

NCES 2015-030

National Household Education Surveys Program of 2012

Data File User's Manual

Parent and Family Involvement in Education Survey

Early Childhood Program Participation Survey





U.S. Department of Education NCES 2015-030

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U.S. Department of Education

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Contents

Acknowl	edgements	iv
Chapter 1	. Introduction	
1.1	Background of Study	2
1.2	Overview of the NHES:2012 Design	3
1.3	NHES:2012 Topical Questionnaires	5
1.3.	Early Childhood Program Participation Survey	5
1.3.2	Parent and Family Involvement in Education Survey	5
1.4	Contents of the Manual	6
Chapter 2	2. Sampling Methodology	7
2.1	Sampling Households	7
2.1.1	Black and Hispanic oversample	8
2.1.2	2 Subsampling by address type	9
2.1.3	Within-household sampling of eligible children	10
2.2	Precision requirements	11
2.3	Expected and Actual Yield	20
2.4	Sampling for Experiments	22
Chapter 3	Data Collection	24
3.1	Overview of Data Collection	24
3.1.1	Data Collection Activities	24
3.1.2	2 Methodology	27
3.2	Details of Data Collection	28
3.2.	Screener Data Collection	28
3.2.2	2 Topical Data Collection	32
3.2.3	Bilingual Mailings	37
3.3	Data Collection Support Activities	41
3.3.	Telephone Operation	41
3.3.2	2 Telephone Tree Operation	42
3.3.3	Telephone Data Editing: Responses to the Screener Questionnaires	43
3.3.4	Responses to the Topical Questionnaires	44
3.3.5	5 E-mail Operation	45
3.3.0	Standard Reports	45
3.4	Data Check-in	45

Chapter 4. Data Processing	47
4.1 Data Capture and Imaging	47
4.2 Reformatting	49
4.3 Preliminary ISR Classification	49
4.4 Computer Edits	50
4.4.1 Range Checks	50
4.4.2 Consistency Edits	50
4.4.3 Blanking Edits	50
4.4.4 Coding Schools	51
4.5 Final Interview Status Recode (ISR) Classificat	ion52
4.6 Data Review	53
4.6.1 Review of "Other, Specify" Text Items	53
4.7 Processing Flags	54
4.8 Data Products	54
4.9 Disclosure Risk Analysis	55
Chapter 5. Response Rates	57
5.1 Unit Response Rates in NHES:2012	57
5.1.1 NHES Screener Unit Response Rates	58
5.1.2 NHES Topical Surveys Unit Response Rat	es
5.2 Item Response Rates in NHES:2012	74
Chapter 6. Imputation	81
6.1 Imputation Methodology	82
6.1.1 Hot Deck Imputation	82
6.1.2 Weighted Random Imputation	85
6.1.3 Manual Imputation	86
6.1.4 Imputation of School Identification Number	er (SID)87
6.1.5 Imputation of Sort Variables	87
6.2 Post-imputation Processing	88
6.3 Imputation Flags	88
Chapter 7. Weighting and Standard Error Calculation	89
7.1 Weighting Methodology	89
7.2 Household-Level Weights	89
7.3 Person-Level Weights for ECPP and PFI	94
7.4 Methods for Computing Sampling Errors	107
7.4.1 Replication Sampling Errors	

7.4.	2 Taylor Series Approximation	109
7.4.	3 Approximate Sampling Errors	110
Refere	nces	113
Chapter 8	8. Data Considerations and Anomalies	115
8.1	Data Considerations	115
8.1.	1 Change in data collection mode from prior years	115
8.1.	2 Short Form Questionnaires	115
8.1.	3 Important Information about School-Level Derived Variables	116
8.1.	4 Non-imputation of CCD and PSS Data	116
8.1.	5 Household composition variables	116
8.1.	6 Missing race data for Hispanic persons	117
8.1.	7 Age Considerations	117
8.1.	8 Homeschooled Students	118
8.1.	9 Manual Imputation	119
8.2	Data Anomalies	119
8.2.	1 Mothers' and Fathers' Specific Relationships to Subject Children	119
8.2.	2 Age and Grade Mismatch for Sampled Children	120
8.2.	Parent Reports of Type of School Child Attends vs. School Classification from the Common Core of Data (CCD) or Private School Universe Survey (PSS) Databases	120
8.2.	Reports of Civil Unions and Domestic Partnerships in the Spanish Questionnaires	120
8.2.	5 Imputation of Child's Place of Birth	120
Refere	nce	121
Chapter 9	9. Guide to the Data File and Codebook	122
9.1	System Variables	123
9.2	Child Health Variables	123
9.3	Household and Family Variables	124
9.4	Derived ECPP-Specific Variables	129
9.5	Derived PFI-Specific Variables	131
9.5.	1 Derived Variables from CCD/PSS	131
9.6	ZCTA-Level Variables	139
9.7	Other Derived, Operational, and Screener Variables	141
9.8	Weighting and Variance Estimation Variables	143
9.9	Imputation and Edit Flag Variables	143
9.10	Numeric and Character Variables	144
Chapter 1	10. Nonresponse Bias Analysis	145
10.1	Relationship Between Response Rates and Nonresponse Bias	145
10.2	Unit Nonresponse Bias Analysis	147

10.2.1 Analysis of Characteristics Associated With Unit Response Propensities	148
10.2.2 A Comparison of Estimates Based on Nonresponse Adjusted and Base Weights	163
10.2.3 A Comparison of NHES:2012 Estimates With Estimates From External Data Sources	175
10.3 Item Nonresponse Bias Analysis	177
10.3.1 Comparison of Extreme Imputed and Unimputed Values	177
10.4 Summary of Nonresponse Bias Findings	186
Reference	187
Appendix A. Questionnaires	188
Appendix B. Data File Layout and Position Order	259
Appendix C. Comparison of Estimates	283
Appendix D. Screener Nonresponse Interview Adjustment Cells	311
Appendix E. ECPP Nonresponse Interview Adjustment Cells	316
Appendix F. PFI Nonresponse Interview Adjustment Cells	319
Appendix G. Summary of Weighting and Sample Variance Estimation Variables	323

List of Tables

Table 1-1.	Topical surveys conducted under the National Household Education Surveys Program, by years administered: 1991–2012	2		
Table 1-2.	Number of completed NHES:2012 surveys, unit response rates, and overall unit response rates, by survey type	4		
Table 2-1.	Percent of sample by address selection characteristic: NHES:2012	9		
Table 2-2.	Percentage distribution of the initial sample by address type: NHES:2012	10		
Table 2-3.	Sample sizes by address type and stratum: NHES:2012	10		
Table 2-4.	Percentage of households with eligible children, by sampling domain: NHES Field Test:2011 and ACS 2010, and NHES:2012			
Table 2-5.	Estimates of required sample size to detect a relative difference between two estimated proportions of 10 or 15 percent	13		
Table 2-6a.	Percent change from 2005 to be detected and sample size requirements for selected ECPP key characteristics: NHES:2012	14		
Table 2-6b.	Percent change from 2007 to be detected and sample size requirements for selected PFI key characteristics: NHES:2012	16		
Table 2-7.	Expected and actual percentage and number of households with eligible children, by sampling domain: NHES:2012	20		
Table 2-8.	Expected and actual number of cases sampled and number of completed screeners and topical surveys in the NHES:2012	21		
Table 2-9.	Expected and actual number of completed interviews by topical survey and stratum: NHES:2012	21		
Table 2-10.	Expected prevalence rates used to calculate expected yield in table 2-9 by stratum and actual rates: NHES:2012	22		
Table 2-11.	Sample allocation rate and probability of selection for methodological experiments and expected and actual sample sizes: NHES:2012	23		
Table 3-1.	Data collection activity timeline: NHES:2012	25		
Table 3-2.	Data collection mailing materials: NHES:2012	26		
Table 3-3.	Brand assignment in initial screener and topical mailings: NHES:2012	27		
Table 3-4.	Mailing schedule for screener questionnaires: NHES:2012	30		
Table 3-5.	Number of completed screeners received throughout data collection, by week: NHES:2012	31		
Table 3-6.	Number of completed screeners received, by mailing wave: NHES:2012	32		
Table 3-7.	Data collection time schedule for topical questionnaires, by mailing group: NHES:2012	35		
Table 3-8.	Number of completed topical questionnaires received throughout data collection, by week: NHES:2012	36		
Table 3-9.	Number of UAA returns: NHES:2012			
Table 3-10.	Spanish screener assignments and returns, by mailing wave: NHES:2012	39		
Table 3-11.	Spanish topical questionnaire assignments and returns, by week NHES:2012	40		

Table 3-12.	Telephone call-in reasons on the Telephone Questionnaire Assistance (TQA) telephone line: NHES:2012	42
Table 3-13.	Telephone tree operation by mailing group: NHES:2012	43
Table 3-14.	Telephone cases, by final outcome codes: NHES:2012	44
Table 3-15.	E-mails received from respondents, by reason: NHES:2012	45
Table 3-16.	Final screener and topical outcome codes: NHES:2012	46
Table 4-1.	Number of changes made to entries for the variables in NHES:2012 computer edits, by percentage of records with changes and questionnaire type	51
Table 4-2.	Results of the NHES:2012 PFI school coding operation, by school type	52
Table 4-3.	NHES:2012 final Interview Status Recode (ISR) counts, by questionnaire type	53
Table 5-1.	Number and percentage of addresses in screener sample by response and eligibility status, and response rate calculation denotation	60
Table 5-2.	Proportion of known eligibility cases that are eligible (ee) by cell	61
Table 5-3.	Weighted and unweighted screener unit response rates.	62
Table 5-4.	NHES:2012 Number of addresses in the screener sample, by response status, weighted unit response rate, and characteristics of the sample	63
Table 5-5.	Number of sampled children, completed questionnaires, and weighted unit response rates and overall unit response rates, by type of topical questionnaire	66
Table 5-6.	Number of surveyed ECPP children, by response status and weighted unit response rates	68
Table 5-7.	Number of surveyed PFI children, by response status and weighted unit response rates	71
Table 5-8.	Weighted item response rates and total response rates for selected items in the ECPP survey	75
Table 5-9.	Weighted item response rates and total response rates for selected items in the PFI survey	77
Table 5-10.	Items with weighted response rates below 90 percent on the ECPP survey	79
Table 5-11.	Items with weighted response rates below 90 percent on the PFI survey	80
Table 7-1.	Base weight for the initial sampling of addresses: NHES:2012	91
Table 7-2.	Sampling fractions and base weights for the subsampling of addresses: NHES:2012	91
Table 7-3.	Control totals for raking the Parent and Family Involvement in Education Survey NHES:2012 person-level weights: 2011 ACS	102
Table 7-4.	Control totals for raking the Early Childhood Program Participation Survey NHES:2012 person-level weights: 2011 ACS	105
Table 10-1.	Summary of the NHES:2012 unit-level nonresponse bias analysis	151
Table 10-2.	Estimates of unit nonresponse bias for various sample characteristics from the NHES:2012 screener	152
Table 10-3.	Estimates of unit nonresponse bias for various sample and survey characteristics from the NHES:2012 ECPP survey	157

Table 10-3.	Estimates of unit nonresponse bias for various sample and survey characteristics from the NHES:2012 ECPP survey—Continued	158
Table 10-4.	Estimates of unit nonresponse bias for various sample and screener characteristics from the NHES:2012 PFI survey	159
Table 10-5.	Comparison of estimates from the NHES:2012 ECPP survey based on nonresponse-adjusted weights and base weights, by child and family characteristics.	164
Table 10-6.	Comparison of estimates from the NHES:2012 PFI survey based on nonresponse-adjusted weights and base weights, by child and family characteristics	166
Table 10-7.	Comparison of estimates of selected key items from the NHES:2012 ECPP survey based on nonresponse-adjusted weights and base weights, by race/ethnicity	168
Table 10-8.	Comparison of estimates of selected key items from the NHES:2012 PFI survey based on nonresponse-adjusted weights and base weights, by race/ethnicity	171
Table 10-9.	Comparison of NHES:2012 ECPP original and extreme imputed value variable estimates, for items with low and high extreme imputed value variables	180
Table 10-10.	Comparison of NHES:2012 PFI original and extreme imputed value variable estimates, for items with low and high extreme imputed value variables	184

List of Exhibits

Exhibit 4-1.	NHES:2012 critical items and criteria for final Interview Status Recode (ISR) classification of completed interview, by questionnaire type	52
Exhibit 4-2.	Flags used in processing NHES:2012 questionnaires	54
Exhibit 6-1.	Additional boundary variables rules used for imputation, by imputed variable: NHES:2012	85
Exhibit 7-1.	Variables used in the screener CHAID analysis	93
Exhibit 7-2.	Variables used in the ECPP and PFI CHAID analysis	97
Exhibit 10-1.	Sampling frame address-level variables used in the NHES:2012 unit nonresponse bias analysis conducted for the screener	148
Exhibit 10-2.	Variables used in the NHES:2012 unit nonresponse bias analysis conducted for the topical surveys	149

Chapter 1. Introduction

The 2012 National Household Education Surveys Program (NHES:2012) Data File User's Manual provides documentation and guidance for users of the NHES:2012 data files. The manual provides information about the purpose of the study, the sample design, data collection procedures, data processing procedures, response rates, imputation, weighting and standard error calculation and use, data considerations and anomalies, a guide to the data file structure, nonresponse bias analysis, data collection instruments, data file layout, comparisons of estimates from NHES:2012 to prior NHES administrations and other data sources, and tables of nonresponse adjustment cells and response rates.

The NHES:2012 consists of two topical surveys—the Early Childhood Program Participation (ECPP) Survey and the Parent and Family Involvement in Education (PFI) Survey—that were last fielded in 2005 and 2007, respectively. The ECPP survey has a target population of children age 6 or younger who are not yet in kindergarten. The PFI survey has a target population of children and youth age 20 or younger who are enrolled in kindergarten through 12th grade in a public or private school or who are being homeschooled for the equivalent grades.

The NHES:2012 was a two-phase survey conducted primarily by mail. The first phase of the survey was the administration of a short household screener questionnaire used to identify households with children under age 20. A total of 159,994 households were selected, and the response rate was 73.5 percent. The second phase of the survey was the collection of topical survey data from households with eligible children. The topical response rate was 78.7 percent for the ECPP survey and 78.4 percent for the PFI survey. The overall response rates (the product of the screener response rate and the topical response rate) were 57.8 percent for the ECPP survey and 57.6 percent for the PFI survey.

The data files contain the following:

- The ECPP survey file contains data from surveys completed with the parents or guardians of 7,893 children age 6 or younger not yet enrolled in kindergarten.
- The PFI survey file contains data from surveys completed with the parents or guardians of 17,563 children age 20 or younger in kindergarten through 12th grade, including 17,166 students whose parents completed the PFI-Enrolled questionnaire for students enrolled in public or private school and 397 students whose parents completed the PFI questionnaire for homeschooled students.

The data are subject to federal law on data confidentiality (Section 9573, 20 U.S. Code). Data may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law.

1.1 Background of Study

The National Household Education Surveys Program (NHES) was developed by the National Center for Education Statistics (NCES), an agency within the U.S. Department of Education's Institute of Education Sciences (IES), to complement its school-based and institutional surveys. Surveys that comprise NHES are integral data collection tools for addressing topics that cannot be studied through institutional data collections. By collecting data directly from households, the NHES has allowed NCES to gather data on a wide range of issues, such as early childhood care and education, children's readiness for school, before- and after-school activities of school-age children, adult education, parents' involvement in education, school choice, and homeschooling. These topics are addressed through a series of topical survey modules. Many of the topical survey modules are repeated on a rotating basis, while others are one-time-only collections. Table 1-1 shows the topical survey modules included in the NHES by year of administration.

Table 1-1. Topical surveys conducted under the National Household Education Surveys Program, by years administered: 1991–2012

				NHI	ES surve	y admini	stration			
Topical survey	1991	1993	1995	1996	1999 ¹	2001	2003	2005	2007	2012
Early childhood education/ program participation	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$		$\sqrt{}$		V
Adult education	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		
School readiness		$\sqrt{}$			$\sqrt{}$				$\sqrt{}$	
School safety and discipline		$\sqrt{}$								
Parent and family involvement in education				$\sqrt{}$	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$
Homeschooling					$\sqrt{}$		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$
Civic involvement				$\sqrt{}$	$\sqrt{}$					
After-school programs and activities			$\sqrt{2}$		$\sqrt{}$	$\sqrt{3}$		$\sqrt{}$		
Household library use				$\sqrt{}$						

¹ The NHES:1999 was a special end-of-decade administration that measured key indicators from the surveys fielded during the 1990s.

² The After-School Programs and Activities Survey of the NHES:1995 only asked about children in first through third grades.

³ The After-School Programs and Activities Survey of the NHES:2001 also included items on before-school programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 1991–2012.

Data from the NHES are used to provide national estimates on populations of interest to education researchers and policymakers. For surveys about children, the population of interest is defined by age or grade in school, or both, depending on the particular survey topic and research questions. The NHES targets populations of interest using specific screening and sampling procedures and includes an oversample of Black and Hispanic children who may otherwise be underrepresented in the NHES sample. Because many of the topical surveys fielded as part of NHES are repeated over time, in addition to providing single point in time cross-sectional estimates, NHES data can be used to develop trend estimates.¹

Until 2012, the NHES was conducted by telephone interviewers using list-assisted random-digit-dial (RDD) and computer assisted telephone interview (CATI) methodologies. Data were collected between January and June approximately every other year from 1991 through 2007. Following the standard schedule, the next NHES would have been conducted in 2009. However, after the 2007 collection, the NHES was redesigned in order to improve response rates and population coverage. Samples were developed using household address information, and data were collected using self-administered paper questionnaires delivered and returned through the mail. The redesign process included a feasibility pilot test, cognitive interviews about the redesigned survey questionnaires and materials, and a full-scale field test of the new methodology and instruments. The time invested in the redesign resulted in a gap in data collection between 2007 and 2012. NHES surveys from 1991 through 2007 and the NHES redesign pilot and field tests were conducted by Westat, Inc. The NHES:2012 was conducted by the U.S. Census Bureau.

Survey data from the NHES have been used for a large number of descriptive and analytic reports and articles, including NCES publications, publications of other federal agencies, policy analyses, theses and dissertations, conference papers, and journal articles. A list of NHES publications issued by NCES can be found on the NHES website, http://nces.ed.gov/nhes.. Publications not issued by NCES that use NHES data can also be found using the NCES Bibliography Search Tool at http://nces.ed.gov/bibliography/.

1.2 Overview of the NHES:2012 Design

The NHES:2012 surveys were designed to provide nationally representative data about populations central to education policy and research. The topical surveys were conducted

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¹ The mode change, from a computer-assisted telephone interview (CATI) to a self-administered paper and pencil survey, required changes in item wording that may affect the comparability of estimates from NHES data from 1991-2007 to those from NHES data from 2012. Data users should take this into consideration when comparing estimates from NHES:2012 to estimates from prior years.

simultaneously because of the high costs associated with screening large numbers of households in order to meet the sample size requirements for precise nationally representative estimates. By fielding more than one topical survey simultaneously in NHES:2012, the cost of screening households to find eligible household members was partitioned over the surveys. This strategy is key to the NHES design.

