

# Characteristics of Parent Respondents in the National Household Education Surveys

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## Introduction

This paper presents the initial analysis for an ongoing research project. In this paper, we examine the demographic characteristics of parent respondents in the National Household Education Surveys (NHES), a system of surveys sponsored by the U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (NCES). We examine changes in parent respondent characteristics in each administration of the NHES from 1993 to the most recent survey in 2007. The results from the analysis are intended to inform future design work for the NHES program and provide general information about parent respondents for NCES and other statistical agencies and organizations that conduct survey research with parents about their children.

The NHES has been conducted nine times (in 1991<sup>1</sup>, 1993, 1996, 1996, 1999, 2001, 2003, 2005, and 2007) as a list-assisted, landline, random-digit-dialed (RDD) telephone survey. NHES is the only regular household survey conducted by NCES. Its purpose is to measure children's and families' activities and behaviors that take place outside of schools or other educational institutions. Such activities include early childhood care and education, children's readiness for school, parent involvement in education, school choice, and homeschooling. In each NHES administration, a screening survey was administered to an adult household respondent to determine household survey eligibility. Eligible children were sampled and the adult who had the most knowledge of the sample child's care and education was selected as the respondent for the topical survey.

Like other telephone surveys, response rates on the NHES have been declining and the decline has accelerated in recent years. The NHES screener response rate in 1993 was 80 percent while the screener response rate in 2007 was 53 percent. Also like other telephone surveys, the NHES faces undercoverage problems due to the increase use of mobile phones. The percentage of households without a landline telephone has decreased rapidly in recent years, with about 20 percent of households in 2008 having no landline telephone (Blumberg and Luke 2009).

To address these concerns while still maintaining a household sampling frame, the NHES is undergoing a redesign. A switch to an address-based survey is being tested, with mail being the primary mode of contact. Address-telephone matching is also being used to test a multi-mode, mail/telephone design. A feasibility pilot will be conducted in the fall of 2009, followed by a large-scale field test in 2011.

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<sup>1</sup> Differences in the information available for respondents in 1991 make comparisons with other years difficult and therefore analyses on the 1991 data are not yet available.

Unlike the telephone survey, where the respondent selection was through an interviewer-administered screener survey that asked for the most knowledgeable respondent about a sampled child's care and education, respondents in the mail survey will be self-selected. The survey currently contains only an instruction that a person in the household who is knowledgeable about the sampled child's care and education should fill-out the survey. Because of such respondent selection differences, as well as other mode differences related to unit and item response, it is important to understand the characteristics of the telephone respondents in order to provide a baseline for comparisons of characteristics of the mail survey and multi-mode respondents.

In addition to establishing a comparison baseline for the mail and multi-mode survey, looking at trends and patterns of NHES respondents across time contributes to a broader understanding of the characteristics of parent responders. Recent work on response propensity has sought to establish characteristics of likely responders to specific surveys in order to tailor contact procedures and other survey design features, and provide information for post-survey weighting adjustments (Groves 2006, Abraham et al. 2006). The more we know about how to contact households and who to ask to respond, the better we can maximize response and reduce cost. Past research on responders has shown some characteristics of responders that are similar across studies. Groves (2006) provides a synthesis of some of the research on respondent demographic characteristics as follows:

Males refuse more than females (Smith 1983). Urbanicity is a powerful indicator of response rates in all modes (de Leeuw and de Heer 2002). Adults who live alone tend to be refusals (Groves and Couper 1998); households with young children show higher response rates than others (Lievesley 1988). (p. 664).

However, these studies examine the general population of adults or household responders, and not specifically parent responders. This paper examines three main research questions related specifically to parent responders:

- What are the demographic characteristics of NHES parent respondents?
- To what extent have these characteristics changed between 1991 and 2007?
- To what extent do key survey items vary by parent respondent characteristics?

## **Data and Methods**

As mentioned above, the NHES has been conducted nine times as a list-assisted landline random digit dialed (RDD) telephone survey. We use data from multiple years and surveys of the NHES in the analysis. Below we describe the content, sample size, and response rates for the NHES surveys, and the statistical tests used in the report.

**Survey content.** The RDD NHES had rotating topical surveys as well as some one-time topical surveys. This analysis is focused on the early childhood surveys and the school-age surveys (the proposed redesigned surveys are the Early Childhood Program Participation (ECP) survey and the Parent and Family Involvement (PFI) survey). Below is a brief description of the surveys examined in the paper. The descriptions are from the 2007 NHES Data File User's Manual (Hagedorn et al. 2008). Table A shows the surveys conducted by year and their sample sizes.

The Early Childhood Program Participation (ECP) and Early Childhood Education surveys (ECE) provide cross-sectional, national estimates of children's participation in care by relatives and non-relatives in private homes and in center-based daycare or preschool programs (including Head Start and Early Head Start). Additional topics addressed in ECP/ECE interviews have included family learning activities, out-of-pocket expenses for non-parental care, continuity of care, factors related to parental selection of care, parents' perceptions of care quality, delayed kindergarten entry and grade retention, child health and disability, and child, parent, and household characteristics.

