



R E S E A R C H

Head Start Impact Study First Year Findings

June 2005



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



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* * * * *

This report presents initial findings from the Congressionally mandated Head Start Impact Study. Three required reports to Congress have already been submitted. This report, while not mandated, presents preliminary findings on impacts after one year in Head Start (fall 2002 to spring 2003). A final report will present results of analyses following children through the end of first grade.

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Exhibit 2.3-A: Description of the Year 1 Analysis Sample: 3-Year-Old Group (Weighted Data)

Characteristic	Head Start (Treatment) Group	Non-Head Start (Control) Group	Difference: (Head Start) – (Non-Head Start)
Child Gender:			
Boy	47.9%	49.1%	-1.2%
Girl	52.1%	50.9%	1.2%
Child Race/Ethnicity:			
White	24.3%	26.0%	-1.7%
Black	33.3%	31.4%	1.9%
Hispanic	37.0%	36.4%	0.6%
Other	5.4%	6.3%	-0.8%
Child Has a Disability	13.5%	11.9%	1.6%
Fall-Spring Language of Child Assessment:			
English-English	75.4%	75.9%	-0.5%
Spanish-English	18.9%	18.0%	0.9%
Spanish-Spanish	4.3%	4.6%	-0.3%
Primary Home Language Is English	71.9%	68.5%	3.4%
Biological Mother Was a Teen Mom	36.2%	37.6%	-1.3%
Biological Mother Is a Recent Immigrant	17.0%	17.8%	-0.8%
Biological Mother Is Employed	51.4%	57.4%	-6.0%
Both Biological Parents Live With Child	48.5%	50.7%	-2.2%
Child's Parents Are			
Married	43.7%	45.3%	-1.6%
Separated or Divorced	11.5%	13.7%	-2.2%
Primary Caregiver's Age as of 9/1/02	29.5 years	28.6 years	<u>0.9 years*</u>
Mother's Education:			
Less Than High School	32.4%	34.8%	-2.3%
High School/GED	34.7%	33.9%	0.8%
Beyond High School	32.9%	31.4%	1.5%
Grandparent Lives in Home	3.6%	1.7%	<u>1.9%**</u>
Parent's Self-Reported Health Is Excellent or Good	85.5%	86.5%	-1.0%
Primary Caregiver—Depression Scale	251.9	251.2	0.7
Primary Caregiver—Locus of Control Scale	249.5	251.2	-1.7
Average Household Income:			
\$500/month or less	14.8%	12.0%	2.9%
\$501-\$1500/month	48.3%	53.4%	-5.1%
Over \$1500/month	36.9%	34.6%	2.3%
Household Receives TANF	10.6%	10.5%	0.1%

* = $p \leq 0.05$, ** = $p \leq 0.01$, *** = $p \leq 0.001$.

Data source: Roster information collected at the time of random assignment and fall 2002 Parent Survey.

**Exhibit 2.3-B: Description of the Year 1 Analysis Sample: 4-Year-Old Group
(Weighted Data)**

Characteristic	Head Start (Treatment) Group	Non-Head Start (Control) Group	Difference: (Head Start) – (Non-Head Start)
Child Gender:			
Boy	49.6%	51.2%	-1.6
Girl	50.4%	48.8%	1.6
Child Race/Ethnicity:			
White	27.8%	24.6%	3.2%
Black	25.5%	23.3%	2.2%
Hispanic	42.4%	45.8%	-3.4%
Other	4.3%	6.2%	-1.9%
Child Has a Disability	12.8%	11.4%	1.4%
Fall-Spring Language of Child Assessment:			
English-English	67.2%	64.3%	2.9%
Spanish-English	25.9%	28.3%	-2.5%
Spanish-Spanish	5.9%	5.4%	0.4%
Primary Home Language Is English	63.6%	63.2%	0.0%
Biological Mother Was a Teen Mom	38.6%	35.2%	3.4%
Biological Mother Is a Recent Immigrant	24.1%	23.5%	0.6%
Biological Mother Is Employed	48.5%	52.0%	-3.4%
Both Biological Parents Live with Child	51.3%	51.3%	0.0%
Child's Parents Are			
Married	45.2%	45.4%	-0.2%
Separated or Divorced	15.9%	14.9%	1.0%
Primary Caregiver's Age as of 9/1/02	29.3 years	29.5 years	-0.2 years
Mother's Education:			
Less Than High School	38.6%	41.6%	-3.0%
High School/GED	31.7%	35.2%	-3.5%
Beyond High School	29.8%	23.3%	<u>6.5%*</u>
Grandparent Lives in Home	2.4%	1.4%	1.0%
Parent's Self-Reported Health Is Excellent or Good	86.6%	86.4%	0.1%
Primary Caregiver—Depression Scale	251.1	248.6	2.4
Primary Caregiver—Locus of Control Scale	251.5	249.5	2.0
Average Household Income:			
\$500/month or less	11.8%	9.1%	2.7%
\$501-\$1500/month	46.2%	50.8%	-4.6%
Over \$1500/month	42.0%	40.0%	2.0%
Household Receives TANF	10.0%	14.4%	<u>-4.5%*</u>

*= p≤0.05, ** = p≤0.01, *** = p≤0.001.