In 2012, households were mailed a short screener asking them to list the first name,² age, sex, type of school enrollment (public or private school, homeschool, or not enrolled), and grade or level of enrollment of anyone age 20 or younger living in the household. Once the screener was returned, one child or youth per household was selected for the sample and the parent was mailed a topical follow-up survey about the child. Households without eligible children were not sent any additional surveys.

Although the sampling method used reduced the number of surveys per household, survey length was also considered to be an important factor in obtaining good response rates and reliable estimates. To reduce time burden on respondents and thereby improve response rates, the number of items included in the NHES:2012 surveys was smaller than in past administrations.

Table 1-2 provides the number of completed surveys and the *weighted* unit response rate and overall unit response rate for the NHES:2012 screener and ECPP and PFI surveys. Table 1-3 provides the *unweighted* unit response and overall unit response rates for these surveys. More details on the computation of these rates, including a discussion of the uses of weighted and unweighted response rates, are given in chapter 5.

Table 1-2. Number of completed NHES:2012 surveys, unit response rates, and overall unit response rates, by survey type

Survey type	Number of completed surveys	Unweighted unit response rate ¹	Unweighted overall unit response rate ²	Weighted unit response rate ¹	Weighted overall unit response rate ²
Screener	99,426	72.5	72.5	73.5	73.5
ECPP survey	7,893	79.6	57.7	78.7	57.8
PFI survey	17,563	79.8	57.9	78.4	57.6

¹ The unit response rate is the percentage of completed surveys for a specific stage of the study (i.e., the screener or topical stage) and is derived by dividing the number of completed surveys by the number of eligible units (e.g., addresses and children) sampled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPP) and Parent and Family Involvement in Education (PFI) surveys of the 2012 National Household Education Surveys Program (NHES:2012).

² The overall unit response rate indicates the percentage of possible surveys that have been completed, taking all sampling stages into account. It is the product of the screener unit response rate and the topical unit response rate.

² Though first name was asked on the standard screener form, approximately 30,000 households received a screener form that did not ask for children's names. This allowed NCES to test the impact on response rates of asking for children's names.

1.3 NHES:2012 Topical Questionnaires

The NHES:2012 was administered using three topical mail questionnaires: one for the ECPP survey and two for the PFI survey. The content, target population, and respondents for these questionnaires are described below.

1.3.1 Early Childhood Program Participation Survey

The Early Childhood Program Participation (ECPP) Survey focused on children age 6 or younger who were not yet enrolled in kindergarten. The survey questionnaire covered children's participation in early education and care arrangements by relatives and nonrelatives in private homes and in center-based daycare or preschool programs (including Head Start). Additional topics included family learning activities, early literacy and numeracy skills, out-of-pocket expenses for nonparental care and education, factors related to parental selection of providers, and parents' perceptions of care and education quality. Parents were also asked about child characteristics, the child's health and disability status, characteristics of the child's parent(s)/guardian(s) who live in the household, and household characteristics. The survey instructions requested that the respondent be the parent or guardian in the household who knew the most about the sampled child.

1.3.2 Parent and Family Involvement in Education Survey

The Parent and Family Involvement in Education (PFI) Survey focused on children and youth age 20 or younger who were enrolled in kindergarten through 12th grade in a public or private school and children who were homeschooled for the equivalent grades.

Parents of enrolled children received the *PFI-Enrolled* questionnaire, which included questions about school choice, parent and family involvement at school, school behavior, grade retention, involvement in schoolwork, involvement and activities outside of school, factors affecting family involvement, and parents' satisfaction with the child's school. Parents of homeschooled children received the *PFI-Homeschooled* questionnaire, which included questions about who is primarily responsible for homeschooling the sampled child, time homeschooled, the use of internet resources, parents' reasons for homeschooling, and subjects covered in homeschooling and the resources used in doing so. Both questionnaires included questions about child characteristics, the child's health and disability status, parent/guardian characteristics, and household characteristics. The instructions for both questionnaires requested that the respondent be the parent or guardian who knew the most about the sampled child.

1.4 Contents of the Manual

The chapters that follow provide additional information about the NHES:2012 sample design (chapter 2), data collection (chapter 3), data processing (chapter 4), response rates (chapter 5), imputation (chapter 6), weights and standard errors (chapter 7), data considerations and anomalies (chapter 8), data file organization and structure (chapter 9), and a nonresponse bias analysis (chapter 10). Appendix A provides a copy of the survey questionnaires; appendix B shows the data file layouts in position order; appendix C contains tables comparing NHES:2012 estimates to those of other surveys; appendix D contains tables of nonresponse adjustment cells and response rates for the ECPP survey; and appendix F contains tables of nonresponse adjustment cells and response rates for the PFI survey.

Chapter 2. Sampling Methodology

Historically, an important purpose of the National Household Education Surveys Program (NHES) has been to conduct repeated measurements of the same phenomena at different points in time. Recently, decreasing response rates and concerns regarding noncoverage of households without a landline telephone required NCES to redesign the NHES. This redesign involved changing the sampling frame from a list-assisted Random Digit Dial (RDD) to an Address-Based Sample (ABS) frame. The mode of data collection has also changed from an interviewer-led telephone interview to a self-administered paper and pencil questionnaire mailed to respondents.

The NHES:2012 used an address-based sample covering the 50 states and the District of Columbia and was conducted from January through August 2012. Households were randomly sampled and a screening questionnaire was sent to each sampled household. Demographic information about household members provided on the screener was used to determine whether anyone in the household was eligible for the second-stage topical Early Childhood Program Participation (ECPP) or Parent and Family Involvement in Education (PFI) surveys. Regardless of the number of eligible children, no more than one child per household was sampled for the topical surveys and no more than one topical survey was administered in a household.

The target population for the ECPP survey consists of children age 6 or younger (as of December 31, 2011) who are not yet in kindergarten. The target population for the PFI survey includes children/youth ages 20 or younger who are enrolled in kindergarten through twelfth grade or are homeschooled for the equivalent grades.

2.1 Sampling Households

An initial sample of 208,000 addresses was selected, of which 159,994 were designated for the NHES:2012. The initial sample of addresses was drawn from a file of residential addresses maintained by a vendor, Marketing Systems Group (MSG), based on the United States Postal Service (USPS) Computerized Delivery Sequence File (CDSF). MSG also provided the sample for the NHES Pilot and Field Tests in 2009 and 2011.

The NHES:2012 sample is a two-stage, stratified sample. The first sampling stage selected residential addresses from the MSG file, and the second sampling stage selected an eligible child from information provided on the household mail screener. Households and children were selected with differential probabilities of selection based on the Black and Hispanic composition of the Census tract where an address is located, residential address type, and children's survey

eligibility within the household (ECPP or PFI). These differential probabilities of selection are accounted for in the NHES weighting methodology. When these weights are applied to the ECPP survey, it is nationally representative of all children from birth through age 6 who are not enrolled in kindergarten. When these weights are applied to the PFI survey, it is nationally representative of students enrolled in grades K-12, including children who are enrolled in public school, private school, and those who are homeschooled for the equivalent grades.

2.1.1 Black and Hispanic oversample

As in past NHES surveys, the NHES:2012 oversampled Black and Hispanic households using Census and sampling frame data. This oversampling is necessary to produce more reliable estimates for subdomains defined by race and ethnicity. Oversampling provides improvement in the precision of estimates by race/ethnicity and protects against unknown factors that may impact the estimates for key subgroups, especially differential response rates.

Addresses were stratified by race/ethnicity into three strata, facilitating the oversampling of Black and Hispanic households in the NHES:2012. These strata are defined by the following criteria:

- 1) Census tracts with 25 percent or more Black persons (Black stratum);
- 2) Census tracts with 40 percent or more persons of Hispanic origin (Hispanic stratum);
- 3) All other tracts (All Other stratum).

As shown in table 2-1, the sample allocation was 20 percent to the Black stratum, 15 percent to the Hispanic stratum, and 65 percent to the All Other stratum. Assignment to strata was sequential: Tracts with 25 percent or more Black persons were assigned to the Black stratum; of the remaining tracts, tracts with 40 percent or more persons of Hispanic origin were assigned to the Hispanic stratum, and; all remaining tracts were assigned to the All Other stratum. Table 2-1 also shows the distribution of the final NHES sample by address-type, after subsampling by address type, as described in section 2.1.2.

Table 2-1. Percent of sample by address selection characteristic: NHES:2012

Address selection characteristic	Percent of Sample
Black and Hispanic defined strata	_
Addresses in Census tracts with 25% or more Black persons	20
Addresses in Census tracts with 40% or more Hispanic persons	15
Addresses in all other Census tracts	65
Residential address type	
PO Boxes that are not flagged as "only way to get mail" (OWGM)	4
All other addresses	96

SOURCE: Marketing Systems Group (MSG)

The NHES:2012 Black and Hispanic oversampling strategy differs from prior NHES survey administrations. Prior NHES administrations conducted by telephone using random digit dialing (RDD) contained two sampling strata; one for phone numbers in areas where 20 percent or more of the population was Black or 20 percent or more was Hispanic; and all other phone numbers. The NHES:2012 approach and the prior NHES approach were both evaluated for use in the NHES:2012 administration and both approaches were expected to achieve a similar yield and have similar impacts on design effects. The current NHES:2012 approach was selected because the separate Black and Hispanic strata offers the flexibility to allow for more precise specification of Black and Hispanic sample sizes and allows the Hispanic sampling stratum to be used to target Spanish-language mailings.

2.1.2 Subsampling by address type

The NHES:2012 sample contains all types of residential addresses in order to ensure the best possible coverage of households in the United States. Addresses include street and city-style addresses, high rises, rural routes, PO Boxes, and addresses flagged as seasonal, vacant, drop points (a single postal delivery point for multiple housing units), PO Box throwbacks (a street address where the mail is delivered to a customer's PO box), and educational addresses (addresses identified as an educational facility such as colleges, universities, dormitories, and apartment buildings occupied by students). In order to increase the efficiency of the mailing, addresses flagged as PO Boxes that were not the "only way to get mail" (OWGM) were sampled at a lower rate than other addresses. According to information from the sample vendor, MSG, these PO boxes are more likely vacant or duplicative of another address (such as a city-style or rural route address) than other address types. Undersampling non-OWGM addresses was designed to increase the efficiency of the sample while still providing coverage of this address type since some of these addresses may be occupied, non-duplicative addresses. The initial sample of 208,000 was divided into two groups based on the address type: Group 1 contained PO

Boxes not flagged as OWGM and Group 2 contained all other addresses. Table 2-2 shows the distribution of the initial sample by address type, before subsampling, and table 2-3 shows the final sample sizes by address-type and racial/ethnic strata. The subsampling approach was as follows:

- 1) Address-type Group 1 (PO Box non-OWGM) 1 in 3 addresses were *selected*
- 2) Address-type Group 2 (All other addresses) 1 in every 5.51 addresses were *deselected* leaving 1 in every 1.22 addresses selected.

Table 2-2. Percentage distribution of the initial sample by address type: NHES:2012

Address type	Percent
PO Box	11.1
Non-OWGM	10.1
OWGM	1.0
All other addresses	88.9

SOURCE: Marketing Systems Group (MSG)

Table 2-3. Sample sizes by address type and stratum: NHES:2012

	Address Type (Group)						
Stratum	Total	Group 1 (PO Box non-OWGM)	Group 2 (All other)				
Total	159,994	7,047	152,947				
Black	32,128	1,320	30,808				
Hispanic	24,113	980	23,133				
All Other	103,753	4,747	99,006				

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Survey (NHES) of 2012.

2.1.3 Within-household sampling of eligible children

In earlier iterations of the NHES, CATI programming allowed for collection of data about more than one child per household while limiting the overall response burden experienced by the children's households. The mail format used in the redesign removed this flexibility. Sending multiple topical forms to the same household would have increased household response burden. As a result, the decision for the NHES:2012 was to restrict the number of topical surveys to no more than one per household.

Each household in the sample was randomly pre-designated as either an "ECPP household" or "PFI household." This pre-designation was used only when a household had children in both domains. In any household with a child/children in the eligible population for only one survey

(either ECPP or PFI, but not both), one child was randomly selected in that domain. Because ECPP-eligible children comprise a smaller portion of the population compared to PFI-eligible children, differential sampling in households with children in both domains was applied to ensure a sufficient sample size for the ECPP survey. Table 2-4 presents the percentages of households with eligible children in each sampling domain using data from the NHES:2011 Field Test, 2010 American Community Survey (ACS), and NHES:2012. Data from the NHES:2011 Field Test and 2010 ACS were used to determine the sampling rate applied to the ECPP and PFI surveys. Historically, NHES has consistently yielded fewer households with children compared to the Current Population Survey (CPS) or ACS. For this reason, NHES:2011 Field Test estimates were considered in addition to ACS estimates when making sampling rate decisions. Among households with children eligible for both surveys, approximately 70 percent were designated to the ECPP domain and 30 percent were designated to the PFI domain. Once the sampling domain for a particular household was determined, a random number was used to sample from amongst the eligible children, if the household had more than one child in the sampling domain.

Table 2-4. Percentage of households with eligible children, by sampling domain: NHES Field Test:2011 and ACS 2010, and NHES:2012

Sampling domain	NHES:2011 Field Test	2010 ACS	NHES:2012
Households with no eligible children	68.1	66.5	67.7
Households with eligible children	31.9	33.6	32.3
Households with at least one child ages 0 through 6 and not yet in kindergarten, and no child enrolled in grades kindergarten through 12 (ECPP-eligible)	6.0	6.8	5.7
Households with at least one child enrolled in grades kindergarten through 12, and no child ages 0 through 6 and not yet in kindergarten (PFI-eligible)	20.0	19.9	20.3
Households with at least one child ages 0 through 6 and not yet in kindergarten, and at least one child enrolled in grades kindergarten through 12 (ECPP-eligible and PFI-			
eligible)	5.9	6.8	6.2

SOURCE: National Household Education Surveys Field Test 2011; U.S. Department of Commerce, U.S. Census Bureau, American Community Survey (ACS), 2009 and 2010; U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Survey (NHES) of 2012.

2.2 Precision requirements

The NHES:2012 was also designed to meet precision requirements that allow for comparison to prior NHES administrations. The precision requirements were the ability to detect a 10 to 15

percent relative change in percentage estimates between 30 and 60 percent. Table 2-5 shows general sample sizes needed to meet these precision requirements (alpha=.05) assuming a design effect of 1.3.

Tables 2-6a and 2-6b show precision estimates for selected ECPP and PFI survey items. The first two columns of the tables show the estimate and standard error of the selected key variable from the most recent past ECPP and PFI administrations. The third column, labeled "Level," shows the absolute percentage size threshold, or "level" that is detectable under the precision requirement. Where possible, this precision requirement is always equivalent to a 10 percent relative change, as shown in the fourth column. However, in some instances, a 10 percent relative change detection is not possible with less than 25,000 cases so a higher percentage is shown, if it is within the 10 to 15 percent range. The last two columns show the sample size required for the subgroup and variable of interest (e.g. Hispanic children in relative care) and the overall sample size required for the subgroup (e.g. Hispanic children) to detect the level change shown in column 3. The differential sampling required to achieve these sample sizes lead to design effects. The design effect is the increase in the variation of the survey estimates because the NHES is not a simple random sample. Complex sample designs like the one used in NHES increase variation in the estimates which means some changes in estimates that would be detectable with a simple random sample may not be detectable with a complex design and therefore require larger sample sizes. The DEFT is the square root of the design effect and can be used to make adjustments to standard errors to account for the design effect when the actual design effect cannot be calculated (for example, to calculate expected estimates before a survey is administered). Past administrations of the NHES typically produced an average DEFT of 1.3, therefore a DEFT of 1.3 was used in the sample calculations.

As seen in these tables, some smaller estimates would require very large sample sizes to detect 10 to 15 percent relative change. Given the costs associated with data collection, it is not feasible to attain the required sample sizes for all estimates. The NHES:2012 sample size is the optimal sample size for balancing needs for precision across a range of estimates and resources available to field the study. Given the study design and resources available for the study, NCES did not anticipate receiving data for more than 25,000 children in NHES:2012.

Table 2-5. Estimates of required sample size to detect a relative difference between two estimated proportions of 10 or 15 percent

	10 percent relative difference			e difference
True value of P_{1}	Value of $P_2(1)$	Sample size (2)	Value of P_2 (1)	Sample size (2)
30 percent	27 or 33 percent	1,320	25.5 or 34.5 percent	600
60 percent	54 or 66 percent	400	51 or 69 percent	170

^{(1):} the value of $P_{\rm 2}\,$ when the true relative difference is 10 or 15 percent.

^{(2):} the number of completed interviews assuming one child per household is selected for either ECPP or PFI. The sample sizes apply to overall estimates and for any particular subgroup of interest, e.g. Hispanic, and are effective sample sizes. Note: The estimates assume a design effect of 1.3.