The School Readiness (SR) surveys provide cross-sectional, national estimates of children's developmental accomplishments and difficulties including emerging literacy and numeracy, center-based program participation, educational activities with family members, and health and nutrition. Parents of preschoolers were also asked about their perceptions of skills or knowledge required to start school. Parents of children in elementary school were also asked about their child's adjustment to school, including feedback from teachers, and early school experiences. Information about family stability and other risk factors was collected along with parent/guardian and household characteristics

The School Safety and Discipline Survey (SSD) provides national estimates related to the school learning environment, discipline policy, safety at school, victimization, availability and use of alcohol and drugs, and alcohol and drug education as reported by youth and their parents. Youth were also asked about peer norms for achievement and behavior in school and substance use. Child, parent/guardian and household characteristics were also collected.

The Parent and Family Involvement in Education surveys (PFI) address specific ways that families are involved in their children’s school, school practices to involve and support families, involvement with children’s homework, and involvement in educational activities outside of school. Parents of homeschoolers were asked about their reasons for choosing homeschooling and resources they used in homeschooling. The interviews also included questions about child, parent, and household characteristics.

The After-School Programs and Activities surveys (ASPA) provide information about children’s participation in care by relatives or nonrelatives in private homes, in school- or center-based programs, and in after-school activities. Parents were also asked about children’s self-care. Information about the specific activities in which children were engaged during the after-school hours was collected. In addition, parents were asked about continuity of care arrangements, parental perceptions of care quality, and reasons for choosing parental care. Information on child, parent/guardian, and household characteristics was collected.

**Table A. NHES early childhood and school-age survey topics by year of administration and sample size: 1991 to 2007.**

Survey topics	NHES survey administration								
	1991	1993	1995	1996	1999 <sup>1</sup>	2001	2003	2005	2007
Early childhood education/program participation	13,298		14,064		6,939	6,749		7,209	
School readiness		10,888			3,631				2,633
School safety and discipline		12,680							
Parent and family involvement in education				20,792	24,600		12,426		10,681
After-school programs and activities					12,396	9,583		11,684	

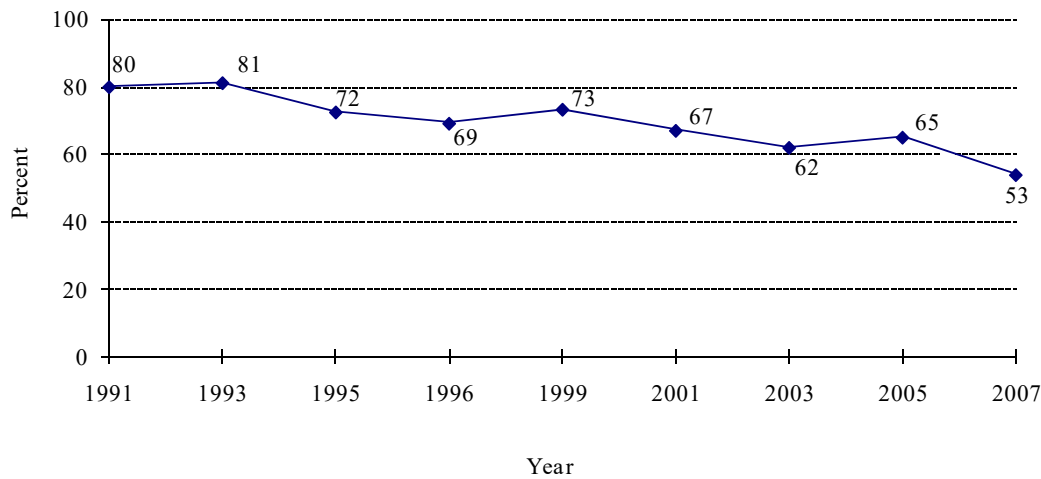
<sup>1</sup> NHES:1999 was a special end-of-decade administration that measured key indicators from the surveys fielded during the 1990s. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 1991, 1993, 1995, 1996, 1999, 2001, 2003, 2005, and 2007.

**Sample size.** The sample size for the NHES household screener was generally about 60,000 in each year, and typical sample sizes for the topical surveys were around 7,000 children for the early childhood surveys and around 12,000 children for the school-age surveys. The exact sample sizes per year are shown in table A by survey topic. In many NHES administrations, more than one child per household may be selected and reported about by the same parent. The child is the unit of analysis. Because the unit of analysis for this paper is the parent respondent, and not the child, in households with multiple children, one child per household was randomly selected to yield one respondent per household. Data on respondents are unweighted.<sup>2</sup>

**Response rates.** Figure 1 shows the weighted screener response rates for each NHES survey from 1991 to 2007.

<sup>2</sup> The NHES oversamples for Black and Hispanic households and weights typically adjust for this design feature and others, such as oversamples of households with matched addresses. The unweighted data are not adjusted for the design. This should not substantially affect comparisons across the NHES because all surveys have the same basic sample design. It will, however, affect comparisons made to extant estimates and population totals.

**Figure 1. NHES screener response rates: 1991-2007**



SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 1991, 1993, 1995, 1996, 1999, 2001, 2003, 2005, and 2007.

