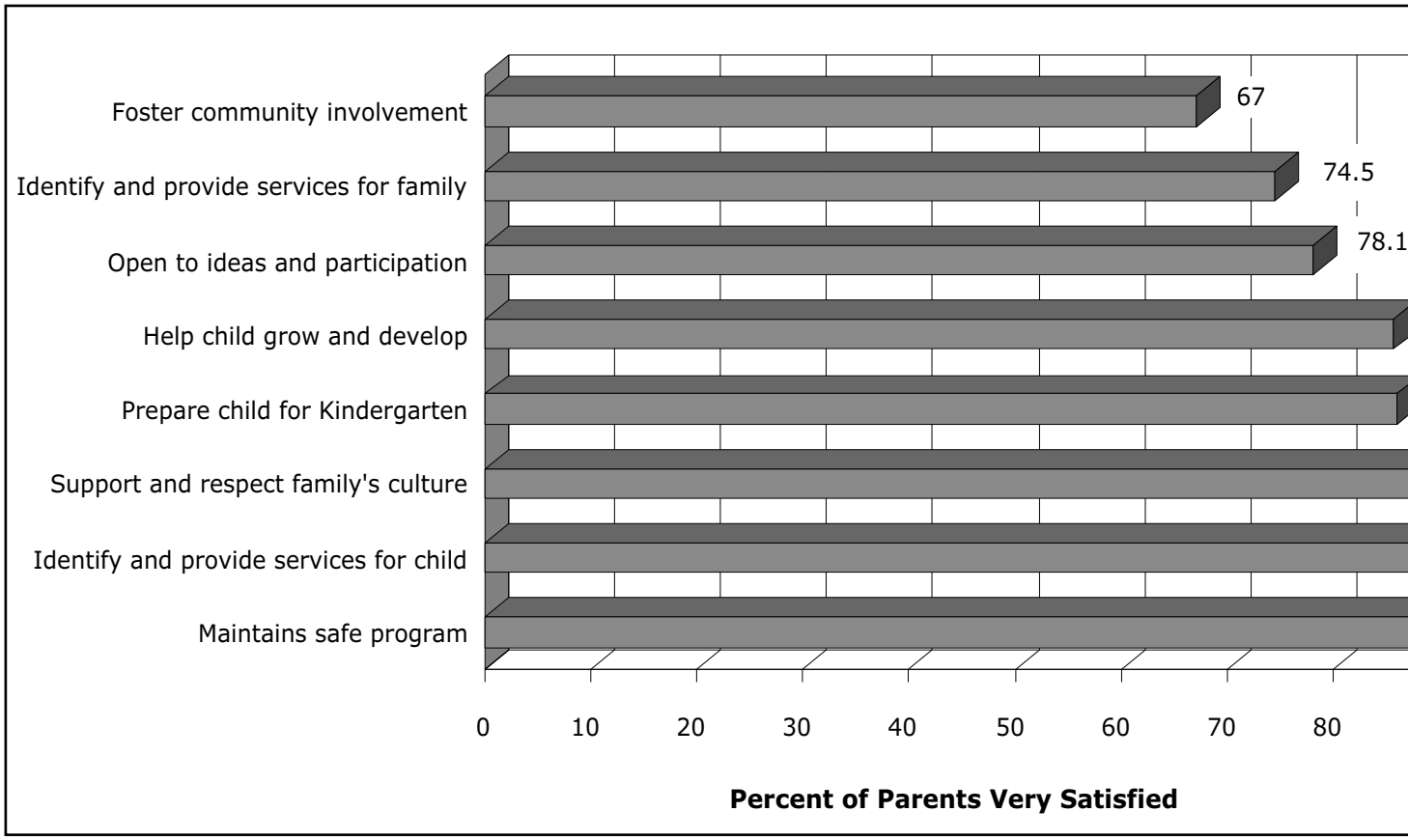
Parents participating in FACES reported very high levels of satisfaction with the program's performance in each of eight areas. Responses were given on a 5-point scale, ranging from "very dissatisfied" to "very satisfied." As indicated in Figure 3.15, over 96 percent of parents were satisfied with their child's preparation for kindergarten (86 percent were "very satisfied"), and over 97 percent were satisfied with the program's "being open to their ideas and participation" (78.1 percent were "very satisfied"). Other areas where Head Start parents reported a high degree of satisfaction were "helping their child grow and develop" (98 percent satisfied; 85.7 percent very satisfied), "supporting and respecting the family's culture and background" (98 percent satisfied; 87.5 percent very satisfied), "identifying and providing services for the child—health screenings, help with speech and language development" (96 percent satisfied; 87.6 percent very satisfied), and "maintaining a safe program" (98 percent satisfied; 88.9 percent very satisfied). Percentages of satisfied parents, while slightly lower, were still quite high for "identifying and helping to provide services to help the families" (84 percent satisfied; 74.5 percent very satisfied) and helping parents "become more involved in groups that are active in the community" (87 percent satisfied; 67 percent very satisfied).

Additional questions from the FACES parent interview gave a very positive picture of parent attitudes toward their child's and their own experiences with Head Start. For example, 96 percent of parents reported that their child "has been happy in the program" often or always; over 97 percent reported that their child "is treated with respect by teachers;" and nearly 96 percent noted that the teacher was supportive of them as parents.

These findings confirm those reported in the 1999 American Customer Satisfaction Index, in which Head Start parents gave the program the highest rating of any government program. For example, parents in both studies demonstrate a high degree of satisfaction with Head Start's support of their child's growth and development, preparation for kindergarten, and provision of health and other services. They also indicate Head Start's openness to the parents' cultural backgrounds, ideas, and participation, as well as fostering their role in the wider community. Taken together, the findings of these two studies amply demonstrate that Head Start's customers are highly satisfied with the quality of the program they receive, and support the continued provision of these important benefits to children and families.

Parent satisfaction in the spring of the Head Start year was related to one parent characteristic: less

Figure 3.15
Primary Caregivers Were Very Satisfied With the Head Start Program



educated parents were more satisfied with the program. After controlling for parent education, greater satisfaction with the Head Start program was reported by parents in centers where teachers reported more parent contacts that went beyond scheduled meetings, home visits, or informal chats when the child was coming or going from the center. These higher order contacts included meetings with parents at parent/family activities, sending written notes home, exploring parent skills that may be shared with other families, and encouraging continuing families to orient newer families to the center activities.

Primary caregivers' involvement in Head Start. Given that parent involvement is a cornerstone of the program, it is important to understand what ways primary caregivers feel they are involved in the program. Figure 3.16 shows the different areas of involvement respondents reported. Most common among these were visiting with Head Start staff in the home at least once (a required activity; 82 percent), attending parent-teacher conferences at least once (81 percent) and observing in the classroom (79 percent). More active involvement, such as volunteering in the classroom, preparing food, and fundraising, were all below 70 percent. Fifty-four percent of the primary caregivers reported attending a parent education meeting.

A composite parent involvement score[11] was created from the 13 questions on the FACES parent interview, such as volunteering in the classroom, helping with field trips and attending parent meetings. Parent involvement was greater when the children had been enrolled in Head Start for a longer period, among parents who were more educated, among parents not currently employed, and for White and other ethnic groups in comparison to African American and Hispanic families.

After controlling for these family characteristics, higher levels of involvement in Head Start activities were reported in centers where teachers reported receiving more in-service training hours in family services and case management and when a larger proportion of teachers had preschool or elementary education teaching certificates.

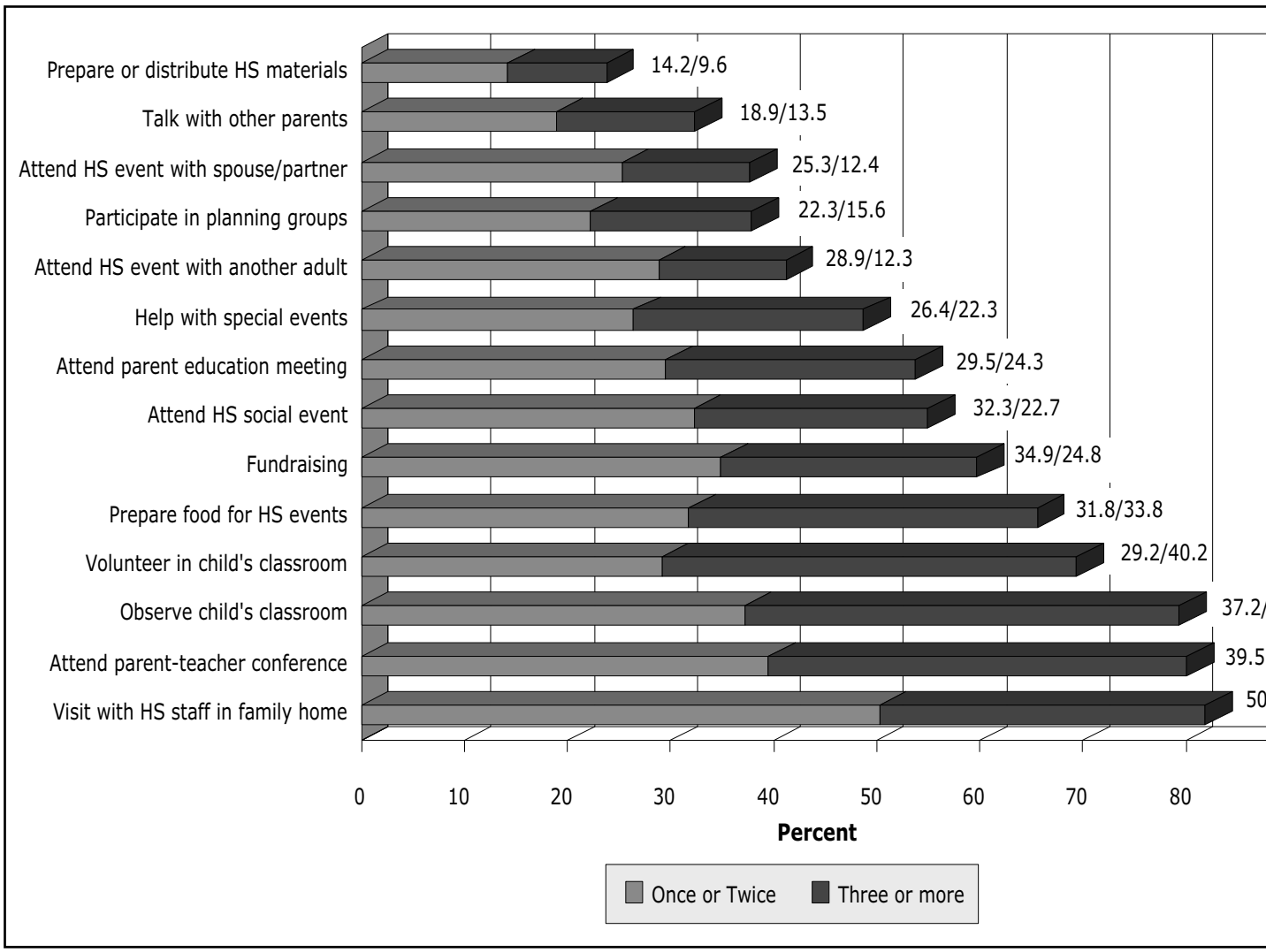
Implications of Parent Involvement

One Head Start performance objective is to strengthen families as the primary nurturers of their children. Thus, the educational and interactive activities that family members do at home with their children are key to supporting children's school readiness. The results from the FACES data suggest that in centers where teachers have more in-service training in child development and more academic activities for children while at Head Start, parents increase the variety of educational and recreational activities that they do with their children at home. These results suggest that when parents visiting Head Start classrooms observe more academically-oriented activities, they may be learning about activities to do at home with their children, including the types of activities that children are capable of and enjoy. Teachers who have more training in child development also may stress the value of these activities in their interactions with parents. In addition, centers that involve parents in a greater variety of teacher-parent contacts lead to higher levels of parent satisfaction with the program.

Parent involvement is a cornerstone of the Head Start program. The results from the interviews with Head Start staff indicate that, while many teaching and administrative staff have some college education and teaching credentials and a

[11] The internal consistency of this scale was .83, indicating that this composite is a reliable index of the 13 individual items.

Figure 3.16
Most Primary Caregivers Were Very Active Within Head Start



good deal of in-service training experiences at Head Start, there is significant variability across centers in these experiences. More importantly, staff in-service training and teacher certification were positively correlated with higher parent involvement in the program, controlling for parent education, ethnicity, employment status, and prior experience with Head Start. These results suggest that keeping parents involved in the program at high levels requires skill, and that teachers who have had more education specific to classroom teaching, culminating in teacher certification, may be more adept at working with parents. Similarly, in-staff training appears to be an important ingredient in increasing or reinforcing this skill.

It is important to note that these relationships are correlational and exploratory. Thus, increasing parent-teacher contacts would not necessarily result in greater parent satisfaction. It is possible that other factors that have not been measured are contributing to these correlations. For example, teachers who seek out ways to connect with parents may have other characteristics that also relate to parents' satisfaction. Nevertheless, these relationships suggest that variables amenable to policy change (e.g., teacher in-service, requirements of teacher certification, wider range of parent contacts) may have implications for further research on program improvement.

F. Conclusions

Head Start serves a diverse array of families. Primary caregivers were equally likely to be married as single. The typical caregiver was young (between 20 and 30 years of age), had at least a high school diploma or GED, and was employed. On average, Head Start households consisted of approximately 4.6 individuals. About 43 percent of the households reported some change in household composition over the course of the program year. Despite the high proportion of caregivers in the workforce, 85 percent of Head Start households received supplemental sources of income.

At the end of the program year, Head Start parents demonstrated higher levels of mental well-being. They reported more control over their lives; however, levels of maternal depression remained stable. Parents rated Head Start highly as a source of social support. In terms of economic well-being, parents showed progress toward their employment goals. More parents had full-time jobs and fewer were on welfare. Nine percent of parents obtained a license, certificate or degree. Overall, Head Start families made several positive changes in their lives, although it is not possible through data collected by FACES to determine Head Start's impact on these changes.

Findings from the case study reveal that 75 percent of parents thought their neighborhood was a good place to raise a child. Of those who thought their neighborhood was not a good place to raise a child, 68 percent mentioned safety or reducing crime or drugs as a concern. Data from the parent interview indicate that 32 percent of the primary caregivers witnessed a violent crime in their neighborhood. About one-fifth of Head Start children were exposed to some form of violence in their lives.

Head Start parents involve their children in a wide range of activities. Nearly all Head Start children were read to at home at least once or twice a week, with about one-third of children read to every day. Family members (usually the mother) engaged in 4.1 common routine, weekly activities (out of seven) with the Head Start child, and 1.9 monthly activities. In centers where teachers had more in-service training in child development and more academic activities for children while at Head Start, parents had more variety in

educational and recreational activities that they did with their children at home. Most primary caregivers' hopes and goals for their children indicated that they generally held optimistic expectations for their child's early schooling experiences and future educational attainment.

Less than half of Head Start children (45 percent) lived with their biological fathers. For the children living without their father in the home, 61 percent were reported to have a father figure available to them, most often the mother's spouse or partner (50 percent) or a relative (39 percent). When fathers were not in the household, families experienced lower financial resources and greater exposure to violence. Regardless of residential status, when mothers rated fathers as more supportive in raising their children, children's social behavior ratings were higher and problem behavior ratings were lower.

Most parents were active in their Head Start program, and had participated by visiting with Head Start staff in their home, attending a parent-teacher conference, and observing in the classroom. Over 85 percent of parents were very satisfied with the services their child received, including the services to help their child grow and develop, prepare their child for kindergarten, and identify and provide services for their child.

Links were also found between teacher background and parent involvement and satisfaction. Centers that involved parents in a greater variety of teacher-parent contacts had higher levels of parent satisfaction with the program. Staff in-service training and teacher certification were found to be linked with parent involvement in the program, controlling for parent education, ethnicity, employment status, and prior experience with Head Start, suggesting that keeping parents involved in the program at high levels requires skill.

Chapter IV

Objective 3: Does Head Start Provide Children With High Quality Educational, Health and Nutritional Services?

The early intervention and child care literature has established a strong empirical connection between the provision of quality services and improvements in child development outcomes. Because of this link, the Head Start Program Performance Measures address quality across all services Head Start provides, including educational, health (including medical, dental, and mental health), and nutritional services. As part of its emphasis on quality, the Measures also state that Head Start staff should interact with children in a skilled and sensitive manner, that programs should support and respect children's cultures, and that programs should provide individualized services for children with disabilities.