Table 2-6a. Percent change from 2005 to be detected and sample size requirements for selected ECPP key characteristics: NHES:2012

	ECPP	2005	Change to b	e detected	Sample size requirement		
Characteristic (by subgroup)	Estimate (percent)	Standard Error	Level (percent)	Percent relative change	Number of completed interviews in subgroup (assuming DEFT = 1.3)	Total number of completed interviews (assuming DEFT = 1.3)	
Overall							
Participation in care arrangements							
Any care	60.8	0.8	6.4	10	374	374	
Relative care	22.3	0.7	2.3	10	3,349	3,349	
Nonrelative care	13.9	0.5	1.5	10	7,216	7,216	
Center-based	36.1	0.6	3.8	10	1,199	1,199	
Recognizes all colors	70.2	0.9	7.4	10	221	221	
Can count higher than 10	48.1	0.9	5.0	10	750	750	
Knows all letters	20.4	0.6	2.1	10	3,537	3,537	
Can write own name	41.9	0.7	4.3	10	950	950	
By race/ethnicity							
White, non-Hispanic							
Participation in care arrangements							
Any care	62.8	1.0	6.2	10	400	719	
Relative care	21.0	0.9	2.2	10	6,610	11,888	
Nonrelative care	17.0	0.9	1.8	11			
Center-based	37.8	0.9	4.0	10	1,250	2,248	
Recognizes all colors	78.5	1.2	7.6	10	150	270	
Can count higher than 10	51.2	1.2	5.4	10	683	1,228	
Knows all letters	22.7	1.0	2.4	10	6,633	11,930	
Can write own name	43.2	1.1	4.5	10	1,017	1,829	

Table 2-6a. Percent change from 2005 to be detected and sample size requirements for selected ECPP key characteristics: NHES:2012—Continued

	ECPP	2005	Change to b	e detected	Sample size	requirement
Characteristic (by subgroup)	Estimate (percent)	Standard Error (percent)	Level (percent)	Percent relative change	Number of completed interviews in subgroup (assuming DEFT = 1.3)	Total number of completed interviews (assuming DEFT = 1.3)
Black, non-Hispanic						
Participation in care arrangements						
Any care	69.9	2.6	7.2	10	450	3,125
Relative care	27.7	2.7	5.3			
Nonrelative care	10.2	1.4	2.7			
Center-based	43.9	2.4	4.7	11		
Recognizes all colors	61.5	3.1	6.5	10	2,957	20,535
Can count higher than 10	55.7	3.1	6.1	11		
Knows all letters	20.6	2.5	4.9			
Can write own name	43.7	3.1	6.1	14		
Hispanic						
Participation in care arrangements						
Any care	49.5	1.4	5.2	10	830	4,010
Relative care	21.2	1.0	2.2	10	10,475	50,604
Nonrelative care	10.4	1.0	2.0		830	4,010
Center-based	25.2	1.3	2.6	10	10,475	50,604
Recognizes all colors	52.3	1.7	5.5	10	,	´
Can count higher than 10	32.6	1.8	3.5	11		
Knows all letters	12.1	1.3	2.5		832	4,019
Can write own name	36.3	1.9	3.8	10		

NOTE: The symbol "--" in the sample size requirement columns indicates that the specified relative difference is not detectable with any realistic sample size (requires subgroup sample sizes of more than 25,000 cases). DEFT is root design effect.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2005

Table 2-6b. Percent change from 2007 to be detected and sample size requirements for selected PFI key characteristics: NHES:2012

	PFI:2	2007	Change to b	e detected	Sample size	requirement
				Percent	Number of completed interviews in subgroup	Total number of completed interviews
Characteristic (by subgroup)	Estimate (percent)	Standard Error	Level (percent)	relative change	(assuming DEFT = 1.3)	(assuming $DEFT = 1.3$)
Overall	(percent)	EHOI	(percent)	change	DEF1 - 1.3)	DEFT - 1.3)
- · · · · · · · · · · · · · · · · · · ·	64.9	0.7	6.8	10	296	296
Child's parents participate in 3 or more activities in the child's school ¹	04.9	0.7	0.8	10	296	296
Child's parents report school practices have been done very well				4.0		
School tells family how child is doing in school	61.0	0.8	6.4	10	370	370
School provides information about how to help child with homework	46.6	0.6	4.9	10	719	719
School provides information about why child is in groups/classes	44.5	0.7	4.7	10	814	814
School provides information on how to help prepare child for college/vocational school	34.0	0.9	3.6	10	1,581	1,581
School provides information about parents' expected role	48.4	0.7	5.0	10	700	700
Child's parents told child a story in the last week (K-5)	71.0	1.1	7.0	10	250	250
Child's parents did arts and crafts with child in the last week (K-5)	76.3	1.0	7.8	10	150	150
Child's parents talked with child about family history/ethnicity in the last month	58.9	0.7	5.6	10	500	500
Child's parents and child visited a library in the last month	41.8	0.8	4.4	10	975	975
Child's parents and child went to a concert/live show in the last month	32.3	0.7	3.4	10	1,550	1,550
Child's parents and child visited a museum/gallery/historical site in the last month	22.6	0.6	2.4	10	2,864	2,864
Child's parents and child visited a zoo/aquarium in the last month	14.3	0.4	1.5	10	5,268	5,268
Child's parents and child went to a sporting event in the last month	37.5	0.6	3.9	10	1,116	1,116

Table 2-6b. Percent change from 2007 to be detected and sample size requirements for selected PFI key characteristics: NHES:2012—Continued

_		PFI: 2007 Change to be detected		Sample si	Sample size requirement	
Characteristic (by subgroup)	Estimate (percent)	Standard Error	Level (percent)	Percent relative change	Number of completed interviews in subgroup (assuming DEFT = 1.3)	Total number of completed interviews (assuming DEFT = 1.3)
By race/ethnicity						
White, non-Hispanic, percent of population	58.4					
Child's parents participate in 3 or more activities in the child's school ¹	69.1	0.8	7.2	10	234	401
Child's parents report school practices have been done very well						
School tells family how child is doing in school	61.8	0.8	6.5	10	355	608
School provides information about how to help child with homework	44.2	0.8	4.6	10	851	1,457
School provides information about why child is in groups/classes	43.1	0.8	4.5	10	899	1,539
School provides information on how to help prepare child for college/vocational school	33.8	0.9	3.5	10	1,602	2,743
School provides information about parents' expected role	48.6	0.8	4.9	10	750	1,284
Child's parents told child a story in the last week (K-5)	73.9	1.1	7.7	10	180	308
Child's parents did arts and crafts with child in the last week (K-5)	75.6	1.2	7.8	10	165	283
Child's parents talked with child about family history/ethnicity in the last month	52.7	0.8	5.5	10	561	961
Child's parents and child visited a library in the last month	41.2	0.9	4.3	10	1,032	1,767
Child's parents and child went to a concert/live show in the last month	34.0	0.8	3.6	10	1,481	2,536
Child's parents and child visited a museum/gallery/historical site in the last month	22.2	0.7	2.3	10	3,385	5,796
Child's parents and child visited a zoo/aquarium in the last month	11.7	0.5	1.2	10	13,317	22,803
Child's parents and child went to a sporting event in the last month	40.3	0.7	4.2	10	1,001	1,714

Table 2-6b. Percent change from 2007 to be detected and sample size requirements for selected PFI key characteristics: NHES:2012—Continued

	PFI:	2007	Change to b	Change to be detected		requirement
Characteristic (by subgroup)	Estimate (percent)	Standard Error	Level (percent)	Percent relative change	Number of completed interviews in subgroup (assuming DEFT = 1.3)	Total number of completed interviews (assuming DEFT = 1.3)
Black, non-Hispanic, percent of population	14.9					
Child's parents participate in 3 or more activities in the child's school ¹	59.2	2.1	6.2	10	677	4,544
Child's parents report school practices have been done very well						
School tells family how child is doing in school	61.0	2.6	6.4	10	948	6,362
School provides information about how to help child with homework	49.3	2.7	5.4	11		
School provides information about why child is in groups/classes	45.7	2.6	5.2	11		
School provides information on how to help prepare child for college/vocational school	32.7	3.1	6.1			
School provides information about parents' expected role	47.1	2.8	5.5	12		
Child's parents told child a story in the last week (K-5)	61.9	3.8	7.5	12		
Child's parents did arts and crafts with child in the last week (K-5)	73.3	3.5	7.7	10	821	5,510
Child's parents talked with child about family history/ethnicity in the last month	67.6	2.0	7.1	10	351	2,356
Child's parents and child visited a library in the last month	47.3	2.4	5.0	10	6,381	42,826
Child's parents and child went to a concert/live show in the last month	33.6	2.1	4.2	12		
Child's parents and child visited a museum/gallery/historical site in the last month	27.3	2.6	5.2			
Child's parents and child visited a zoo/aquarium in the last month	16.9	1.4	2.8			
Child's parents and child went to a sporting event in the last month	38.4	2.1	4.2	11	25,000	167,785

Table 2-6b. Percent change from 2007 to be detected and sample size requirements for selected PFI key characteristics: NHES:2012—Continued

	PFI: 2	2007	Change to b	e detected	Sample size	requirement
				Percent	Number of completed interviews in subgroup	Total number of completed interviews
	Estimate	Standard	Level	relative	(assuming	(assuming
Characteristic (by subgroup)	(percent)	Error	(percent)	change	DEFT = 1.3)	DEFT = 1.3)
Hispanic, percent of population	18.7					
Child's parents participate in 3 or more activities in the child's school ¹	57.0	1.4	6.0	10	536	2,866
Child's parents report school practices have been done very well						
School tells family how child is doing in school	60.4	1.5	6.3	10	457	2,444
School provides information about how to help child with homework	54.1	1.7	5.7	10	738	3,947
School provides information about why child is in groups/classes	50.7	1.8	5.3	10	1,007	5,385
School provides information on how to help prepare child for college/vocational school	37.7	2.0	4.0	11	20,000	106,952
School provides information about parents' expected role	51.3	1.7	5.4	10	890	4,759
Child's parents told child a story in the last week (K-5)	67.8	2.4	7.1	10	428	2,289
Child's parents did arts and crafts with child in the last week (K-5)	81.4	1.6	8.3	10	100	535
Child's parents talked with child about family history/ethnicity in the last month	67.2	1.4	7.0	10	295	1,578
Child's parents and child visited a library in the last month	38.5	1.4	4.0	10	1,801	9,631
Child's parents and child went to a concert/live show in the last month	25.2	1.2	2.6	10	8,878	47,476
Child's parents and child visited a museum/gallery/historical site in the last month	19.6	1.3	2.6	13	25,000	133,690
Child's parents and child visited a zoo/aquarium in the last month	20.6	1.2	2.4	12	25,000	133,690
Child's parents and child went to a sporting event in the last month	30.9	1.5	3.2	10	7,753	41,460

¹ Any 3 or more of FSMTNG, FSATCNFN, FSSPORT, or FSVOL.

NOTE: The symbol "--" in the sample size requirement columns indicates that the specified relative difference is not detectable with any realistic sample size (requires subgroup sample sizes of more than 25,000 cases). DEFT is root design effect.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2007.

2.3 Expected and Actual Yield

As described above, the NHES:2012 sample consisted of 159,994 addresses. The expected number of completed screeners was approximately 96,800, derived from an expected overall screener response rate of 68 percent and an expected address ineligibility³ rate of 11 percent (based on results from the 2009 NHES Pilot and 2011 NHES Field Test). The actual overall response and ineligibility rates were 69.4 and 10.5 percent, respectively, which yielded 99,426 completed screeners.

Field test results for NHES:2012 suggested that approximately 31 percent of households would have eligible children. Actual data collection experiences for NHES:2012 differed from this expectation to some degree. Table 2-7 shows both assumptions for sampling based on field test results, and actual data collection results.

Table 2-7. Expected and actual percentage and number of households with eligible children, by sampling domain: NHES:2012

Household composition	Expected percent of households	Actual percent of households	Expected number of screened households	Actual number of screened households
Total households with eligible children	31.0	32.3	30,000	32,086
Households with at least one ECPP-eligible child and no PFI-eligible children	6.0	5.7	5,800	5,694
Households with at least one PFI-eligible child and no ECPP-eligible children	20.0	20.3	19,350	20,195
Households with at least one ECPP-eligible child and at least one PFI-eligible child	5.9	6.2	5,800	6,197

NOTE: Detail may not sum to totals because of rounding. Expected estimates are based on calculations from NHES:2011 Field Test. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys (NHES) of 2012.

Table 2-8 summarizes the expected numbers of completed interviews for the NHES:2012. These numbers take into account within-household sampling. The assumptions used for the expected yield are shown in table 2-10.

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³ Ineligible addresses are those which are undeliverable. After two unsuccessful mailings, an address returned as a postmaster return (PMR) was coded ineligible.

Table 2-8. Expected and actual number of cases sampled and number of completed screeners and topical surveys in the NHES:2012

Survey	Expected number sampled NHES:2012	Actual number sampled NHES:2012	Expected number of completed interviews NHES:2012	Actual number of completed interviews NHES:2012
Household screeners	160,000	159,994	96,800	99,426
ECPP	9,630	9,963	6,940	7,893
PFI	20,580	22,123	14,830	17,563

NOTE: Expected estimates are based on calculations from NHES:2011 Field Test.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys (NHES) of 2012.

Table 2-9 shows expected and actual completed interviews by topical survey and race/ethnicity strata. The assumptions used for the expected yield are shown in table 2-10.

Table 2-9. Expected and actual number of completed interviews by topical survey and stratum: NHES:2012

	Topical survey								
	ECPP	ECPP		PFI					
Stratum	Expected	Actual	Expected	Actual	Expected	Actual			
Total	6,940	7,893	14,830	17,563	21,770	25,456			
Black	1,190	1,269	2,550	2,771	3,740	4,040			
Hispanic	1,210	1,354	2,580	2,764	3,790	4,118			
All Other	4,540	5,270	9,700	12,028	14,240	17,298			

NOTE: Details may not sum to totals due to rounding. Expected estimates are based on calculations from NHES:2011 Field Test. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys (NHES) of 2012.

Table 2-10. Expected prevalence rates used to calculate expected yield in table 2-9 by stratum and actual rates: NHES:2012

	Stratum						
	Black		Hispanic		All other		
Assumptions	Expected	Actual	Expected	Actual	Expected	Actual	
Sample selection rate	0.20	0.20	0.15	0.15	0.65	0.65	
Screener response rate	0.58	0.61	0.58	0.62	0.68	0.74	
Household ineligibility rate	0.11	0.15	0.11	0.11	0.11	0.09	
Child eligibility rate	0.31	0.33	0.45	0.42	0.31	0.30	
Topical response rate	0.73	0.73	0.68	0.74	0.73	0.82	

NOTE: Expected estimates are based on calculations from NHES:2011 Field Test. Ineligible households are those which are undeliverable. After two unsuccessful mailings, an address returned as a postmaster return (PMR) was coded ineligible.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys (NHES) of 2012.

2.4 Sampling for Experiments

The NHES:2012 contains several methodological experiments. Table 2-11 shows the experiments, their sample allocation rates and expected and actual sample sizes. The experiments were pre-assigned to all sampled addresses. The experiment assignments were used when a case became eligible for a given experiment. All screener cases were eligible for the screener-mailing experiments. Topical cases became eligible under specific, pre-defined survey conditions. One of the experiments conducted in the NHES:2012 tested the impact of using Department of Education-branded materials compared to Census Bureau-branded materials. Cases assigned to receive Department of Education-branded materials received mailings with the Department of Education seal on all letters, envelopes, and survey forms. Cases assigned to Census Bureaubranded materials received mailings with the Census Bureau seal on all letters, envelopes, and survey forms. Another experiment, conducted at the Screener phase, was to test the effect of requesting children's names on the Screener questionnaire compared to not requesting children's names. The first topical experiment was the use of a \$15 topical incentive versus a \$5 topical incentive for screener cases that were completed late in the survey period, after the third screener mailing. Expected sample sizes shown in table 2-11 were calculated assuming 18 percent of screener completes would be completed after the third screener mailing, and that 34 percent of these late-responding households would have children who were eligible for the ECPP or PFI surveys. These assumptions are based on results from the NHES: 2011 Field Test.

The second topical experiment was the use of a shortened survey form at the 4th topical mailing versus the regular survey form. Expected sample sizes shown in table 2-11 were calculated using

the screener completion assumptions outlined in section 2-3 and assuming a nonresponse rate of 27 percent for the topical survey after the 3rd mailing.

Table 2-11. Sample allocation rate and probability of selection for methodological experiments and expected and actual sample sizes: NHES:2012

	Sample	Sample size	
Experiment	allocation rate	Expected	Actual
Screener			
Asks for child's first name/initials/nickname	0.81	130,000	129,976
Does not ask for child's first name/initials/nickname	0.19	30,000	30,018
Department of Education-branded	0.81	130,000	129,976
Census Bureau-branded	0.19	30,000	30,018
Topical			
\$15 incentive for 3 rd or 4 th wave screener responders	0.60	3,576	3,610
\$5 incentive for 3 rd or 4 th wave screener responders	0.40	2,384	2,550
Short-form at the 4th topical mailing	0.50	4,052	3,405
Regular form at the 4th topical mailing	0.50	4,052	3,410

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys (NHES) of 2012.

Chapter 3. Data Collection

3.1 Overview of Data Collection

Data collection for the 2012 National Household Education Surveys Program (NHES:2012) primarily utilized a mail-based, self-administered methodology. Data collection was conducted in two stages: a screener stage and a topical survey stage. Data collection began with the mailing of brief screener questionnaires to sampled household addresses. Once completed screener questions were returned, information from the questionnaires was used to subsample children in the household for a more in-depth topical follow-up survey. Parents of sampled children were mailed one of the three topical questionnaires in the second stage of data collection: the Early Childhood Program Participation (ECPP) questionnaire, the Parent and Family Involvement in Education (PFI-Enrolled) questionnaire for children enrolled in public or private school, or the Parent and Family Involvement in Education (PFI-Homeschooled) questionnaire for homeschooled children. In addition, during data collection, several different methodological experiments were conducted. See section 3.1.2 for a description of these experiments.

3.1.1 Data Collection Activities

The data collection activities for the NHES:2012 were conducted between January and August of 2012. Table 3-1 highlights the timing of these activities.

Table 3-1. Data collection activity timeline: NHES:2012

Activity	Date
Advance letters mailed	January 11–12, 2012
Initial screener questionnaires mailed	January 17, 2012
Screener reminder postcards mailed	January 24, 2012
Second screener questionnaires mailed	February 8-9, 2012
Third screener questionnaires mailed, via FedEx and USPS	February 29, 2012
Automated telephone calls to nonresponding household addresses, if telephone number available	February 29, 2012
Fourth screener questionnaires mailed	March 21-22, 2012
Returned screener questionnaires processed, and households with children assigned to receive the PFI-Enrolled, PFI-Homeschooled, or ECPP questionnaire	January–June 2012
First topical questionnaires mailed	February–July 2012
Reminder postcards mailed to topical sampled households one week after the first topical questionnaire packages mailed	February–July 2012
Topical questionnaire follow-up mailed to nonresponding households	February–July 2012
Automated telephone calls to nonresponding household addresses, if telephone number available	February–May 2012
Last completed questionnaires accepted	July 18, 2012
Last undeliverable as addressed (UAA) questionnaires accepted	August 2, 2012

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

Table 3-2 shows a full list of the mailing materials used throughout the NHES:2012 data collection process. There were several versions of the same questionnaire. Versions differed only slightly for how child's name, sex, and grade were collected, as described in the table 3-2 table notes. One version is provided in the appendixes. Additional versions are available upon request by contacting nhes@ed.gov.