**Statistical tests.** All comparisons have been tested using Student's t-tests and differences reported are significant at the .05 level unless otherwise noted. Standard error tables are available from the authors upon request.

## Results

First we discuss changes in respondent characteristics over time and by survey population. Then we discuss differences in key survey measures by respondent characteristics. Comparisons to population trends are presented in the discussion. Table 4 shows population trends for selected characteristics and years. NHES results are presented in tables 1 through 3 and tables 5 and 6. The parent characteristics examined are respondent sex, relationship to the sampled child, age, labor-force participation, educational attainment, marital status, interview language, and household poverty. Note that the NHES estimates are of parents and households with children, whereas population estimates are of all people or households. This allows for observation of broad differences between parent respondents and the adult population, and comparisons of trends over-time, but definitions of terms may vary somewhat.

### Characteristics of respondents over time and by survey population

Table 1 shows the characteristics of parent respondents in the two most recent NHES surveys (2005 and 2007), by survey population. Tables 2 and 3 show characteristics of parent respondents, by each applicable survey year, for the early childhood population and school-age population.

**Sex and Relationship to child.** A large majority of parent respondents were mothers in each survey year and in each survey population. Fathers were somewhat more present as respondents in the two school-age surveys of enrolled children (ASPA and PFI) compared to the surveys of the early childhood population. The survey population with the highest percentage of mother respondents was the homeschooling population (table 1). The percentage of fathers responding has increased over time for both the early childhood and school-age surveys (tables 2 and 3). The percentage of early childhood father respondents was 14 percent in 1993 and 17 percent in 2007. For school-age father respondents, their percentage was 16 percent in 1993 and 21 percent in 2007.

Grandparent respondents, mostly grandmothers, made-up about 3 to 4 percent of all respondents in each recent survey population (table 1), except homeschoolers, where they were about 2 percent. There was a slight increase in the percentage of grandmothers responding when comparing 1993 and 2007 (tables 2 and 3). In most cases if there was a parent and other adult(s) living in the household, the parent responded. The ECPP and SR had the highest percentage of non-parent responders when a parent lived in the household (2.3 percent, each).

**Table 1. Percentage of NHES parent respondents in recent NHES surveys and mean age, by survey population and respondent characteristics: 2005 and 2007**

Respondent characteristic	Survey and population				
	ECPP:2005 Children ages birth-age 6 not in kindergarten	ASPA:2005 Students ages 3-15, in grades K-8, not homeschooled	SR:2007 Children ages 3-6, not yet in kindergarten	PFI:2007 Students ages 3-20, in grades K-12, not homeschooled	PFI:2007 Students ages 5-17, homeschooled
Total	100.00	100.00	100.00	100.00	100.00
Sex					
Male	18.86	19.98	17.59	21.99	12.12
Female	81.14	80.02	82.41	78.01	87.88
Relationship to child					
Mother	77.43	75.14	78.50	73.11	84.51
Birth/adoptive mother	76.89	73.47	77.70	71.60	82.83
Other mother	0.54	1.67	0.80	1.51	1.68 !
Father	18.39	19.01	17.10	21.06	11.11
Birth/adoptive father	18.09	17.67	16.91	19.70	10.44
Other father	0.30	1.34	0.19	1.36	10.44
Grandmother	2.88	3.25	3.27	3.50	1.68 !
Grandfather	0.27	0.48	0.46	0.48	0.34 !
Other female respondent	0.83	1.63	0.65	1.40	1.68 !
Other male respondent	0.19	0.50	0.04	0.45	0.67 !
Parent in HH, but nonparent respondent	2.32	1.78	2.32	1.56	0.34 !
Mean age	33.28	39.90	35.57	42.60	42.61
Age					
under 20	1.15	0.16	0.27	0.17	0.34 !
20-24	9.61	1.58	4.79	0.91	0.34 !
25-29	20.54	6.99	15.31	4.55	4.04
30-34	28.45	16.60	24.54	10.86	8.08
35-39	22.31	23.57	28.95	18.95	22.22
40-44	12.00	24.96	16.72	23.82	25.25
45-50	3.71	18.05	5.89	25.23	26.94
over 50	2.22	8.09	3.53	15.50	12.79
Labor force participation <sup>1</sup>					
35 hours or more per week	43.97	51.96	44.38	55.64	22.64
Less than 35 hours per week	18.96	19.53	19.68	18.75	23.65
Looking for work	5.85	4.51	3.97	3.95	2.03 !
Not in labor force	31.23	24.01	31.97	21.66	51.69
Educational attainment <sup>1</sup>					
Less than a high school diploma	9.61	9.83	8.01	7.20	3.72
High school diploma or equivalent	24.76	27.50	19.60	22.02	17.57
Some college or associate's degree	27.54	29.29	27.77	30.03	40.54
Bachelor's degree	22.79	19.85	26.37	23.39	23.65
Graduate or professional school	15.29	13.54	18.24	17.36	14.53

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**Table 1. Percentage of NHES parent respondents in recent NHES surveys and mean age, by survey population and respondent characteristics: 2005 and 2007 – continued**