The Second Program Performance Measures Report demonstrated the importance of classroom quality, as well as Head Start's progress in meeting its objective of providing children with high-quality, developmentally appropriate educational services, according to the Spring 1997 FACES field test. FACES has been designed to assess the quality of educational services through direct observation of the Head Start classrooms in operation. Overall, the Spring 1997 field test data indicate that higher quality Head Start programs have children showing significantly higher levels of skills. The question is whether quality in Head Start changed over time, or over the program year.

This chapter presents results from analyses of the measures of classroom quality for the 40 programs that participated in FACES from Fall 1997 to Spring 1998. The chapter summarizes the findings from the 1997 field test, and describes the quality of Head Start classrooms in the 1997-1998 program year and change in quality within the year. While this chapter focuses on the quality of Head Start classrooms, it also presents a special example of the quality of services Head Start provides to children with disabilities. The quality of other Head Start services, including health and nutrition, are included in Chapter VI in the Program Performance Measures Matrix.

A. Defining and Measuring Classroom Quality

In the FACES study, quality was considered to include the number of children and adults in each classroom, the physical arrangement of the classroom, the availability of learning materials, and the teacher's influence on the variety and type of learning opportunities provided to all children. Through the use of trained classroom observers, FACES assesses the three primary domains of program quality well known in the research literature: processes, structure and teacher qualifications. Additionally, results from the Spring 1997 FACES data suggested that the quality of a given classroom in the Head Start program may be related to characteristics of the centers and the programs within which classrooms are located. Program management styles, resources, and the demographics of the community influence how quality is transmitted to center directors and, indirectly, to teachers in individual classrooms.

The multi-level nature of the FACES study lends itself to exploring the influence of program context on classroom quality. This has relevance for policy because teachers often are not in a position to change quality without some influence from the center and program management, and the selection of quality teachers for Head Start is at least partially due to choices and resources available at the broader program level. Thus, in addition to observations in classrooms, FACES data collection included teacher questionnaires indicating the teachers' views of quality and their

time use across a typical Head Start day. FACES also obtained information about the demographics of the families whose children attended the Head Start program in order to characterize a given program (and the centers and classrooms within that program) according to such factors as the percentage of minority families served, the average annual incomes of families, and the educational attainment of parents. This examination of quality attempts to build a model that essentially "unpacks" the critical ingredients of quality in Head Start by accounting for explainable variation according to classroom-, center- and program-level factors. By doing so, it can be understood how quality may change over time and what factors may be most relevant for influencing positive change in classroom quality in Head Start.

Processes refers to the quality of the learning activities provided in the classroom. These reflect direct influences on children of the teachers' behavior and classroom planning as well as indirect influences of factors at the center and program levels. Teachers in high-quality classrooms provide warmth, sensitivity and responsiveness and encourage independence and self-help skills. The teachers' influence in the classroom is evident through the variety of learning materials provided to stimulate both fine and gross motor development, creative and dramatic play, language and literacy, math and science, and cultural diversity. Teachers in high-quality classrooms display a planful approach that is evident in classroom schedules providing for small group and individualized opportunities for discovery learning using both free play and structured activities. A range of developmentally appropriate activities is emphasized that involves independent exploration, hands-on and experiential manipulation of materials, in a "calm but busy" environment. A larger proportion of the teachers' reported time use in high-quality classrooms focuses on completing administrative tasks and planning, as well as more time in teacher-directed learning and free choice activities, which allow for more individualized learning and focused instruction in language learning activities. Teachers' behavior also enhances quality by providing a warm and responsive environment, free of harsh criticism, that encourages children's individuality, exploration and independence.

Structure refers to regulatable characteristics of centers such as group size and child:adult ratio. These characteristics are assumed to indirectly affect the child by influencing the availability of stimulating resources in the classroom and determining the teachers' behavior as a director and facilitator of children's learning. With more children and fewer adults in a classroom, the teacher becomes less able to provide individual attention to the children, to prevent negative behavior, and is unable to engineer opportunities for learning during the course of the children's play. Put another way, when there are a high number of children and few adults taking care of the children, that is, a high child:adult ratio, teachers are constrained in the types of activities they can provide during a typical classroom day. When a high proportion of the day is spent in routine caregiving tasks or transition activities, it is often because the teachers do not have sufficient personnel to provide more individualized learning opportunities.

Structural aspects of quality are often linked to factors at the center and program levels, because indicators such as the child:adult ratio are influenced by program resources, the ability to hire quality teachers, and the communities in which the programs are located. Lower child:adult ratios can be achieved through many different means, of which the most obvious is giving the programs more financial resources. But programs located in isolated areas with few qualified personnel available may still have trouble fulfilling their need for quality teachers that goes beyond simply adding monetary resources. Lower

child:adult ratios (indicative of higher quality) can also be achieved by activities that involve parents and others as volunteers in the classrooms, and these are often facilitated by the center director or the program management. A useful proxy measure of the influence of the center and program levels on classroom quality is the teachers' reports of time use during a typical Head Start day. When much of the time is spent on routine caregiving tasks, there is less time available for direct teaching activities, thereby reducing the observed quality of the classroom. The teacher's use of time may be dictated by the center director or the program office and may not necessarily be related to other facets of quality, such as the teacher's background, training or experience.

Teacher qualifications include the number of years of teaching experience, the highest level of education achieved, and the number of courses in early childhood education and child development taken. These are expected to be related to the ability of the teacher to provide a warm and attentive environment that encourages learning and to the teacher's ability to plan formal and informal learning opportunities in a stimulating classroom environment. In FACES, a brief teacher questionnaire collected teacher background information. Teachers with more training in preschool education can recognize the importance of allowing for sufficient time during the day for directed learning and free play, and provide activities that focus on specific areas of learning, such as language and emergent literacy. Finally, teachers with more years of experience in Head Start become invaluable resources for parents and program staff, to assist in monitoring quality and making improvements as needed.

Measures of Quality

FACES measured a variety of dimensions of program quality using reliable, well-known measures designed to be employed by specially-trained classroom observers. The classroom observers spent an entire "Head Start day" in the classroom and, using standard measures, assessed various aspects of the classroom that were known indicators of quality. Observers recorded the amount and arrangement of learning materials and the daily schedule of activities, and counted the total number of children and adults in the classroom. Observers also measured the warmth, responsiveness and prosocial discipline practices employed by the teacher in their interactions with the children. Questionnaires completed by the teachers provided information about the teachers' qualifications and training and also gave more information about the teachers' view of quality and their time spent in various activities during a typical day, including routines, transitions, direct learning activities, administrative work and contact with parents.

In this report, the nature of the quality in the FACES sample of programs and their classrooms is described, as collected during Fall 1997 and again in the spring of the same Head Start year (Spring 1998). Findings are presented showing the average quality across all classrooms, changes over the two time periods in the quality ratings, and how structural aspects, teacher backgrounds, teacher-reported time use, and program-level factors influence observed quality in Head Start classrooms. Before presenting these findings, a brief description of the measures is provided.

Classroom Observation Procedures

Classroom quality data were collected in 40 sampled Head Start programs, comprising approximately 180 centers, 518 classrooms and 3,200 children. Specially-trained observers, each of whom were present in one classroom throughout one full "Head Start day," completed the following standardized and widely-used measures:

- *The Assessment Profile Scheduling* scale (Abbott-Shim & Sibley, 1987). This scale assesses the written plans for classroom scheduling and how classroom activities are implemented.

- *The Assessment Profile Learning Environment* scale (Abbott-Shim & Sibley, 1987). This scale measures the variety of learning materials available in the classroom that provide learning experiences in small muscle/manipulatives, self-help, art, drama/role play, science, math, language, nutrition/health, and diversity.

- *The Early Childhood Environment Rating Scale (ECERS)* (Harms, Clifford, & Cryer, 1998). This measure consists of 37 scales measuring a wide variety of quality related processes occurring in the classroom, including routines, teacher-child interaction (particularly in the use of language), learning activities, classroom tone, creative, dramatic, and gross and fine motor activities, equipment and furnishings, and staff and parent facilities. The ECERS items were rated on a seven-point scale, with the following anchors: (1) inadequate, (3) minimal, (5) good, and (7) excellent. An overall quality rating was then obtained by averaging the scores across all items. Subscales scores were also calculated.

- *The Arnett Scale of Caregiver Behavior* (Arnett, 1989). This is a rating scale of teacher behavior towards the children in the class. It consists of 26 items that assess the teacher's sensitivity, punitiveness, detachment, permissiveness, and the teacher's encouragement of child self-help.

Results of Classroom Data Collection Efforts

Inter-rater reliability was assessed using research staff trained in the observation methods to conduct parallel, independent observations for all the quality measures. One classroom in 39 of the 40 programs was checked for inter-rater reliability. In Fall 1997, the percentage agreement for the observations of quality ranged from 85 percent (for the ECERS) to 91 percent (for the Assessment Profile Scales). These findings indicate the observers in the classroom were well-trained and followed the coding criteria in assigning scores for program quality. Further, internal consistency of the process quality measures was very good, with coefficients ranging from .62 to .98, attesting both to the measurement properties of the measures and their use in this study.

B. Summary of Findings From the Second Progress Report: Head Start Classrooms as Child Development Environments

The Quality of Most Head Start Classrooms Is Good

A major finding from the Spring 1997 data was that Head Start classroom quality was good, with an overall average ECERS score of 4.9 for the 403 classrooms in the national sample (with a standard deviation of 0.6). Seventeen percent of the Head Start classrooms were rated as excellent, with average ratings of 6 or higher (on a 7-point scale), while only 1.5 percent of classrooms had an average score of 3. Notably, no classrooms received an average ECERS score lower than 3 on the 7-point scale (minimal quality). That is, no classroom in the sample was of "inadequate" quality.

A comparison of these findings with previous studies of center-based preschools revealed that average quality in Head Start classrooms is higher than that found in most center-based child care and preschool programs, and that Head Start programs do not have the same "bottom" to the distribution found in these other programs. The existing efforts towards monitoring the Head Start Program Performance Standards have had

the desired effect of bringing all programs above the minimal standard of quality.

These findings regarding process quality in classrooms were further supported by data from structural aspects of quality, such as class size, child:adult ratio, and teacher backgrounds. The Spring 1997 average class sizes and child:adult ratios were far better than those required by the Head Start Program Performance Standards and exceed the National Association for the Education of Young Children (NAEYC) accreditation standards. The data suggest that most Head Start programs sampled in this study meet or exceed the monitoring standards already in place. Further, since the child:adult ratios are based on the total number of adults in the classroom reported by FACES observers, including parents and other volunteers who are actively involved in classroom activities, an important contributor to overall program quality appeared to be increased parent involvement as classroom volunteers.

The earlier-reported findings of teacher backgrounds and qualifications, using the Spring 1997 field test data, revealed that most Head Start teachers have good teaching qualifications–approximately 30 percent of the Head Start teachers had an undergraduate degree or higher, including 5 percent with graduate degrees. While Head Start teachers are experienced and qualified to teach early childhood education, as a group their qualifications are lower than those of teachers in public elementary schools.

In the Second Program Performance Measures Report, data were reported that showed considerable variation in classroom quality across three levels: Head Start classrooms, centers and programs. Approximately one-third of the variation in classroom process quality could be attributed to each of the three levels: classroom, centers and programs. Slightly more variation occurred at the classroom and the program levels than at the center level. These findings indicate that, within a given Head Start program, classrooms in the same center were more varied in their quality compared with classrooms from different centers within the same program.

These findings suggest the importance of studying factors at the level of the center or the program that contribute to the observations of process quality in classrooms. Some of these potential factors include differences in teacher competence, training and experience, and the role of the center director and educational coordinator in maintaining quality, providing resources to teachers, and determining policies that affect quality across classrooms in the same center, as discussed in the Second Program Performance Measures Report. Finally, program organization, such as resources, staff salaries, training policies, and perhaps support from the communities in which the programs operate, may all have a significant impact on quality.

This Third Progress Report updates the measures of quality using data from the Fall 1997 cohort, which cover many classrooms from the original field test plus 29 percent more classrooms (as a result of the increase in the number of children in the sample). Quality was measured at two periods: during visits to classrooms in the Fall of 1997 and then in the Spring of the same Head Start year, Spring 1998. Updated findings of the structural and teacher-related characteristics in these classrooms, as well as results looking at the influence of the center and the program on quality in individual classrooms, are also reported.

C. Classroom Quality in Fall 1997 and Spring 1998 Continues to be Good

Using the same measures of quality, the findings indicate that quality in Head Start continues to be good. In Fall 1997, the average ECERS score across the 518 classrooms was 4.93 (standard deviation of .63), which is virtually identical to the Spring 1997 mean of 4.9. An ECERS score of 5 on the 7-point scale is considered "Good" while scores of 6 or 7 on the scale are indicative of "Excellent" overall quality. Table 4.1 displays the distribution of classrooms along the ECERS scale points for the Fall 1997 measurement period. Nineteen percent of the Head Start classrooms were given average ratings of 6 or higher.[12] Twenty-nine percent of the classrooms scored four or lower, but again, as found in the field test, no classrooms received an average ECERS score lower than 3 on the 7-point scale (minimal quality). That is, no classroom was of "inadequate" quality.[13]

[12]The average scores were rounded off to the whole number reflecting the closest scale point, so that a score of 6 or higher includes scores of 5.5 or greater. A score of 4 or lower includes scores of 4.49 or less.

[13]These results are based on the unweighted data. However, class-level weights were computed and the weighted results did not differ. In this report, only the results from unweighted data were given. A forthcoming technical report will provide results from weighted data, including standard error estimates.

Table 4.1
Distribution of Classrooms by ECERS Mean Score, Fall 1997

ECERS Score	Percent of Classrooms
1 Inadequate	0
2	0
3 Minimal	0.8
4	26.8
5 Good	53.7
6	18.1
7 Excellent	0.6
	100 percent

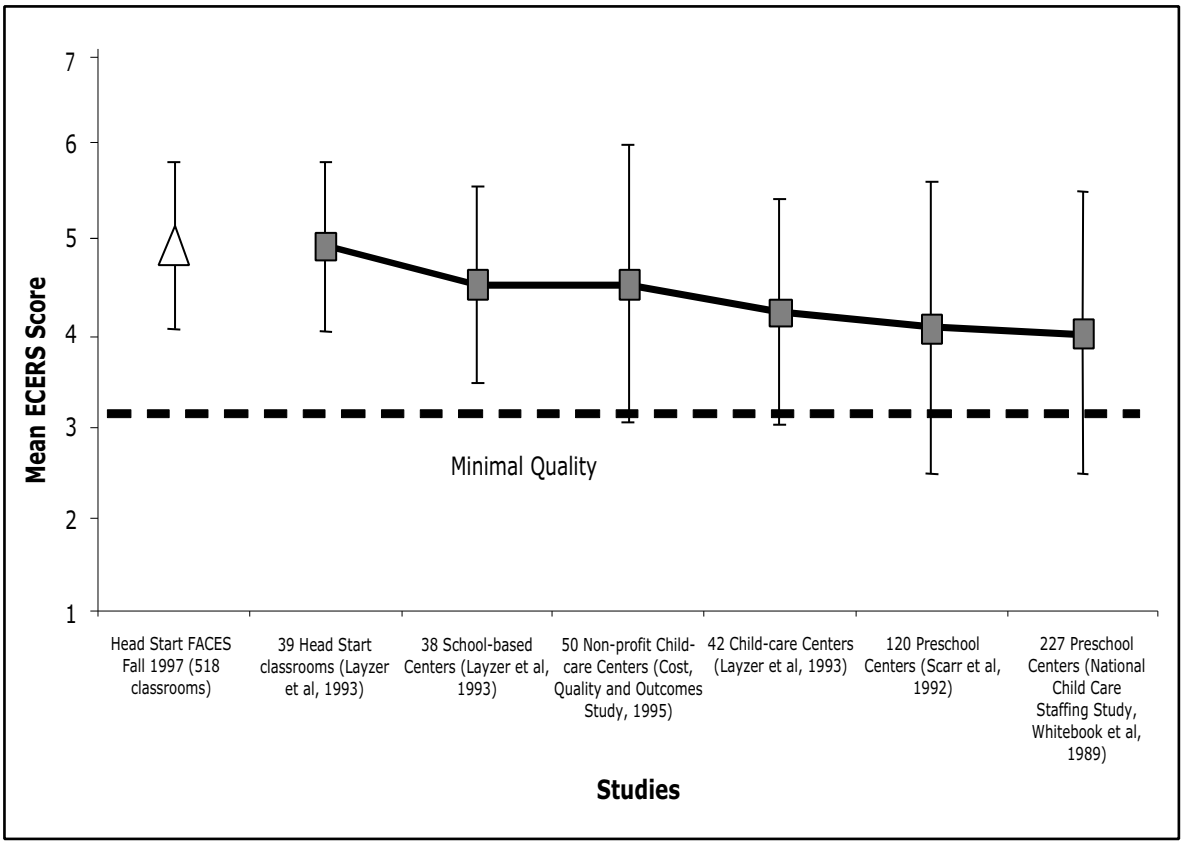
SOURCE: Head Start Family and Child Experiences Survey (FACES) Fall 1997 Data

Note: There were 518 classrooms with valid scores. Mean scores were rounded to the nearest scale point.

