Getting Ready for Kindergarten: Children's Progress During Head Start

FACES 2009 Report

OPRE Report 2013-21a

June 2013

Head Start FACES
family and child experiences survey

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SUMMARY

This brief report focusing on children's kindergarten readiness is the third in a series of reports describing data from the 2009 cohort of the Head Start Family and Child Experiences Survey (FACES 2009). Previous FACES 2009 reports described the characteristics of children and their families and programs as they entered Head Start in fall 2009 (Hulsey et al. 2011) and, in spring 2010, at the end of one year in the program (Moiduddin et al. 2012). This brief report describes the family backgrounds and developmental outcomes of children as they completed the Head Start program and also describes progress in children's outcomes between Head Start entry and exit. It focuses on the population of children who entered Head Start for the first time in fall 2009 and completed one or two years of the program before entering kindergarten in the fall.

Key Findings

- With the exception of letter–word knowledge, children assessed in English score below norms across language, literacy, and math measures at both Head Start entry and exit. However, children make progress toward norms across areas, and they score at the norm on letter–word knowledge at program exit.

- Teachers report that children show growth in their social skills from program entry to exit, and they also rate children as having fewer problem behaviors by program exit, as well as more positive approaches to learning and stronger executive functioning skills.

- There are no changes in children's body mass index (BMI) between the beginning and end of the program, nor are there differences in parent reports of children's general health status between program entry and exit. The majority of children are reported by their parents as being in excellent or very good health at Head Start entry and exit. Using criteria set by the Centers for Disease Control and Prevention, about one-third of children are overweight or obese at Head Start entry and exit.

FACES 2009 is the fifth in a series of nationally representative cohort studies of newly entering Head Start children, their families, and the programs they attend (previous cohorts were initiated in 1997, 2000, 2003, and 2006). The study includes a battery of child assessments across many developmental domains; interviews with children's parents, teachers, and program managers; and observations of classroom quality. Additional information on the study design, instruments, and measures used for this brief report is presented in a set of accompanying data tables (Kopack Klein et al. 2013). The FACES 2009 study is conducted by Mathematica Policy Research and its partners—Educational Testing Service and Juárez and Associates—under contract to the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

INTRODUCTION

This brief report focusing on children's kindergarten readiness is the third in a series of reports describing data from the 2009 cohort of the Head Start Family and Child Experiences Survey (FACES 2009). Previous FACES 2009 reports described the characteristics of children and their families and programs as they entered Head Start in fall 2009 (Hulsey et al. 2011) and, in 2010, at the end of one year in the program (Moiduddin et al. 2012). This report describes the family backgrounds and developmental outcomes of children as they completed the program and also describes progress in children's outcomes between Head Start entry and exit. It focuses on the population of children who entered Head Start for the first time in fall 2009 and completed one or two years of the program in spring 2010 or spring 2011 before entering kindergarten in the fall.[1] FACES 2009 is the fifth in a series of nationally representative cohort studies of Head Start children, their families, and the programs they attend (previous cohorts were initiated in 1997, 2000, 2003, and 2006).[2]

After providing background information on children's characteristics and family demographics, we describe children's outcomes at the end of Head Start and changes in children's skills and development between Head Start entry and exit. These changes reflect a range of influences, including maturation, program and family influences, and other factors in children's lives. We describe findings for the population as a whole and highlight differences in findings between groups of children who entered the program at age 3 or 4.[3] The FACES 2009 child sample was selected to represent 3- and 4-year-old children as they entered their first year of the program, drawing on participants from 60 selected programs from across the country. The sample used for this brief report is the 2,356 children who entered the program in fall 2009 and who completed one or two years of the program.[4] All findings are weighted to represent this population and all findings presented on children's developmental progress are statistically significant at the $p \leq .05$ level. Additional information on the study design, instruments, and measures used for this brief report is presented in a set of accompanying data tables (Kopack Klein et al. 2012).

CHILD AND FAMILY DEMOGRAPHICS

Head Start serves a diverse population of low-income children and their families. In recognition of the important role that families play in children's development, Head Start has made the family a cornerstone of its framework. The FACES 2009 parent interview collected information from Head Start parents in a variety of areas, including characteristics of children, households (such as income, number of adult household members, and languages spoken in the home), and household members (including parent education and employment status).

This section presents key findings on child and household demographics. We present this information for all children and also provide descriptive information by age at program entry. Findings are drawn from information collected in the fall 2009 parent interview.

Characteristics of Children

Half of children completing Head Start were 3 years old when they first entered the program in fall 2009; the other half were 4 years old or older. Children are evenly divided between boys and girls (50 percent in each group). Thirty-nine percent of children completing Head Start are Hispanic/Latino and another 32 percent are African American. Thirteen percent of children had participated in Early Head Start. Children who entered Head Start as 3-year-olds were more likely to have participated in Early Head Start than those who entered Head Start as 4-year-olds, but the difference is small (14 and 11 percent, respectively).