Respondent characteristic	Survey and population				
	ECPP:2005 Children ages 3-6, not yet in kindergarten	ASPA:2005 Students ages 3-15, in grades K-8, not homeschooled	SR:2007 Children ages birth-age 6 not in kindergarten	PFI:2007 Students ages 3-20, in grades K-12, not homeschooled	PFI:2007 Students ages 5-17, homeschooled
<b>Marital status<sup>1</sup></b>					
Married	77.98	73.06	82.42	76.26	87.16
Partnered	7.19	4.45	5.76	4.06	1.69 !
Separated	2.80	3.74	2.53	2.99	2.36 !
Divorced	3.08	10.03	3.70	9.51	5.41
Widowed	0.39	1.65	0.39	1.96	1.35 !
Never been married	8.56	7.07	5.21	5.22	2.03 !
<b>Interview language</b>					
English	89.09	91.42	89.63	92.59	97.64
Spanish	10.91	8.58	10.37	7.41	2.36 !
<b>Interview language*Resp. language</b>					
English-English	81.64	85.42	80.93	86.07	93.60
English-Spanish	2.15	1.98	2.28	2.09	0.34 !
Spanish-Spanish	10.14	7.89	9.84	7.01	2.36 !
English-English/Spanish	1.11	1.24	1.67	1.33	0.67 !
Spanish-English/Spanish	0.38	0.48	0.34	0.26	0.00
English-Other	3.16	1.64	3.31	2.01	2.02 !
English-English/Other	1.05	1.06	1.44	1.09	1.01 !
Spanish-Other	0.02	0.03	0.00	0.03	0.00
Spanish-English/Other	0.00	0.01	0.04	0.00	0.00
Spanish-English	0.36	0.25	0.15	0.11	0.00
<b>Household poverty level</b>					
Poor	19.79	16.88	15.65	12.10	10.77
Near-poor	21.58	20.85	19.76	16.62	25.59
Nonpoor	58.64	62.28	64.59	71.27	63.64

— Not available.

! Interpret data with caution; coefficient of variation is 30 percent or more.

<sup>1</sup>Labor force participation, educational attainment, and marital status were not reported for respondents in cases where the respondent was not the parent if a parent resided in the household.

**Table 2. Percentage of NHES early childhood parent respondents by survey year and respondent characteristics: 1993 to 2007**

Respondent characteristic	Early childhood survey year					
	1993 <sup>3</sup>	1995	1999	2001	2005	2007 <sup>3</sup>
Total	100.00	100.00	100.00	100.00	100.00	100.00
Sex						
Male	13.91	18.51	18.88	19.23	18.86	17.59
Female	86.09	81.49	81.12	80.77	81.14	82.41
Relationship to child						
Mother	83.45	78.16	77.64	77.39	77.43	78.50
Birth/adoptive mother	83.05	77.73	77.22	76.99	76.89	77.70
Other mother	0.40	0.43	0.42	0.40	0.54	0.80
Father	13.65	17.96	18.41	18.74	18.39	17.10
Birth/adoptive father	13.36	17.61	17.83	18.32	18.09	16.91
Other father	0.28	0.35	0.58	0.42	0.30	0.19 !
Grandmother	2.05	2.45	2.64	2.47	2.88	3.27
Grandfather	0.21 !	0.36	0.26	0.25	0.27	0.46
Other female respondent	0.59	0.88	0.84	0.91	0.83	0.65
Other male respondent	0.05 !	0.19	0.21	0.24	0.19	0.04 !
Mean age	32.21	31.45	31.93	32.24	33.28	35.57
Age						
under 20	0.54	2.82	2.26	1.78	1.15	0.27 !
20-24	10.04	14.49	12.42	12.50	9.61	4.79
25-29	24.49	23.28	24.23	22.96	20.54	15.31
30-34	31.71	28.03	27.21	27.24	28.45	24.54
35-39	21.68	19.93	20.69	20.91	22.31	28.95
40-44	8.12	7.56	8.99	9.77	12.00	16.72
45-50	2.20	2.23	2.90	3.03	3.71	5.89
over 50	1.23	1.67	1.29	1.80	2.22	3.53
Labor force participation <sup>1</sup>						
35 hours or more per week	42.27	45.06	48.46	48.58	43.97	44.38
Less than 35 hours per week	18.54	15.88	18.17	17.11	18.96	19.68
Looking for work	5.91	6.74	5.05	4.64	5.85	3.97
Not in labor force	33.28	32.31	28.31	29.66	31.23	31.97
Educational attainment <sup>1</sup>						
Less than a high school diploma	10.74	12.91	10.27	10.97	9.61	8.01
High school diploma or equivalent	36.20	33.54	28.16	29.15	24.76	19.60
Some college or associate's degree	31.08	29.26	32.26	29.70	27.54	27.77
Bachelor's degree	13.11	14.97	18.78	19.43	22.79	26.37
Graduate or professional school	8.88	9.33	10.52	10.75	15.29	18.24
Marital status <sup>1,2</sup>						
Married	—	—	—	75.22	77.98	82.42
Partnered	—	—	—	7.65	7.19	5.76
Separated	—	—	—	3.06	2.8	2.53
Divorced	—	—	—	3.87	3.08	3.7
Widowed	—	—	—	0.46	0.39	0.39 !
Never been married	—	—	—	9.73	8.56	5.21