An updated comparison between the FACES sample and previous studies of center-based preschools, using the Fall 1997 ECERS total score and range (within 2 standard deviations), also continued to support the findings presented in the Second Program Performance Measures report that the quality in Head Start is considerably higher than the average quality found in other child-care or center-based preschool programs (Figure 4.1). Also, variability in quality in Head Start classrooms was lower than in other center-based preschool or child-care programs.

Figure 4.1 also shows that both the average score for quality and its variation across classrooms in the FACES Fall 1997 sample were almost identical to those found in an earlier study that included a sample of Head Start classrooms. Studies of center-based preschool programs reported the lowest quality scores while studies of school-based and non-profit child-care centers reported slightly

Figure 4.1
Classroom Quality Compares Favorably to Other Preschool Programs



The range represents the mean plus or minus 2 SDs.

higher quality, but still not at the same levels as the studies of Head Start classrooms.

Structural Factors Support Good Quality in Head Start Classrooms

Structural aspects of program quality, such as class size and child:adult ratio, further support the conclusion that the quality of many Head Start classrooms is good and higher than other center-based preschool programs. According to data collected by FACES observers at two separate time periods during their stay in the classroom, the number of children per class (class size) averaged 14.17 in Fall 1997 and 13.78 in Spring 1998. These are similar to the average class size of 13.6 reported in the field test.

These average numbers are far better than the class sizes required by the Head Start Program Performance Standards of a maximum of 17 3-year-olds or 20 4-year-olds per classroom. The class sizes also exceed the National Association for the Education of Young Children (NAEYC) accreditation standards of 16 3-year-olds and 20 4-year-olds per classroom. The lower class sizes found in FACES suggest that most Head Start programs in this study meet or exceed the current monitoring standards.

The average child:adult ratio for the FACES classrooms was 6.3 children per adult at the Fall 1997 observation and 6.2 children per adult during the Spring 1998 observation. These compare with 5.6 children per adult reported for the field test (Spring 1997) and are far better than the NAEYC accreditation standard of eight or fewer 3-year-olds or 10 or fewer 4-year-olds for each adult. This ratio also exceeds the Head Start Program Performance Standards of 7.5 to 8.5 or fewer 3-year-olds or 10 or fewer 4-year-olds per adult. Again, Head Start classrooms in the FACES sample had fewer children per adult than the NAEYC accreditation and Head Start Program Performance Standards.

These child:adult ratios are based on the total number of adults in the classroom reported by FACES observers, averaged across two distinct time periods. The ratios include parents and other volunteers in the classroom, as long as they were actively involved in classroom activities. However, the Head Start Program Performance Standards and the NAEYC standards for child:adult ratio only count paid professional staff, so comparisons are difficult. The method by which Head Start classrooms were able to have more favorable child:adult ratios was primarily through volunteer assistance, further underlining the importance of parent involvement as a contributor to overall program quality in Head Start.

These findings indicate that structural aspects of quality are important factors distinguishing Head Start classrooms from other preschool settings. Head Start classrooms provide substantially better child:adult ratios than current standards and this factor may play an important role in the linkage between Head Start program quality and children's development.

Head Start Teachers Are Well Qualified

Table 4.2 summarizes the characteristics of the Head Start lead teachers according to their answers on a self-administered questionnaire, given at each of the observation periods, Fall 1997 and Spring 1998. While most of the data did not change substantially, there was some variation due to classrooms added to the Spring 1998 observations, and some shifting of lead teachers between classrooms (see Table 4.2).

Overall, lead teachers in Head Start classrooms have been teaching in Head Start for 7.5 years and teaching for an average of 11.7 years in all educational settings. Thus, teachers spent most of their

Table 4.2
Comparison of Teacher Backgrounds and Qualifications, Fall 1997 and Spring 1998

		Fall 1997	Spring 1998
Highest Level of Education Achieved			
	High School/GED	7.1%	8.5%
	Attended College	34.9%	34.3%
	Associate's Degree	25.4%	28.4%
	Bachelor's Degree	29.6%	25.8%
	Graduate Degree	3.0%	3.0%
	Total	100.0%	100.0%
Years Teaching Head Start			
	1-2 Yrs	14.2%	14.1%
	3-4 Yrs	22.7%	19.8%
	5-9 Yrs	34.1%	39.1%
	10+ Yrs	29.0%	26.9%
	Total	100.0%	100.0%
Age Category			
	18-29	14.7%	16.4%
	30-39	33.3%	31.9%
	40-49	31.8%	32.3%
	50-59	15.9%	15.3%
	60-69	3.7%	3.3%
	70 or older	0.6%	0.8%
	Total	100.0%	100.0%
Member of Early Education Association			
	No	47.1%	46.8%
	Yes	52.9%	53.2%
	Total	100.0%	100.0%
CDA Certificate/Credential			
	No	23.9%	20.8%
	Yes	76.1%	79.2%
	Total	100.0%	100.0%
Teacher Ethnicity			
	Black	34.2%	33.3%
	Hispanic	22.4%	22.7%
	Asian	2.3%	2.6%
	White	41.1%	41.4%
	Total	100.0%	100.0%

teaching careers in Head Start classrooms. However, there was a wide range of teaching experience. Approximately 14 percent of the Head Start teachers were relatively new, having been teaching in Head Start for less than two years, while almost one-third had been teaching in Head Start for 10 years or more.

Most Head Start teachers have good teaching qualifications, but lower than those of teachers in public elementary schools. In the Fall 1997, approximately one-third of the Head Start teachers had an undergraduate degree and another 35 percent had some college experience. Over three-quarters had a Child Development Associates (CDA) or related certificate. Head Start teachers were generally between 30 and 50 years of age with 32 percent in the 40 to 49 year age group and another 30 percent in the 30 to 39 year age group. Fifty-three percent belonged to a national professional association for early childhood educators (e.g., NAEYC, NHSA, NEA). In terms of racial and ethnic background, 41 percent of the teachers were White, 34 percent were African American, 22 percent were Hispanic, and 2 percent were Asian. The data reveal that Head Start teachers are experienced and qualified to teach early childhood education.

Teacher Backgrounds Are Correlated With Classroom Quality Measures

A series of simple bivariate correlations were conducted using teacher backgrounds (age and race) and qualifications (the number of years teaching Head Start, membership in an early childhood association, highest education level attained) and classroom quality (the ECERS, Assessment Profile, Arnett, class size and child:adult ratio). Results indicate significant positive correlations between teachers' highest education level and ECERS subscales and total score and the Arnett (lead teacher). As illustrated by Figure 4.2, classrooms with higher process quality ratings and more sensitive teachers were also those with significantly higher teacher qualifications. Additionally, classrooms with lower child:adult ratios and fewer children had more qualified teachers.

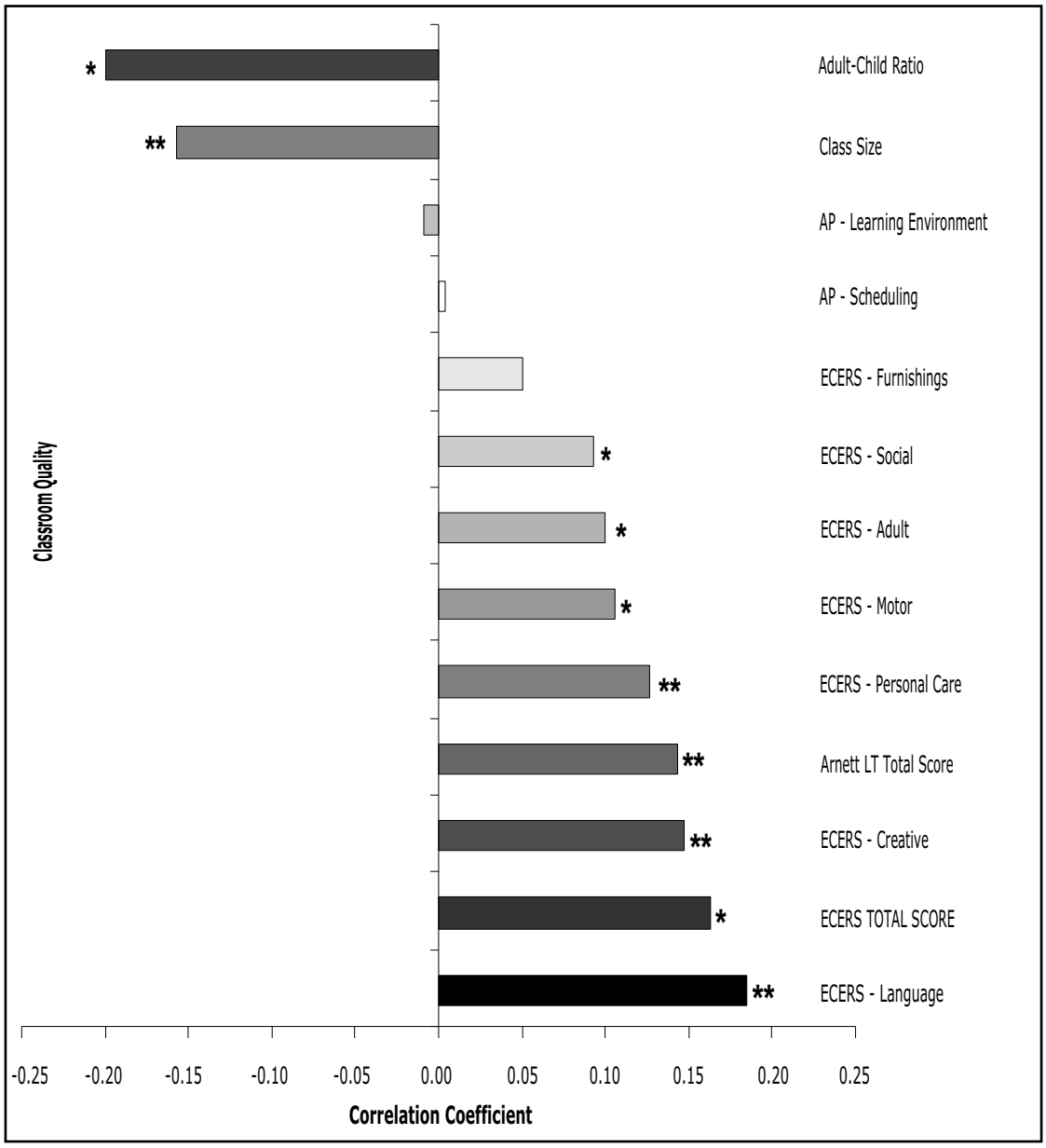
The only significant correlation between the number of years spent teaching Head Start and classroom quality was a negative correlation with the ECERS Adult Subscale (provisions for adults); classrooms with fewer provisions for adults (staff and parents) have teachers with significantly more years of experience teaching Head Start.

A series of regressions looked at all teacher background factors together, at the classroom level, controlling for the strata from which the program came (that is, whether it was located primarily in rural vs. urban areas, and the geographic region of the country in which it was located). The analyses identified the relative contribution of all teacher background factors to classroom quality, and revealed that regardless of race or years of experience teaching in Head Start, teachers with higher levels of education are in classrooms with significantly higher quality language activities (as measured by the ECERS Language Subscale), and are significantly more sensitive and responsive.

Classroom Quality Is Consistent Over Two Years

When the Spring 1997 findings are compared with the Fall 1997 findings, the results show that classroom quality across two separate years remains remarkably consistent and good (see Figure 4.3). The Fall 1997 classrooms included some that were observed in the Spring 1997, plus some additional classrooms, but all came from the same sample of 40 programs. The figure indicates that classroom quality scores were consistent over the two years, within the same programs, with an average ECERS score of 4.9. At both time periods, there were a similar number of classrooms rated "good" quality or higher (78.5 percent in Spring 1997 and 72.4 percent in Fall 1997).

Figure 4.2
Highest Education Correlated with Classroom Quality, Spring 1998



*Significant at p<.05

**Significant at p<.01

SOURCE: Analysis of data from Head Start Family and Child Experiences Survey (FACES), Spring 1998.

D. Classroom Quality Improves in the Same Head Start Year

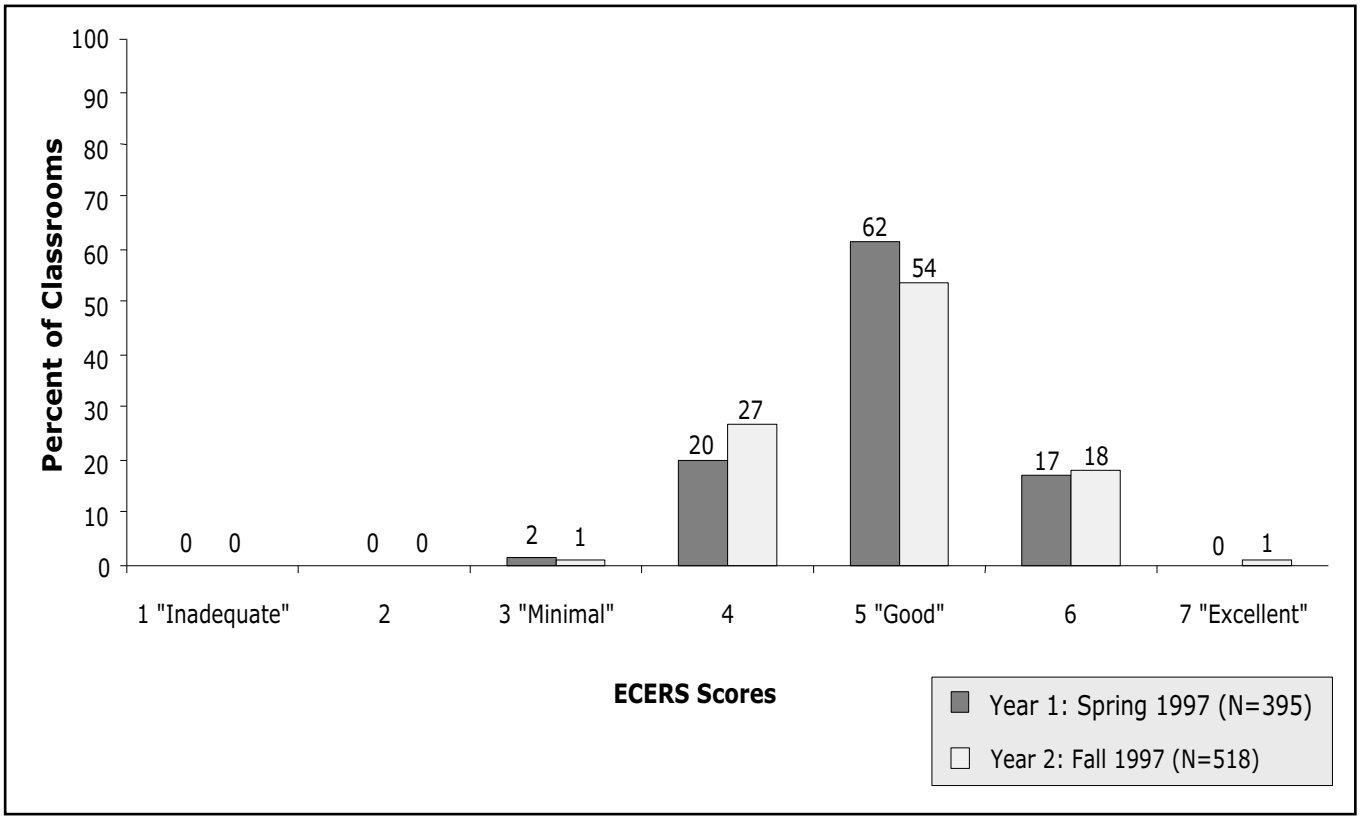
In the Spring of the 1997-1998 Head Start year, observations were again made of classroom quality and a modest but significant increase was found. The average ECERS score increased from 4.9 to 5.1 (with a standard deviation of .61), which, given the sample size, represents a significant increase in average quality.[14]

Table 4.3 displays the distribution of classrooms along the ECERS scale points for the Spring 1998 measurement period. More classrooms in Spring 1998 were given ratings of 6 or higher; 26 percent compared with 19 percent in Fall 1997, while fewer classrooms received average scores of four or lower (13 percent vs. 29 percent in Fall 1997).[15] No classrooms received an average classroom quality score lower than 3 on the 7-point scale and

[14]Some classrooms in the Fall 1997 sample were not the same as those in the Spring 1998 sample, but when the same classrooms were compared across time using repeated-measures MANOVA statistical tests, there was still a significant main effect of time, indicating a significant increase in quality among the same classrooms measured at both time periods.