Data source: Roster information collected at the time of random assignment and fall 2002 Parent Survey.

significant impacts of Head Start were found on reported Total Problem Behavior and on the reported Aggressive Behavior subscale (i.e., indicating reductions in reported negative behaviors).²

² Statistically significant findings in Exhibits 6.3-A and 6.3-B for differences in impact are not discussed because it is possible they are due to chance alone and do not represent true impacts of the intervention (see discussion of subgroup impact analysis in Chapter 4).

Exhibit A.2.3.1: Estimates of the Race/Ethnicity Distribution of the Research Sample at Different Stages of Sampling

Data Source - Units Measured	Observations Examined	Percent Hispanic	95 Percent Confidence Interval	Percent Black	95 Percent Confidence Interval	Percent White and Other
1. PIR - Total Enrollment	All programs in the National PIR Data System (N=1,715)	28%		37%		36%
2. PIR - Total Enrollment	Frame of programs in selected PSU's (N=355)	30%		38%		32%
3. PIR - Total Enrollment	Subsample of programs in selected PSU's (N=261)	30%		38%		32%
4. PIR - Total Enrollment	Restricted frame of programs (less saturated) (N=223)	31%		38%		30%
5. PIR - Total Enrollment	Selected programs [grantees/delegate agencies] (N=90)	31%	[25%,36%]	39%	[33%,45%]	30%
6. PIR - Total Enrollment	Final sample of programs (N=84)	34%		33%		33%
7. CIF - Total Enrollment	Frame of centers (N=1,423)	35%	[30%,40%]	30%	[24%,36%]	34%
8. CIF - Total Enrollment	Restricted frame of centers (less saturated) (N=1,254)	36%	[31%,41%]	29%	[24%,34%]	35%
9. CIF - Total Enrollment	Selected centers (N=458)	36%	[30%,42%]	29%	[23%,35%]	35%
10. CIF - Total Enrollment	Selected centers where RA was done (N=378)	38%	[32%,44%]	28%	[22%,34%]	34%
11. Roster - All Applicants	Frame of children (including exempt) (N=27,562)	39%		27%		34%
	All 3-Year-Old Group	35%		31%		34%
	All 4-Year-Old Group	42%		25%		33%
12. Roster:	Restricted frame of children (N=14,439)	44%		24%		32%
Nonexempt, Newly entering Applicants	Newly Entering 3-Year-Old Group	37%		31%		32%
	Newly Entering 4-Year-Old Group	52%		17%		31%
13. Roster:	Sampled children (N=4,747)	43%		25%		32%
Nonexempt, Newly entering Applicants	Newly Entering 3-Year-Old Group	34%		33%		33%
	Newly Entering 4-Year-Old Group	53%		16%		31%
14. Roster:	Poststratification (N=3,723 child respondents)	37%		30%		33%
Nonexempt, Newly entering Applicants	Fall 2002 NHIS - Newly Entering 3-Year-Old Group	33%		35%		32%
	Fall 2002 NHIS - Newly Entering 4-Year-Old Group w/ poststratified weight	43%		24%		33%
	HSNRS: Newly Entering 4-Year-Old Group	36%		25%		39%
	HSNRS: Returning 4-Year-Old Group	26%		35%		39%