Family Environment

Twenty-eight percent of children completing Head Start live in households where a language other than English is the primary language spoken to them. Spanish is by far the most prevalent non-English language spoken in the home and is the primary language spoken to 25 percent of children at home. Three-year-olds are slightly more likely to be spoken to primarily in a language other than Spanish or English (3 percent) than are 4-year-olds (1 percent).

Family structure. Forty-three percent of children live with both biological/adoptive parents. Just

over one-quarter (28 percent) of children live with their married parents, and 15 percent live in households where their parents are cohabiting. Three-year-olds are more likely (45 percent) to live with both biological/adoptive parents than 4-year-olds (41 percent). Three-year-olds are also more likely to live with married parents (30 percent) than are 4-year-olds (26 percent).

Parent education, employment, and income. Sixty-seven percent of children have at least one parent with at least a high school diploma or GED living with them at Head Start entry. Four-year-olds are less likely to have a parent with at least a high school diploma or GED than 3-year-olds are. Among children living with their mothers, 63 percent have mothers with at least a high school diploma or GED. Among children living with their fathers, 50 percent have fathers with at least a high school diploma or GED.

Seventy-seven percent of children have at least one parent who is working full time living with them, and 12 percent have at least one parent who is working part time. Ten percent of children are living with a parent who is not employed, including 7 percent who live with at least one parent who is unemployed/looking for work. For children who live with their mother, 47 percent of their mothers are employed (26 percent of mothers are working full time and another 21 percent are working part time). Among children living with their fathers, 72 percent of their fathers are employed; most fathers (58 percent) are working full time. Ninety-two percent of children live in households where total income is less than or equal to 185 percent of the poverty threshold, and 64 percent live in households where the total household income is at or below the poverty threshold.[5]

Cumulative socioeconomic risk. Coming from a low-income family, a single-parent household, or having a mother who did not complete high school are identified as risk factors for poor developmental and educational outcomes. Thirteen percent of children completing Head Start have none of these three risk factors, but the majority (75 percent) have one or two family risks, and 12 percent have all three.

CHILD OUTCOMES

In this section we describe children's cognitive, social-emotional, and health and physical development. We report on children's skills on norm- and criterion-referenced measures using raw scores, item response theory (IRT) based scores and standard scores. Standard scores provide information on children's performance relative to same-age peers. These scores have a mean of 100 and a standard deviation of 15. An increase in a standard score signifies that the child is making progress relative to peers. Raw and IRT scores allow for measurement of change or growth in performance over time. However, they are an indicator of absolute, rather than relative, performance.

Throughout this section, we describe the outcomes for all children and then provide descriptive information by age. As noted previously, changes in children's skills and development during Head Start reflect a range of influences, including maturation, program and family influences, and other factors in children's lives. We first describe children's cognitive development during Head Start before turning to a description of children's social-emotional development. Finally, we report on several aspects of children's health and physical development.

Child Cognitive Development

To assess children's skills and knowledge, norm- and criterion-referenced measures of language, literacy, and math development were directly administered to children. The direct child assessment began with a screening to determine whether children who primarily spoke a language other than English at home should be assessed in English, in Spanish, or with a short assessment of vocabulary and height and weight measurements.[6] Two subtests from the Preschool Language Assessment Survey 2000 (*pre*LAS 2000; Duncan and DeAvila 1998), Simon Says and Art Show, were used as screening tools.

Receptive and expressive vocabulary were measured for all children using the Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4) (Dunn and Dunn 2006) and the Expressive One-Word Picture Vocabulary Test (EOWPVT; EOWPVT-Spanish-Bilingual Edition [SBE];

Brownell 2000).[7] For children assessed in English, the assessment battery also measured children's letter–word knowledge and skills in applied problems and early writing, using the Letter-Word Identification, Applied Problems, and Spelling subtests from the Woodcock Johnson III (WJ III; Woodcock et al. 2001).[8] A supplemental set of math items from the Early Childhood Longitudinal Study-Birth (ECLS–B) and ECLS–Kindergarten (ECLS–K) math assessments was used to assess a broader set of skills than is captured by Applied Problems.[9] Similarly, to tap the skills of children who had progressed beyond letter knowledge but had not yet acquired sight words, a supplemental set of letter-sound items from the ECLS–B was included.[10]

In this section, we first describe the language skills of all children, followed by the literacy and math skills of those who were assessed in English at both program entry and exit.[11]