[15]The average scores were rounded off to the whole number reflecting the closest scale point, so that a score of 6 or higher includes scores of 5.5. or greater. A score of 4 or lower includes scores of 4.49 or lower.

Figure 4.3
The Percentage of Classrooms Rated Good Quality or Higher Is Consistent Over Two Years



Fall 1997 classrooms consist of Spring 1997 classrooms plus new classrooms from the same 40 Head Start programs.

SOURCE: Head Start Family and Child Experiences Survey (FACES) Spring 1997 and Fall 1997 data.

the number of classrooms receiving an average score of 3 on the ECERS declined from 0.8 percent to 0.6 percent.[16]

Figure 4.4 underlines the change in average classroom quality, with 87.1 percent of classrooms rated "good" or higher (compared with 72.4 percent in the Fall, and 78.5 percent in Spring 1997). These findings indicate that classroom quality in two measurement periods during the same Head Start year, among the same classrooms, is good and slightly increases from the first to the second measurement period.

There are a number of possible explanations for the slight increase in quality from the fall to the spring of the year. First, this may be a natural process in Head Start classrooms where, at the beginning of the year, teacher assignments and children's attendance patterns are less fixed. Over the course of the year, teacher planning and activities may be more predictable and consistent and

[16]These results are based on the unweighted data. However, class-level weights were computed and the weighted results did not differ. In this report, only the results from unweighted data are given. A forthcoming technical report will provide results from weighted data, including standard error estimates.

Table 4.3
Distribution of Classrooms by ECERS Mean Score, Spring 1998

ECERS Score	Percent of Classrooms
1 Inadequate	0
2	0
3 Minimal	0.6
4	12.3
5 Good	60.5
6	26.2
7 Excellent	0.4
	100 percent

SOURCE: Head Start Family and Child Experiences Survey (FACES) Spring 1998 Data

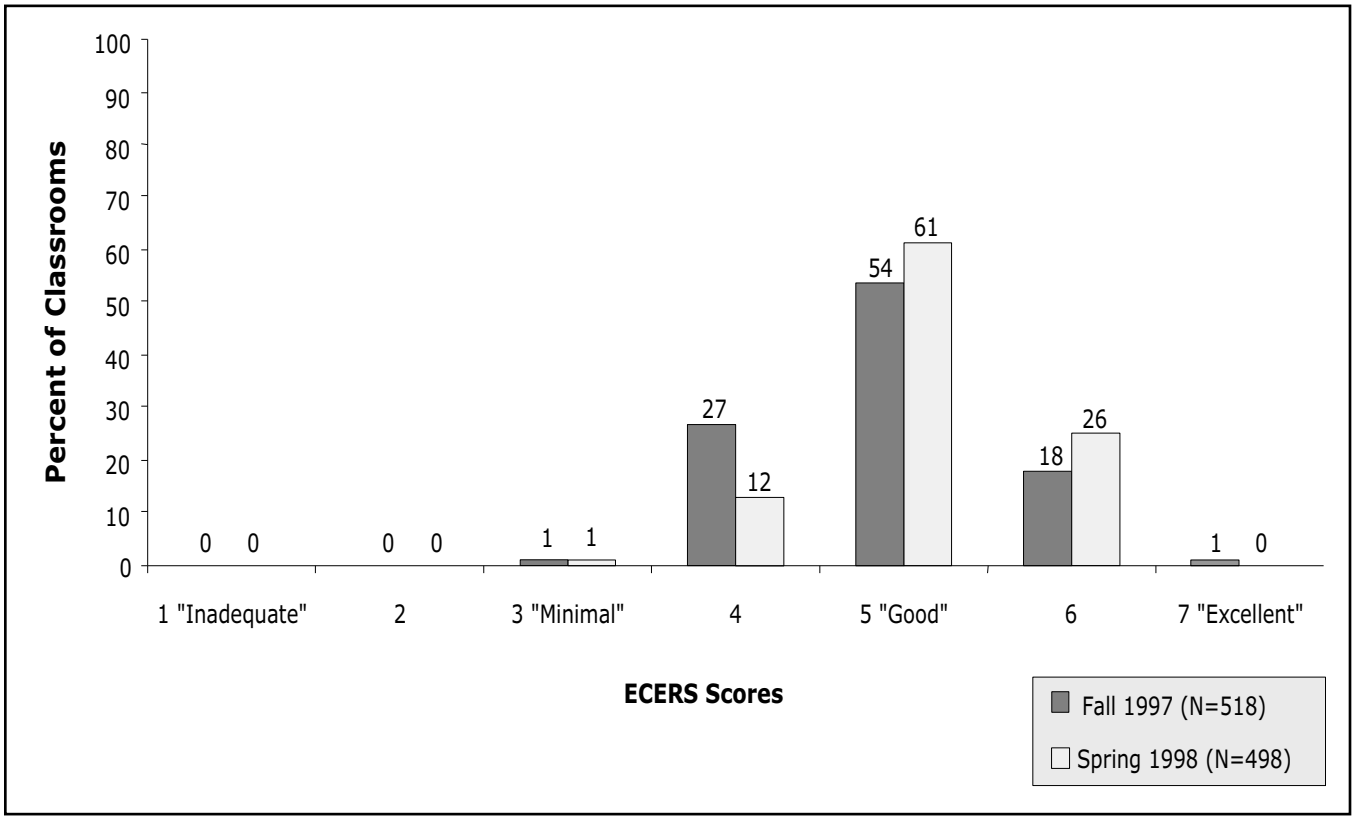
Note: There were 498 classrooms with valid scores in Spring 1998, which are slightly less than classrooms observed in Fall 1997, because some children changed classrooms. Mean scores were rounded to the nearest scale point.

thus the observed quality of the classroom processes may show an increase.

An alternate explanation is that the use of the ECERS may have functioned inadvertently as an "intervention" influencing observed classroom quality, due to the teacher interview required to complete the ECERS following the classroom observation, and the relatively short time frame between the fall and spring measures. These factors may have allowed the teachers to ascertain the targets of the quality measures so that, by the next observation period, they may have made changes in the classroom to reflect these expectations.

However, the scoring criteria of the other measures of classroom quality used in FACES (the Assessment Profile Scheduling and Learning Environment Scales and the Arnett Scales of Caregiver Behavior) are different from the ECERS and do not require a teacher interview. On these measures, a significant change was found from Fall 1997 to Spring 1998, and the change in the ECERS scores was significantly correlated with the change in these other measures of classroom

Figure 4.4
The Percentage of Classrooms Rated Good Quality or Higher Is Consistent From Fall to Spring in the Same Year (1997-1998)



SOURCE: Analysis of data from Head Start Family and Child Experiences Survey (FACES) Fall 1997 and Srping 1998 classroom observations.

quality (with correlation coefficients ranging from .33 to .38 for the two Assessment Profile scales and the Arnett Scales of Caregiver Behavior). Thus, it is unlikely that just knowing what the observers are rating in classrooms will result in an increase in observed classroom quality over two time periods.

Overall, these results support the notion that a modest increase in classroom quality may be a naturally-occurring trend among Head Start classrooms as the teachers become more familiar with the children, with their classrooms, and with the curriculum. Also, the training and technical assistance provided to teachers by the programs and the Head Start Quality Improvement Centers may have improved classroom quality.

E. Highlight on Head Start's Services to Children With Disabilities and Health Problems: A Special Case of Head Start Quality

Head Start defines quality broadly and does not limit its efforts to the classroom. Head Start has a legislative mandate to serve children with disabilities and sets aside at least 10 percent of its enrollment for children with disabilities. Head Start has historically exceeded this mandate and programs adhere to specific Performance Standards to serve children in integrated, developmentally appropriate programs. The importance of this mandate is reflected in Performance Measure 15: "Head Start programs provide individualized services for children with disabilities." To assess Head Start's performance in this area, primary caregivers were asked, in the Spring, 1998 Parent Interview, whether their child had a disability, whether their child received services for this disability, and their level of satisfaction with Head Start services. This section describes the range of disabilities and health problems that Head Start encounters as well as how Head Start reaches out to support children's well-being outside the classroom in the special case of children with disabilities and health problems.[17]

Types of Disabilities Reported by Parents

In total, 16 percent of primary caregivers reported that their child had one or more diagnosed or suspected disabilities. (This compares with a total of 13 percent of children who were reported as professionally diagnosed with disabilities by the Program Information Report (PIR), a national-level survey which collects data on total enrollment from all Head Start programs.) Of the 16 percent with diagnosed or suspected disabilities, 72 percent were reported by the primary caregiver as having only one disability, 16 percent had two disabilities and another 9 percent were reported as having three or more disabilities.

Table 4.4 presents both the parent report of diagnosed or suspected disability in FACES and disabilities that were professionally diagnosed as reported by programs in the national PIR. By far, the most frequent type of disability was speech and language impairments, which together were reported to affect slightly over 12 percent of all the children in FACES, compared with about 8 percent in the PIR. Cognitive impairments, which include learning disability, mental retardation, autism and non-categorical developmental delay, totaled approximately 2 percent of children as reported by parents, which is roughly consistent with approximately 2 percent reported in the PIR. However, developmental delay occurred with greater frequency in the PIR (just under 2 percent) than in parent reports, where the frequency was roughly a half a percentage point. Socioemotional

[17] Unweighted data are reported throughout this section. The matrix in Chapter VI reports weighted data for this Performance Measure.

problems were more frequent in parent reports (almost 2.5 percent) than in the PIR (only a half of a percent). No other impairment affected more than 1 percent of the total children, although Head Start served children with a wide range of disabilities. These included deafness and other hearing impairments (roughly a tenth of a percent according to PIR data), blindness and other visual impairments (a tenth of a percent by PIR frequency), orthopedic impairments (about two-tenths of a percent according to the PIR), and chronic health problems, such as asthma and heart conditions, which totaled slightly under 1 percent on the PIR.

Individual Education Plans

Once a disability is diagnosed, an Individualized Education Plan (IEP) is developed for the child by the Head Start program in conference with the parents. Most of the parents of children with diagnosed or suspected disabilities (66 percent) reported participating in an IEP. Participation in

Table 4.4
Disabilites and Health Problems Were Reported for Over 15 Percent of Head Start Children

Disability	FACES Primary Caregiver Report (Spring 1998) N=2688	National Head Start Program Reports N=860,226
Speech or Language Impairments	12.35%	7.70%
Non-Categorical/Developmental Delay	0.60%	1.98%
Health Impairment	1.19%	0.81%
Emotional/Behavioral Disorder	2.42%	0.51%
Learning Disabilities	1.15%	0.22%
Orthopedic Impairment	0.37%	0.19%
Mental Retardation	0.26%	0.16%
Hearing Impairment (including Deafness)	1.19%	0.11%
Visual Impairment (including Blindness)	0.60%	0.10%

Note: Disability categories are from the Head Start Program Information Report. Autism and Traumatic Brain Injury were less than 0.1% for both the FACES reports and the national reports.

an IEP was highest for speech-language impairments (70 percent) and cognitive impairments (66 percent), and lowest for socioemotional impairments (49 percent) and all other impairments (45 percent). More than one-quarter (27 percent) of families reporting suspected or diagnosed disabilities did not participate in the IEP process. This may be explained by a difference in parental report of special needs as compared to the program's professional diagnosis of disability as reported in the PIR, for which a child requires special education and/or related services.

Of the parents participating in the IEP process, 86 percent reported receiving at least some of the IEP services. Of these parents, preliminary analyses revealed that 70 percent reported receiving most or all of the services. Twelve percent of the parents received none or a few services identified in the IEP. Seventy percent of children with speech-language impairments received most or all of the services recommended in the IEP. For cognitive impairments, 60 percent of children received most or all of the recommended services, while 50 percent of children with socioemotional impairments received most or all recommended services.

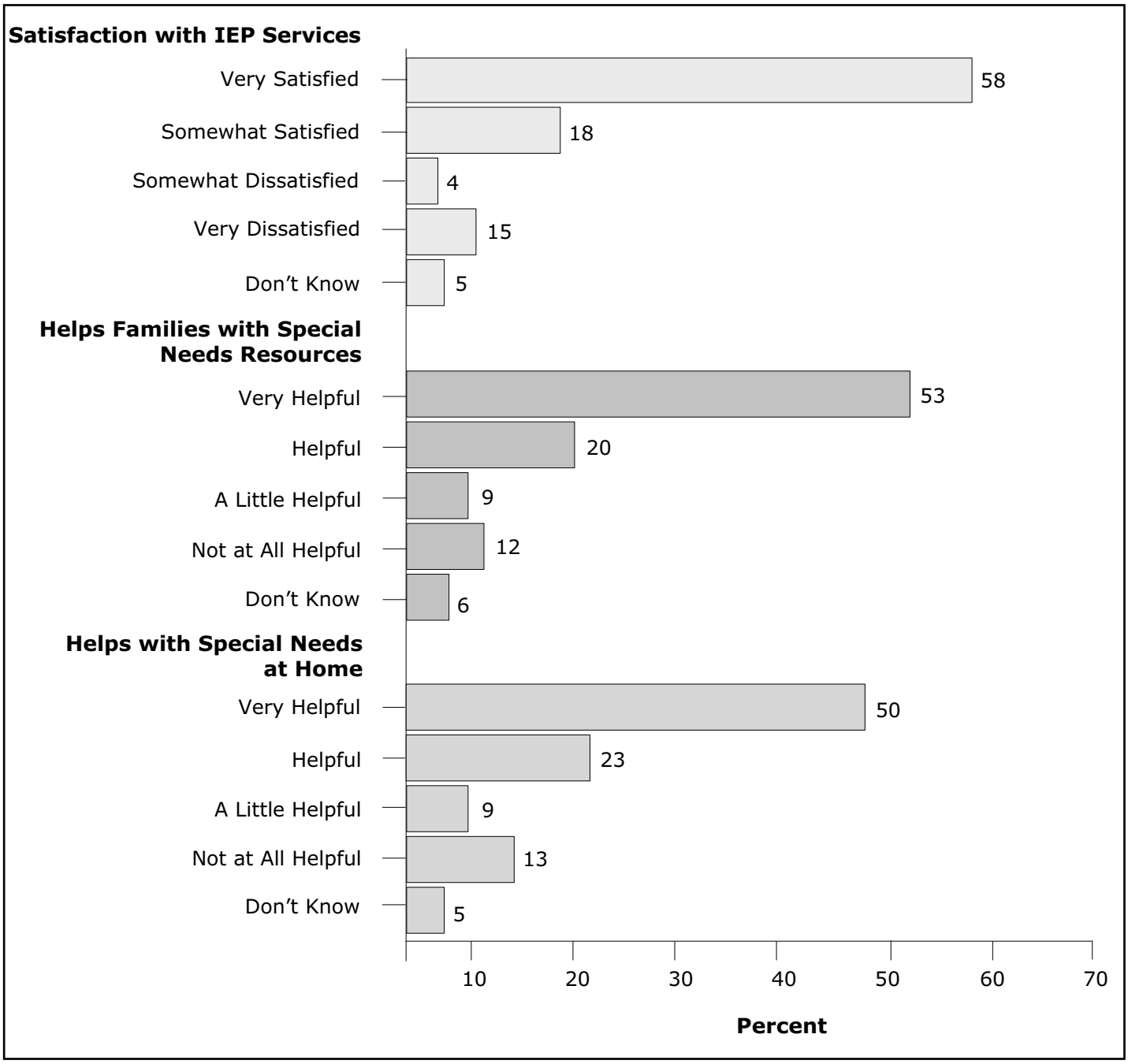
Parent Satisfaction With Services for Children With Disabilities

Most families receiving services for children with disabilities were very satisfied with Head Start services. In fact, 58 percent of the families were very satisfied, 18 percent were somewhat satisfied, 4 percent were somewhat dissatisfied and 15 percent were very dissatisfied. Only 5 percent of families answered this question with "don't know." Satisfaction (somewhat or very satisfied) was highest for speech-language disabilities at 83 percent, followed by 79 percent in the "other" category. For the cognitive disabilities category, parent-reported satisfaction was 76 percent. Parental reports of satisfaction were lowest for children with socioemotional impairments, with only 53 percent being somewhat or very satisfied.