Exhibit A.4.1.1: Item Nonresponse Rates for Imputed Variables

Variable Name	Reported Count	Imputed Count	Percent Imputed	Total of Reported and Imputed Count
Crime & Violence Maximum Likelihood Ability Estimate	3,546	352	9.0%	3,898
Crime & Violence IRT True-Score	3,546	352	9.0%	3,898
Number of children age 17 and under in household	3,796	102	2.6%	3,898
Restricting Child Movement Scale – fall	3,539	359	9.2%	3,898
Family Cultural Enrichment Scale	3,524	374	9.6%	3,898
Family Cultural Enrichment Scale 2	3,540	358	9.2%	3,898
Removing Harmful Objects Subscale – fall	3,538	360	9.2%	3,898
# Times child is read to	3,548	350	9.0%	3,898
Safety Devices Subscale – fall	3,538	360	9.2%	3,898
Parental Safety Practices Scale – fall	3,537	361	9.3%	3,898
Spanked child in last week	3,544	354	9.1%	3,898
# Times spanked child	3,528	370	9.5%	3,898
Used time out in last week	3,542	356	9.1%	3,898
# Times used time out	3,524	374	9.6%	3,898
Adult books in home	3,547	351	9.0%	3,898
Derived caregiver's race	141	7	4.7%	148
Derived child race	3,882	16	0.4%	3,898
Child sex	3,898	0	0.0%	3,898
Derived father's race	3,710	188	4.8%	3,898
Head Start participation	3,897	1	0.0%	3,898
Derived mother's race	3,777	121	3.1%	3,898
Caregiver's age	137	11	7.4%	148
Child born in the United States	3,792	106	2.7%	3,898
Economic difficulty scale	3,525	373	9.6%	3,898
Father's employment status	1,875	2023	51.9%	3,898
Father's highest educational attainment	3,460	438	11.2%	3,898
Father's marital status	3,421	477	12.2%	3,898
Father's age	3,283	615	15.8%	3,898
Biological father's immigrant status	3,702	196	5.0%	3,898
Biological father a recent immigrant	1,273	90	6.6%	1,363
Biological father lives with child	3,660	238	6.1%	3,898
Biological father years in the United States	1,170	193	14.2%	1,363
Grandparent in the household	3,786	112	2.9%	3,898
Anyone in household with health condition	3,537	361	9.3%	3,898
Homelessness	3,535	363	9.3%	3,898
Primary home language	3,870	28	0.7%	3,898
Biological mother's immigrant status	3,773	125	3.2%	3,898
Biological mother recent immigrant	1,210	104	7.9%	1,314
Biological mother lives with child	3,789	109	2.8%	3,898
Biological mother years in the United States	1,210	104	7.9%	1,314
Household monthly income range	3,403	495	12.7%	3,898
Mother's employment status	3,598	300	7.7%	3,898

Exhibit A.4.1.1: Item Nonresponse Rates for Imputed Variables (continued)

Variable Name	Reported Count	Imputed Count	Percent Imputed	Total of Reported and Imputed Count
Mother has a GED	3,757	141	3.6%	3,898
Biological mother educational attainment	3,757	141	3.6%	3,898
Mother's marital status	3,759	139	3.6%	3,898
Mother's age	3,722	176	4.5%	3,898
Number of moves in last 12 months	3,449	449	11.5%	3,898
Other caregiver's employment status	135	13	8.8%	148
Other caregiver's educational attainment	134	14	9.5%	148
Number of adults 18 and over in household	3,534	364	9.3%	3,898
Primary caregiver health impairs caring for child	3,545	353	9.1%	3,898
Primary caregivers health	3,545	353	9.1%	3,898
Child had dental care, fall 02	3,542	356	9.1%	3,898
Child's health status, fall 02	3,544	354	9.1%	3,898
Child had care for an injury, fall 02	3,537	361	9.3%	3,898
Child has health insurance, fall 02	3,542	356	9.1%	3,898
Child needs ongoing health care, fall 02	3,785	113	2.9%	3,898
Child has regular place for medical care, fall 02	3,538	360	9.2%	3,898
PELS, fall 02	3,548	350	9.0%	3,898
Child has special needs, fall 02	3,787	111	2.8%	3,898
Child has an unmet health need, fall 02	3,540	358	9.2%	3,898
Housing problems scale	3,514	384	9.9%	3,898
Receives Food Stamps	3,771	127	3.3%	3,898
Receives TANF	3,765	133	3.4%	3,898
Respondent's relationship to child	3,786	112	2.9%	3,898
Public or subsidized housing	3,523	368	9.5%	3,891
Mother had a teen birth	3,733	165	4.2%	3,898
Number of children under age 6 in household	3,796	102	2.6%	3,898
Depression maximum likelihood ability estimate	3,536	362	9.3%	3,898
Depression IRT true-score	3,536	362	9.3%	3,898
Elision IRT score	2,408	294	10.9%	2,702
Elision true score	2,408	294	10.9%	2,702
PPVT IRT score	3,187	465	12.7%	3,652
PPVT true score	3,187	465	12.7%	3,652
PPVT standard score	3,187	465	12.7%	3,652
PPVT W-ability score	3,187	465	12.7%	3,652
Spanish Elision IRT score	1,015	124	10.9%	1,139
Spanish Elision true score	1,015	124	10.9%	1,139
TVIP IRT score	1,038	101	8.9%	1,139
TVIP true score	1,038	101	8.9%	1,139
TVIP standard score	1,038	101	8.9%	1,139
TVIP W-ability score	1,038	101	8.9%	1,139
Locus of control IRT scale score	3,534	364	9.3%	3,898
Locus of control true scale score	3,534	364	9.3%	3,898
Is respondent mother or father?	3,796	102	2.6%	3,898
How well did child do in bear counting	3,434	464	11.9%	3,898