Table 3-2. Data collection mailing materials: NHES:2012

Material name	Language
Questionnaires	
Screener with name	English, Spanish
Screener without name	English, Spanish
ECPP with sex question	English, Spanish
ECPP without sex question	English, Spanish
PFI-Enrolled with sex question and with grade verification	English, Spanish
PFI-Enrolled without sex question and with grade verification	English, Spanish
PFI-Enrolled with sex question and with grade collection	English, Spanish
PFI-Enrolled without sex question and with grade collection	English, Spanish
PFI-Homeschooled with sex question	English, Spanish
PFI-Homeschooled without sex question	English, Spanish
Letters and Envelopes	
Advance letter envelope	English
Advance letter	English, bilingual
Screener envelope	English, bilingual
Initial screener mailing letter	English, bilingual
Screener reminder postcard	Bilingual
Second screener mailing letter	English, bilingual
Third screener mailing letter	English, bilingual
Fourth screener mailing letter	English, bilingual
Topical envelope	English, bilingual
Initial ECPP mailing letter	English, Spanish
Second ECPP mailing letter	English, Spanish
Third ECPP mailing letter	English, Spanish
Initial PFI-Enrolled mailing letter	English, Spanish
Second PFI-Enrolled mailing letter	English, Spanish
Third PFI-Enrolled mailing letter	English, Spanish
Initial PFI-Homeschooled mailing letter	English, Spanish
Second PFI-Homeschooled mailing letter	English, Spanish
Third PFI-Homeschooled mailing letter	English, Spanish
Fourth ECPP, PFI-Enrolled, PFI-Homeschooled mailing letter	English, Spanish
Topical reminder postcard	Bilingual
Return mailing envelope, postage-paid	English

NOTE: One version of the screener asked for child's first name and one did not; one version of the topical asked respondents to indicate the child's sex and one did not. The version that was mailed to a respondent was determined based on the information provided on the screener: if the child's sex was provided, a topical questionnaire without the sex question was sent; if the child's sex was not provided, respondents were asked to provide the child's sex. The PFI-Enrolled questionnaire also had a version to verify or collect the grade of the sampled child based on the information provided on the screener. If the child's grade was provided, the grade verification question was asked; if the child's grade was not provided, respondents were asked to provide the child's grade.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

As part of a methodological experiment, every NHES:2012 screener and topical questionnaire was assigned either a U.S. Department of Education or Bureau of the Census brand. Table 3-3 lists the total number of cases assigned to each brand in the initial screener and topical mailings. The branding procedure is described in section 3.1.2.

Table 3-3. Brand assignment in initial screener and topical mailings: NHES:2012

Material name	Department of Education	Bureau of the Census
Screener	129,976	30,018
ECPP	8,035	1,950
PFI-Homeschooled	415	98
PFI-Enrolled	17,458	4,181

NOTE: Differences in counts of respondents between tables in chapter 3 and other chapters are due to differences in case status coding resulting from survey post-processing.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

3.1.2 Methodology

During data collection, several methodological experiments were fielded to determine if a particular method would increase response rates, to validate methodology from previous field studies on a more representative sample, and to inform future implementations of the NHES.

In one experiment, survey materials were branded differently. Approximately 80 percent of the initial 159,994 sampled cases were assigned to U.S. Department of Education-branded materials. This included using Department of Education letterhead for all letter correspondence (signed by the Commissioner of the National Center for Education Statistics) and the Department of Education logo for all questionnaire headers and envelopes. The other 20 percent of the initial sampled cases were assigned to U.S. Census Bureau-branded materials. The U.S. Census Bureau-branded materials were printed using Census Bureau letterhead (and signed by the Director of the Census Bureau), and questionnaires and envelopes displayed the Census Bureau seal. Specific text within the letters and answers to Commonly Asked Questions made reference to the Census Bureau conducting the survey on behalf of the Department of Education.

In addition to the branding experiments, which were applied at both the screener and topical stages, some treatments were specific to each stage. At the screener stage, an experiment was conducted to test the effect of requesting children's first names, nicknames, or initials on the screener questionnaire. A total of 30,018 addresses from the sample were assigned to a screener questionnaire that did not request the child's name; the other 129,976 addresses were assigned to a screener questionnaire that asked for the name of each child living in the household. Collecting

children's first names, nicknames, or initials at the screener stage allows customization of survey materials at the topical stage, but may create privacy concerns for some respondents.

At the topical stage, one experiment tested the effect of including different incentive amounts with the topical questionnaires. As described later in this chapter, each mailing group was given an incentive during the first mailing with both the screener and topical questionnaires. All screener questionnaires were mailed with a \$5 cash incentive. The topical questionnaire incentive amount was determined by which screener questionnaire mailing (initial, second, third, or fourth) the household returned. Cases were pre-assigned to receive either a \$5 or \$15 cash incentive with the first topical mailing. Any household that returned a screener questionnaire from either the first or the second mailing waves received a \$5 topical questionnaire incentive. Households that returned a screener questionnaire from the third or fourth mailing received either \$5 or \$15 with topical questionnaires, depending on their experiment pre-assignment. Although sixty percent of the sample was pre-assigned to receive the \$15 incentive, the actual number of households that received the \$15 incentive was 3,610. The remainder of the sample received the \$5 incentive.

A second experiment conducted at the topical stage tested the effect of sending a shortened questionnaire in the final mailing. The shortened questionnaire was designed to collect information on key estimates, but reduce the burden on respondents by asking fewer questions. The shortened questionnaire was sent to some households who did not respond to the first through third mailings.⁴

3.2 Details of Data Collection

3.2.1 Screener Data Collection

Data collection began with the mailing of advance notification letters to sampled addresses on January 11–12, 2012. The letter introduced the survey, informed the household that it had been selected to participate, and provided notice of the forthcoming questionnaire. The letter included a toll-free number for the recipient to call with any questions or to report that the address was ineligible (e.g., if the address was a school or business).

In the initial mailing for screener packages, the package was addressed to "Resident Sample Member" in both the mailing address and the salutation. In subsequent mailings, packages were

⁴ A PFI-Homeschooled short form was not mailed during the NHES:2012 data collection period.

addressed to the "CITY RESIDENT," where "CITY" corresponded to the city or town name on file.

The initial screener packages were mailed to all sample addresses on January 17, 2012. Nonresponding households were sent screener packages in three subsequent mailings. Except in the third mailing, when most screener packages were shipped via FedEx, packages were shipped via U.S. Postal Service (USPS) First-Class mail.⁵ All envelopes were preprinted with either the Department of Education or Census Bureau logo on the left-hand side.

There were two versions of the initial screener questionnaire package: an English-only version and a bilingual (English and Spanish) version. The English-only package contained the following:

- an English-language letter to the household that introduced the survey and requested that the questionnaire be filled out by an adult household member living at the sampled address;
- an English-language screener questionnaire;
- a \$5 monetary incentive; and
- a pre-addressed, postage-paid return envelope.

The bilingual package contained the following:

- a letter with English on one side and Spanish on the other that introduced the survey and requested that the questionnaire be filled out by an adult household member living at the sampled address;
- an English-language screener questionnaire and a Spanish-language screener questionnaire;
- a \$5 monetary incentive; and
- a pre-addressed, postage-paid return envelope.

One week after the initial screener mailing, a reminder postcard was sent to each household. Nonresponding households were sent screener questionnaires in three waves mailed 3 weeks after the previous wave to allow time for the receipt of completed screener questionnaires.

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⁵ FedEx does not ship to P.O. boxes, so any packages in the third mailing with a P.O. box address were sent by USPS Priority Mail.

The packages sent to nonresponding households included a cover letter, a replacement questionnaire, and a postage-paid return envelope. For households that were designated to receive a bilingual mailing package, the cover letter was in English on one side and Spanish on the other. These households also received a Spanish-language replacement screener questionnaire). No incentive was included in any of the follow-up mailings.

The schedule for all screener-related mailings is shown in table 3-4.

Table 3-4. Mailing schedule for screener questionnaires: NHES:2012

Item	Mailing date	Number mailed
Advance letter – All Spanish-language letters and a partial mailing of U.S. Department of Education-branded English-language letters	January 11, 2012	60,411
Advance letter – All remaining English-language letters	January 12, 2012	99,583
Initial screener questionnaire mailing – All packages	January 17, 2012	159,994
Reminder postcard mailing – All postcards	January 24, 2012	159,994
Second screener questionnaire mailing – All packages mailed on a flow basis	February 8–9, 2012	105,213
Third screener questionnaire mailing, via FedEx and USPS – All packages	February 29, 2012	76,852
Fourth screener questionnaire mailing – All packages mailed on a flow basis	March 21–22, 2012	50,786

NOTE: Differences in counts of respondents between tables in chapter 3 and other chapters are due to differences in case status coding resulting from survey post-processing.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

Table 3-5 presents the number of screener questionnaires mailed back from respondents during each week of data collection. Data from these screeners were keyed and transmitted weekly to Census Bureau analysts on Wednesdays. By February 8, 2012, a total of 63,989 screener questionnaires had been processed and used to identify the cases for the topical mailings. By May 23, 2012 (the cut-off date for the receipt of screeners used to sample cases for the topical mailings), 99,346 screener questionnaires had been received.

 $^{^{6}}$ Refer to section 3.2.3 of this chapter for more information about the bilingual mailings.

Number of completed screeners received throughout data collection, by **Table 3-5.** week: NHES:2012

			Со	mpleted screeners	1	
Week	Week ending	Total number completed weekly	Cumulative total	Households with children	Households without children	Percent of households with children
	Total	99,597		34,788	64,809	34.93
1	February 1, 2012	51,206	51,206	15,806	35,400	30.87
2	February 8, 2012	12,783	63,989	5,238	7,545	40.98
3	February 15, 2012	4,308	68,297	1,706	2,602	39.60
4	February 22, 2012	6,616	74,913	2,379	4,237	35.96
5	February 29, 2012	3,322	78,235	1,325	1,997	39.89
6	March 7, 2012	6,168	84,403	2,176	3,992	35.28
7	March 14, 2012	8,491	92,894	3,298	5,193	38.84
8	March 21, 2012	1,838	94,732	773	1,065	42.06
9	March 28, 2012	969	95,701	440	529	45.41
10	April 4, 2012	1908	97,609	780	1,128	40.88
11	April 11, 2012	750	98,359	337	413	44.93
12	April 18, 2012	407	98,766	171	236	42.01
13	April 25, 2012	210	98,976	87	123	41.43
14	May 2, 2012	111	99,087	45	66	40.54
15	May 9, 2012	177	99,264	69	108	38.98
16	May 16, 2012	82	99,346	40	42	48.78
17	May 23, 2012	60	99,406	27	33	45.00
18	May 30, 2012	38	99,444	17	21	44.74
19	June 6, 2012	35	99,479	15	20	42.86
20	June 13, 2012	28	99,507	17	11	60.71
21	June 20, 2012	29	99,536	14	15	48.28
22	June 27, 2012	16	99,552	6	10	37.50
23	July 4, 2012	12	99,564	7	5	58.33
24	July 11, 2012	15	99,579	6	9	40.00
25	July 18, 2012	11	99,590	5	6	45.45
	After close of data collection	7	99,597	4	3	57.14

¹ This number does not include cases closed out as undeliverable as addressed (UAA) because these cases were determined to be ineligible for the study.

NOTE: Differences in counts of respondents between tables in chapter 3 and other chapters are due to differences in case status coding resulting

from survey post-processing.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

Table 3-6 presents the number of completed screener questionnaires returned by mailing wave.

Table 3-6. Number of completed screeners received, by mailing wave: NHES:2012

			Completed screeners ¹			
Mailing wave	Mail date	Total number completed	Households without children	Percent of households with children	Percent of households without children	Households with children
	Total	99,597	64,809	34.93	65.07	34,788
1	Jan. 17, 2012	71,992	47,551	33.95	66.05	24,441
2	Feb. 8, 2012	10,242	6,524	36.30	63.70	3,718
3	Feb. 29, 2012	15,086	9,439	37.43	62.57	5,647
4	Mar. 21, 2012	2,277	1,295	43.12	56.87	982

¹ This number does not include cases closed out as undeliverable as addressed (UAA) because these cases were determined to be ineligible for the study. Reported counts are based on the mailing wave indicator on the form that was returned, not the date on which the form was received. NOTE: Differences in counts of respondents between tables in chapter 3 and other chapters are due to differences in case status coding resulting from survey post-processing.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

3.2.2 Topical Data Collection

The NHES:2012 topical data collection was conducted from February through August of 2012. Households with children were assigned to a topical mailing group upon receipt of a sufficiently complete screener questionnaire. Sufficiently complete screener questionnaires were those that included answers for the child's age or school enrollment status. Once the screener data were processed, within-household sampling occurred. One child was selected from each eligible household that returned a completed screener. Refer to chapter 2 for full details on the sampling methodology.

Households were assigned to a mailing group based on the date when the completed screener questionnaire for that household was received. There were eight topical mailing groups in total. Each topical mailing group followed its own mailing track for initial and nonresponse follow-up mail packages. The initial topical packages were mailed in groups as households were assigned, up to June 1, 2012. Topical group assignments took place 2 weeks prior to mailing out the initial topical package; any screeners received between group assignment and the group mailing, were assigned to the next group.

The initial screener packages were received in early February, with the first topical group assignment beginning on February 8, 2012. Topical mail packages were sent between 2 and 3 weeks after a screener package was received. Packages were shipped via USPS First-Class mail.

All envelopes were preprinted either with the Department of Education or Census Bureau logo on the left-hand side.

The initial topical package contained the following:

- a letter to the household introducing the topical questionnaire and requesting that an adult member of the household complete the questionnaire;
- a monetary incentive either \$5 or \$15 as part of an incentive experiment;
- a pre-addressed, postage-paid return envelope; and
- the appropriate topical questionnaire:
 - Households with children age 6 or under who were not yet enrolled in kindergarten received the ECPP questionnaire.
 - Households with children age 20 or younger who were enrolled in a public or private school for kindergarten through 12th grade or the equivalent received the PFI-Enrolled questionnaire.
 - Households with children age 20 or younger who were homeschooled for kindergarten through 12th grade or the equivalent received the PFI-Homeschooled questionnaire.

The language of the topical mailing package (English or Spanish) was determined by the language of the screener form returned by the household. If a Spanish screener form was returned, the topical mailing package materials were sent in Spanish. If an English screener form was returned, the topical mailing package materials were sent in English. The topical package was addressed to "The parent of SAMPLED CHILD" when the child's first name, nickname, or initials were provided in the screener. When the name was not provided, no reference to the child appeared in the address, and the sampled child was referenced in the questionnaire by his or her age or grade and sex, if available.

A postcard was mailed to all topical households approximately 1 week after the initial mailing to remind the parent to complete and return the questionnaire. The first follow-up package (containing a follow-up letter, questionnaire, and postage-paid return envelope) was mailed approximately 2 weeks after the reminder postcard. Each subsequent mailing was sent approximately 3 weeks later. The second follow-up package for nonresponding households was mailed using FedEx services, where possible, ⁷ for groups 1 through 7. A total of four mailings

⁷ Packages with a P.O. box address were mailed using USPS Priority Mail because FedEx does not deliver to P.O. boxes.

were completed for groups 1 through 5. Due to time constraints in the mail-out process, groups 6 and 7 did not receive a fourth mailing. Also, due to time constraints, group 8 only received two mailings, the second of which was sent via FedEx when possible. The cut-off date for receipt of completed topical questionnaires to be included in the data file was July 18, 2012. Past NHES studies have shown that the return of questionnaires that are "undeliverable as addressed" (UAA) can significantly lag that of completed questionnaires. As a result, final UAA collection for both the screener and topical questionnaires was August 2, 2012, which is considered the end date of the data collection.

Table 3-7 summarizes the specific data collection activities for the topical questionnaires and the date when each occurred. The table shows that the first mailing of topical questionnaires occurred on February 21, 2012, and that a total of 17,891 cases in group 1 were mailed an initial topical questionnaire. The total of all initial mailings of topical questionnaires was 32,092 through all eight groups.

Table 3-7. Data collection time schedule for topical questionnaires, by mailing group: NHES:2012

Mailing		Initial	mailing	Follow-up mai	lings to nonrespond	ing households
group		Questionnaires	Reminder postcards	First follow-up	Second follow-up	Third follow-up
Group 1	Date Number	February 21, 2012 17,891	February 27, 2021 17,891		April 4, 2012 4,461	April 25, 2012 2,843
Group 2	Date Number	March 5, 2012 3,842	March 12, 2012 3,842	March 28, 2012 2,477	April 18, 2012 1,541	May 9, 2012 979
Group 3	Date Number	March 19, 2012 3,000	March 26, 2012 3,000	April 11, 2012 1,962	May 2, 2012 1,408	May 23, 2012 960
Group 4	Date Number	April 2, 2012 5,464	April 9, 2012 5,464		May 16, 2012 2,748	June 6, 2012 1,952
Group 5	Date Number	April 16, 2012 433	April 23, 2012 433	May 9, 2012 315	May 30, 2012 250	June 20, 2012 186
Group 6	Date Number	April 30, 2012 1,138	May 7, 2012 1,138		June 13, 2012 688	
Group 7	Date Number	May 14, 2012 229	May 21, 2012 229	June 6, 2012 186	June 27, 2012 145	
Group 8	Date Number	June 1, 2012 95		June 15, 2012 51		

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

Table 3-8 presents the number of completed topical questionnaires received during each week of data collection. However, the table does not indicate the total number of topical questionnaires marked as complete for the final data products. During data review, some of the questionnaires marked as complete during data collection were reclassified as noninterviews because they did not meet completeness requirements for processing. This resulted in approximately 50 cases initially considered complete surveys being reclassified as nonrespondents. (See chapter 4, Data Processing, for additional information.)

Table 3-8. Number of completed topical questionnaires received throughout data collection, by week: NHES:2012

		Number of completed questionnaires ¹					
Week	Week ending	Total received by week	Total cumulative received	ECPP received by week ²	ECPP cumulative received	PFI received by week	PFI cumulative received
1	February 29, 2012	576	576	0	0	576	576
2	March 7, 2012	6,593	7,169	1,825	1,825	4,768	5,344
3	March 14, 2012	4,225	11,394	1,572	3,397	2,653	7,997
4	March 21, 2012	1,594	12,988	572	3,969	1,022	9,019
5	March 28, 2012	2,035	15,023	643	4,612	1,392	10,411
6	April 4, 2012	1,390	16,413	436	5,048	954	11,365
7	April 11, 2012	1,884	18,297	602	5,650	1,282	12,647
8	April 18, 2012	1,751	20,048	551	6,201	1,200	13,847
9	April 25, 2012	957	21,005	292	6,493	665	14,512
10	May 2, 2012	639	21,644	206	6,699	433	14,945
11	May 9, 2012	1,243	22,887	392	7,091	851	15,796
12	May 16, 2012	534	23,421	170	7,261	364	16,160
13	May 23, 2012	593	24,014	178	7,439	415	16,575
14	May 30, 2012	427	24,441	130	7,569	297	16,872
15	June 6, 2012	299	24,740	93	7,662	206	17,078
16	June 13, 2012	247	24,987	66	7,728	181	17,259
17	June 20, 2012	236	25,223	90	7,818	146	17,405
18	June 27, 2012	142	25,365	34	7,852	108	17,513
19	July 4, 2012	71	25,436	18	7,870	53	17,566
20	July 11, 2012	82	25,518	33	7,903	49	17,615
21	July 18, 2012	41	25,559	8	7,911	33	17,648
	After close of data collection	11	25,570	4	7,915	7	17,655

¹ This number does not include cases closed out as "undeliverable as addressed."

Table 3-9 shows the number of questionnaires returned during data collection as UAA at least once for screener and topical mailings during data collection. This table also provides the number of cases that were UAA for one mailing, but returned a form in a subsequent mailing.