Of the children with diagnosed or suspected disabilities, most parents (80 percent) reported that Head Start had helped them obtain special needs resources for the child. Of those receiving these resources, 73 percent felt that Head Start was very helpful or helpful, while 21 percent said Head Start was only a little or not at all helpful. Six percent of the parents did not know. Head Start also assisted most families (79 percent) with special needs at home. Once again, most families were very satisfied with Head Start services in this area, with 73 percent reporting that Head Start was either very helpful or helpful, 22 percent reporting that Head Start was only a little or not at all helpful, and 5 percent responding with "don't know."

For many children, their diagnosed or suspected disabilities negatively affected their ability to learn. By parent reports, disabling conditions and impairments had negatively affected the learning of almost a third (31 percent) of children with disabilities. In approximately 27 percent of children with speech and language impairments, parents reported that the child's learning was negatively affected. As would be expected, learning was negatively affected in 79 percent of children with cognitive disabilities. Parents of children with socioemotional impairment reported that learning was negatively affected for 63 percent of the children. For children with "other" diagnoses, including health, orthopedic, sensory and neurological problems, learning was impeded for 34 percent of the children.

Figure 4.5
Parent Satisfaction with Services for Children with Disabilities



F. Conclusions

FACES has demonstrated that classroom quality can be measured reliably in a large-scale survey using standard observational scales. Findings from two consecutive years, a Spring 1997 field test, and pre- and post-data from the 1997-1998 Head Start program year, indicate that classroom quality in Head Start classrooms was good and higher than the quality of other center-based preschool programs. Structural aspects of Head Start classrooms (child:adult ratio and class size) were also favorable and exceeded existing standards. Further, Head Start teachers were well-trained and experienced, although their qualifications were lower than those of teachers in public elementary schools. The level of teachers' educational attainment was positively correlated with a variety of structural and process quality measures. Classroom quality remained consistent across two years. Evidence also indicates that classroom quality increased slightly over the course of the program year.

Head Start's services to children with disabilities is an additional example of the quality of the program. In total, 16 percent of primary caregivers reported that their child had one or more disabilities, with the most frequent problem being speech and language impairments. Approximately half of all children's disabilities were identified after the child was enrolled in Head Start, indicating that Head Start both recruits children with disabilities and its screening services identify undetected disabilities in children already enrolled. Most parents of children with disabilities (66 percent) reported participating in an IEP. Seventy-six percent of parents were either very or somewhat satisfied with Head Start services for their children with disabilities.

Chapter V

Summary and Implications

Through FACES, the national Head Start Program has collected a wealth of information related to the quality of the program and the progress of Head Start children and their families through the child's Head Start and kindergarten years. In addition to highlighting the successes and strengths of the program, the data also point to program areas needing improvement.

A. Summary of Findings

Head Start Enhances Children's Growth and Development

FACES data indicate that Head Start does enhance children's growth and development in several important areas. Students who entered Head Start began the year at a great disadvantage to other children, demonstrated by standardized test scores and family poverty levels. Children in Head Start showed significant gains in vocabulary, writing skills and social skills over the Head Start year. For example, on an assessment of word knowledge, the percentage of children scoring close to or above the national mean increased from only one in four when they started the program to more than one in three—nearly a 40 percent increase. In addition, Head Start worked to narrow the gaps among children with varying levels of skills. The children with the least skills at program entry demonstrated the most gain during the period of program participation. Language-minority children in Head Start showed gains in school readiness skills and their knowledge of English by the end of the Head Start year.

However, with respect to letter recognition, Head Start children showed a slight but statistically significant decrease in average standard scores. They also showed no gains in book knowledge, and little or no change in problem behavior other than a reduction in hyperactive behavior. Overall, data from the child assessment and teacher and parent ratings reveal that the typical 4-year-old completing Head Start possessed the knowledge in early literacy and numeracy and social skills that indicate a readiness to learn when the child reaches kindergarten and first grade.

Head Start Graduates Show Substantial Progress in Kindergarten

Results from the FACES kindergarten follow-up further support the conclusion that children leaving Head Start are "ready to learn," because they had, in fact, learned a great deal by the end of kindergarten. At the end of kindergarten, Head Start graduates made substantial gains in word knowledge, letter recognition, math skills, writing skills, and phonemic awareness. For example, 83 percent of the Head Start graduates could identify most or all letters of the alphabet, and children demonstrated familiarity with key book and print concepts. The skills that typical Head Start graduates could demonstrate have been shown to be positive predictors of learning to read. However, despite the progress they made in kindergarten, Head Start graduates continued to score below national norms on most tasks for which norms were available.

Head Start Families Make Progress During the Program Year

Head Start families could cite many achievements over the program year. Nine percent of Head Start primary caregivers obtained a license, certificate or degree over the program year, there was a 2 percent increase in employment, and 3.8 percentage point reduction in the number of families receiving TANF, representing a decline of 14 percent. Parents also reported a greater sense of

control over their lives at the end of the program year compared to the beginning.

Head Start parents were actively involved with their children, and reported a slight increase in participating in a variety of weekly and monthly activities with their child over the program year. More than two-thirds of Head Start parents reported reading to their children at least three to five times a week. Parents have the opportunity to learn parenting skills, including discipline, as part of the Head Start program, and there was a small but significant decline in parental spanking from fall to spring.

Nearly all parents (94 percent) viewed Head Start as a helpful source of support for raising their child. Parents were involved in Head Start in numerous ways, with most parents visiting with Head Start staff in the home, attending parent-teacher conferences, and observing in the classroom. More than half of the parents volunteered in the classroom, prepared food for a Head Start event, or attended a parent education meeting. Parents were generally very pleased with their program experiences, reporting high levels of satisfaction with the child and family services provided by Head Start. These findings reinforce those of the 1999 American Customer Satisfaction Index, in which Head Start received the highest rating of any government program.

Classroom Quality in Head Start Continues to be Good

Across three measurement points, results from classroom observations using the Early Childhood Environment Rating Scale (ECERS) indicate that the quality in Head Start classrooms is good. Further, classroom quality improved over the course of the Head Start year. Seventy-five percent of Head Start classrooms were rated as good or better, nearly one-fifth of Head Start classrooms were rated as very good or excellent, and no Head Start classroom was found to be of "inadequate" quality. When compared to results from national studies, the quality of Head Start classrooms is better than other center-based preschool programs. Data reveal that Head Start class size and child:adult ratios meet or exceed standards. Further, Head Start teachers are well qualified. The higher the teacher's educational level, the better the observed classroom quality.

Classroom Quality Is Linked to Child Outcomes

The observed quality of Head Start classrooms has been linked with child outcomes. Two aspects of program quality were significant predictors of spring vocabulary scores. Centers with higher average scores on the ECERS language scale and lower child:adult ratios had higher average center scores. In addition, children whose parents read to them more frequently and had more books in the home had higher vocabulary scores. Children in classrooms rated higher in learning environment materials spent more time in simple interactive play or pretend play, and they spent less time in non-interactive play. Observed play is a key indicator of social development.

B. The Head Start Program—Accomplishments and Areas Needing Improvement

FACES points to areas in which Head Start is achieving its goal of enhancing children's school readiness. The classroom quality of Head Start is consistently good; in fact, a comparison with other national studies shows that Head Start quality is better than other center-based preschool programs. Other results highlight that Head Start has a meaningful impact on the immediate intellectual development of the low-income children it

serves. Head Start also has a positive influence on children's social skills. Children in Head Start have high rates of receipt of immunizations and medical and dental screenings. Parents are highly involved and satisfied with the program. Despite these achievements, data from FACES also indicate areas in the program needing improvement.

Emerging literacy. Pre- and post-data indicate that Head Start children showed no advance in knowledge of book and print conventions or letter-word identification from the beginning to the end of the Head Start year. Interviews with lead teachers revealed that most did not give children's acquisition of these skills high priority in their curricular goals or daily activity plans. Head Start programs need to increase their efforts to provide creative and developmentally appropriate initiatives to promote emergent literacy. On a related topic, the proportion of parents who said they read to their children every day did not increase. The proportion who did not read to their children at all in the previous week did decline from fall to spring, and more than two-thirds of Head Start parents reported reading to their children at least three to five times a week. However, given the impact of daily parental reading on children's vocabulary knowledge, it would appear that Head Start programs could be doing more to encourage and support regular reading by parents.

Child behavior problems. Head Start children did not show change from the beginning to the end of the program year in the frequency of emotional and conduct problems except for children showing hyperactive behavior, who showed a reduction in this behavior. Although only a minority of children showed problem behavior with any frequency, the size of that minority did not diminish between fall and spring. Head Start could do more to address the mental health needs of children with problem behaviors.

Fatherhood. Regardless of whether fathers were present in the household, those who engaged in more activities with their children were more likely to have children with higher positive social behavior ratings than fathers who were reported to engage in fewer activities. Yet fathers' mean activity rating was just over two activities a week, and one monthly activity. Further, because of a father either joining or leaving a household, children experience considerable change in household composition. When a father is not present in the household, children are more likely to be exposed to violence. In order for children to reap the benefits from their fathers' involvement, programs need to continue to emphasize the importance of fathers' activities in the home. Head Start programs should emphasize more paternal involvement through financial and emotional availability, while supporting access to all available resources.

Family needs. Head Start parents face a number of challenges in their daily lives. Improvement of their educational status, income levels, housing and mental health are all important needs. Single parent families and the children in them are especially vulnerable to environmental threats such as violence in the community. Overall, parents display mild depression. While there is significant improvement in parents' feelings of control over their lives, Head Start could focus more on programs to improve mental health and social support services.

C. Conclusion

Clearly Head Start is providing services and benefits most needed by the children and families it serves. The program's continuing efforts to improve program quality, staff credentials and child and family outcomes should move Head Start further towards its goals of enhanced quality and effectiveness.

Chapter VI

Head Start Program Performance Measures Matrix

This chapter presents both outcome and process data for the Program Performance Measures identified in Chapter I, Figure 1.2, Head Start Program Performance Measures. The data are organized by the five objectives of the Performance Measures:

- Objective 1. Enhance children's healthy growth and development.
- Objective 2. Strengthen families as the primary nurturers of their children.
- Objective 3. Provide children with educational, health and nutritional services
- Objective 4. Link children and families to needed community services.
- Objective 5. Ensure well-managed programs that involve parents in decision-making.

The matrix of Head Start Program Performance Measures that follows identifies each specific measure, the indicator of performance on that measure, the data source, and data.

The matrix presents all of the Program Performance Measures data that are currently available from the FACES 1997 Field Test and Fall 1997 and Spring 1998 pre- and post-test. Data are also drawn from the national Head Start Program Information Report (PIR) and regional office reports. The PIR is a mandatory self-reporting program level data system through which data are submitted by every Head Start program to the Head Start Bureau at the end of the program year. The PIR contains data on children and families served, services delivered, staff characteristics, and issues of special interest to the Bureau. Some data were available in 1997 from the Head Start Management Tracking System (HSMTS). This system is in transition and new monitoring data are not yet available.

HEAD START PROGRAM GOALS, OBJECTIVES, MEASURES, INDICATORS AND DATA SOURCES

ULTIMATE GOAL:

To bring about a greater degree of social competence in preschool children from low-income families

OBJECTIVE 1: ENHANCE CHILDREN'S GROWTH AND DEVELOPMENT

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
1. Head Start children demonstrate improved emergent literacy, numeracy, and language skills	Head Start children's emergent literacy	Child assessment: Woodcock-Johnson Letter-Word Identification	4-year-old HS children finishing the program had median standard scores of 88.9 (compared to the national mean of 100).	In HS, children gain points from Fall to S (no gain compared norms). 4-year-old children finishing th program had mean s scores of 89.8 (com the national mean o

[1]Change data are not available for the 1997 field test.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
1. Head Start children demonstrate improved emergent literacy, numeracy, and language skills (continued)	Head Start children's emergent literacy	Child assessment: Woodcock-Johnson Dictation	4-year-old HS children finishing the program had median standard scores of 86.3.	In HS, children gain points. In K they gained 4. 4-year-old Head Sta children finishing th program had mean standard scores of 8 (compared to the n mean of 100).
		Parent Interview	According to parents, 45% of children can recognize most or all letters; 40% can count to 20; 59% can write their first name.	According to parent of children can reco most or all letters; count to 20; 61% c their first name.
	Head Start children's language skills	Child assessment: Peabody Picture Vocabulary Test, Parent Interview, teacher ratings	4-year-old Head Start children finishing the program had mean standard scores of 89.5.	In HS, children gain points in raw scores In K they gained 20 in raw scores. 4-year-old Head Sta children finishing th programs had mean standard scores of 8
	Head Start children's numerical skills	Child assessment: Math Applied Problems, Parent Interview, teacher ratings	4-year-old Head Start children finishing the program had mean standard scores of 89.4.	In HS, children gain points. In K they gained 6. points. 4-year-old Head St children finishing th program had mean standard scores of 8

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
2. Head Start children demonstrate improved general cognitive skills	Head Start children's general memory, reasoning, and problem solving	Child assessment	At the end of the HS year, 4-year-old Head Start children had median standard scores of 89.4 on the WJ-R Applied Problems math task.	In HS children gaine points on the WJ-R Problems from Fall (no gain compared norms). 4-year-old children HS had mean stand scores of 86.6.
	Head Start children's musical ability and creativity	Child Observation Record (teacher ratings on scale of 1 to 5)	At the end of the HS year, 4-year-old children had a mean score of 3.28 for music and 3.16 for creativity.	4-year-old children' score in music and movement increase 3.09 in Fall to 3.63 i Creativity scores inc from 2.91 in Fall to Spring.
3. Head Start children demonstrate improved gross and fine motor skills	Head Start children's gross and fine motor skills	Child assessment: McCarthy Draw-A-Design	Not available	In HS, children incr from 3.11 in Fall to Spring. This is an ef of .58 SD which is educationally mean
4. Head Start children demonstrate improved positive attitudes toward learning	Head Start children's initiative and attitudes toward learning	Teacher ratings	Not available	Not available
	Head Start children's task mastery	Parent Interview, classroom observation	Not available	Not available
5. Head Start children demonstrate improved social behavior and emotional well-being	Head Start children's positive social behavior	Parent Interview, teacher ratings (Social Skills Rating System)	Not available	HS children showed significant improver classroom social be from Fall to Spring points to 16.1 point 24 point scale). In K they gained .4

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
5. Head Start children demonstrate improved social behavior and emotional well-being (continued)	Head Start children's behavior problems	Items from Personal Maturity Scale, Social Skills Rating System, Child Behavior Checklist for Preschool-Aged Children	Not available	Average problem b scores in HS were l (5.22 of 28 points i Spring). A minority children showed pr behavior. However, did not change sign over the year, with exception of hypera activity, which sign decreased from 1.3 to 1.2 in Spring. In K average proble behavior scores we up from 3.9 at the Head Start.
	Head Start children's social interaction with peers	Classroom observation	Children spent the most time in "non-interactive" forms of play (44% of the observed play time), although they also spent 29% of their time in interactive play with their peers, and 9% of their time in pretend play. They were uninvolved in play for only 7% of their total play time.	Children showed m complex play and le uninvolved or solita in the Spring than i Fall. Uninvolved de from 7% in the Fall in the Spring. Simp interactive play inc from 26% to 34% o intervals observed. play increased from the Fall to 9% in th

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
6. Head Start children demonstrate improved physical health	Status of children's health	Parent Interview	Percent of HS children in: ▪ Excellent or Very Good health - 75% ▪ Good health - 18% ▪ Fair or Poor health - 7%	Percent of HS childr ▪ Excellent or Very G health - Fall 76.4% Spring 76.1%. ▪ Good health - Fall Spring 19.5%. ▪ Fair or Poor health Fall 6.5%; Spring