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**Table 2. Percentage of NHES early childhood parent respondents by survey year and respondent characteristics: 1993 to 2007 – continued**

Respondent characteristic	Early childhood survey year					
	1993	1995	1999	2001	2005	2007
Interview language						
English	95.54	92.91	92.43	90.12	89.09	89.63
Spanish	4.46	7.09	7.57	9.88	10.91	10.37
Household poverty level						
Poor	18.30	22.41	18.28	18.91	19.79	15.65
Near-poor	26.99	24.78	25.49	21.05	21.58	19.76
Nonpoor	54.71	52.82	56.23	60.04	58.64	64.59

— Not available.

! Interpret data with caution; coefficient of variation is 30 percent or more.

<sup>1</sup> Labor force participation, educational attainment, and marital status were not reported for respondents in cases where the respondent was not the parent if a parent resided in the household.

<sup>2</sup> Marital status of the parent respondent was not collected prior to 2001.

<sup>3</sup> In 1993 and 2007 the early childhood survey did not include children ages 0-2.

**Age.** The mean age for parent respondents was 33 in ECPP and in 36 in SR. For ASPA and PFI, the mean age was around 40 (table 1). Parent respondents were older in 2007 compared to 1993 for both the early childhood and school-age survey populations. The mean age was 32 in 1993 and 36 in 2007 for early childhood respondents, and 38 and 43, respectively, for school-age respondents (tables 2 and 3). There is a clear trend toward older parent respondents for the school-age population.

**Labor-force participation.** Labor-force participation was lowest in the homeschooled population, where half of the respondents were not in the labor-force, followed by ECPP and SR where about a third were not in the labor force. Labor-force participation was highest for the two school-age enrolled surveys where 20 to 25 percent of respondents were not in the labor-force (table 1). There were no measurable changes in respondents' labor-force participation over time.

**Educational attainment.** Educational attainment did not vary much among the survey populations and most respondents had at least some college education. However, over time, there appears to be a decline of in the percentage of respondents whose highest level of educational attainment was a high school diploma or equivalent for both the early childhood and school-age populations (tables 2 and 3). Between 1993 and 2007 the relative decline was 46 and 36 percent respectively. The decrease is concurrent with a sharp increase in respondents with Bachelor's degrees. Between 1993 and 2007 there was a 50 and 36 percent increase, respectively, in the percentage of respondents whose highest level of educational attainment was a Bachelor's degree.

**Marital status.** Marital status varied by population, but not over time. The percentage of respondents who were married was highest in the homeschooled population, followed by ECPP and SR, and lowest in the school-age enrolled populations. When we look at married or partnered together, the same pattern holds. Concurrently, the percentage of divorced respondents is higher in the school-age enrolled populations at about 10 percent, compared to all other populations (table 1).



**Table 3. Percentage of NHES K-12 school-age parent respondents by survey year and respondent characteristics: 1993 to 2007**

Respondent characteristic	K-12 survey year				
	1993	1996	1999	2003	2007
Total	100.00	100.00	100.00	100.00	100.00
Sex					
Male	16.95	21.83	20.30	19.89	21.70
Female	83.05	78.17	79.70	80.11	78.30
Relationship to child					
Mother	79.17	73.65	75.39	75.91	73.44
Birth/adoptive mother	78.68	72.14	73.73	74.27	71.93
Other mother	0.49	1.51	1.66	1.64	1.51
Father	16.26	20.61	19.31	18.93	20.77
Birth/adoptive father	15.96	18.94	17.70	17.82	19.43
Other father	0.29	1.67	1.61	1.12	1.33
Grandmother	2.15	2.37	2.42	2.54	3.45
Grandfather	0.12	0.26	0.31	0.28	0.48
Other female respondent	1.73	2.15	1.89	1.66	1.41
Other male respondent	0.57	0.97	0.68	0.67	0.45
Mean age	38.28	39.14	39.48	40.65	42.60
Age					
under 20	0.20	0.59	0.35	0.20	0.18
20-24	1.66	1.76	2.03	1.59	0.89
25-29	9.11	7.43	8.55	6.75	4.53
30-34	20.95	17.91	15.57	14.76	10.78
35-39	26.72	25.68	24.67	21.73	19.04
40-44	23.12	24.02	23.74	24.35	23.86
45-50	12.82	15.71	17.44	20.07	25.27
over 50	5.42	6.90	7.65	10.55	15.45
Labor force participation <sup>1</sup>					
35 hours or more per week	55.84	59.49	58.85	55.45	54.68
Less than 35 hours per week	17.32	17.12	16.45	16.98	18.88
Looking for work	4.60	3.76	3.55	5.02	3.89
Not in labor force	22.24	19.64	21.15	22.55	22.54
Educational attainment <sup>1</sup>					
Less than a high school diploma	10.76	9.76	10.02	10.01	7.10
High school diploma or equivalent	36.69	34.09	30.07	27.90	21.90
Some college or associate's degree	31.71	30.34	31.89	30.96	30.34
Bachelor's degree	11.03	15.06	15.57	18.66	23.39
Graduate or professional school	9.82	10.75	12.45	12.47	17.27
Marital status <sup>1,2</sup>					
Married	—	—	—	73.12	76.55
Partnered	—	—	—	4.50	3.99
Separated	—	—	—	4.16	2.97
Divorced	—	—	—	10.23	9.41
Widowed	—	—	—	1.79	1.95
Never been married	—	—	—	6.19	5.13