² Data capture programming was not completed for the ECPP questionnaires until March 1, 2012; therefore, no ECPP questionnaires were checked in or scanned until after week 1.

NOTE: Differences in counts of respondents between tables in chapter 3 and other chapters are due to differences in case status coding resulting from survey post-processing.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

Table 3-9. Number of UAA returns: NHES:2012

Form type	Returned as UAA ¹	Converted to non-UAA status ²	Converted to interview
Screener	18,560	1,629	1,517
Topical	788	189	157

¹ At least one of the mailings resulted in the form being returned as a UAA.

If a screener was returned as UAA in the first mailing, the Census Bureau mailed two more packages to determine if delivery was possible. As described in chapter 5, Response Rates, UAAs at the topical level were considered eligible cases since the sampled child remained eligible even though the family was no longer at the same address. These cases were considered nonrespondents in the topical response rate calculations.

3.2.3 Bilingual Mailings

NHES:2012 used several variables in the sample file to determine which addresses would receive a bilingual screener package. As described in chapter 2, Sample Design, the NHES used a stratified sample design and oversampled areas with high Black and Hispanic populations. The high Hispanic stratum was made up of Census tracts with a Hispanic population of 40 percent or higher. The NHES used an augmented mailing frame that contained information about the household, including the surname of the head of household for some cases. The frame vendor matched the surname to a Census Bureau file of surnames that are commonly shared by people of Hispanic origin. If the surname was in the Census file, an indicator of Hispanic surname was placed in the frame file.

A variable was then created to identify sampled households in Census tracts that are linguistically isolated (LI) and Spanish-speaking. These tracts are made up of addresses in Census blocks where a selected percentage of the households had no one over the age of 14 who spoke only English or who spoke English "well or very well" and Spanish was the primary language spoken. Bilingual materials were initially sent to areas with higher concentrations of Spanish-speaking households that were most likely to need Spanish survey materials. The percentage cutoff was lowered during the course of the mailings. The percentage of linguistically isolated Spanish-speaking households used as part of the bilingual mailing material criteria decreased over the course of the four mailings, from 10 percent in the initial mailing to 3 percent in the second mailing to 2 percent in the third and fourth mailings. Additionally, another variable

² Includes interview, non-interview, and out of scope status.

NOTE: Differences in counts of respondents between tables in chapter 3 and other chapters are due to differences in case status coding resulting from survey post-processing.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

was used in determining the criteria for the households to receive bilingual screener packages in the third and fourth mailings. The variable was the percentage of people ages 5 or older who speak Spanish in a Census tract. This variable was used to target those households that did not meet the other bilingual criteria, yet had potential Spanish-speaking respondents. Addresses that were in Census tracts in which 2 percent or more of the population ages 5 or older spoke Spanish were also sent bilingual materials in the third and fourth mailings.

The following criteria were used to determine which addresses received a bilingual screener package:

- *First mailing criteria:* An address was in the Hispanic stratum, or there was a Hispanic surname associated with the address, or the address was in a Census tract where 10 percent or more of households met the criteria of being linguistically isolated Spanish-speaking.
- *Second mailing criteria:* An address was in the Hispanic stratum, or there was a Hispanic surname associated with the address, or the address was in a Census tract where 3 percent or more of households met the criteria of being linguistically isolated Spanish-speaking.
- Third and fourth mailing criteria: An address was in the Hispanic stratum, or there was a Hispanic surname associated with the address, or the address was in a Census tract where 2 percent or more of households met the criteria of being linguistically isolated Spanish-speaking, or the address was in a Census tract where 2 percent or more of the population spoke Spanish.

During the course of data collection, 14 respondents called to request a screener mailing in Spanish and 26 respondents called to request a Spanish-language topical questionnaire. Of the Spanish screener requests, all had previously been assigned to receive a Spanish package in the third and fourth mailings; therefore, no reassignment was necessary. Table 3-10 displays the total number of Spanish screener packages mailed during each wave and the returns for each mailing.

Spanish screener assignments and returns, by mailing wave: NHES:2012 **Table 3-10.**

Mailing wave	Spanish screeners mailed	Spanish screeners mailed as a percent of total English and Spanish mailed	Spanish Screeners completed	Spanish screeners completed as a percent of Spanish screeners mailed	Total number of completed English and Spanish Screeners	Spanish screeners completed as a percent of screeners completed in English and Spanish
Spanish screener initial mailing	35,414	22.13	13,269	37.47	71,992	18.43
Spanish screener second mailing	37,884	36.01	3,219	8.50	10,242	31.43
Spanish screener third mailing	60,713	79.00	11,397	18.77	15,086	75.55
Spanish screener fourth mailing	40,833	80.40	1,830	4.48	2,277	80.37

NOTE: Differences in counts of respondents between tables in chapter 3 and other chapters are due to differences in case status coding resulting from survey post-processing.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household

Education Surveys Program (NHES) of 2012.

If a completed Spanish screener was returned and the household was eligible for a topical questionnaire, a Spanish topical form was sent.

Table 3-11 displays the total number of Spanish topical packages mailed during each wave and the returns for each mailing.

Table 3-11. Spanish topical questionnaire assignments and returns, by week NHES:2012

Week	Week ending	Spanish topical questionnaires mailed	Spanish topical questionnaires mailed (as a percent of total English and Spanish mailed)	Spanish topical questionnaires returned	Spanish topical questionnaires returned (as a percent of total English and Spanish completed)
1	Feb. 29, 2012	0	0.00	0	0.00
2	March 7, 2012	1,371	35.68	0	0.00
3	March 14, 2012	0	0.00	0	0.00
4	March 21, 2012	288	9.60	178	11.17
5	March 28, 2012	0	0.00	388	19.07
6	April 4, 2012	552	5.46	197	14.17
7	April 11, 2012	199	10.14	211	11.20
8	April 18, 2012	569	28.82	171	9.77
9	April 25, 2012	394	6.08	131	13.69
10	May 2, 2012	1,257	49.37	126	19.72
11	May 9, 2012	27	2.09	130	10.46
12	May 16, 2012	321	10.78	55	10.30
13	May 23, 2012	188	10.56	89	15.01
14	May 30, 2012	21	8.40	61	14.29
15	June 6, 2012	241	10.79	39	13.04
16	June 13, 2012	81	11.77	14	7.61
17	June 20, 2012	0	0.00	27	11.44
18	June 27, 2012	15	10.34	17	11.97
19	July 4, 2012	0	No mailing	10	14.08
20	July 11, 2012	0	No mailing	12	14.63
21	July 18, 2012	0	No mailing	2	4.88
	After close of data collection			2	18.18

NOTE: Most Spanish-language questionnaires were sent in groups 2 through 8 because they were not finalized in time to mail in group 1, wave 1 or group 1, wave 2. Any Spanish-language questionnaires mailed and returned in group 1 were cases reassigned from English to Spanish in subsequent mailings. Cases were reassigned from English to Spanish based on telephone calls received from respondents requesting a Spanish form. Differences in counts of respondents between tables in chapter 3 and other chapters are due to differences in case status coding resulting from survey post-processing.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

3.3 Data Collection Support Activities

3.3.1 Telephone Operation

The purpose of the Telephone Questionnaire Assistance (TQA) operation was twofold. First, interviewers were trained to assist respondents who called with questions about the screener or topical questionnaires; address respondent concerns about confidentiality, purpose, sponsorship, and other similar issues; and convey the importance of survey participation to respondents who were reluctant to participate. Second, interviewers collected screener data over the phone when a respondent called about the screener survey.

Twenty telephone interviewers and four supervisors were selected for the NHES:2012 by the Telephone Center Coordination Office (TCCO) at the Census Bureau in October 2011. All of the interviewers had experience with at least two other surveys operating out of the Census Bureau's Jeffersonville, Indiana, Telephone Center (JTC), and four were bilingual. NCES and Census Bureau staff conducted two training sessions at the beginning of January 2012 to prepare interviewers for calls. The training sessions were conducted at the JTC and lasted approximately 3 hours.

The interviewers filled out a paper log that documented the type of calls received from respondents. NHES supervisors at the JTC keyed the call log entries into two different Excel spreadsheets. One spreadsheet documented any call that was resolved during the actual phone call. The calls in this log were considered complete, with no further action required. The other spreadsheet documented unresolved calls, which were referred to a Census Bureau analyst for further action. Table 3-12 provides a full list of the reasons why respondents called the Census Bureau.

Table 3-12. Telephone call-in reasons on the Telephone Questionnaire Assistance (TQA) telephone line: NHES:2012

Call-in reason	Number of calls
Total number of calls	2,712
Completing a screener interview ¹	1,461
General question	281
Complaint about receiving duplicate forms	243
Hard refusal ²	164
Correcting demographic information about child on topical form ³	103
Verifying that the Census Bureau received completed form	81
Vacant household or household moved	72
Question or concern about incentive and/or legitimacy of survey	58
Issue with packet (no incentive in the packet, replacement requests, etc.)	55
Request questionnaire in English/Spanish	44
Business or college residence	40
Incorrect address	37
Question on how to fill out form	37
Other reason that required NCES input	10
Telephone operation complaint	10
Received telephone call from the telephone tree operation, but never received mailing packet ⁴	6
Other language issue	6
Sampled child deceased	4

¹ Several of the respondents who called also mailed in a completed screener questionnaire. More details on this are provided in section 3.3.3.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

3.3.2 Telephone Tree Operation

A prerecorded telephone message was delivered to households on the mailing date of the FedEx package for both the screener and topical mailings.⁸ Phone numbers were obtained for these households by address-to-telephone matching, which resulted in a phone number match for 40.5

² This number represents the total number of refusals received by telephone. Often, respondents called to refuse without providing an identifier, and analysts were unable to code these refusals in the system. For example, frequently callers would state that they had received the survey but refused to do it, and then hang up. Other reasons for refusing to participate included that the caller believed the NHES:2012 asked too many personal questions, the caller did not have time to participate, and general complaints about intrusive government operations.

³ Correcting the demographic information about a child on a topical form did not always result in a reassignment of forms. For example, a respondent might call to inform JTC that the form listed a male 13-year-old, but that the child living in the house was actually a female 13-year-old, which would not result in a reassignment of the topical form. Sometimes, however, a respondent would call to report an incorrect age on the form, typically when a grade was not reported. Since Census generally assigned 5-year-olds to the PFI-Enrolled if a grade was not indicated, this type of call often occurred when that 5-year-old was actually in preschool and should have been assigned an ECPP questionnaire. However, the calls about 5-year olds assigned an incorrect form were received too late in data collection for the case to be reassigned to the ECPP.

⁴ See Section 3.3.2. Telephone Tree Operation below for a detailed description of this operation.

⁸ FedEx was used for the third screener mailing and the third topical mailings for mailing groups 1-7 when possible. FedEx was used for the second (and final) mailing for group 8 when possible because the end of the data collection period prevented additional mailings for this group. Packages with a P.O. box address were mailed using USPS Priority Mail for these mailings because FedEx does not deliver to P.O. boxes.

percent of addresses. The phone recording notified respondents that they would be receiving a FedEx package and reminded them of the importance of their prompt response. The prerecorded phone operation ended when topical group 4 was mailed out on May 16, 2012. Table 3-13 shows the dates of and number of households contacted in the telephone tree operation.

Table 3-13. Telephone tree operation by mailing group: NHES:2012

Mailing group	Date of operation	Number of households contacted
Screener	February 29–30, 2012	24,992
Topical group 1	April 4, 2012	1,726
Topical group 2	April 18, 2012	552
Topical group 3	May 2, 2012	547
Topical group 4	May 16, 2012	1,090

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

3.3.3 Telephone Data Editing: Responses to the Screener Questionnaires

In total, the TQA interviewers recorded 1,461 calls in which a respondent wanted to complete the screener questionnaire over the phone. Of these cases, 224 also returned a screener questionnaire. When a duplicate case was received, Census Bureau analysts compared the data from the telephone interview with the returned questionnaire and kept the case that had the most items completed. When the item counts were equal, the analysts kept the data that had been received first.

About 76 percent of all questionnaires collected over the phone were from households with no children. A full screener interview of a household with children was completed in 24 percent of the calls. ¹⁰ Eligible and completed cases for which data were collected over the phone were included in the data processing and household sampling for the topical survey. Table 3-14 shows a breakdown of the telephone screener completions.

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⁹ The script for the screener automated reminder call said, "I'm calling from the U.S. Census Bureau about an important study we are conducting for the Department of Education. Recently we sent a short survey to your address but we have not received a response. Due to the importance of this response, we have Fedex'd another survey. Please complete it and return it to us as soon as possible. If you have any questions, please call us at 1-888-840-8353. That number again is 1-888-840-8353. Thank you." Similarly, the topical reminder phone call recording said, "I'm calling from the U.S. Census Bureau about a study we are conducting for the Department of Education. Based on your household response to an earlier survey, you have been selected to participate in a study about your child. Recently, we sent a questionnaire to your address, but we have not received your response. Due to the importance of this response, we have Fedex'd another survey. Please complete it and return it to us. If you have any questions, please call us at 1-888-840-8353. That number again is 1-888-840-8353. Thank you"

¹⁰ An interview was considered complete if at least an age or grade was provided for the children in the household. Typically, telephone interviews collected all or most of the screener data, including the name, age, sex, grade, and school enrollment status of the children in the household.

Table 3-14. Telephone cases, by final outcome codes: NHES:2012

Final outcome code	Number of calls	Percentage of calls
Completed screener by phone; household with children	256	17.5
Completed screener by mail; household with children	96	6.6
Completed screener by phone; household without children	981	67.1
Completed screener by mail; household without children	128	8.8

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

3.3.4 Responses to the Topical Questionnaires

Several times, respondents called in to report problems with the demographic information on the topical questionnaire they received. Some respondents also called in to report receiving the wrong topical questionnaire or to report that their child was no longer in school. Census Bureau analysts handled these on a case-by-case basis. In general, if a household called to report a problem, an analyst would cross-check the data given over the phone with the data on the screener to determine what changes needed to be made.

Census Bureau analysts updated demographic information in a total of 55 cases. Thirty-seven of those cases resulted in a different topical questionnaire assignment, either to another questionnaire all together or to another version of the same questionnaire (for example, to the Spanish version instead of the English version). After these cases were reassigned to the appropriate topical questionnaire, they were mailed in the next wave for the group the case was assigned to. For the other 18 cases, changes were made to the demographic information of the sampled child that did not affect the topical questionnaire assignment (for example, the name or the gender of the child was changed).

In 94 cases, the respondent reported that a child either no longer lived in the household or had never lived in the household. These cases were reassigned a screener outcome code to indicate a completed screener with no children. Sixty-two cases were coded as topical refusals through telephone and e-mail operations. Other outcome codes that were assigned included "out of scope," "moved household," and "vacant household."

3.3.5 E-mail Operation

The NHES screener and topical questionnaires contained an e-mail address, which respondents could use to contact the Census Bureau with questions or comments. In total, 33 e-mails were received, including 8 that were received after the Census Bureau responded to an initial e-mail. Table 3-15 provides a full listing of these e-mails.

Table 3-15. E-mails received from respondents, by reason: NHES:2012

Reason	Number of e-mails
Response to a previous e-mail	8
Re-mail request	7
General inquiry	6
Hard refusal	5
General comment or question about incentive	4
Media inquiry	1
Question about eligibility for the survey	1
Question about another survey ¹	1

¹ This inquiry involved another NCES survey; the respondent could not find contact information for the survey and requested assistance in confirming its validity.

3.3.6 Standard Reports

Census Bureau analysts monitored the status of the data collection by creating and reviewing weekly reports. Statistics provided in the reports included the number of cases sent by topical questionnaire type and distributions by questionnaire response rates, refusal rates, and UAA rates.

3.4 Data Check-in

Respondents were encouraged to complete and mail back all forms sent to them in the preaddressed, postage-paid return envelope addressed to the Census Bureau's main processing facility
in Jeffersonville, Indiana. Upon receipt of the questionnaires, clerical staff immediately assigned a
check-in code that indicated the form's completion status and checked it into the Automatic
Tracking and Control (ATAC) system. At this stage, both screener and topical questionnaires
received an outcome code of complete if any item on the questionnaire was answered. During data
review, some of the questionnaires marked as complete during this stage were reclassified as
noninterviews because they did not meet completeness requirements for processing. (See Chapter
4, Data Processing, for more information.) Additional outcome codes included refusals, blanks,
duplicates, UAA, and various out-of-scope codes. (See table 3-16 for a complete list of outcome

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

codes.) The questionnaires were then grouped into batches by type of form and interview status (i.e., interviews, noninterviews, and out of scope for the survey) for data capture.

Table 3-16. Final screener and topical outcome codes: NHES:2012

Outcome code description	Outcome code number
Complete (screener with eligible children or completed topical questionnaire)	01
Blank	03
Soft refusal	05
Hard refusal	06
Out of scope	10
Complete (screener without eligible children)	11
UAA with address correction	20
Not deliverable as addressed (default UAA reason if no reason given)	21
Insufficient address	22
Moved, left no address	23
Unclaimed	24
Attempted – not known	25
No such street	26
No such street number	27
Vacant	28
Illegible address	29
No mail receptacle	30
P.O. box closed – no forwarding order	31
Returned for better address	32
Deceased	33
Forwarding order has expired	34
Moved out of U.S. – no forwarding address	35
UAA not assigned	97
Mailed, not yet returned	99

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Surveys Program (NHES) of 2012.

When the screener questionnaires were being checked in, if Question 1 "Are there any youth or children age 20 or <u>younger</u> living in this household?" was marked "No," the questionnaires were not sent to data capture, as long as clerical staff confirmed that no other data were marked on the screener. All other questionnaires were sent to data capture. This procedure lowered the data capture workload considerably. Screener questionnaires that were completed over the telephone were not sent to the check-in staff; the data were processed directly by Census Bureau headquarters analysts without going through the clerical review procedures. More information regarding data capture and imaging can be found in chapter 4, Data Processing.

Chapter 4. Data Processing

Data from the NHES:2012 went through a series of processing procedures after respondents filled out and returned questionnaires and before the resulting data were made available to the public. To ensure that the data are complete and accurate, a series of data processing procedures was conducted on all topical questionnaires after receipt of the keyed questionnaire data. These procedures are data capture and imaging; the reformatting of keyed data; a preliminary interview status classification; a series of computer edits (to check that the data are in range, are consistent throughout a questionnaire record, and follow the correct skip pattern); school coding (where applicable); a final interview status classification; and a set of imputation procedures used to generate values for all appropriate questionnaire items with missing information. After imputation was completed, the editing procedures were repeated to ensure that no errors were introduced during imputation.