Children's language development. Looking first at language development, children score below norms in their expressive and English receptive vocabulary skills at both Head Start entry and exit (Table 1). However, they make progress toward

Table 1. Mean PPVT-4 and EOWPVT Standard Scores by Child Age, Home Language, and Assessment Language: Head Start Entry, Head Start Exit, Entry–Exit Change

	PPVT-4[a]				EOWPVT[a]			
		Head Start Entry	Head Start Exit	Entry-Exit Change		Head Start Entry	Head Start Exit	Entry-Exit Change
	n	Mean	Mean	Mean	n	Mean	Mean	Mean
All Children	1,931	85.0	90.6	5.7***	1,768	80.2	84.7	4.5***
Age[b]								
3 years old or younger	928	85.9	92.3	6.4***	1,045	78.5	84.6	6.1***
4 years old or older	1,003	84.1	89.0	4.9***	723	82.6	85.0	2.4**
Home Language								
English home language	1,410	89.0	93.8	4.7***	1,421	82.9	86.2	3.3***
All dual language learner (DLL) children	521	71.5	80.2	8.7***	347	67.6	77.7	10.1***
DLL children passing language screener								
Spanish home language	286	76.3	84.4	8.2***	105	72.8	82.3	9.5***
Other home language	34	80.8	88.0	7.3*	32	65.1	80.4	15.3***
DLL children not passing language screener								
Spanish home language	187	63.3	72.7	9.3***	189	67.0	75.5	8.5***
Other home language	14	!	!	!	21	!	!	!

Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

*p≤.05; **p≤.01; ***p≤.001

[a] These scores, normed against children in the U.S. nationally, allow for comparison of children's skills with English-speaking peers. Scores in this table are for all children, regardless of performance on the language screener threshold.

[b] Age as of September 1, 2009

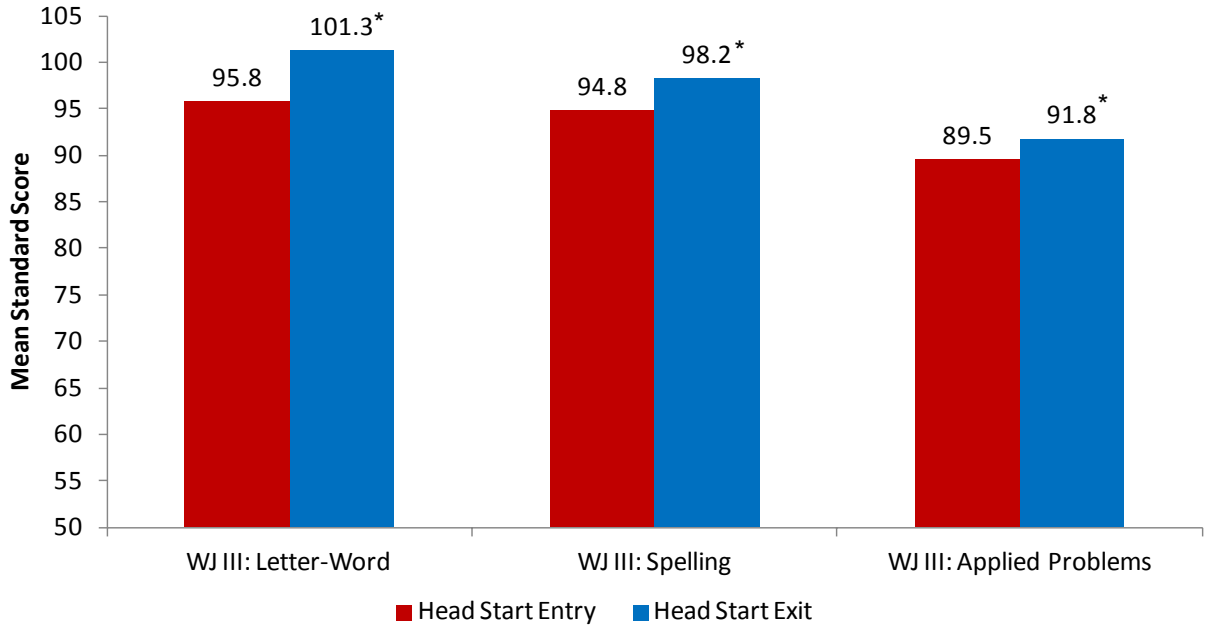
! Too few cases for a reliable estimate.

norms during Head Start in both areas. For example, they gain about 6 standard score points in English receptive vocabulary and 5 standard score points in expressive vocabulary during Head Start. In English receptive vocabulary at both entry and exit, children who entered the program at age 3 score closer to same-age peers than do 4-year-olds. Three-year-olds also make greater gains in both expressive and English receptive vocabulary during Head Start.