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**Table 3. Percentage of NHES K-12 school-age parent respondents by survey year and respondent characteristics: 1993 to 2007 – continued**

Respondent characteristic	K-12 survey year				
	1993	1996	1999	2003	2007
Interview language					
English	96.04	95.76	94.00	91.85	92.74
Spanish	3.96	4.24	6.00	8.15	7.26
Household poverty level					
Poor	15.28	13.93	14.69	15.19	12.07
Near-poor	23.48	22.45	23.15	20.75	16.87
Nonpoor	61.24	63.62	62.16	64.06	71.06

— Not available.

<sup>1</sup> Labor force participation, educational attainment, and marital status were not reported for respondents in cases where the respondent was not the parent if a parent resided in the household.

<sup>2</sup> Marital status of the parent respondent was not collected prior to 2001.

**Interview language.** There has been an increase in the percentage of interviews conducted in Spanish<sup>3</sup>, particularly for the early childhood population. The percentage of Spanish interviews in the early childhood population was about 5 percent in 1993 and was about twice that, at 10 percent, in 2007 (table 2). In households where English and Spanish were both spoken, more interviews were conducted in English than in Spanish (table 1).

**Household poverty.** We present household poverty as poor (below the poverty threshold), near-poor (between 100% and 200% poverty), and nonpoor (at or above 200% poverty). The percentage of parent respondents in households below the poverty level has decreased in recent years and appears unrelated to survey population of interest (tables 1, 2, and 3).

<sup>3</sup> NHES is conducted in English and Spanish only.

**Table 4. Population characteristics, selected years.**

Population characteristic	1990/1993	1995	1999	2000/2001	2005/2007
Sex					
Male	48.9	48.9	49.0	49.1	49.2
Female	51.1	51.1	51.0	50.9	50.8
Age					
15-24	14.0	13.8	13.9	14.0	14.2
25-34	16.4	15.8	14.4	14.0	13.4
35-44	15.7	16.0	16.2	15.8	14.6
45-54	11.1	11.8	13.1	13.7	14.5
55+	20.7	20.7	21.0	21.3	23.2
Labor force participation					
In labor force	66.3	66.6	67.1	66.8	64.7
Not in labor force	33.7	33.4	32.9	33.2	35.3
Educational attainment					
Bachelor's degree or higher	21.9	23.0	25.2	26.2	27.0
Household marital status					
Married households	56.0	54.4	52.9	52.3	49.8
Other	44.0	45.6	47.1	47.7	50.2
Language spoken at home					
English	92.5	—	—	82.1	80.5
Spanish	7.5	—	—	10.7	12.1
Household poverty level					
Poor	12.3	10.8	9.3	9.2	9.8
Nonpoor	87.7	89.2	90.7	90.8	90.2

Source: Statistical Abstract of the United States: 2009; U.S. Census Bureau American Factfinder (Census 1990 and 2000 and American Community Survey 2005/2007); U.S. Bureau of the Census, Current Population Survey, Annual Social and Economic Supplements; *Language Use and Linguistic Isolation: Historical Data and Methodological Issues* by Paul Siegel, Elizabeth Martin, and Rosalind Bruno. U. S. Census Bureau, 2001.

— Not reported or not available.

## **Key variables by respondent characteristics**

Tables 5 and 6 show parent respondents' reports of key survey variables for the early childhood and school-age populations. These data are from the 2007 NHES survey administration. Variables for which there are measurable differences based on respondent characteristics are discussed below. Some differences are expected given the associations between the key variables and some of the characteristics. These instances are noted.

**Early childhood key variables** (table 5). Overall, there are more differences in reporting on key early childhood variables than there are on key school-age variables. Male respondents report higher percentages of children's center-based care participation compared to female respondents and report lower percentages of children's Head Start participation. Lower percentages of grandmothers report reading to the child and that the child can write his or her first name, but higher percentages report the child ever attended Head Start and the family received TANF. The latter two differences are likely due to associations between grandmother households and socio-economic status that affect child care and public welfare receipt. Similarly, lower percentages of respondents who are looking for work report reading to the child and that the child can write his or her first name compared to respondents in other labor-force categories and higher percentages report the child ever attended Head Start and the family received TANF. The latter differences are also likely due to real differences in the population. All differences related to educational attainment are in the direction expected and are likely due to real differences in the population. A higher percentage of respondents who are married report reading to the child and that the child can write his or her name and lower percentages report Head Start and family receipt of TANF. Interview language and household poverty show a difference in reporting for all variables and in the direction expected in the population.