4.1 Data Capture and Imaging

The NHES:2012 data were captured (converted from paper to electronic format) using a combination of imaging technology and manual data keying, both of which were facilitated by the Census Bureau's Integrated Computer Assisted Data Entry (iCADE) system. After the questionnaires were received at the Census Bureau's National Processing Center (NPC), the questionnaires were checked in by Census Bureau clerical processing staff using the bar code identifying the case. Questionnaires were entered into the iCADE system for tracking purposes and grouped into batches by questionnaire type for imaging and data capture. Before the imaging process, each questionnaire was disassembled using a machine that cuts off the stapled edge, and both sides of each page were scanned simultaneously using duplex scanning equipment. During the imaging process, the questionnaire forms were scanned and images of each form page were saved. These images were used by analysts to view the questionnaires online during their review of the data. At the conclusion of the imaging process, the iCADE system matched the number of imaged pages with the number of pages expected for each questionnaire type. If the actual and expected number of imaged pages matched for all forms in the batch, the batch was accepted and could proceed to the next stages in processing. If the actual and expected number of imaged pages did not match for all cases in a batch, the batch was sent to a manual registration process (described later in this section).

The batches that were accepted proceeded to the next stages of data capture: auto registration including optical mark recognition (OMR), and manual registration. Prior to the data capture

process, a data capture template was created which was used to tell the iCADE system where on the form to look for answer marks and how to code these marks. OMR was used to capture responses to items where the respondent answered by writing an "x" in the box next to a categorical response option. During auto registration, all of the scanned images were matched to the data capture template by using the page identifier barcode. The page identifier barcode told the iCADE system that controls the scanning process what page of the questionnaire was being scanned. Once a page was identified, the iCADE system could recognize the presence of and read answer marks in the answer boxes next to precoded, categorical items. Software in the iCADE system then converted the data from the paper form into electronic format for that questionnaire.

During auto-registration, a number of things could potentially go wrong. For example, if the iCADE system was unable to read a bar code, then it could not identify the questionnaire ID. If the system was unable to recognize a page corner point, it sometimes could not register the page correctly. Occasionally, there were also checkbox ambiguities due to marks outside of a checkbox, scratch-outs, or random marks on a page. If any of these problems occurred, the problem page(s) automatically went through the manual registration. Manual registration involved presenting scanned pages to clerical staff, allowing clerical staff to resolve the issue. If there were no problems during auto-registration and OMR, manual registration was skipped altogether.

After the OMR data were captured for the NHES:2012, all write-in fields (e.g., open-ended, numeric, and character fields) were captured by a process called "keyed from image" (KFI). Prior to data capture, keying programs were developed for each NHES topical questionnaire. These keying programs provided the location of answer marks for items that OMR could not be used for. In the KFI process, clerks were presented with fields to key when the iCADE system detected the "presence" of data in an answer field. The clerk either keyed the data present in the field or indicated that the field was blank.

Responses from the KFI process were then verified. The KFI data file was sent to a verification clerk to verify the validity of the KFI output. The verification clerk independently entered responses from the survey image and was not provided with the data entered by the original keyer. The KFI clerk's entry and the verification clerk's entry were compared; fields with differences were flagged. Differences were classified into a number of categories, based on the keying issue. When differences were found between the KFI entry and the verification entry, they were forwarded to an adjudicator, who resolved the discrepancy. The adjudicator could (1) agree with the keyer, (2) agree with the verifier, or (3) provide his or her own interpretation of

the respondent's answer. The adjudicator then classified the discrepancy into one of a number of categories based on the keying issue and adjusted the data as necessary. The system also computed coding discrepancy rates for the nonblank fields. The batch was then marked as finished and was ready to be transmitted to Census Bureau experts for further processing.

4.2 Reformatting

The NHES questionnaire data were captured in ASCII files at the Census Bureau's National Processing Center (NPC). Afterward, the files were sent to Census headquarters, where they were reformatted into SAS datasets in order to facilitate the remaining data processing tasks. Once the keyed files were reformatted, they were processed through editing and imputation programs. The edit processes are discussed in section 4.4 of this chapter, while imputation is discussed in Chapter 6. There were 10 separate keyed files (one for each form type described in Chapter 3). For processing, they were combined into three different files: (1) Early Childhood Program Participation (ECPP); (2) Parent and Family Involvement in Education for children enrolled in public or private school (PFI-Enrolled); and (3) Parent and Family Involvement in Education for homeschooled children (PFI-Homeschooled). After the final interview classification, the two PFI files were combined into a single PFI file.¹¹

4.3 Preliminary ISR Classification

The preliminary Interview Status Recode (ISR) was an initial determination of whether each topical case was an interview, a noninterview, or out-of-scope for the NHES. Cases with any data were classified as interviews (ISR = 1); cases with no data were classified as noninterviews (ISR = 2). In other surveys, cases that are determined to be ineligible during data collection are often classified as out-of-scope (ISR = 3). However, since the screener operation of the NHES:2012 precluded the possibility of out-of-scope topical questionnaires, there are no such cases in the topical data files. The subsequent data editing procedures were only run on cases that were classified as interviews (ISR=1) at this stage. After these data editing procedures were complete, each case was given a final ISR classification. This is discussed in section 4.5.

¹¹ The PFI enrolled and PFI homeschooled questionnaires were separate forms and were processed separately because they had separate interview criteria and a considerable number of unique variables.

¹² Cases that were discovered to be out of scope during the screener operation were not included in the topical sample.

4.4 Computer Edits

After the preliminary ISR classification, all data files were submitted to a series of computer edits: range checks, consistency edits, and blanking edits. In addition, a school coding operation was performed for certain PFI cases.

4.4.1 Range Checks

The first of the computer edits were the range checks. Range checks were used to delete entries that were outside the range of acceptable values determined prior to the administration of NHES. Most entries that were classified as out of range were imputed, along with other missing variables, after the edit stages of processing. The exceptions to this were for the variables P1MTHSWRK and P2MTHSWRK, in which months greater than 12 were top-coded to 12.

4.4.2 Consistency Edits

The consistency edits identified inconsistent entries within each case and, whenever possible, corrected them. If the inconsistencies could not be corrected, the entries were deleted. These inconsistencies could occur within an item or between items on the same form. For example, a within-item inconsistency would occur if the write-in field within the "Other relationship" part of ECPP questionnaire item 130—the relationship between the respondent and the sampled child—contained text, but no checkbox within the item was marked. In this case, the "Other relationship" variable would be changed to "Yes." An example of an inconsistency between items on the same form would be if ECPP item 30b indicated that Temporary Assistance for Needy Families (TANF) helped pay for child care, but item 132a did not indicate that the family received benefits from TANF in the last 12 months. In this case, a "No" answer in item 132a would be changed to "Yes."

In addition, the consistency edits filled in some items where data were missing or incomplete by using other information from the same data record. For example, if ECPP item 66—whether the child is 2 years old or under—did not have an entry, but item 85 indicated the child was 1 year old, item 66 was marked as "Yes" during the consistency edit. Every variable that was changed by a consistency edit was flagged. These flags are discussed in more detail in section 4.7 below.

4.4.3 Blanking Edits

The blanking edits deleted extraneous entries and replaced them with the "not applicable" code (e.g., in situations where skip patterns were not followed correctly) and assigned the "not answered" code to items that should have been answered, but were not.

Table 4-1 below summarizes the number of changes made to the entries for the variables in the data files for the ECPP and PFI questionnaires.

Table 4-1. Number of changes made to entries for the variables in NHES:2012 computer edits, by percentage of records with changes and questionnaire type

	Total number Total number		Number of variables changed, by percent of recorwith changes		of records	
Questionnaire type	of interviews (ISR = 1)	of variables in questionnaire	None	1–15 percent	16–30 percent	More than 30 percent
ECPP	7,893	238	133	104	1	0
PFI	17,563	309	192	112	2	3

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Survey (NHES) of 2012.

4.4.4 Coding Schools

For every PFI case representing an enrolled student, a coding operation was performed to assign an NCES School ID. Assigning NCES School IDs allowed school-related data from the Common Core of Data (CCD) and the Private School Universe Survey (PSS) to be included in the PFI data files (in addition to the data provided by respondents in the School Characteristics section of the PFI questionnaire).

Respondents to the PFI-Enrolled survey were provided a list of 15 schools from which to select the child's school. The list was drawn from the 2010 CCD and the 2010 PSS, using the child's grade (as provided in the screener) and zip code, and included both public and private schools. If the grade was not provided in the screener, it was derived from the child's age. Respondents were asked to select the child's school from the list, with write-in boxes available if the school was not included.

In 31 percent of the enrolled PFI cases (approximately 5,300), respondents did not select a school from the list provided on the questionnaire, but did write in the name of a school. Using the school's name, address, and zip code, Census Bureau analysts attempted to properly code these schools using an online school lookup application that accessed the CCD and the PSS. In this way, analysts were able to match schools to 97 percent of the cases, leaving 532 cases where an appropriate match could not be found. School codes for these cases were imputed (imputation is discussed in chapter 6). Table 4-2 below provides the results of the coding operation.

Table 4-2. Results of the NHES:2012 PFI school coding operation, by school type

School type	Selected from list provided in questionnaire	Matched based on name or address	Imputed	Total
Public	11,291	3,850	434	15,575
Private	571	922	98	1,591
Total	11,862	4,772	532	17,166

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Survey (NHES) of 2012.

4.5 Final Interview Status Recode (ISR) Classification

After the range checks, consistency edits, and blanking edits were completed, each case was put through an edit to make a final determination of whether it was eligible for the survey and, if so, whether sufficient data had been collected for it to be classified as a completed survey. This is referred to as the Interview Status Recode (ISR). A final ISR value was assigned to each case as a result of this edit. Ultimately, 27 cases were classified as noninterviews based on the final ISR coding and were not included in the data files. Exhibit 4-1 below summarizes the critical items and criteria used to determine a final ISR classification.

Exhibit 4-1. NHES:2012 critical items and criteria for final Interview Status Recode (ISR) classification of completed interview, by questionnaire type

Questionnaire	Criteria	Item name (description)
All questionnaire types	At least two of the following items must have a valid entry AND there must be data in at least 10 percent of the remaining items:	CSEX (child's sex) P1REL (relation of first parent/guardian to child) P2GUARD (second parent/guardian in household) P1EDUC or P2EDUC (parent 1 or parent 2's highest grade level completed)
ECPP	At least one of the following items must have a valid entry:	CAGE (child's age) TTLHHINC (total household income) OWNRNTHB (home ownership status)
PFI (homeschool)	At least one of the following items must have a valid entry:	GRADEEQA or GRADDEQB (child's grade equivalent) TTLHHINC (total household income) OWNRNTHB (home ownership status)
PFI (enrolled)	At least one of the following items must have a valid entry:	GRADEAT or GRADEBT (child's grade) TTLHHINC (total household income) OWNRNTHB (home ownership status)

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Survey (NHES) of 2012.

The final ISR counts for the data files for the ECPP and PFI questionnaires are shown in Table 4-3.

Table 4-3. NHES:2012 final Interview Status Recode (ISR) counts, by questionnaire type

	_	Final ISR		
Questionnaire type	Number of records	Number of interviews	Number of noninterviews	
ECPP	7,914	7,893	21	
PFI	17,593	17,563	30	
Total	25,507	25,456	51	

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Household Education Survey (NHES) of 2012.

4.6 Data Review

After the automated edits were run, a manual data review process was initiated. The overall goal of the data review process was to make sure that the final datasets contained clean, accurate data and that there were no "not answered" items that should have an answer in any record in the final data files. Another component of the manual data review process was reviewing "other, specify" text responses to determine if they should be coded into one of the existing code categories.

During the data review process, analysts looked at the frequencies of the data items in order to observe the changes that occurred in the data throughout the different stages of processing. By reviewing the frequency counts of data items at each stage of processing, analysts were able to make sure that the edit and imputation programs were working correctly. The data review process also helped to ensure that the imputed values were consistent with the other data in the questionnaire record. The imputation, which was run after the final ISR classification, is discussed in chapter 6.

Another reason why analysts examined the frequencies of data items at each stage of processing was to identify any suspect values (e.g., if a response was outside the range of possible answer choices or if an answer seemed unlikely given the respondent's other responses in the survey). Occasionally, analysts looked at the image of the questionnaire page to verify that the data were keyed correctly. Appropriate fixes were made to the data files when necessary.

4.6.1 Review of "Other, Specify" Text Items

The "other, specify" responses were reviewed by Census analysts and, where appropriate, coded into one of the existing response categories. Additionally, new values were created in some cases. In situations where enough of the write-in comments indicated that an additional category would be appropriate, analysts created a new category. On the PFI file, two new variables were

added because of write-in data provided in the variable SOTHSCOS¹³. The new variables are SINTST, 'Internet instruction provided by – state' and SEDWEB, 'Internet instruction provided by – educational or tutoring website'. Also, on both the ECPP and PFI values, an additional value was added for the variable RELATION. This value was 'Sibling' and is coded as '9' on both files.

4.7 Processing Flags

Flag variables were created to allow users to identify values that were changed during the consistency edits and values that were imputed. For each item for which any values were changed during the consistency edits, a consistency edit flag was created. A value of 0 indicates that the value for that item was not changed; a value of 1 indicates that the value for that case was changed. After the final ISR classification, imputation flags were also created to indicate whether data items were imputed. Imputation was performed on items that should have been answered according to questionnaire skip patterns, but lacked valid entries (imputation is described in detail in chapter 6). Exhibit 4-2 provides information on the types of flag variables in the NHES data files and the possible values for these variables.

Exhibit 4-2. Flags used in processing NHES:2012 questionnaires

Processing step	Flag variables	Flag values and definitions
Consistency edit	ef_[variable] = (e.g., ef_RCNOW)	0 = No consistency edit performed.1 = Consistency edit performed.
Imputation $f_{\text{variable}} = (e.g., f_{\text{RCNOW}})$		 0 = Data reported. Not imputed. 1 = Data value imputed using unweighted sequential hot deck imputation.
		2 = Data value adjusted during analysts' post-imputation review of data.
		3 = Data value imputed using the statistical distribution of nonimputed values.

4.8 Data Products

After all stages of imputation were completed and the blanking and consistency edits were run once again, the data were split into two data files (one each for the ECPP and PFI questionnaires). Each of these data files included all variables—frame variables, survey variables, created variables, weighting variables, and imputation flags. These files were used as the source files for the restricted-use and public-use files:

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¹³ Item 24, PFI-Enrolled questionnaire.

- Early Childhood Program Participation. The ECPP file includes all items from the Early Childhood Program Participation questionnaires: Forms NHES-21AE, NHES-21AE(SP), NHES-21BE, NHES-21BE(SP), NHES-21AC, NHES-21AC(SP), NHES-21BC, NHES-21BC(SP), NHES-61AE, NHES-61AE(SP), NHES-61AC, NHES-61AC(SP). It also includes several items from the corresponding screener questionnaire for each record and additional derived variables. The derived variables were created using data from both outside data sources—for example, the American Community Survey (ACS)—and the survey.
- Parent and Family Involvement in Education. The PFI file includes all items from the Parent and Family Involvement in Education questionnaires: Forms NHES-31AE, NHES-31AE(SP), NHES-31BE, NHES-31BE(SP), NHES-41AE, NHES-41AE(SP), NHES-41BE, NHES-41BE(SP), NHES-42AE, NHES-42AE(SP), NHES-42BE, NHES-42BE(SP), NHES-31AC, NHES-31AC(SP), NHES-31BC, NHES-31BC(SP), NHES-41AC, NHES-41AC(SP), NHES-41BC, NHES-41BC(SP), NHES-42AC, NHES-42AC(SP), NHES-42BC, NHES-42BC(SP)), NHES-51AE, NHES-51AE (SP), NHES-51AC, and NHES-51AC(SP). It also includes items from the corresponding screener questionnaire for each record and additional derived variables. The derived variables were created using data from both outside data sources (the ACS, CCD, and PSS) and the survey.

4.9 Disclosure Risk Analysis

Central to the mission of NCES is a commitment to protecting the identity of respondents to its various data collections. Surveys that make up the NHES are designed to protect respondent identity. All direct identifiers, as well as any characteristics that might lead to identification, are omitted or modified in the public-use dataset to protect the identities of individuals. An extensive respondent disclosure risk analysis is performed on the NHES data set prior to its release. As in past NHES collections, results from this analysis led to modifications to some data included on the data files. The modifications included coarsening of response categories (such as top and bottom coding variables as well as grouping rare categories together) and swapping of certain data items between respondents. These confidentiality edits modify respondent data in order to

¹⁴ These form labels are detailed in appendix A.

¹⁵ The forms listed here were combined into ten separate keyed files for processing (as discussed earlier in this chapter). Each keyed file corresponded to a questionnaire form with substantive differences (i.e., differences in content rather than branding). These were: two types of ECPP forms (one asking child's sex and one not), two types of PFI homeschool forms (one asking child's sex and one not), four types of PFI enrolled forms (one asking grade and child's sex, one asking grade and not asking child's sex, one verifying grade and asking child's sex, and one verifying grade and not asking child's sex), and two short forms (ECPP and PFI-enrolled). Each of these forms had a Census- and ED-branded version and a Spanish version.

prevent positive identification of individual respondents. Tests on the modified data were conducted to assure that the data remain accurate and useful.

Under law, data collected and distributed by NCES may be used only for statistical purposes. Any effort to determine the identity of any reported case by data users is prohibited by law. Violations are subject to Class E felony penalties including a fine of up to \$250,000, a prison term of up to 5 years, or both. Any intentional identification or disclosure of a person violates the assurances of confidentiality given to the providers of the information.

Users must adhere to the following:

- Use the data in this dataset for statistical purposes only.
- Make no use of the identity of any person discovered inadvertently, and advise NCES of any such discovery.
- Not link this dataset with individually identifiable data from other NCES or non-NCES datasets.

Chapter 5. Response Rates

This document describes the method used for calculating unit and item response rates for the NHES:2012 screener and the two topical surveys, the Early Childhood Program Participation (ECPP) Survey and the Parent and Family Involvement in Education (PFI) Survey.

The NHES:2012 screener was conducted using an address-based, stratified sample of 159,994 addresses. All U.S. civilian, noninstitutional, occupied addresses were eligible to be sampled for the screener. Every sampled address was sent a short screener questionnaire to determine whether the household was eligible to participate in the ECPP survey or the PFI survey. Households were eligible to participate in the ECPP survey if they had a child age 6 or younger who was not yet enrolled in kindergarten. Households were eligible to participate in the PFI survey if they had a child or youth age 20 or younger who was enrolled in kindergarten through twelfth grade or homeschooled for the equivalent grades. Households with eligible children as described above that responded to the screener were sent a topical survey. More details on the NHES:2012 sampling methodology and data collection process can be found in chapters 2 and 3, respectively.

5.1 Unit Response Rates in NHES:2012

A unit response rate is the ratio of the number of units with completed questionnaires to the number of units sampled and eligible for the questionnaire. For the NHES:2012 screener, a unit was an address or a household. For the NHES ECPP and PFI surveys, a unit was a child within a household that completed the screener. In some cases, response rates are easily defined and computed, whereas in other cases, the denominator of the ratio must be estimated due to the unknown eligibility status of nonrespondents.