OBJECTIVE 2: STRENGTHEN FAMILIES AS THE PRIMARY NURTURERS OF THEIR CHILDREN

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
7. Head Start parents demonstrate improved parenting skills	Head Start children's home environment safety	Parent Interview	Not available	In Fall, parents foll mean of 7 of 9 safe practices. In Spring followed a mean of behaviors all the ti a mean of 8 behavi most of the time. B of changes in the s fall to spring compa are available.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
7. Head Start parents demonstrate improved parenting skills (continued)	Head Start children's learning environment in the home	Parent Interview	64% of the Head Start children were read to by their parents or someone else 3 or more times a week. 36% read to the child every day in the past week.	More HS parents re their children at lea times a week in the (68.4%) compared Fall (67%), a statis nonsignificant incre percentage who rea day was 34%, lowe national averages i National Household Education Survey.
			94% of the caregivers reported taking child to do errands. 93% played with toys or games indoors. 90% involved child in household chores. 95% talked to child about what happened in Head Start. 89% taught child letters or numbers.	HS parents showed significant increase numbers of weekly (Fall - 3.88; Spring and monthly (Fall - Spring - 5.23) intel stimulating activitie they did with their as well as the numb weekly (Fall - 0.66; Spring - 0.80) and (Fall - 3.14; Spring socially stimulating that they did with t children.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
7. Head Start parents demonstrate improved parenting skills (continued)	Head Start parents' limit-setting and disciplinary methods	Parent Interview	Not available	Parents reported significantly less spa in the Spring (43%) the Fall (46%). The no difference in the of time-outs used. P implemented signifi more limit-setting ru the end (3.96) than beginning (3.76) of year.
8. Head Start parents improve their self-concept and emotional well-being	Head Start parents' sense of control over their own lives	Parent Interview Pearlin Mastery Scale	HS parents at the end of the year had a mean locus of control score of 15.58 meaning they felt they had considerable control over their lives.	HS parents showed positive, but signific increase in locus of scores from Fall (15 Spring (15.58).
	Head Start parents' depression	Parent Interview CES-D Depression Scale	HS parents at the beginning and end of the program had mean depression scores in the mildly depressed range. 29% were moderately or severely depressed in the Fall as were 26% in the Spring.	HS parents reported significant change in depression levels ov Head Start year fro in the Fall to 6.94 in Spring.
	Head Start parents' social support network	Parent Interview	95% of families rated Head Start as a helpful/very helpful source of support.	94% of families rate Head Start as a helpful/very helpful of support.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
9. Head Start parents make progress toward their educational, literacy, and employment goals	Head Start parents' receipt of needed employment, job training, education, and literacy services	Parent Interview	In 49% of the families, one parent was employed full- or part-time.	Respondents were m likely to have full- o part-time jobs in the than in the Fall and were unemployed in
				The percentage of p caregivers who were or part-time employ increased from 53% to 55% in Spring.
			71% of the primary caregivers had attained at least a high school diploma or GED; 26% had some college; and 8% had obtained an associate's, bachelor's, or higher level degree.	Parents were more li have a high school d or GED and some co an associate's degree Spring than in the Fa completed a license, certificate, or degree the year.
			Median monthly household income of Head Start families was $1,100.	Monthly family incom increased significantl the Head Start year f $1,242 in Fall to $1,3 Spring.
			32% of Head Start families received TANF.	The percentage of pr caregivers receiving T decreased from 27.2 to 23.5% in Spring.
	Of the total number of paid staff or volunteers, the number and percent who are current or former Head Start parents	PIR	46,364 of 147,473 Head Start staff (31%) were current or former Head Start parents.	46,345 of 159,596 H Start staff (29%) are or former Head Start

OBJECTIVE 3: PROVIDE CHILDREN WITH EDUCATIONAL, HEALTH, AND NUTRITIONAL SERVICES

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
10. Head Start programs provide developmentally appropriate educational environments	Measurement of Head Start programs' classroom physical environments including space, equipment, and materials	Classroom observation: Early Childhood Environment Rating Scale (ECERS) Assessment Profile Learning Environment and Scheduling Scales	Head Start classroom quality average was "good" on the ECERS (mean score of 4.9) with no classes scoring below the minimal level of "3." The standard scores on the Assessment Profile Learning Environment and Scheduling Scales averaged 54.6 and 56.2 respectively, almost 1 standard deviation above the norm for center-based preschools. 79% of classrooms met the criteria for at least 3 different language materials available and accessible to the child, and 71% of classrooms provided at least 3 different math/numeracy learning materials.	Head Start classroo quality average con be "good" on the EC (mean score of 4.9) classes scoring belo minimal level. Score increased slightly fr to Spring (Fall mean Spring mean 5.1). T scores on the Asses Profile Scales also s significant increases 11.2 to 11.6 for sch and from 13.5 to 13 learning environme the same period. In 68% of classrooms at least 3 different l learning materials t available and acces the child, and 67% at least 3 different math/numeracy lear materials. In Spring classrooms provided least 3 different lan learning materials a provided at least 3 math/numeracy lear materials for childre independent use.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
10. Head Start programs provide developmentally appropriate educational environments (continued)	The extent to which Head Start program activities are varied and well-planned	Classroom observation: Assessment Profile	The standard score for the Assessment Profile Scheduling subscale averaged 54.6 (raw scores average 11.07 out of a possible 14), almost one standard deviation higher than other center-based preschools.	In Fall, the standard for the Assessment Scheduling subscale averaged 54.14 (ra scores average 11.2 a possible 14), almo standard deviation in quality than othe center-based presch In Spring, the stand score increased slig 54.5.
		Early Childhood Environment Rating Scale (ECERS) "Schedule" scale	According to the ECERS, 84% of classrooms were rated "good" or "excellent" in offering a varied and planned schedule of activities and 63.3% were rated "good" or "excellent" in providing sufficient small group and individualized activities.	According to the ECE in Fall 84% of class were rated "good" o "excellent" for havir varied and well-plan schedule, which incr to 91% in the Sprin of classrooms were "good" or "excellent in providing small g and individualized a which increased to 8 in the Spring.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
10. Head Start programs provide developmentally appropriate educational environments (continued)	Measurement of Head Start programs' opportunities for child choice and self-initiated learning	Classroom observation: Assessment Profile Scheduling and Learning Environment Scales	Assessment Profile standard scores of 54.6 for Scheduling and 56.2 for Learning Environment are almost one standard deviation higher than the norms. 77% of classrooms were rated as providing at least one hour daily of child guided/child choice activities and in 91% of classrooms the learning materials were arranged to be accessible for independent child use.	Assessment Profile s scores of 54.1 (Fall) 54.5 (Spring) for Sc and 55.6 (Fall) and (Spring) for Learnin Environment are alr one standard deviat higher than the norr significant change, particularly in the Le Environment Scale. Fall, 83% of classro were rated as provid least one hour daily guided activities and of classrooms mater were arranged to be accessible for indep child use. In the Spr there were 84% and of classrooms respe that were rated as p sufficient child guide self-initiated learnin opportunities.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
10. Head Start programs provide developmentally appropriate educational environments (continued)	Measurement of Head Start programs' opportunities for child choice and self-initiated learning	Classroom observation: Arnett Scale of Caregiver Behavior	Arnett Scale of Caregiver Behavior teachers were rated as averaging 8.47 on allowing independence.	Arnett Scale of Careg Behavior teachers w rated as averaging 8 Fall and 8.64 in Spri allowing independen
		Early Childhood Environment Rating Scale (ECERS) Free Play item	According to the ECERS, 78% of classrooms were rated "good" or "excellent" in scheduling enough free play or free choice activities.	According to the ECE in the Fall, 71% of classrooms were rat "good" or "excellent scheduling enough fr play or free choice a which increased to 8 the Spring.
	Measurement of parents' satisfaction with the helpfulness of Head Start services and support	Parent Interview	87% of parents were very satisfied with the Head Start program in helping children grow and develop, 82% for preparing the child for kindergarten, 88% for supporting and respecting the family's culture, 88% for identifying and providing services for the child, and 90% for maintaining a safe program.	85.7% of the parent very satisfied with th Start program in hel children grow and de 86% for preparing th for kindergarten, 87 supporting and respe the family's culture, for identifying and p services for the child 88.9% for maintainir safe program.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
11. Head Start staff interact with children in a skilled and sensitive manner	Measurement of teachers' facilitation of children's cognitive, linguistic, social, emotional, and physical development	Classroom observation: Early Childhood Environment Rating Scale (ECERS) Language, Creative, and Physical Activities scales	30% of classrooms were rated "excellent" on informal use of language, and 33% were "excellent" on receptive language activities. However, 33% of classrooms were rated "lower" (4 or lower on 7-point scale) on activities to stimulate thinking and reasoning and 31% were "lower" on stimulation of children's expressive language skills. In terms of creative activities, 56% of classrooms were rated "excellent" on teacher's supervision of creative activities, 40% were rated "excellent" on music and movement and 37% were rated "excellent" on block play. However, 62% were rated "lower" on dramatic play and 53% were rated "lower" on art activities. In terms of physical activities, 41% were rated "excellent" for providing space for gross motor activities, 36.4% were rated "excellent" for their gross motor equipment, and 54.4% were rated "excellent" for the teacher's supervision of the children's gross motor activities. Also, 39% were rated "excellent" in scheduling fine motor activities, although only 25.9% of classrooms were rated "excellent" for the teacher's supervision of fine motor activities.	In the Fall, 35% of cl were "excellent" on r language activities ar stimulation of childre expressive language s However, 42% of clas were rated "lower" or activities to stimulate and reasoning and 50 "lower" on informal us language. By Spring c of classrooms were ra "lower" on informal u language while 40% still rated "lower" on to simulate thinking a reasoning. However, classrooms were rate "excellent" on express language skills (from 3 the Fall) and 39% we "excellent" in recepti language skills (from the Fall). In terms of activities, in Fall, 51% classrooms were rate "excellent" on teache supervision of "creati activities, 38% were "excellent" on music movement and 44% rated excellent" on bl However, 67% were "lower" on dramatic p 56% were rated "lowe activities. By Spring, c were rated "lower" or dramatic play althoug were still rated "lowe activities. Also in Spr were rated "excellent teacher's supervision creative activities, 48 "excellent" in music a movement and 47% "excellent" in block p

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
11. Head Start staff interact with children in a skilled and sensitive manner (continued)	Measurement of Head Start teachers' emotional tone of adult-child interaction	Classroom observation Early Childhood Environment Rating Scale (ECERS)	80.3% of classrooms scored in the "good" or "excellent" range on ECERS Classroom Tone scale in the Spring.	79.6% of classroom in the "good" or "ex range on ECERS Cla Tone scale in the Sp
		Arnett Scale of Caregiver Behavior	Lead teachers had mean scores of 72.28 (of 90 points) on the Arnett Scale of Caregiver Behavior in the Spring. Assistant teachers had mean scores of 69.6.	Lead teachers had m scores of 73 (of 90 p on the Arnett Scale Caregiver Behavior Spring. They gained points over the year Assistant teachers h scores of 70.77. The gained 2.19 points o year.
12. Head Start programs support and respect children's cultures	Measurement of how well Head Start programs serve children and families whose native language is not English	HSMTS	335 of 347 grantees reviewed serving non-English speaking children (97%) employed same language staff.	Not available
		Parent Interview	88% of parents felt that Head Start was supportive and respectful of family's culture.	87.5% of parents felt Head Start was supp and respectful of fam culture.
	The extent to which the diversity of family culture, languages, and family life is represented in materials and activities for children and parents	Classroom observation: Early Childhood Environment Rating Scale	75.8% of programs scored 4 or lower on the ECERS Cultural Awareness item (7-point scale).	In Fall, 73.5% of pro scored 4 or lower on ECERS Cultural Awar item (7-point scale) a Spring, 71.8% of pro scored in the "lower" for providing cultural awareness in the clas

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
12. Head Start programs support and respect children's cultures (continued)	The extent to which the diversity of family culture, languages, and family life is represented in materials and activities for children and parents	Classroom observation: Assessment Profile Learning Environment Diversity item	Not available	In the Fall, 58% of classrooms were rat providing sufficient l materials for childre learning of cultural differences, which in to 61% in the Spring
13. Head Start assures children receive needed medical, dental, and mental health services	The number and percent of Head Start children who received needed medical services	PIR	156,969 of the 185,706 children (85%) who needed medical services received medical services.	164,278 of the 186,3 children (88%) who n medical services rece medical services.
		HSMTS	376 of 469 grantees reviewed (80%) provided/arranged health services for all enrolled children needing treatment.	Not available
		Parent Interview	Not available	Of the 61.5% of the respondents that repo needing Medicaid in S 91.7% received it. 2.2 those who received it reported getting help Head Start.
	The number and percent of Head Start children who received needed dental services	PIR	179,403 of the 226,761 children (79%) who needed dental services received dental services.	189,407 of the 229,0 children (83%) who n dental services receiv dental services.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
13. Head Start assures children receive needed medical, dental, and mental health services (continued)	The number and percent of Head Start children who received needed medical/dental services	Parent Interview	Not available	Of the 60% of the respondents that rep needing medical/den services for the HS c Spring, 92.5% recei 37.4% of those who received it reported g help from Head Star Of the 36.7% of the respondents that rep needing medical/den services for adults in family in Spring, 76. received services. 2 those who received reported getting help Head Start.
	The number and percent of Head Start children who received needed mental health services	PIR	30,610 of the 39,980 children (77%) who needed mental health services received mental heath services.	33,314 of the 43,155 children (77%) who r mental health service received mental healt services.
		Parent Interview	Not available	Of the 6.4% of the respondents that rep needing mental healt services in Spring, 89 received services. 21. those who received it reported getting help Head Start.
	The number and percent of Head Start children who received needed immunizations	PIR	790,178 of 841,170 children (94%) received needed immunizations.	824,016 of 868,014 children (95%) receiv needed immunization

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
14. Head Start children receive meals and snacks that meet their daily nutritional needs	The number and percent of children who received meals and snacks meeting their nutritional needs	HSMTS	250 of 264 grantees reviewed (95%) were providing required meals and snacks.	Not available
		Early Childhood Environment Rating Scale	84.3% of classrooms were rated as good or excellent in the provision of meals and snacks.	In Spring, 83.6% of classrooms were rat good or excellent in provision of meals a snacks.
15. Head Start programs provide individualized services for children with disabilities	Measurement of how well Head Start serves children with disabilities	PIR	95,071 of 107,473 children with disabilities (88%) had IEPs.	96,141 of 108,797 children with disabilit (93%) had IEPs.
	Number and percent with Individualized Education Plans (IEPs)	HSMTS	398 of 459 grantees reviewed (87%) had an IEP for every child with a disability.	Not available
	Number and percent receiving services in their IEPs	HSMTS	411 of 459 grantees reviewed (90%) provided special education and related services as soon as possible after the IEP meeting.	Not available
		Parent Interview	63% of interviewed FACES parents with children with special needs reported receiving IEP services.	86% of interviewed F parents with children special needs who participated in the IE process reported rec IEP services.
	Number and percent fully engaged in program activities	Classroom observation: Early Childhood Environment Rating Scale	87.3% of classrooms were rated "Good" or "Excellent" in provisions and planning for exceptional children.	93.4% of classrooms rated "Good" or "Exc in provisions and pla for exceptional childr

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
15. Head Start programs provide individualized services for children with disabilities (continued)	Percent of Head Start parents who are able to better meet the special needs of their children with disabilities because of Head Start	Parent Interview	73% of parents with children with special needs reported that Head Start was helpful or very helpful in assisting families at home. 74% of parents with children with special needs reported that Head Start was helpful or very helpful in contacting other schools, agencies, and resources.	73% of parents with with special needs re that Head Start was or very helpful in ass families at home. 73% of parents with with special needs re that Head Start was or very helpful in con other schools, agenci resources.