Across language groups,[12] children score below norms in the areas of expressive vocabulary and English receptive vocabulary skills at both Head Start entry and exit. There are expected differences by language, with children from homes where English is primarily spoken having the highest scores in these areas and children who are dual language learners (DLLs) and unable to pass the language screener having the lowest scores. All groups make progress toward norms in both areas during Head Start. DLLs make greater gains toward norms than children with an English home language in both receptive (+8.7 versus 4.7 standard score points) and expressive vocabulary (+10.1 versus 3.3 standard score points).

Children assessed in English.[13] Looking next at children's literacy and math development, with the exception of letter–word knowledge, children assessed in English at Head Start entry and exit score below norms across measures at both waves (Figure 1). However, across areas, children make progress toward norms during Head Start. For example, they gain about 3 points in early writing, scoring near norms at the end of Head Start (98.2). They gain almost 6 standard score points in the area of letter–word knowledge during this period and score just above the national average in this area by Head Start exit (101.3). They also gain approximately 2 standard score points in applied problems, but despite making progress toward norms during the program year, children remain below norms in this area at the end of Head Start.

Figure 1. Mean Literacy and Math Standard Scores for Children Taking the Assessment in English: Head Start Entry-Head Start Exit



Source: Fall 2009 and Spring 2010 or Spring 2011 FACES Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

* Asterisk indicates that the difference between the entry and exit score is statistically significant at the $p \leq .05$ level.

As with their language development, those who entered Head Start at age 3 generally perform closer to their same-age peers nationally in their letter–word knowledge at both program entry and exit than those who entered at age 4. Children who entered the program at age 3 gain about 6 standard score points during this period and score above the national average by Head Start exit (103.4). Meanwhile, those who entered at age 4 gain about 5 standard score points and score at norms by the end of Head Start (99.5).

In other areas of literacy and math development, both groups similarly score below norms at both entry and exit, and they make similar progress during this period. For example, on average, those who entered the program at age 3 and age 4 gain about 3 to 4 standard score points in early writing, and score near norms by the end of Head Start (98.8 and 97.7, respectively). Three- and 4-year-olds make similar progress toward norms in applied problems during this period (+3 versus 2 standard score points), with both groups remaining below norms, on average, in this area at Head Start exit.

On the ECLS-B math items, although only 30 percent of children are able to identify numbers and shapes at the start of Head Start, by program exit, 71 percent are able to do so. This pattern holds true for both those who entered at age 3 and at age 4. For example, while 16 percent of children in the 3-year-old cohort are able to identify numbers and shapes at the start of Head Start, by the spring of their second year, 73 percent are able to do so. In the 4-year-old cohort, the percentage increases from 44 percent at Head Start entry to 68 percent by spring. Finally, based on the ECLS-B letter-word items, children know more letter sounds by the end of Head Start than they do at program entry, including children in both age cohorts. However, mean scores on this assessment and the small number of children administered these items suggest that children have not fully developed letter-sound skills by the end of Head Start.[14]