This chapter reports a unit response rate that measures the percentage of questionnaires that were completed for a specific stage of the survey and the overall unit response rate that measures the percentage of possible questionnaires that were completed, taking all survey stages into account. Specifically, children were identified for the survey in a two-stage process. Screener questionnaires were mailed to identify whether the household included members eligible for one of the topical questionnaires and then to sample one child in each household for whom a topical survey was sent to the household. If the screener was not completed, a child could not be sampled for a topical questionnaire.

Based on this design, the unit response rate for the first stage is the estimated percentage of eligible households that completed the screener. The unit response rate for the second stage (ECPP or PFI questionnaires) is the percentage of sampled children for whom topical questionnaires were completed. The overall unit response rate—calculated independently for the ECPP and the PFI—is the product of the first- and second-stage unit response rates (i.e., the screener unit response rate multiplied by the topical survey unit response rate).

Unit response rates can be either unweighted or weighted. The unweighted rate, computed using the raw number of cases, describes the success of the operational aspects of the survey. The weighted rate, computed by summing the weights (usually the reciprocals of the probability of selecting the units) for both the numerator and the denominator, describes the success of the survey with respect to the population sampled because the weights allow inference of the sample data (including response status) to the population level. Both rates are usually similar unless the probabilities of selection and the unit response rates in the categories, with different selection probabilities, vary considerably. All the unit response rates discussed below are weighted by the inverse of the probability of selection unless noted specifically in the text.

The next section discusses the unit response rate for the screener and provides a profile of the characteristics of the respondents.¹⁶ The subsequent sections discuss the screener and topical unit response rates and the overall unit response rates for the ECPP and PFI surveys.

5.1.1 NHES Screener Unit Response Rates

To calculate the screener unit response rate, each sampled address in the screener operation was classified in one of four ways: a response (R), a nonresponse (NR), an ineligible case (I), or a case of unknown eligibility (U). Eligible cases (E) in the NHES screener consisted of responses (R) and nonresponses (R) indicated by the returned paper questionnaires received by the Census Bureau. (The term "eligible" here refers to whether the address was residential and occupied and thus able to respond to the screener questionnaire.) A response (R) was defined as a completed questionnaire from a household with or without children. A nonresponse (NR) was defined as either a blank or an incomplete questionnaire or another clear refusal reply. Ineligible cases were those returned by the postmaster with one of the following statuses: unit is vacant; undeliverable as addressed (UAA); insufficient address; unclaimed; no such street; no such street number; illegible address; and no mail receptacle. The following types of cases were also ineligible based on the postmaster's information: box closed—no order; forwarding order has

¹⁶ The unit response rate and overall response rate for the screener are the same because there is only one stage of selection (household address) at the screener level.

expired; deceased; moved, left no address; and moved out of U.S.—no forwarding address. Although these last three ineligibility types are usually thought of as pertaining to individuals and the NHES:2012 screener questionnaires were not addressed to specific persons, postal workers used the United States Postal Service (USPS) procedures to assign these types. Even though these dispositions did not exactly apply to households, it was decided early in the NHES planning to carry over these dispositions into the NHES processing. Sample addresses for which a questionnaire was never received were identified as unknown eligibility (*U*)—neither a response nor a nonresponse—because information was insufficient to determine whether they were valid, occupied households.

One reason some cases were not returned was that screener questionnaire packages were mailed to a simplified addressee, "City/County Resident," using first-class mail. According to the USPS Domestic Mail Manual (DMM), return service is not required for mailings using this format. However, the USPS informed the Census Bureau's National Processing Center (NPC) that even though the DMM states that undeliverable mail pieces with a simplified addressee are treated as waste, 90 percent of the USPS personnel will not discard first-class mail and will return an undeliverable mail piece to the sender. Experience with the NHES:2011 Field Test, which used the same mailing format, indicated that undeliverable mail addressed to a simplified addressee was often returned to the sender; however, it is not possible to determine how many unreturned cases were discarded as undeliverable. As a result, it is possible that some of the unreturned cases of unknown eligible status were undeliverable and thus ineligible.

Table 5-1 shows the disposition of the 159,994 cases resulting from the NHES:2012 screener operation.

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¹⁷ The initial screener mailing was addressed to "Resident Sample Member," which was also a simplified address. All subsequent screener mailings were addressed to "City/County Resident."

¹⁸ The initial screener mailing and the first and third screener nonresponse follow-up mailings were sent via first-class mail. The second screener nonresponse mailing was sent via FedEx when possible.

Table 5-1. Number and percentage of addresses in screener sample by response and eligibility status, and response rate calculation denotation

Response and eligibility status	Response rate calculation denotation	Unweighted number of cases	Percentage of all addresses
Total	T	159,994	100
Eligible cases	E	99,968	62.5
Respondents	R	99,426	62.1
Nonrespondents	NR	542	0.3
Ineligible cases	I	16,767	10.5
Cases of unknown eligibility	U	43,259	27.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program, 2012.

For the NHES:2012, the unit response rate was calculated per NCES standard 1-3-2, which corresponds to the American Association for Public Opinion Research (AAPOR) Response Rate 3 (RR3) formula and weighted data:

$$RR3 = \left[\frac{R}{E + ee * U}\right] * 100$$

where

$$ee = \frac{E}{T - U}$$

and

R = sum of base weights of respondents,

E = sum of base weights for eligible sample units: E = R + NR, (NR = sum of base weights of nonrespondents)

U = sum of base weights for unknown-eligibility cases,

T = sum of base weights over all cases in sample, and

ee = proportion of known eligibility cases that are eligible.

Although the formula is standard, the calculation of unit response rates is complicated by the cases with unknown eligibility, which comprise 27.0 percent of the number of addresses in the sample (table 5-1). The specific assumptions about the eligibility status of the addresses from which no response was received will have an impact on the response rate calculation. Assuming

that they are all ineligible would provide a response rate at one end of the spectrum, and assuming that they are all nonresponses would define the other end.

To reflect differences in eligibility by address information provided on the vendor's sample frame, the eligibility rate, ee, was estimated separately for each subgroup formed according to the combinations of address types available on the frame presented in table 5-2. Specifically, ee was calculated by dividing the number of eligible cases by the difference between the total number of cases in a subgroup (i.e., address type) and the number of unreturned questionnaires in that subgroup. Because this approach uses direct information about likely household occupancy status associated with the particular address, this approach yields more accurate estimates of eligibility rates than other potential methods.

Table 5-2 presents the proportion of known eligibility cases for six subgroups of addresses. The eligibility rate varied from a low of 0.08, for addresses on the frame flagged as vacant and type of dwelling was unknown, to a high of 0.91 for addresses on the frame identified as not a PO Box, not vacant, and not a drop point.

Table 5-2. Proportion of known eligibility cases that are eligible (ee) by cell

Eligibility rate (ee)	Cell definitions
0.08	Addresses indicated on the NHES:2012 frame as vacant and type of dwelling (whether single or multi-unit) is unknown
0.28	Addresses indicated on the NHES:2012 frame as vacant and type of dwelling (whether single or multi-unit) is known
0.80	 Addresses indicated on the NHES:2012 frame as drop point or augmented drop point^{1, 2}
0.82	 Addresses indicated on the NHES:2012 frame as PO Box addresses and non-OWGM (not the only way to get mail) and not vacant and not drop/augmented drop point
0.88	5. Addresses indicated on the NHES:2012 frame as PO Box addresses and OWGM (the only way to get mail) and not vacant and not drop/augmented drop point
0.91	Addresses indicated on the NHES:2012 frame as non-PO Box addresses and not vacant and not drop/augmented drop point

¹ A drop point is an address that is a single postal delivery point for multiple housing units. An augmented drop point is a drop point that includes a unit designation (i.e., an apartment number) added by the frame vendor.

² Vacant addresses and drop point/augmented drop point addresses are mutually exclusive on the NHES frame.

To calculate the response rate, a base-weighted response rate was first calculated for each of the mutually exclusive subgroups or cells described in table 5-2. The ee was multiplied by the weighted number of unknown cases in each cell to obtain a count of unknown eligibility cases that were likely eligible per cell. The response rate was then calculated as the weighted sum of responding cases divided by the weighted sum of responding and nonresponding cases, plus the

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program, 2012.

weighted sum of the unknown cases deemed eligible. Each cell's response rate was proportionally represented in the overall response rate by multiplying the rate by the base-weighted number of records corresponding to the cell. These products were summed and divided by the base-weighted number of records for the screener survey.

With this method, the NHES:2012 screener unit response rate was 73.4 percent and is shown in table 5-3. The table also presents two other response rates based on different eligibility assumptions. The response rate labeled "conservative" assumes that 100 percent of the unknown eligible cases would have been eligible and yielded a weighted response rate of 70.1 percent. The single-eligibility unit response rate was calculated using the proportion of known-eligibility screener cases that were eligible. That proportion, *ee*, was applied overall to the unknown-eligibility cases in the entire screener sample. This response rate method assumed that the unknown-eligibility screener cases were all eligible at the same rate as the known-eligibility screener cases. Because the calculations for the weighted frame-assisted unit response rate and the weighted single-eligibility unit response rate were very similar, the single-eligibility unit response rate was used for the response rate calculations in the rest of the screener unit response rate section because it is a simpler calculation and more easily replicated than the frame-assisted method.

Table 5-3. Weighted and unweighted screener unit response rates

Estimated screener unit response rates ¹	Weighted rate (percent)	Unweighted rate (percent)
Frame-assisted rate ² $ee = variable$	73.4	72.5
Single-eligibility unit response $rate^3 ee = 0.84$	73.5	72.6
Conservative unit response rate $ee = 1.0$	70.1	69.4

¹ Weighted unit response rates weight the numerator and denominator by the inverse of the probability of selection associated with each case considered eligible. Unweighted unit response rates include the same cases in the numerator and denominator as the weighted estimates, but without weights applied.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program, 2012.

Table 5-4 presents the screener unit response rate by selected characteristics of addresses. These characteristics were chosen because they were available for most or all addresses or were associated with response propensity in the NHES:2011 Field Test. Screener unit response rates were lower for addresses in Census tracts where at least 25 percent of the population was Black; tracts where at least 40 percent of the population was Hispanic; PO Box addresses that were not a household's only way to get mail (OWGM); households in the South; addresses without a

² The frame-assisted rate uses variables shown in table 5-2 from the vendor's frame to estimate the proportions of known eligible addresses, *ee.* A separate *ee* and response rate is calculated for each subgroup listed in table 5-2, and then the six response rates are combined to form the frame-assisted unit response rate.

³ The single-eligibility rate uses the AAPOR response rate 3 formula. One *ee* is estimated and is applied to the unknown eligibility cases over the entire screener sample.

telephone number match; and households sent Department of Education-branded materials, compared with the higher response rates for households in Census tracks with lower percentages of Black or Hispanic residents, non-PO Box households, households in other regions (particularly the Midwest), households with a telephone number match; and households receiving Census-branded materials (NHES12 T-test Tables Chapter 5, Screener t-tests, #2-3) (NHES12 T-test Tables Chapter 5, Screener t-tests #31-36) (NHES12 T-test Tables Chapter 5, Screener t-tests, #4) (NHES12 T-test Tables Chapter 5, Screener t-tests #30). Screener unit response rates also varied by household income and tenure. Higher income households generally had higher unit response rates (NHES12 T-test Tables Chapter 5, Screener t-test, #5-14) and owning a home was associated with higher screener unit response compared with renting (NHES12 T-test Tables Chapter 5, Screener t-test #15).

Table 5-4. NHES:2012 Number of addresses in the screener sample, by response status, weighted unit response rate, and characteristics of the sample

Characteristic	Total	Responded (R)	Did not respond/ refused (NR)	Number of ineligible cases by characteristic (I)	Cases of unknown eligibility (U)	Estimated unit response rate (percent) ¹ (RR3)
Total	159,994	99,426	542	16,767	43,259	73.5
Stratum - Addresses in Census tracts ²						
With 25% or more Black persons	32,128	16,675	106	4,716	10,631	66.5
With 40% or more Hispanic persons	24,113	13,305	80	2,639	8,089	66.0
All other Census tracts not selected for the groups above	103,753	69,446	356	9,412	24,539	75.8
OWGM status						
OWGM PO Boxes	1,652	711	3	508	430	74.1
Non-OWGM PO Boxes	7,047	2,519	21	2,514	1,993	71.9
All other addresses	151,295	96,196	518	13,745	40,836	73.6
Questionnaire logo						
Census Bureau	30,018	19,920	89	3,069	6,940	77.4
Dept. of Education	129,976	79,506	453	13,698	36,319	72.6
Ability to match phone number to address						
Phone number matched on sampling frame	64,814	48,620	252	2,677	13,265	80.1
No phone number matched on sampling frame	95,180	50,806	290	14,090	29,994	69.3

Table 5-4. NHES:2012 Number of addresses in the screener sample, by response status, weighted unit response rate, and characteristics of the sample—Continued

Characteristic	Total	Responded (R)	Did not respond/ refused (NR)	Number of ineligible cases by characteristic (I)	Cases of unknown eligibility (U)	Estimated unit response rate (percent) ¹ (RR3)
Income for address						
\$50,000 or less	58,293	35,115	212	4,911	18,055	69.3
\$50,001-\$100,000	48,471	34,526	152	2,167	11,626	76.2
\$100,001-\$150,000	16,312	12,740	42	471	3,059	81.1
\$150,001-or more	7,824	6,278	24	215	1,307	83.0
Income unknown	29,094	10,767	112	9,003	9,212	69.7
Home tenure						
Rent	31,311	16,993	106	3,360	10,852	65.7
Own	91,087	67,153	302	3,556	20,076	78.1
Home tenure unknown	37,596	15,280	134	9,851	12,331	68.5
Address type						
City style / street	115,073	77,321	377	8,487	28,888	75.5
PO Box	8,699	3,230	24	3,022	2,423	72.1
High rise	35,864	18,650	140	5,211	11,863	67.2
Rural route	358	225	1	47	85	76.1
Dwelling type						
Single family	111,382	75,590	363	8,030	27,399	76.0
Multi unit	39,913	20,606	155	5,715	13,437	66.6
Dwelling type unknown	8,699	3,230	24	3,022	2,423	72.1
Census region						
Northeast ³	27,702	17,738	94	2,425	7,445	74.2
South ⁴	63,977	37,712	206	7,538	18,521	71.4
Midwest ⁵	33,355	21,804	126	3,600	7,825	76.7
West ⁶	34,960	22,172	116	3,204	9,468	73.3

¹ These response rates were calculated using the AAPOR response rate 3 formula.

NHES Topical Surveys Unit Response Rates

For the topical surveys, ECPP and PFI, the unit response rate was calculated as a ratio of responses to eligible cases. Topical sample cases were all cases in the screener sample for which

² The three strata are mutually exclusive. The Hispanic stratum was selected after the Black stratum was removed from the universe so the two strata did not overlap. Then the "all other stratum" was left after the Hispanic stratum was removed.

³ Northeast states include PA, NY, NJ, CT, RI, MA, VT, NH, ME.

⁴ South states include FL, GA, SC, NC, VA, DC, MD, DE, WV, AL, MS, TN, KY, AR, LA, TX, OK.

⁵ Midwest states include ND, SD, NE, KS, MO, IA, MN, WI, IL, IN, MI, OH.

⁶ West states include NM, CO, WY, MT, ID, UT, AZ, NV, WA, OR, CA, HI, AK.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of the National Household Education Surveys Program, 2012.

a completed questionnaire was received and the household had one or more children eligible for a topical survey. Eligible cases in the NHES topical surveys were all cases in the topical sample except for those where a note on the topical questionnaire or correspondence indicated that the sampled child was either attending college or no longer in school. Completed topical cases included cases with valid answers for 10 percent of the items on the questionnaire as well as valid answers to at least two of the following questionnaire items: gender of child, relationship of parent one 19 to child, presence of a second parent or guardian in the household, or highest level of education of either parent one or parent two. Additionally, to be considered complete as an ECPP case, at least one of the following additional questions had to have a valid answer: age of child, total household income, or home ownership status. In addition to items needed to be considered a completed topical case, completed PFI homeschool cases had to have a valid response for at least one of the following items: child's grade equivalent, total household income, or home ownership status. In addition to items needed to be considered a completed topical case, completed PFI enrolled cases had to have a valid response for at least one of the following items: child's grade equivalent, total household income, or home ownership status.

Calculation of the topical unit response rate differs from the screener unit response rates because it does not include unknown eligible cases in the denominator or take into account the proportion of known eligibility cases that are actually eligible. The topical surveys had no unresolved cases because all households in the topical samples had already responded to the screener and eligible cases were known (with the exception of topical cases that later became ineligible because the sampled child was attending college or was no longer in school). For overall response rates, the topical unit response rate was multiplied by the screener unit response rate.

The number of persons sampled, and those with completed questionnaires for each survey of NHES:2012, are presented in table 5-5. Of the children enumerated in the screener and eligible for the ECPP survey, a sample of 9,969 children was selected; of the children enumerated in the screener and eligible for the PFI survey, a sample of 22,117 children was selected. Less than 1 percent of the ECPP sampled children (n = 44) were classified as ineligible because they were enumerated in error (i.e., children who were not household members at the time of screening) or were not actually in the age and grade range eligible for the survey according to the reports of the ECPP respondents. Less than 1 percent of PFI sampled children (n = 115) were classified similarly. Completed ECPP questionnaires were obtained for 7,893 of the sampled children for

¹⁹ Parent one refers to the child's parent or guardian living in the household and is usually the person who answered the topical questionnaire. If the person who answered the questionnaire is not the child's parent or guardian, parent one can refer to either of the child's parents or guardians who live in the household.

²⁰ Parent two refers to the child's other parent or guardian who lives in the household.

an estimated 78.7 percent single-stage response rate and an overall response rate of 57.8 percent. Completed PFI questionnaires were obtained for 17,563 of the sampled children for an estimated 78.4 percent single-stage response rate and an overall response rate of 57.6 percent.

Table 5-5. Number of sampled children, completed questionnaires, and weighted unit response rates and overall unit response rates, by type of topical questionnaire

Type of questionnaire	Number	Estimated unit response rate (percent)	Estimated overall unit response rate (percent) ¹
ECPP questionnaire		78.7	57.8
Sampled ²	9,969	_	_
Ineligible	44		_
Did not respond	2,026		_
Total complete	7,893	_	_
Sampled as PFI, completed as ECPP	0	_	_
Sampled as ECPP, completed as ECPP	7,893	_	_
PFI questionnaire		78.4	57.6
Sampled ²	22,117	_	_
Ineligible	115	_	_
Did not respond	4,445	_	_
Total complete	17,563	_	_
Sampled as ECPP, completed as PFI	6	_	_
Sampled as PFI, completed as PFI	17,557	_	_

[—] Not available.

completed as PFI (6); the number ineligible (44); and the number that did not respond (2,026). The number sampled for the PFI survey includes the number sampled as PFI, completed as PFI (17,557); the number sampled as PFI, completed as ECPP (0); the number ineligible (115); and the number that did not respond (4,445).