OBJECTIVE 4: LINK CHILDREN AND FAMILIES TO NEEDED COMMUNITY SERVICES

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
16. Head Start parents link with social service agencies to obtain needed services	The ratio of the total number of Head Start families to the number of family service workers	PIR	17,445 family service workers to 781,836 Head Start families provide a 1/45 ratio of family service workers to families.	22,374 family work 800,539 Head Start provide a 1/36 ratio family workers to fa
	The extent to which parents received needed social services (e.g., child care, WIC, housing assistance)	Parent Interview	Families that received: Welfare - 32% Food Stamps - 51% WIC - 48% Child Support - 20% SSI - 13% Energy Assistance - 15%	Families that receiv Welfare - 23.5% Food Stamps - 42% WIC - 48.3% Child Support - 20. SSI - 12.3% Energy Assistance -
	The extent to which parents received needed social services (e.g., child care, WIC, housing assistance)	Parent Interview	Not available	Families reported le receipt of TANF in t Spring (23.5%) tha Fall (27.2%). In Spring, for only 17 listed social serv percentage of respo that reported needi service was higher the percentage rep not needing the ser The 3 services are f nutrition, Medicaid, medical/dental serv for the child. The m of those who neede services received it for one service (fam problems), the mos common source for remaining 17 servic not Head Start.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
17. Head Start parents link with educational agencies to obtain needed services	The extent to which parents received needed educational services (e.g., GED classes)	Parent Interview	22% of Head Start parents reported needing educational assistance. Of these, 70% received assistance. 51% of those receiving assistance received it or were referred to it by Head Start.	16.8% of Head Start reported needing edu assistance. Of these, received assistance. of those receiving as received it or were re to it by Head Start.
	Measurement of how well Head Start helped parents and children make the transition from Head Start to kindergarten (e.g., talking to kindergarten teachers, visiting the new school)	Parent Interview	82% of Head Start parents reported that they were very satisfied or somewhat satisfied with Head Start's efforts to prepare their child for kindergarten.	86% of Head Start pa reported that they we satisfied with Head S efforts to prepare the for kindergarten.
18. Head Start parents link with health care services to obtain needed care	The number and percent of parents who report that they and their children have an ongoing source of continuous, accessible health care (i.e., a medical home)	Parent Interview	96.5% of parents reported that their children had an ongoing source of health care. 83% of parents reported that they had an ongoing source of health care.	98.7% of parents rep that their children ha ongoing source of he care. 94.1% of paren reported that they ha ongoing source of he
	The extent to which parents secured needed health services (e.g., child immunizations, mental health services)	Parent Interview	Not available	Percentage of respon that reported receivir Medicaid decreased f in Fall to 59.3% in Sp 92% of the responde received Medical/Den services in both Fall a Spring.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
19. Head Start parents secure child care in order to work, go to school, or gain employment training	The number and percent of Head Start programs providing child care (number and percent of families needing child care who receive it through Head Start)	PIR	772 of 1,972 Head Start programs (39%) provided child care.	Program data no long available; 89,350 of 330,780 H Start families (27%) need full day/full yea care receive child car through a Head Start
	The number and percent of Head Start parents who report they have stable child care services	Parent Interview	In Spring, 30% of Head Start parents needing child care reported their children received it in a relative's home; 18% by a relative in the child's home; 13% in a child care center; 12% in a family day care home; and 9% in Head Start. 63% of child care arrangements did not have licenses or certifications. 90% of parents reported their child always felt safe and secure in child care, 73% always got lots of individual attention, and 77% had caregivers who were always open to new information and learning.	In Spring, 32.2% of H Start parents needing care reported their ch received it in a relativ home; 14.9% by a re in the child's home; 1 in a child care center 11.1% in a family da home; and 7.3% in H Start. 63.5% of child arrangements did no licenses or certificatio 91.8% of parents rep their child always felt and secure in child ca 71.6% always got lot individual attention, a 78% had caregivers w always were open to information and learn

OBJECTIVE 5: ENSURE WELL-MANAGED PROGRAMS THAT INVOLVE PARENTS IN DECISION-MAKI

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DAT
20. Head Start programs are well-managed	The number and percent of programs using a financial management system that ensures budget management; maintains control over current operations; and provides timely, accurate, current, and complete disclosure of financial matters	HSMTS	408 of 459 grantees reviewed (89%) had appropriate financial management systems.	Not available
	The number and percent of programs that performed annual self-assessments	HSMTS	415 of 459 grantees reviewed (90%) conducted annual self-assessments.	Not available
	Head Start staff ratings of how important program goals regarding meeting parent needs are to staff (e.g. to teach parents about health and nutrition)	Staff interview	Not available	90% of staff felt tha working with familie young children was important."
	The number and percent of programs that conducted a Community Assessment (CA) and used the information from the CA for planning purposes	HSMTS	366 of 459 grantees reviewed (80%) conducted CAs and used the information for planning purposes.	Not available
21. Head Start parents are involved actively in decisions about program operations	The number and percent of programs that met all of the criteria regarding effective parent participation in the process of making decisions about the nature and operation of Head Start	HSMTS	336 of 459 grantees reviewed (73%) met all criteria for effective parent participation in decision making.	Not available

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
21. Head Start parents are involved actively in decisions about program operations (continued)	The extent to which parents influence Head Start programs	Parent Interview	33% of parents participated in Policy Council or other planning groups at least once. 15% participated more than 3 times.	38% of parents part in Policy Council or o planning groups at le 16% participated mo 3 times.
22. Head Start programs employ qualified staff	The number and percent of classroom teachers with a degree in Early Childhood Education (ECE), a Child Development Associate (CDA) credential, a State-awarded preschool certificate, or a degree in a field related to ECE plus a State-awarded certificate	PIR	32,152 of 35,707 Head Start teachers (90%) had early childhood credentials.	34,656 of 39,590 He Start teachers (88% had early childhood credentials.
		Staff interview	The highest educational level of Head Start teachers: High School - 7% Associate/Vo-tech Degree - 25% Attended College - 35% Undergraduate/BA - 30% Graduate - 3% Head Start teachers having an Early Education Association membership - 58%	The highest educatio level of Head Start teachers: High School - 9% Associate/Vo-tech Degree - 28% Attended College - 3 Undergraduate/BA - 2 Graduate - 3% Head Start teachers having an Early Education Associatio membership - 53%
	The number and percent of home-visitors with a degree in child and family studies, adult education, home economics, psychology, or social work; a degree in ECE; or a home-visitor CDA	PIR	2,739 of 4,276 home visitors (64%) had appropriate credentials.	2,968 of 4,840 home visitors (61%) had appropriate credenti
	The number and percent of programs operating center-based or combination center/home-based options that employ at least two paid staff per classroom and maintain appropriate class sizes for the ages of the children served	HSMTS	404 of 459 grantees reviewed (88%) maintained appropriate staffing and class size.	Not available
		Classroom observations	Average class size was 13.6 children and 5.6 children per adult (including volunteers).	Average class size w 13.8 children and 6. children per adult (including volunteer

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
22. Head Start programs employ qualified staff (continued)	The number and percent of programs operating home-based options that maintain an average caseload of 10 to 12 families per home visitor and no more than 12 families for any home visitor	HSMTS	163 of 171 home-based grantees reviewed (95%) had appropriate caseloads for home visitors.	Not available
	The extent to which Head Start staff salaries are equitable with national averages	PIR	Head Start staff Directors-$40,688 Teachers-$17,771 Aides-$11,243 Home Visitors-$15,227	Head Start staff Directors-$42,941 Teachers-$18,304 Aides-$11,722 Home Visitors-$16,5
		National Center for Early Childhood Workforce	Child Care Workforce (CCW) data available only for teaching staff. In 1994 dollars, average child care teaching staff earned $11,725 per year for a 50-week year. Earnings for teaching staff by educational level: HS Diploma $10,151 Some college $11,617 College Degree $14,506	The Center for Child Workforce reports av child care teacher sa 5 cities in relatively high-quality centers from $13,125 - $18, 1997 dollars. Teache earned from $10,500 - $12,500. According to the NEA Survey, the average school teacher salary 1998-99 was $40,58
	Of the total number of staff, length of service and number and percent who left the program and were replaced	PIR	Of 147,473 total staff, 12,143 (8%) were replaced during the operating year.	Of 159,596 total sta 15,598 (10%) were during the operating

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
22. Head Start programs employ qualified staff (continued)	The extent to which Head Start staff receive appropriate ongoing training and staff development	HSMTS	408 of 459 grantees reviewed (89%) provided staff and parent training in child development.	Not available
		Staff interview	HS lead teachers report a mean of 102 hours of training and other teachers report 69 hours of training over the program year.	Component coordina center directors rece over 140 hours of tr the previous year; c teachers received ov hours of training du previous year.
23. Head Start programs support staff development and training	The extent to which Head Start programs provide ongoing and effective staff development and training activities	HSMTS	423 of 459 grantees reviewed (92%) provided appropriate staff development and training.	Not available
		Staff interview	Percent of Head Start teachers wanting more training in bilingual education (nearly 80%); multicultural sensitivity (over 30%); domestic violence (over 30%); behavior management (over 20%); and mental health issues (over 20%).	Over 95% of staff interviewed indicate training provided by Start was helpful (o thought it was very
	The extent to which Head Start programs maintain a positive organizational climate that offers administrative and peer support and teamwork	Staff Interview	Not available	Over 90% of staff interviewed indicate satisfaction with job are "very satisfied") 88% expect to retur next program year.

PERFORMANCE MEASURE	PERFORMANCE INDICATOR Percent of change in:	DATA SOURCE	1997 FIELD TEST DATA[1]	1998 DATA
24. Head Start programs comply with Head Start regulations	Of the programs identified as having significant performance problems, the number and percent that have corrected their deficiencies or have been replaced.	Regional Office Reports	92 grantees were identified as having deficiencies and were working on Quality Improvement Plans. Since October 1993, 90 programs had relinquished their grants or been terminated.	200 grantees identif seriously deficient h improved. Since 1993, approxi 100 grantees have b terminated or have relinquished their He grants.

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Instruments to Assess Child

INSTRUMENTS TO ASSESS CHILD HS = Head Start child, KG = Kindergarten child, 1G = 1st grade child					
Name of the Instrument	Spring 1997	Fall 1997	Spring 1998	Spring 1999	Spring 2000
COGNITIVE OUTCOMES					
1. Social Awareness Tasks	HS	HS	HS, KG	HS, KG	KG, 1G
2. Peabody Picture Vocabulary Test III (PPVT)/Test de Vocabulario en Imagenes Peabody (TVIP)*[1]	HS	HS	HS, KG	HS, KG	KG, 1G
3. McCarthy Draw-A-Design	HS	HS	HS	HS	-
4. Color Names and Counting	HS	HS	HS	HS	-
5. Woodcock-Johnson Letter-Word Identification*[2]/ Woodcock-Muñoz Identifcación de letras y palabras	HS	HS	HS, KG	HS	-
6. Woodcock-Johnson Applied Problems*[2]/ Woodcock-Muñoz Problemas aplicados	HS	HS	HS, KG	HS, KG	HS, 1G
7. Woodcock-Johnson Dictation*[2]/Woodcock-Muñoz Problemas aplicados	HS	HS	HS, KG	HS, KG	KG, 1G
8. Story and Print Concepts • 1997: Goodnight Moon/Buenas Nochas Luna • 1998, 1999: Where's My Teddy/¿Dónde Está Mi Osito?	HS	HS	HS, KG	HS	-
9. The Phonemic Analysis Task from the Test of Language Development, Third Version (TOLD-III)	HS*[3]	-	KG	KG	KG, 1G
10. Name Writing Task	-	-	KG	KG	KG, 1G
11. Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) Reading	-	-	-	KG	KG, 1G
12. Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) General Knowledge	-	-	-	KG	KG, 1G
13. Developmental Accomplishments	HS	HS	HS, KG	HS, KG	KG, 1G*[4]
SOCIO-EMOTIONAL OUTCOMES					
1. Social Skills (completed by teacher)	HS	HS	HS, KG	HS, KG	KG
2. Classroom Conduct Problems (completed by teacher)	HS	HS	HS, KG	HS, KG	KG
3. Your Child's Behavior (completed by parent)	HS	HS	HS, KG	HS, KG*[5]	KG*[5]
4. Peer Play Observation Scale	HS	HS	HS	HS*[6]	-
5. Assessment Behavior Scale (completed by interviewer)	HS	HS	HS, KG	HS, KG	KG, 1G
6. Teacher Feedback on Child's School Performance and Behavior (completed by parent)	-	-	KG	KG	KG, 1G
7. Child Observation Record (COR)	HS	HS	HS, KG	HS, KG	KG, 1G

*[1] TVIP was administered mainly in Spring 1997 and Fall 1997. In Spring 1998, Spring 1999 and Spring 2000, it was administered only to children in Spanish-speaking classrooms.
*[2] Woodcock-Johnson Scales were not administered to 3-year-old children in the second cohort.
*[3] Administered only to 4-year-old children.
*[4] Parents were asked only questions about their child reading storybooks on own.
*[5] This version of the scale is different from the one used with HS children and the scale used with KG children in Spring 1998.
*[6] Used only for a small subsample of children observed by the Quality Control Visitors.

Citation and Ordering Information for Child Instruments

Cognitive Outcomes

1. **Social Awareness Tasks** - Child is asked to tell his/her full name, age, birthday and address. (Instructions were also translated into Spanish by the FACES Research Team.)

   Authors: FACES Research Team, modified from the Social and Communicative Competence tasks in: Jana M. Mason and Janice Stewart (1989), *The CAP Early Childhood Diagnostic Instrument (prepublication edition)*, American Testronics.

2. **Peabody Picture Vocabulary Test - III Performance Record, Form A (PPVT)/Test de Vocabulario en Imagenes Peabody (TVIP)**

   Authors of PPVT: Dunn, L. M. & Dunn, L. M. (1997) *Peabody Picture and Vocabulary Test, Third Edition. Examiner's Manual and Norms Booklet*. Circle Pines, MN: American Guidance Service.

   Authors of TVIP: Dunn, L.M., Padilla, E.R., Lugo, D.E., & Dunn, L.M. (1986). *Test de Vocabulario en Imagenes Peabody*. Circle Pines, MN: American Guidance Service.

   Ordering Information:
   American Guidance Service, Inc.
   4201 Woodland Road, PO Box 190
   Circle Pines, MN 55014-1796
   1-800-328-2560
   www.agsnet.com

3. **McCarthy Draw-A-Design Task from the McCarthy Scales of Children's Abilities**. (Instructions were also translated into Spanish by the FACES Research Team.)

   Author: McCarthy, D. (1970, 1972). *McCarthy Scales of Children's Abilities*. San Antonio, TX: The Psychological Corporation.

   Ordering Information:
   The Psychological Corporation
   4555 Academic Court
   San Antonio, TX 78204-2498
   210-299-1061 or 1-800-211-8378
   www.psychcorp.com

4. **Color Names and Counting** – Child is shown a page of ten colored bears and asked to name all the colors he or she can. For those colors that the child cannot name, assessor asks, "Can you find the...(color)...bear?" Then the child is asked to count the bears. (Instructions were also translated into Spanish by the FACES Research Team.)

   Authors: FACES Research Team, modified from the Color Concepts and Number Concepts tasks in: Jana M. Mason and Janice Stewart (1989), *The CAP Early Childhood Diagnostic Instrument (prepublication edition)*, American Testronics.

5. **Letter-Word Identifcation Test, Applied Problems Test, and Dictation Test from Woodcock-Johnson, Revised Tests of Achievement, Standard Battery / Bateria Woodcock-Muñoz Pruebas de Aprovechamiento-Revisada.**

Authors of English version: Woodcock, R. W., & Mather, N. (1989, 1990). *WJ-R test of achievement: Examiner's manual*. In R.W. Woodcock & M.B. Johnson, *Woodcock-Johnson Psycho-Educational Battery - Revised*. Chicago: Riverside.

Authors of Spanish version: Woodcock, R.W., & Muñoz-Sandoval, A.F. (1996). *Bateria Woodcock-Muñox Pruebas de Aprovechamiento-Revisada*. Chicago: Riverside.

Ordering Information:
Riverside Publishing
425 Spring Lake Drive
Itasca, IL 60143-2079
1-800-323-9540
www.riverpub.com

6. **Story and Print Concepts** – Child is asked to show the front of the book, open it for reading, point to where the assessor can start reading, point to things on the page that are requested by the assessor, explain why certain things are happening in the story, point to the title of the book, explain what the author does when author's name is pointed to, and recall certain content from the book. (Instructions were also translated into Spanish by the FACES Research Team.)

Authors: FACES Research Team, modified from Story and Print Concepts tasks in: Jana M. Mason and Janice Stewart (1989), *The CAP Early Childhood Diagnostic Instrument (prepublication edition)*, American Testronics.

The books used to assess child's story and print concepts are as follows:

Author for English version: Brown, M. W. (1947). *Goodnight Moon*. New York, NY: Harper Collins [ISBN 0-06020-705-1].