Child Social-Emotional Development

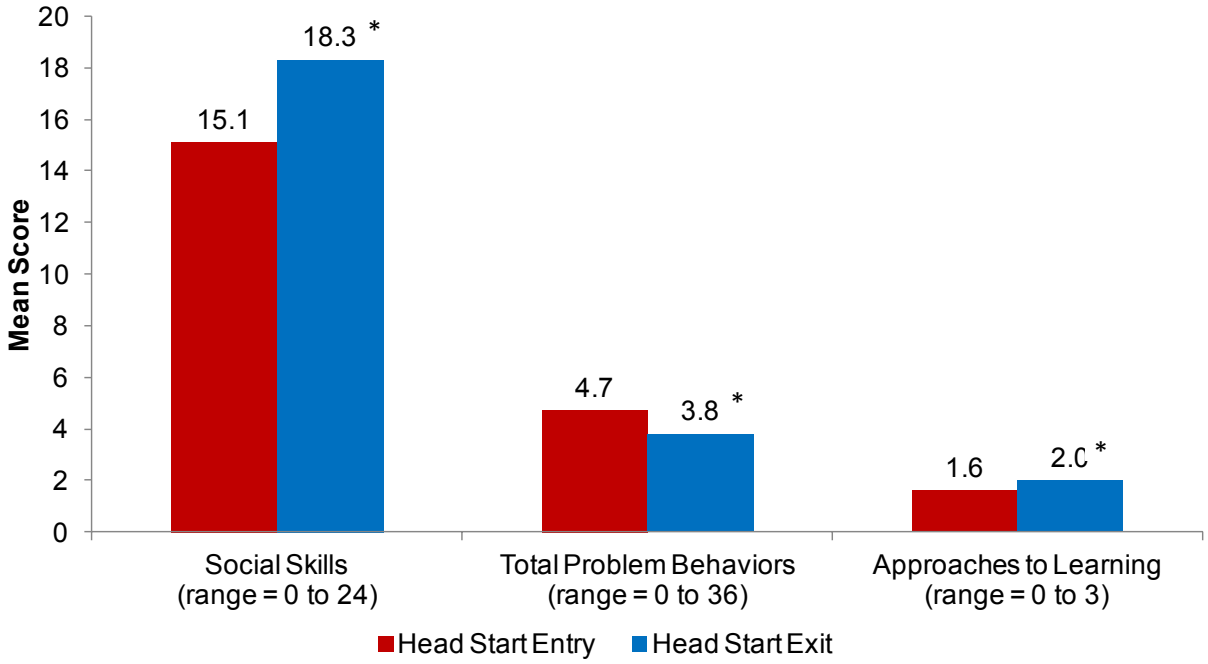
FACES 2009 uses measures from a variety of sources—teacher, parent, assessor, and direct assessment—to provide multiple perspectives on children's positive and challenging behaviors that may affect their ability to learn and interact with peers and adults. Using items taken from the Behavior Problems Index (Peterson and Zill 1986), Personal Maturity Scale (Entwisle et al. 1997), and Social Skills Rating System (Gresham and Elliott 1990), we present teacher reports of children's cooperative classroom behavior, such as making friends easily and waiting their turn in games or other activities, as well as problem behaviors in the classroom, such as being very restless and unable to sit still or disrupting ongoing activities. We also present teachers' ratings of children's approaches to learning, using the ECLS–K Approaches to Learning scale (U.S. Department of Education 2002).[15] Finally, for FACES 2009, a pencil tapping task (Blair 2002; Diamond and Taylor 1996; Smith-Donald et al. 2007) was added to capture 4-year-old children's executive functioning. As with cognitive measures, we describe the skills and behaviors of all children, and then by children's age at program entry.

Teachers report that children demonstrate more social skills, more positive approaches to learning, and fewer total problem behaviors on average by the end of Head Start (Figure 2). Among the behaviors comprising the total problem behavior score, teachers report children as demonstrating fewer aggressive and hyperactive behaviors by the end of their program experience.

On the pencil-tapping task, which was administered to children ages 4 and older, children are better able to inhibit their initial impulse and respond correctly across more trials by the end of Head Start as compared to when they first entered the program. In fact, children are able to do so 60 percent of the time at Head Start exit, which is more than by chance. In comparison, children were able to do so less than half the time (42 percent) at the beginning of Head Start.

Teachers report both children who entered at age 3 and age 4 as showing more social skills and positive approaches to learning by Head Start exit; however, they report those who entered at age 3 as showing greater gains in social skills during Head Start than those who entered at age 4. Teachers only report children who entered the program at age 3 as having fewer total problem behaviors, aggressive behaviors, and withdrawn behaviors by Head Start exit. This suggests that the improvements in total behavior problems and

Figure 2. Teacher Reports of Social-Emotional Development: Head Start Entry-Head Start Exit



Source: Fall 2009 and Spring 2010 or Spring 2011 Teacher Child Report.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

* Asterisk indicates that the difference between the entry and exit score is statistically significant at the $p \leq .05$ level.

aggressive behaviors for the population overall are driven largely by the 3-year-old cohort. Teachers report both age groups as having fewer hyperactive behaviors by the end of the program.