**School-age key variables** (table 6). There were few differences in reporting for respondents to the school-age surveys. A greater percentage of males than females expected their child to graduate from college. Higher percentages of grandmother respondents reported their child attended public school and lower percentages reported they attended a parent-teacher conference, expect their child to graduate from college, and reported visiting a library. Young respondents (under age 20) had similar reporting patterns to grandmothers. For both of these groups, these differences are in the direction expected. A lower percentage of respondents who are looking for work expect their child to graduate from college compared to other groups. Interview language and household poverty show a difference in reporting for all variables and in the direction expected in the population.

**Table 5. Percentage of NHES early childhood parent respondents by key survey items and respondent characteristics: 2007**

Respondent characteristic	Early childhood key survey items				
	Child is read to everyday	Child can write first name	Child participates in center-based care	Child ever attended Head Start	Family receives TANF
Total	59.88	64.89	66.79	10.64	2.62
Sex					
Male	59.61	67.39	70.84	7.78	1.08 !
Female	59.94	64.36	65.93	11.25	2.95
Relationship to child					
Mother	60.55	64.57	66.07	10.75	2.52
Birth/adoptive mother	60.98	64.50	66.11	10.76	2.45
Other mother	19.05 !	71.43	61.91	9.52 !	9.52 !
Father	59.56	67.78	70.67	7.56	1.11 !
Birth/adoptive father	59.78	67.87	71.01	7.19	0.90 !
Other father	40.00 !	60.00 !	40.00 !	40.00 !	20.00 !
Grandmother	48.84	58.14	63.95	18.61	13.95
Grandfather	58.33	50.00	75.00	16.67 !	0.00
Other female respondent	41.18	70.59	58.82	35.29 !	0.00
Other male respondent	100.00	100.00	100.00	0.00	0.00
Age					
under 20	28.57 !	42.86 !	42.86 !	28.57 !	0.00
20-24	42.06	45.24	44.44	22.22	6.35
25-29	52.85	60.30	57.82	14.14	5.71
30-34	61.15	64.86	65.48	10.22	1.86 !
35-39	62.73	69.82	71.39	7.48	1.31 !
40-44	66.59	67.96	75.23	8.86	1.36 !
45-50	61.29	62.58	67.10	8.39	2.58 !
over 50	50.54	62.37	68.82	19.36	6.45 !
Labor force participation <sup>1</sup>					
35 hours or more per week	57.41	68.80	74.23	9.29	1.84
Less than 35 hours per week	66.40	67.59	71.54	10.28	1.19 !
Looking for work	49.02	45.10	54.90	21.57	5.88 !
Not in labor force	61.31	61.44	55.84	10.95	3.41
Educational attainment <sup>1</sup>					
Less than a high school diploma	33.98	49.03	35.44	17.96	6.31
High school diploma or equivalent	46.43	55.75	56.75	18.45	4.17
Some college or associate's degree	55.88	65.55	64.15	13.45	2.80
Bachelor's degree	71.53	71.39	75.37	4.57	0.59 !
Graduate or professional school	76.12	73.35	84.44	2.77	0.64 !
Marital status <sup>1</sup>					
Married	64.23	66.87	68.10	8.12	1.18
Partnered	36.49	52.03	50.68	16.89	4.73 !
Separated	35.39	60.00	67.69	24.62	3.08 !
Divorced	52.63	65.26	71.58	21.05	7.37 !
Widowed	20.00 !	60.00	80.00	40.00 !	10.00 !
Never been married	41.05	57.46	64.18	24.63	14.18

– continued

**Table 5. Percentage of NHES early childhood parent respondents by key survey items and respondent characteristics: 2007 – continued**

Respondent characteristic	Early childhood key survey items				
	Child is read to everyday	Child can write first name	Child participates in center-based care	Child ever attended Head Start	Family receives TANF
Interview language					
English	63.76	66.77	70.16	9.58	2.71
Spanish	26.37	48.72	37.73	19.78	1.83 !
Household poverty level					
Poor	40.78	51.94	50.24	26.70	10.19
Near-poor	52.31	56.92	53.46	15.19	2.50
Nonpoor	66.82	70.47	74.88	5.35	0.82

! Interpret data with caution; coefficient of variation is 30 percent or more.

<sup>1</sup> Labor force participation, educational attainment, and marital status were not reported for respondents in cases where the respondent was not the parent if a parent resided in the household.