Author for Spanish version: Brown, M. W. (1947) *Buenas Nochas Luna* (T.M. Lawer, Trans.). New York, NY: Harper Collins [ISBN 0-06026-214-1].

Author for English version: Alborough, J. (1992). *Where's My Teddy?* Cambridge, MA: Candlewick Press [ISBN 1-56402-048-7].

Author of Spanish version: Alborough, J. (1992). *¿Dónde Está Mi Osito?* (M. Castro, Trans.) Compton, CA: Santillana. [ISBN 1-56014-582-X].

7. **The Phonemic Analysis Task from the Test of Language Development, Third Version (TOLD-III)**

Authors: Newcomer, P.L., & Hamill, D.D. (1997). *Test of Language Development, Second Edition*. Austin, TX: Pro-Ed.

Ordering Information:
Pro-Ed
8700 Shoal Creek Blvd.
Austin, TX 78758-6897
512-451-3246
www.proedinc.com

Name Writing Task. (Instructions were also translated into Spanish by the FACES Research Team.)

Authors: FACES Research Team, modified from the Name Writing tasks in: Jana M. Mason and Janice Stewart (1989), *The CAP Early Childhood Diagnostic Instrument (prepublication edition)*, American Testronics, and Wriring Samples test in Woodcock-Johnson, Revised Achievement Battery.

8. **Early Childhood Longitudinal Study** – Kindergarten Cohort (ECLS-K) - Reading assessment and General Knowledge assessment. These assessment instruments are not available for use by other investigators without special arrangements with the National Center for Education Statistics (NCES).

Contact Information:
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9. **Developmental Accomplishments Scale ("Your Child's Activities")** - Parents report on their children's accomplishments and difficulties in 17 specific areas, including cognitive skills, fine motor skills, speech, and gross motor coordination. Thirteen of the items are from the 1993 National Health Interview Survey on School Readiness, which can provide comparative data on a national sample of preschool children. Four additional items on number recognition, name recognition, counting, and liking to write were added by members of the Head Start Quality Research Consortium.

Authors: Zill, N., Collins, M., & West, J. (1995). *Approaching kindergarten: A look at preschoolers in the United States*. NCES Statistical Analysis Report 95-280. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Socio-Emotional Outcomes

1. **Social Skills (Rating scale completed by Head Start and kindergarten teachers)** - Twelve-item scale assessing frequency with which child engaged in friendly, cooperative, and compliant behavior in class during past month.

   Authors: FACES Research Team. Modified from Elliot, S.N., Gresham, F.M., Freeman, R. & McCloskey, G. (1988). Teacher and observer ratings of children's social skills: Validation of the social skills rating scales. *Journal of Psychoeducational Assessment, 6*, 152-161.

2. **Classroom Conduct Problems (Rating scale completed by Head Start and kindergarten teachers)** - Fourteen-item scale assessing frequency with which child engaged in aggressive, hyperactive, or depressed-withdrawn behavior in class during past month.

   Authors: FACES Research Team. Modified from: Achenbach, T.M. (1992). Teacher/Caregiver Report Form for Ages 2-5. Burlington, VT: Center for Children, Youth, and Families, University of Vermont; and Zill, N. (1976), Child Behavior Rating Scale for Teachers (Personal Maturity Scale), National Survey of Children. New York: Foundation for Child Development.

   See also: Alexander, K.L., & Entwisle, D.R. (1988). Achievement in the first two years of school: Patterns and processes. *Monographs of the Society for Research in Child Development, 53* (2), Serial No. 218.

3. **Your Child's Behavior**

   Rating scale completed by Head Start parents - Seven items assess frequency with which child engaged in prosocial behavior and positive approaches to learning during past month. Twelve items assess frequency with which child engaged in aggressive, hyperactive, anxious or depressed behavior during past month.

   Authors: FACES Research Team and Head Start Quality Research Consortium.

   Positive items modified from Elliot, S.N., Gresham, F.M., Freeman, R. & McCloskey, G. (1988). Teacher and observer ratings of children's social skills: Validation of the social skills rating scales. *Journal of Psychoeducational Assessment, 6*, 152-161.

   Selection of problem behavior items based in part on unpublished discriminant analyses of Child Behavior Check List done for National Center for Health Statistics by Thomas Achenbach (1996), Burlington, VT: Center for Children, Youth, and Families, University of Vermont. Selected items were among those found to be most discriminating of children receiving clinical mental health services.

   Rating scale completed by kindergarten parents – Twenty-six item child behavior rating scale used in parent interview of Early Childhood Longitudinal Study of a kindergarten cohort (ECLS-K). Thirteen items assess frequency with which child engaged in cooperative social behavior and positive approaches to learning. Thirteen items assess frequency with which child engaged in aggressive, hyperactive, anxious or depressed behavior.

   Authors: Samuel J. Meisels and Sally Atkins-Burnett, University of Michigan School of Education, and Jerry West and Elvira Germino Hausken, National Center for Education Statistics. Items modified from Elliot, S.N., Gresham, F.M., Freeman, R. & McCloskey, G. (1998). Teacher and observer ratings of children's social skills: Validation of the social skills rating scales. *Journal of Psychoeducational Assessment, 6*, 152-161.

4. **Peer Play Observation Scale** - Time-sampling observational measure of extent and nature of child's interaction with other children and teachers or other adults during free-play periods.

   Authors: FACES Research Team. Adapted from Howes Peer Play Scale with permission from Carollee Howes.

   Howes, C., & Matheson, C.C. (1992). Sequences in the development of competent play with peers: Social and social pretend play. *Developmental Psychology, 23*, 961-974.

   Howes, C., & Stewart, P. (1987). Child's play with adults, toys and peers: An examination of family and child care influences. *Developmental Psychology, 23*, 423-430.

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   howes@gseis.ucla.edu

   Gary Resnick
   resnicg1@westat.com

5. **Assessment Behavior Scale (Interviewer's rating of child behavior during cognitive assessment)** - Upon completion of assessment battery, interviewer rates child's attitude and behavior during assessment. Eight items cover task persistence, attention span, body movement, attention to directions, comprehension of directions, verbalization, ease of relationship, and confidence. Interviewer also completes seven-item check list of special conditions that may have applied, such as nonverbal responses, nonstandard English, English as second language, limited English proficiency, child had difficulty hearing or seeing, and child's speech was difficult to understand.

   Authors: FACES Research Team.

6. **Teacher Feedback on Child's Social Performance and Behavior (Checklist completed by kindergarten parents)** - Fourteen-item checklist of types of feedback parent has received from child's teacher about the child's academic performance and classroom behavior during the current school year. Similar reports on teacher feedback were obtained for a national sample of kindergarten children in the 1993 National Household Education Survey.

   Authors: Zill, N., Loomis, L.S., & West, J. (1997). *The elementary school performance and adjustment of children who enter kindergarten late or repeat kindergarten: Findings from national surveys*. NCES Statistical Analysis report 98-097. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

7. **Child Observation Record (COR)** - Criterion-referenced ratings by teacher of child's problem solving and initiative, social relationships, creative representations, musical skills and fine and gross motor coordination, and language and mathematical skills.

   Authors: High/Scope Educational Research Foundation (1992). *Child Observation Record-Manual*. Ypsilanti: MI: High/Scope Educational Research Foundation.

Parent Interviews

PARENT INTERVIEWS					
Name of the Instrument	Spring 1997	Fall 1997	Spring 1998	Spring 1999	Spring 2000
1. Head Start Parent Interview	English Spanish	English Spanish	English Main English Supplement Spanish Main Spanish Supplement	English Spanish	-
2. Kindergarten Parent Interview	-	-	English Spanish	English Spanish	English Spanish
3. 1st Grade Parent Interview	-	-	-	-	English Spanish

SOURCES OF ITEMS IN THE PARENT INTERVIEWS	
Question Domain	Source
Family Demographics	FACES Research Team
Activities with your Child	National Household Education Survey (NHES) & FACES Research Team
Disabilities	National Household Education Survey (NHES), Head Start Program Information Report (PIR), A Descriptive Study of the Head Start Health Component (HS Health), & Head Start Quality Research Consortium (QRC)
Your Activities in Head Start	Head Start Quality Research Consortium (QRC)
Satisfaction with Head Start	Head Start Quality Research Consortium (QRC)
Your Child's Activities	National Household Education Survey (NHES)
Your Child's Behavior	FACES Research Team and Head Start Quality Research Consortium (QRC). Selection of behavior problem items based on unpublished discriminant analysis of Child Behavior Checklist by Thomas Achenbach (1996), Center for Children, Youth, and Families, University of Vermont.
Household Rules	National Longitudinal Study of Youth (NLSY), Early Head Start Evaluation (EHS), Head Start Quality Research Consortium (QRC)
Employment and Income	Head Start Quality Research Consortium (QRC), University of Maryland Department of Family Studies (UMD)
Community Services	Head Start Quality Research Consortium (QRC), FACES Research Team
Child Care	The NICHD Study of Early Child Care (NICHD), Emlen, A. (1998). From a parent's point of view: Flexibility, income, and quality of child care. Background paper for New Perspectives on Child Care Quality Conference, SEED 2000 Consortium of Federal Agencies, Bethesda, MD.

SOURCES OF ITEMS IN THE PARENT INTERVIEWS

Question Domain	Source
Family Health Care	Head Start Quality Research Consortium (QRC), A Descriptive Study of the Head Start Health Component (HS Health), National Health Interview Survey (NHIS)
Home Safety	University of North Carolina, Frank Porter Graham Center (UNC)
Home and Neighborhood Characteristics	FACES Research Team, Department of Labor (DOL), National Household Education Survey (NHES)

Your Feelings	• Center for Epidemiology Studies Depression Scale (Radloff, 1977). Abbreviated version as used in Ross, Mirowsky, & Huber (1983)
	  • Radloff, L.S. (1977). The CES-D: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
	  • Ross, C.E., Mirowksy, J., & Huber, J. (1983). Dividing work, sharing work, and in-between: Marriage patterns and depression. *American Sociological Review, 48*, 809-823.
	• Pearlin Mastery Scale (Locus of Control) (Pearlin & Schooler, 1978)
	  • Pearlin, L.I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 22*, 337-356.
	• Family Support Scale - Adapted from Dunst, C.J., Jenkins, V., and Trivette, C.M. (1984).
	  • Dunst, C.J., Jenkins, V., and Trivette, C.M. (1984). Family Support Scale: Reliability and validity. *Journal of Individual, Family and Community Wellness, 1* (4), 45-52.

Getting Ready for Kindergarten	Head Start Quality Research Consortium (QRC)
About your Child and Family	Head Start Quality Research Consortium (QRC), FACES Research Team

Instruments to Observe Classroom

INSTRUMENTS TO OBSERVE CLASSROOM					
Name of the Instrument	Spring 1997	Fall 1997	Spring 1998	Spring 1999	Spring 2000
1. *Assessment Profile - Scheduling*	√	√	√	-	-
2. *Assessment Profile - Learning Environment*	√	√	√	-	-
3. *Early Childhood Environment Rating Scale (ECERS)*	√	√	√	-	-
4. *Arnett Scale of Caregiver Behavior* - Lead Teacher Form	√	√	√	-	-
5. *Arnett Scale of Caregiver Behavior* - Assistant Teacher Form	√	√	√	-	-
6. Counts of adults/children	√	√	√	-	-

Citation and Ordering Information for Classroom Instruments

1. **Assessment Profile for Early Childhood Programs** (modified for FACES)

   Authors: Abbott-Shim, M., & Sibley, A. (1987). *Assessment profile for early childhood programs*. Atlanta, GA: Quality Assist, Inc.

   Ordering Information:
   Quality Assist, Inc.
   368 Moreland Ave. NE, Suite 240
   Atlanta, GA 30307
   404-325-2225

2. **Early Childhood Environment Rating Scale (ECERS)** (adapted by permission of publisher)

   Authors: Harms, T., Clifford, R.M., & Cryer, D. (1998). *Early childhood environment rating scale*. New York: Teachers College Press.

   Ordering Information:
   Teachers College Press
   1234 Amsterdam Ave.
   New York, NY 10027
   212-678-3929
   1-800-575-6566

3. **Arnett Scale of Caregiver Behavior**

   Authors: Arnett, J. (1989). Caregivers in day-care centers: Does training matter? *Journal of Applied Developmental Psychology, 10*, 541-552.

4. **Counts of staff/children** - Observer records during two time periods in the classroom the number of boy children, girl children, and adults working with the children in the classroom.

   Authors: FACES Research Team

Staff Questionnaires

STAFF QUESTIONNAIRES	
Name of the Instrument	Number of times inteviewed/administered during the course of the study
1. Center Director Interview	once
2. Classroom Teacher Interview	Every new teacher of sample childen was interviewed during the course of the study
3. Coordinator Interview (asked of all coordinators)	once
4. Health Coordinator Interview	once
5. Parent Involvement Coordinator Interview	once
6. Social Service Coordinator Interview	once
7. Education Coordinator Interview	once
8. Home-Based Teacher Interview	once
9. Family Service Worker Interview	once
10. Head Start Teacher Self-Administered Survey	Spring 1997, Fall 1997, Spring 1998, Spring 1999
11. Kindergarten Teacher Self-Administered Survey	Spring 1998, Spring 1999, Spring 2000
12. First Grade Teacher Self-Administered Survey	Spring 2000

Instruments Used in the Validation Sub-Study

INSTRUMENTS USED IN THE VALIDATION SUB-STUDY				
Name of the Instrument	Spring 1997	Fall 1997	Spring 1998	Fall 1998
1. Home Visit Interview	√	√	√	-
2. Monthly Telephone Interview	√	√	√	√
3. Community Agency Interview	√	√	√	√

SOURCES OF ITEMS IN THE VALIDATION SUB-STUDY	
Question Domain	Source

Fall '97 Home Visit
Parent's Description of Their Child
Reasons for Enrolling Child in Head Start
Hopes and Goals for Child
Positive Qualities of Family
Areas for Family Improvement
Problems at Home
Home/Neighborhood Observations
	• Home Visit interview was adapted from "Getting to Know your Family" (Ramey & Ramey, 1992).
	  • Ramey, C.T., & Ramey, S.L. (1992). *Child and Family Transitions to School: Measuring Adaptation throughout the Elementary School Years*. Unpublished manuscript. Civitan International Research Center, University of Alabama at Birmingham.
	• Home/Neighborhood observation items were from the physical environment subscale on the HOME (Caldwell & Bradley, 1984) plus items developed by the FACES Research Team
	  • Caldwell, B.M. & Bradley, R.H. (1984). *Home Observation for Measurement of the Environment. Administration Manual*. University of Arkansas at Little Rock.

Spring '98 Home Visit A Typical Day at Head Start Family's Participation/Satisfaction with Head Start Parenting Beliefs, Hopes, Goals Transition to Kindergarten Parent's Description of Neighborhood Characteristics	FACES Research Team

SOURCES OF ITEMS IN THE VALIDATION SUB-STUDY

Question Domain	Source
Monthly Telephone Interviews (Core) *Family Status:* Health Child Care Arrangements Employment *Head Start Activities for the Family* Perceptions/Goals for Activities Parent Meetings Volunteer Opportunities Home Visits by Head Start Staff Parent Teacher Meetings	FACES Research Team

Monthly Telephone Interviews (Rotated)
 	
Intimate Social Support
Informational Social Support
Instrumental Social Support
Psychological Well-Being
Family Events
Head Start Satisfaction
Family Resources
Transition to Kindergarten
	• Social Support Measures (Chen, Telleen, & Chen, 1995)
	  • Chen, S.P., Telleen, S., & Chen E.H. (1995). Family and community support of urban pregnant students: Support person, function and parity. *Journal of Community Psychology, 23* (1), 28-33.
	• Psychological Well-Being - Center for Epidemiology Studies Depression Scale (Radloff, 1977)
	  • Radloff, L.S. (1977). The CES-D: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
	• Family Resources (Dunst & Leet, 1987)
	  • Dunst, C.J., & Leet, H.E. (1987). Measuring the adequacy of resources in households with young children. *Child Care, Health, and Development, 13*, 2 111-125.
	• Other measures (FACES Research Team)

Community Agency Interviews Agency Services Offered Goals and Missions Target Population Auspice of Agency Sites for Service Delivery Collaboration with Head Start Quality of Collaboration With Head Start Referral Systems Community Linkages	FACES Research Team