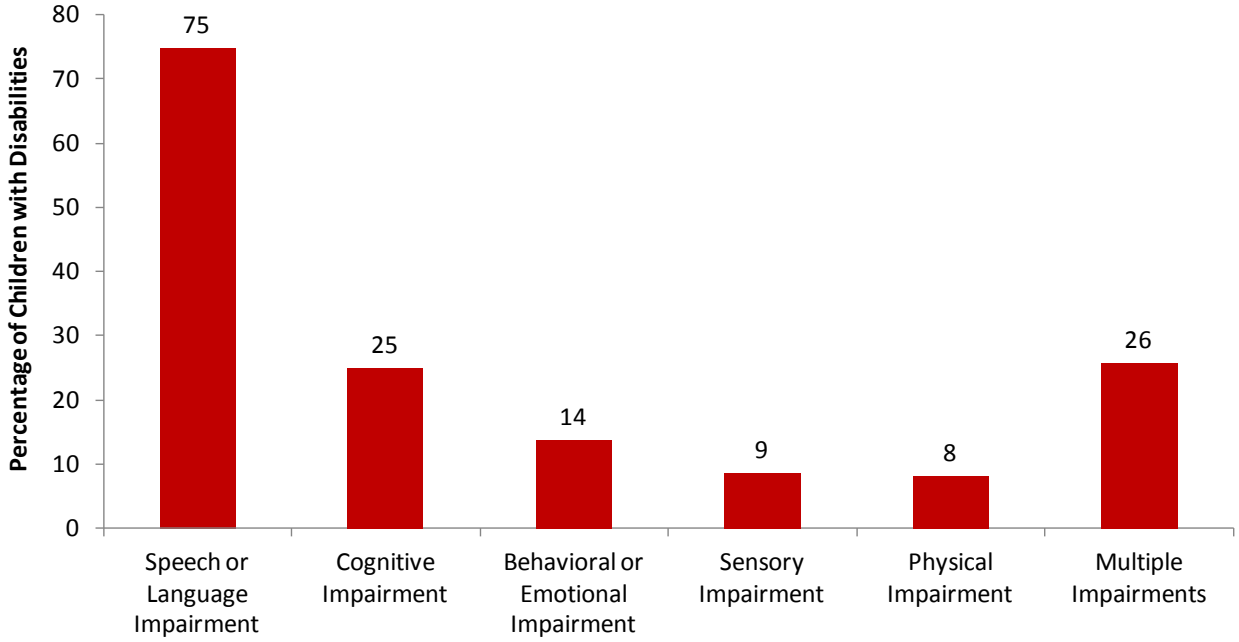
Child Health and Physical Development

Parents and teachers reported on several aspects of children's health and physical development, including disability status and health and developmental conditions or concerns. As in FACES 2006, each child's height and weight were measured to support analyses of overweight, obesity, or underweight status. In this section, we provide information from teacher reports on children's status at Head Start exit, including child disability and Individualized Education Plan (IEP) or Individualized Family Service Plan (IFSP) status. We also report on children's height and weight and Body Mass Index (BMI) between Head Start entry and exit. From parent reports, we present child health status during Head Start.

On average, the majority of children are reported by their parents as being in excellent or very good health at Head Start entry and exit (80 percent and 80 percent, respectively), including children in the 3- and 4-year-old cohorts. For both age groups, there were no changes in reports of children's general health status between Head Start entry and exit.

Head Start is mandated to serve children with disabilities, and at least 10 percent of its enrollment is set aside for these children. About 15 percent of children are reported by their teachers to have a diagnosed disability at the end of the Head Start. The majority of children with diagnosed disabilities are reported to have either speech/language impairments (75 percent) or cognitive impairments (25 percent; Figure 3). Seventy-six percent of children with teacher-reported disabilities have an IEP or IFSP. Twenty-six percent of children with teacher-reported disabilities have more than one disability or impairment.

Figure 3. Teacher-Reported Disability Categories for Children with Disabilities: Head Start Exit



Source: Spring 2010 or Spring 2011 Teacher Child Report.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

Teachers were asked whether a professional had indicated that the child had a developmental problem, delay, or other special need, and to indicate the specific need or disability.

Percentages do not sum to 100 because children can be reported to have more than one impairment across the impairment categories.

Cognitive Impairment includes developmental delay, intellectual disability,[16] and autism or pervasive developmental delay.

Behavioral/Emotional Impairment includes behavior problems, hyperactivity, and attention deficit.

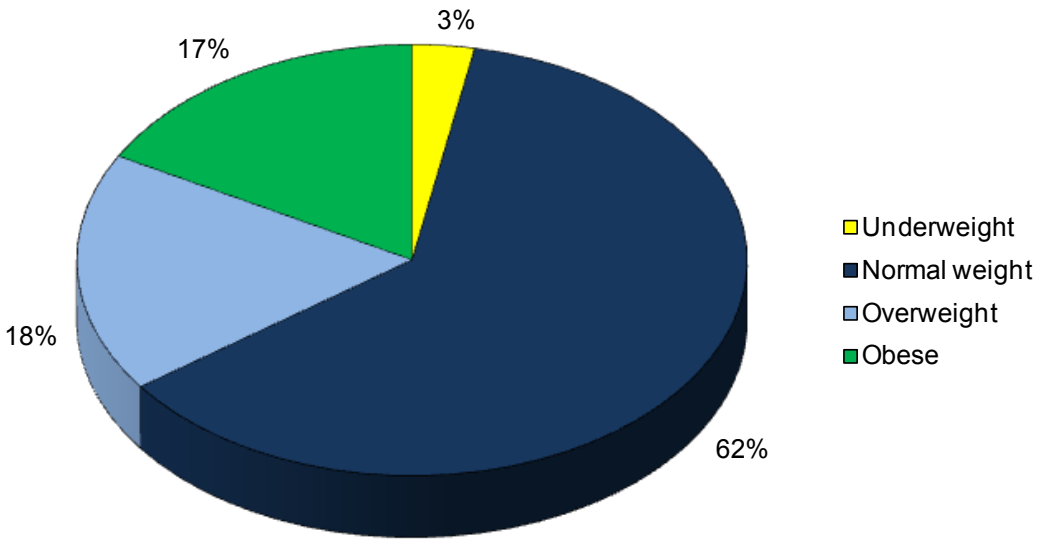
Sensory Impairment includes deafness, hearing impairment/hard of hearing, blindness, and vision impairment.