**Table 6. Percentage of NHES K-12 parent respondents<sup>1</sup> by key survey items and respondent characteristics: 2007**

Respondent characteristic	K-12 key survey items				
	Child attends public, chosen school	Family member went to a parent-teacher conference	School emailed or called about child	Expect child to graduate from college <sup>3</sup>	Visited a library with child in past month
Total	15.65	77.36	58.71	73.26	39.92
Sex					
Male	15.28	79.26	59.14	78.49	41.70
Female	15.75	76.83	58.60	71.70	39.42
Relationship to child					
Mother	15.48	76.98	58.39	73.21	39.76
Birth/adoptive mother	15.58	77.01	58.44	73.73	39.86
Other mother	10.90	75.64	55.77	54.05	34.62
Father	15.17	79.82	59.26	79.31	41.98
Birth/adoptive father	15.23	79.71	59.12	79.65	41.87
Other father	14.29	81.43	61.43	74.39	43.57
Grandmother	21.05	76.18	62.88	44.50	36.01
Grandfather	12.00	72.00	58.00	57.14	40.00
Other female respondent	16.55	70.34	58.62	60.95	30.34
Other male respondent	23.91	60.87	54.35	62.16	30.43
Age					
under 20	33.33	44.44	55.56	53.85	33.33
20-24	21.28	78.72	64.89	82.76	37.23
25-29	18.09	88.30	71.28	67.86	38.51
30-34	17.74	86.27	66.40	70.16	44.03
35-39	16.56	82.22	61.11	65.30	44.71
40-44	14.59	78.74	56.75	73.84	42.48
45-50	14.97	72.14	55.33	77.55	35.65
over 50	14.55	68.64	54.90	72.03	34.85
Labor force participation <sup>2</sup>					
35 hours or more per week	15.73	77.37	59.18	75.60	39.07
Less than 35 hours per week	14.48	76.76	56.30	74.73	41.13
Looking for work	14.93	82.59	67.41	59.39	43.28
Not in labor force	16.08	76.70	57.45	67.82	40.69
Educational attainment <sup>2</sup>					
Less than a high school diploma	15.44	70.63	61.07	51.30	32.65
High school diploma or equivalent	17.22	73.02	57.79	55.50	33.50
Some college or associate's degree	15.72	77.53	57.94	70.79	38.52
Bachelor's degree	14.68	79.44	57.15	89.44	43.94
Graduate or professional school	17.22	82.32	61.64	90.58	48.39
Marital status <sup>2</sup>					
Married	14.73	78.52	57.40	77.08	40.82
Partnered	18.16	77.24	61.74	53.89	35.84
Separated	16.12	70.39	65.13	67.58	42.43
Divorced	14.89	70.01	60.60	67.13	34.23
Widowed	17.09	69.85	53.77	60.00	32.66
Never been married	25.61	79.85	67.98	55.60	42.56

– continued

**Table 6. Percentage of NHES K-12 parent respondents by key survey items and respondent characteristics: 2007 – continued**

Respondent characteristic	K-12 key survey items				
	Child attends public, chosen school	Family member went to a parent-teacher conference	School emailed or called about child	Expect child to graduate from college	Visited a library with child in past month
Interview language					
English	15.64	77.13	58.51	73.69	40.43
Spanish	15.69	80.26	61.31	66.47	33.59
Household poverty level					
Poor	17.52	77.20	62.64	52.79	38.24
Near-poor	17.41	76.53	61.44	61.45	40.77
Nonpoor	14.92	77.58	57.41	78.83	40.01

! Interpret data with caution; coefficient of variation is 30 percent or more.

<sup>1</sup> Children homeschooled in 2007 are not represented in this table.

<sup>2</sup> Labor force participation, educational attainment, and marital status were not reported for respondents in cases where the respondent was not the parent if a parent resided in the household.

<sup>3</sup> Expected educational attainment was only asked of respondents reporting on students in grades 6-12.

## Discussion

Overall, there is little variation in the characteristics of NHES parent respondents over time. NHES parent respondents are overwhelmingly female and mothers, although we see an increase in male and father respondents in more recent years. Parent respondents are different by survey population, in expected ways, such as age, and unexpected ways, such as the percentage of fathers responding. Homeschooling parent responders are particularly unique.

Most of the changes in the NHES respondents, such as the increase in Spanish interviews, are similar to what we might expect from general population change in the United States (table 4). It is important to note that the NHES estimates are of parents and households with children, while population totals are of people and families, and definitions of variables may vary somewhat between the NHES and the population data sources. The increase over-time in respondents with higher levels of education mirrors population trends, but is sharper than may be expected. Changes in poverty status somewhat reflect what we might expect from general population changes, with household poverty declining between 1993 and 2007, but sharper decreases in the percentage of parent respondents below poverty suggest that NHES may somewhat under-represent poor households in recent years, particularly for households with school-age children. However, differences between population totals and survey totals have been shown to be corrected in the NHES with post-survey statistical adjustments.

Relationships between parent respondent characteristics and key survey variables are mostly as expected. One difference of concern is the difference in reporting by demographic characteristics (particularly males and females) about child care participation. Because the NHES would likely continue to measure child care participation under any new survey design, and because the within household respondent selection criteria is likely to be less rigorous than in the telephone design, this difference should be explored further.

It is also important to note this preliminary conference paper contains only the initial analysis for an ongoing project. Here we examine the demographic characteristics of NHES parent respondents, however, we intend to examine other aspects of parent response to the NHES: We also intend to examine differences in respondent characteristics between the initial screener and the topical interview; differences in response rates to the topical interview when the screener and topical respondent are different, and; make comparisons to population estimates of parents or households with children.



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