Physical Impairment includes motor impairment.

A larger percentage of children who entered the program at age 3 than of those who entered at age 4 are reported by their teacher to have a disability at the end of the Head Start (17 versus 14 percent, respectively). A larger percentage of 3-year-old children with a teacher-reported disability are reported to have a speech or language impairment than those who entered at age 4 (79 versus 70 percent, respectively). For both groups, speech or language impairments are the most common disability. Larger percentages of those who entered at age 3 have an IEP or IFSP than those who entered at age 4 (82 versus 70 percent, respectively), but similar percentages of children in both age groups have more than one impairment (26 percent each) on average.

At both Head Start entry and exit, children have an average Body Mass Index (BMI) that is above average for their age range (that is, higher than the 50th percentile). Using criteria set by the Centers for Disease Control and Prevention (CDC),[17] about one-third of children are overweight or obese at Head Start entry and exit (33 and 35 percent, respectively; Figure 4). Similar percentages of 3- and 4-year-olds are overweight or obese at Head Start entry (31 versus 35 percent, respectively) and exit

Figure 4. Child BMI Categories: Head Start Exit



Source: Spring 2010 or Spring 2011 Direct Child Assessment.

Note: Statistics are weighted to represent all children who entered Head Start for the first time in fall 2009, completed one or two years of the program, and will enter kindergarten in fall 2010 or fall 2011.

(34 versus 36 percent, respectively). For both age groups, there were no changes, on average, in BMI between the beginning and end of Head Start. However, a smaller percentage of 3-year-olds were underweight by program exit and a larger percentage were obese at the end of the program.

SUMMARY

For all children completing Head Start, with the exception of letter–word knowledge, children score below norms across developmental areas, including language, literacy, and mathematics, at both Head Start entry and exit. However, children make progress toward norms across areas, and they score at the norm on letter–word knowledge. These findings are similar to FACES 2006 (Malone et al. 2010), in which children made progress toward norms across areas but only scored at norms in letter–word knowledge at program exit.

By age groups, in their language development and letter–word knowledge, children who entered the program at age 3 score closer to same-age peers than do 4-year-olds at both entry and exit. Three-year-olds also make greater gains in both areas during Head Start. In other areas of their literacy and math development, both groups score similarly below norms at entry and exit, and make similar progress during this period.

In an assessment of executive functioning skills, children are able to inhibit their initial impulse and respond correctly across more trials on the pencil tapping task by the end of the Head Start, suggesting improvements in this area. For all children completing Head Start, teachers report that children show growth in their social skills from program entry to exit. Teachers also rate children as having fewer problem behaviors by program exit, as well as more positive approaches to learning. In FACES 2006 (Malone et al. 2010), Head Start teachers also reported children as demonstrating more social skills, fewer problem behaviors, and more positive approaches to learning on average at Head Start exit than at entry.

By age group, children who enter the program at age 3 show similar patterns in the progress in

their social-emotional skills during Head Start as those who enter at age 4. However, 3-year-olds show greater gains in social skills and have fewer problem behaviors by Head Start exit.

For all children completing Head Start, 15 percent have an identified disability; a larger percentage of children who entered the program at age 3 than those who entered at age 4 are reported by their teacher as having a disability.

For all children completing Head Start, more than one-third of children are overweight or obese at the end of the program. There are no changes in their BMI between the beginning and end of the program. Similar percentages of 4-year-old and 3-year-old children are overweight or obese at program exit.

Finally, on average, parents report children completing the program to be in excellent or very good physical health, and there are no differences in these reports between program entry and the end of the program year or by child age at entry.

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NOTES

[1] Two cohorts of children are included in FACES 2009—those who entered Head Start at age 3 and those who entered at age 4. Children entering the program at age 3 completed Head Start in spring 2011, while those who entered at age 4 completed the program in spring 2010.

[2] For detailed information on the FACES 2009 study design and measures, see West et al. 2011.

[3] In addition to presenting findings on child outcomes by age, we also present findings by gender, race/ethnicity, and family risk in an accompanying set of data tables (Kopack Klein et al. 2013).

[4] In fall 2009, 3,349 children participated in the FACES study. The sample included in this brief report is smaller for a variety of reasons. Some children became ineligible after the initial data collection because (1) they left Head Start before completing a year or, for children who entered the program at age 3, before completing two years (27 percent), or (2) they did not have a completed child assessment or TCR for each round of data used for this brief report (4 percent).

[5] Head Start qualifying criteria are based on family (not household) income, and there are other (non-income) ways to qualify for the program. Information presented on household income should not be used to estimate eligibility for Head Start.

[6] In fall 2009, children whose home language was Spanish and who made five consecutive errors on Simon Says and Art Show were then routed to the Spanish-language cognitive assessment. Similarly, a child who made five consecutive errors on both the Simon Says and Art Show and primarily spoke a language other than English or Spanish was routed out of the cognitive assessment following administration of the vocabulary measures, and was weighed and measured for height. Children who passed the language screener and whose primary home language was a language other than English received the cognitive assessment battery in English. Those from homes in which English was primarily spoken were administered the cognitive assessment battery in English, regardless of their scores on the language screener. In subsequent spring assessments, an adapted version of the screening procedure was used. All children were administered the Simon Says task of the *pre*LAS 2000. Following this task (and the receptive and expressive vocabulary measures), those who primarily spoke English at home and those who had passed the language screener in the prior round(s) were routed to the English version of the assessment. All other children were administered both Simon Says and Art Show, and, as in the fall, performance on both tasks was used to determine whether these children should be assessed in English, assessed in Spanish, or administered a short assessment of vocabulary and measured for height and weight.

[7] The EOWPVT and EOWPVT-SBE measure children's expressive vocabulary. They include the same items in the same order, but the EOWPVT-SBE allows for conceptual scoring (that is, it provides prompts for both English and Spanish and accepts responses in either language, including responses in various Spanish dialects). FACES uses the EOWPVT-SBE and conceptual scoring with children whose primary home language is Spanish. Standard scores based on

the EOWPVT norms provide a measure of children's expressive vocabulary relative to English-speaking peers nationally, while those based on the EOWPVT-SBE norms reflect these skills relative to Spanish-bilingual and Spanish-dominant peers in the U.S. FACES provides standard scores based on the EOWPVT norms for all children, regardless of home language. The study only reports standard scores based on the SBE norms for children with a Spanish home language.

[8] The English assessment used the WJ III subtests; the Spanish assessment used the same subtests from the Batería III Woodcock-Muñoz (WM III) Tests of Achievement (Woodcock et al. 2004).

[9] FACES used 23 mathematics items from the ECLS–B in fall and spring of the Head Start year(s) and an additional 7 items from the ECLS–K in kindergarten.

[10] Because this measure requires a higher skill set for children and was administered to children passing a threshold on the letter-word subtest, only a subset of children received it. In addition, it is only available in English. Scores were calibrated based on the subsample of children who were administered the full set of items.

[11] With the exception of vocabulary measures, we are unable to provide information on changes in the skills of children who changed their language of assessment between program entry and exit, as these children received different assessment measures at each wave. In addition, given the small number of children who were assessed in Spanish at program exit, we do not provide information in this section on the skills of children on the Spanish assessments.

[12] FACES 2009 assessed the expressive vocabulary and English receptive vocabulary of all children regardless of home language and screener performance, providing an opportunity to understand the language development of all children.

[13] Some children were administered large sections of (or the majority of) the cognitive assessments in Spanish (or not assessed at all) in fall 2009 and then were assessed in English in subsequent rounds. Data in this section reflect the performance of children assessed in English at both Head Start entry (fall 2009) and exit (spring 2010 or 2011, depending on age at program entry). See Kopack Klein et al. 2012 for the mean scores for all children assessed in English at Head Start exit, regardless of language of assessment, child performance, or availability of valid scores in the fall. In this set of tables, children's mean Head Start exit scores are slightly lower (for example, 1 to 3 standard score points lower). Variability in children's scores is comparable for both sets of scores.

[14] As noted previously, because this measure requires a higher skill set for children and was administered to children passing a threshold on the letter-word subtest, only a subset of children received it.

[15] For the first time in FACES, teachers in FACES 2009 rated each child on the six items that comprise the Approaches to Learning scale from the ECLS–K. Earlier FACES cohorts used the Preschool Learning Behavior Scale (PLBS) (McDermott et al. 2000) to assess children's approaches to learning.

[16] In some earlier FACES reports, the disability category *intellectual disability* was referred to as *mental retardation*. Here, we use the more recent terminology accepted by the Office of Management and Budget.

[17] According to the CDC, a child is considered to be overweight when his or her BMI score is at or above the 85th percentile but below the 95th percentile for his or her age and gender, and obese if his or her BMI is at or above the 95th percentile.

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