SOURCE: U.S. Department of Education, National Center for Education statistics, National Household Education Surveys Program, 2012.

The unit response rates for the ECPP and PFI surveys could be examined only by variables for both respondents and nonrespondents that were available on both the sampling frame and the screener. The variables shown in tables 5-6 and 5-7 for both the ECPP and PFI surveys are stratum, only way to get mail status (OWGM) for PO Box addresses, questionnaire logo, ability to match phone number to address, incentive amount, household income, enrollment status of child or youth, home tenure, address type, number of children eligible for ECPP/PFI, child's age, and Census region. For the PFI survey, the child's grade is also included. Table 5-6 shows the number of surveyed children by response status and unit response rate for the ECPP, and table 5-7 shows the same for PFI. For both the ECPP and PFI surveys, unit response rates were lower for addresses in Census tracts where at least 25 percent of the population was Black and in Census

¹ The estimated overall unit response rate is computed by multiplying the screener unit response rate by the appropriate survey unit response rate.

² The number sampled for the ECPP survey includes the number sampled as ECPP, completed as ECPP (7,893); the number sampled as ECPP, completed as PFI (6); the number ineligible (44); and the number that did not respond (2,026). The number sampled for the PFI survey includes

tracts where at least 40 percent of the population was Hispanic compared to households in all other Census tracts (NHES12 T-test Tables Chapter 5, ECPP t-tests #2-3 and PFI t-test #2-3). Topical unit response rates varied by household income on both the ECPP and the PFI, with the lowest income households (i.e., households making \$50,000 or less) having lower response rates than the higher income households (NHES12 T-test Tables Chapter 5, ECPP t-tests #4-13 and PFI t-test #4-13). Among respondents to waves 3 and 4 of the screener mailings, the \$15 topical incentive was associated with higher topical unit response rates compared with the \$5 topical incentive for both the ECPP and PFI surveys (NHES12 T-test Tables Chapter 5, ECPP t-tests #23-25 and PFI t-test #23-25). Topical unit response rates varied by Census region on the PFI, with the Midwest having higher unit response rates than all other regions (NHES12 T-test Tables Chapter 5, PFI t-tests #30-35). On the ECPP, the Midwest had a higher response rate than the South and West (NHES12 T-test Tables Chapter 5, ECPP t-tests #30-35). For the PFI, topical unit response rates were higher for the Census-branded mailing materials than for mailing materials that used the Department of Education seal (NHES12 T-test Tables Chapter 5, PFI ttest #29). There was no measurable difference in response rates by questionnaire brand on the ECPP (NHES12 T-test Tables Chapter 5, ECPP t-test #29).

Table 5-6. Number of surveyed ECPP children, by response status and weighted unit response rates

Characteristic	Total	Responded ¹ (R)	Did not respond/ refused (NR)	Number of ineligible cases by characteristic (I)	Estimated unit response rate (percent)
Total	9,963	7,893	2,026	44	78.7
Stratum - Addresses in Census tracts ²					
With 25% or more Black persons	1,751	1,269	474	8	71.1
With 40% or more Hispanic persons	1,833	1,354	471	8	72.4
All other Census tracts	6,379	5,270	1,081	28	81.3
OWGM					
OWGM PO Boxes	44	37	7	0	84.4
Non-OWGM PO Boxes	185	121	61	3	66.0
All other addresses	9,734	7,735	1,958	41	79.3
Questionnaire logo					
Census Bureau	1,947	1,539	395	13	78.3
Dept. of Education	8,016	6,354	1,631	31	78.8
Ability to match phone number to address:					
Phone number matched on sampling frame	3,518	2,927	571	20	83.9
No phone number matched on sampling frame	6,445	4,966	1,455	24	76.1
Type of incentive					
\$5 (Screener wave 1 and 2 respondents) ³	7,995	6,563	1,398	34	81.3
\$5 (Screener wave 3 and 4 respondents)	800	511	282	7	64.6
\$15 (Screener wave 3 and 4 respondents) ⁴	1,168	819	346	3	70.5
Income for address					
\$50,000 or less	3,598	2,715	863	20	74.6
\$50,001–\$100,000	3,311	2,763	535	13	83.2
\$100,001-\$150,000	1,209	1,043	163	3	86.5
\$150,001– or more	588	505	80	3	86.5
Income unknown	1,257	867	385	5	68.9

Table 5-6. Number of surveyed ECPP children, by response status and weighted unit response rates—Continued

Characteristic	Total	Responded ¹ (R)	Did not respond/ refused (NR)	Number of ineligible cases by characteristic (I)	Estimated unit response rate (percent)
Enrollment status of child from					
screener					
Preschool	3,176	2,613	554	9	82.1
Homeschool	92	74	18	0	75.1
Not in school	6,356	4,972	1,354	30	77.6
Status unknown	339	234	100	5	70.0
Home tenure					
Rent	2,162	1,584	567	11	72.0
Own or other	5,943	4,984	932	27	83.9
Home tenure unknown	1,858	1,325	527	6	71.1
Address type					
City style / street	7,857	6,399	1,423	35	81.3
PO Box	229	158	68	3	67.5
High rise	1,864	1,328	531	5	71.1
Rural route	13	8	4	1	54.4
Number of children in the household eligible for ECPP					
1 child	7,113	5,652	1,431	30	79.2
2 children	2,461	1,955	494	12	79.3
3 children	333	252	80	1	75.2
4 children	30	19	11	0	65.8
5 children	26	15	10	1	60.2
Sampled child's age					
0 years	1,779	1,378	381	20	76.4
1 year	1,443	1,171	269	3	80.6
2 years	2,031	1,581	441	9	77.2
3 years	1,951	1,559	386	6	79.8
4 years	1,970	1,582	384	4	79.5
5 years	746	593	151	2	79.8
6 years	17	11	6	0	68.6
Child's age unknown	26	18	8	0	74.3

Number of surveyed ECPP children, by response status and weighted unit **Table 5-6.** response rates—Continued

Characteristic	Total	Responded ¹ (R)	Did not respond/ refused (NR)	Number of ineligible cases by characteristic (I)	Estimated unit response rate (percent)
Census region					
Northeast ⁵	1,638	1,307	325	6	78.9
South ⁶	3,726	2,913	798	15	77.2
Midwest ⁷	2,120	1,733	378	9	81.2
West ⁸	2,479	1,940	525	14	78.5

¹ Includes all questionnaires that were completed for the ECPP survey, regardless of whether the child was originally sampled for the PFI survey. This includes 7,893 children sampled and completed as ECPP. (There were no children sampled as PFI but completed as ECPP.)

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPP) Survey of the National Household Education Surveys Program, 2012.

² The three strata are mutually exclusive. The Hispanic stratum was selected after the Black stratum was removed from the universe so the two strata did not overlap. Then the all other stratum was left after the Hispanic stratum was removed.

³ All cases that responded to the first or second screener mailing that were sampled to receive a topical survey received a \$5 incentive in the initial topical mailing.

⁴ Cases that responded to the third or fourth screener mailing that were sampled to receive a topical survey were randomly assigned to receive either a \$5 incentive or a \$15 incentive with their initial topical mailing.

⁵ States include PA, NY, NJ, CT, RI, MA, VT, NH, ME. ⁶ States include FL, GA, SC, NC, VA, DC, MD, DE, WV, AL, MS, TN, KY, AR, LA, TX, and OK.

⁷ States include ND, SD, NE, KS, MO, IA, MN, WI, IL, IN, MI, OH.

⁸ States include NM, CO, WY, MT, ID, UT, AZ, NV, WA, OR, CA, HI, AK.

Table 5-7. Number of surveyed PFI children, by response status and weighted unit response rates

Characteristic	Total	Responded ¹ (R)	Did not respond (NR)	Number of ineligible cases by characteristic (I)	Estimated Unit Response Rate (percent)
Total	22,123	17,563	4,445	115	78.4
Stratum - Addresses in Census tracts ²					
With 25% or more Black persons	3,783	2,771	984	28	70.9
With 40% or more Hispanic					
persons	3,701	2,764	924	13	73.1
All other Census tracts	14,639	12,028	2,537	74	80.8
OWGM					
OWGM PO Boxes	144	107	36	1	70.7
Non-OWGM PO Boxes	488	325	159	4	65.8
All other addresses	21,491	17,131	4,250	110	79.2
Questionnaire logo					
Census Bureau	4,276	3,473	773	30	80.8
Dept. of Education	17,847	14,090	3,672	85	77.9
Ability to match phone number to address					
Phone number matched on sampling frame	10,469	8,665	1,742	62	83.2
No phone number matched on sampling frame	11,654	8,898	2,703	53	74.7
Type of incentive					
\$5 (Screener wave 1 and 2 respondents) ³	17,949	14,777	3,067	105	81.6
\$5 (Screener wave 3 and 4 respondents)	1,735	1,108	624	3	62.4
\$15 (Screener wave 3 and 4 respondents) ⁴	2,439	1,678	754	7	67.8
Income for address					
\$50,000 or less	7,410	5,555	1,814	41	74.3
\$50,001–\$100,000	7,617	6,189	1,377	51	81.4
\$100,001-\$150,000	3,297	2,859	429	9	86.0
\$150,001– or more	1,887	1,653	230	4	87.6
Income unknown	1,912	1,307	595	10	64.4

Table 5-7. Number of surveyed PFI children, by response status and weighted unit response rates—Continued

Characteristic	Total	Responded ¹ (R)	Did not respond (NR)	Number of ineligible cases by characteristic (I)	Estimated Unit Response Rate (percent)
Home tenure	10111	(11)	(1111)	characteristic (1)	(регесии)
Rent	3,822	2,797	1,008	17	72.8
Own or other	15,266	12,651	2,532	83	82.9
Home tenure unknown	3,035	2,115	905	15	66.3
Address type					
City style / street	18,628	15,113	3,413	102	80.8
PO Box	632	432	195	5	66.3
High rise	2,814	1,977	829	8	68.0
Rural route	49	41	8	0	76.8
Number of children in household eligible for PFI					
1 child	10,974	8,683	2,222	69	78.4
2 children	7,778	6,268	1,479	31	79.6
3 children	2,494	1,960	528	6	77.7
4 children	665	500	157	8	75.0
5 children	212	152	59	1	74.7
Sampled child's age					
0 to 4 years	51	28	22	1	66.3
5 years	827	638	186	3	77.0
6 years	1,291	1,005	283	3	77.5
7 years	1,338	1,082	253	3	80.4
8 years	1,381	1,127	251	3	81.3
9 years	1,385	1,094	284	7	78.3
10 years	1,523	1,206	313	4	77.5
11 years	1,531	1,258	270	3	79.9
12 years	1,648	1,327	317	4	80.4
13 years	1,724	1,381	340	3	78.3
14 years	1,722	1,396	322	4	79.5
15 years	1,886	1,531	347	8	80.8
16 years	2,030	1,618	405	7	79.0
17 years	2,153	1,740	404	9	77.9
18 years	1,021	778	228	15	74.1
19 years	205	112	79	14	53.1
20 years	108	48	42	18	53.7
Child's age unknown	299	194	99	6	64.8

Number of surveyed PFI children, by response status and weighted unit **Table 5-7.** response rates—Continued

Characteristic	Total	Responded ¹ (R)	Did not respond (NR)	Number of ineligible cases by characteristic (I)	Estimated Unit Response Rate (percent)
Enrollment status of child from screener					
Public/private/preschool	21,134	16,906	4,158	70	78.7
Homeschool	507	394	107	6	78.5
Not in school	140	44	70	26	30.9
Status unknown ⁵	342	219	110	13	71.2
Grade of child					
Kindergarten/pre-k	1,458	1,121	332	5	76.8
1st grade	1,279	1,022	255	2	79.5
2nd grade	1,326	1,066	257	3	79.9
3rd grade	1,423	1,146	272	5	80.3
4th grade	1,411	1,117	288	6	78.0
5th grade	1,488	1,203	281	4	80.0
6th grade	1,577	1,273	304	0	78.1
7th grade	1,640	1,330	303	7	80.0
8th grade	1,667	1,332	329	6	79.2
9th grade	1,816	1,456	354	6	79.2
10th grade	1,970	1,582	377	11	80.4
11th grade	2,031	1,650	372	9	79.1
12th grade	2,128	1,655	436	37	75.7
Child's grade unknown	909	610	285	14	67.1
Census region ⁶					
Northeast	3,870	3,064	788	18	78.7
South	8,433	6,561	1,825	47	76.7
Midwest	4,539	3,762	761	16	81.8
West	5,281	4,176	1,071	34	77.8

¹ Includes all questionnaires that were completed for the PFI survey, regardless of whether the child was originally sampled for the ECPP survey; 17.557 children completed as PFI plus 6 children sampled as ECPP but completed as PFI, for a total of 17.563.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education (PFI) Survey of the National Household Education Surveys Program, 2012.

² The three strata are mutually exclusive. The Hispanic stratum was selected after the Black stratum was removed from the universe so the two strata did not overlap. Then the all other stratum was left after the Hispanic stratum was removed.

3 All cases that responded to the first or second screener mailing that were sampled to receive a topical survey received a \$5 incentive in the

initial topical mailing.

⁴ Cases that responded to the third or fourth screener mailing that were sampled to receive a topical survey were randomly assigned to receive either a \$5 incentive or a \$15 incentive with their initial topical mailing ⁵ These cases were sent the PFI enrolled questionnaire, not the homeschooled questionnaire.

⁶ States include Northeast (PA, NY, NJ, CT, RI, MA, VT, NH, ME); South (FL, GA, SC, NC, VA, DC, MD, DE, WV, AL, MS, TN, KY, AR, LA, TX, and OK); Midwest (ND, SD, NE, KS, MO, IA, MN, WI, IL, IN, MI, OH); West (NM, CO, WY, MT, ID, UT, AZ, NV, WA, OR, CA,

5.2 Item Response Rates in NHES:2012

For most of the data items collected in the NHES:2012 surveys, the item response rates were very high. The tables in this section show the item response rates for a representative group of items from each topical survey. These items were selected to represent key items considered in the sample design and to represent the range of item response rates. The number of cases for which each item was attempted and the percentage of cases for which a valid response was obtained are shown.

Tables 5-8 and 5-9 show the item response rates and total response rates (the product of the item response rate and the overall unit response rate for the survey) for a representative group of items from the ECPP and PFI surveys, respectively. These item response rates were calculated using the sample base weights (i.e., the inverse of the probability of selection). For the ECPP and PFI surveys, the median item response rates were 96.4 percent and 97.9 percent, respectively, and the median total response rates were 55.7 and 56.4, respectively. For items that are asked only of a small subgroup of respondents, a small number of missing values could result in a low item response rate.

Table 5-8. Weighted item response rates and total response rates for selected items in the ECPP survey

	Number	Item response rate	Total response rate
Item	attempted	(percent)	(percent) ¹
Demographic characteristics			
Child's birth month	7,893	98.7	57.0
Child's birth year	7,893	98.0	56.6
State, country, or territory child born in	7,893	97.5	56.3
Language child speaks most at home	7,893	99.1	57.3
Whether child is of Hispanic origin	7,893	98.5	56.9
Race of child	7,893	93.2	53.8
Childhood care and programs			
Child receiving care from relative other than a parent/guardian on a regular basis	7,893	99.0	57.2
Child receiving care from nonrelative on a regular basis (item 17)	7,893	98.7	57.1
Child attending daycare center, preschool, or pre-K	7,893	98.7	57.0
Finding and choosing care for child			
Good choices for child care	7,893	98.8	57.1
Developmental characteristics			
Child can identify red, yellow, blue, and green	5,333	98.0	56.7
Family activities			
Number of books child owns	7,893	93.8	54.2
Times read to child in past week	7,893	96.7	55.9
Number of days family ate dinner together in past week (item 65)	7,893	98.5	57.0
Visited a library in the past month	7,893	99.1	57.3
Things child may be learning			
Child reads words or pretends to read	5,333	98.0	56.6
Parent/guardian characteristics			
Relationship to child-parent/guardian 1	7,893	99.0	57.2
Marital status-parent/guardian 1	7,893	98.8	57.1
Country where parent/guardian 1 was born	7,893	96.0	55.5
Highest educational attainment-parent/guardian 1	7,893	98.5	56.9

Table 5-8. Weighted item response rates and total response rates for selected items in the ECPP survey—Continued

Item	Number attempted	Item response rate (percent)	Total response rate (percent) ¹
Health and disability			
Rating of child's health	7,893	99.6	57.6
Child has specific learning disability	7,893	100	57.8
Child has Pervasive Developmental Disorder (PDD)	7,893	100	57.8
Household characteristics			
Household size	7,893	99.4	57.4
Received WIC benefits	7,893	98.3	56.8
Received Food Stamps in past month	7,893	98.5	56.9
Received Section 8 housing assistance	7,893	97.0	56.1
Total household income range	7,893	96.1	55.6
Home tenure	7,893	97.9	56.6

¹ The total response rate for a given item is the product of the overall unit response rate for the survey and the item response rate for the item. SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPP) Survey of the National Household Education Surveys Program, 2012.

Table 5-9. Weighted item response rates and total response rates for selected items in the PFI survey

		Item response	Total
	Number	rate	response rate
Item	attempted	(percent)	(percent) ¹
Demographic characteristics			
Child's birth month	17,563	98.4	56.7
Child's birth year	17,563	100	57.6
Language child speaks most at home	17,563	99.2	57.2
State, country, or territory child born in	17,563	96.1	55.3
Race of child	17,563	93.0	53.6
Whether child is of Hispanic origin	17,563	98.1	56.5
Child's schooling			
Child's grade in school	17,166	98.6	56.8
Child attends public/private school	17,166	99.3	57.2
Allowed to choose school in any school district	17,166	97.9	56.4
Other schools considered for child	17,166	97.4	56.1
Child's grades across all subjects	17,166	98.9	57.0
Child enrolled in advanced classes	17,166	99.1	57.1
Family/school involvement and school practices			
Attend general school meeting	17,166	99.1	57.1
Participated in fundraising for the school	17,166	98.8	56.9
Family involvement in schoolwork			
How often homework done outside school	17,166	97.9	56.4
Family involvement outside of school			
Visited a library in the past month	17,563	99.1	57.1
Number of days family ate dinner together in past week (item 39)	17,563	96.1	55.4
Visited zoo/aquarium in past month	17,563	98.9	57.0
Health and disability			
Rating of child's health	17,563	99.2	57.1
Household worked with school to develop IEP	1,993	85.4	49.2

Table 5-9. Weighted item response rates and total response rates for selected items in the PFI survey—Continued

Item	Number attempted	Item response rate (percent)	Total response rate (percent) ¹
Parent/guardian characteristics			
Marital status-parent/guardian 1	17,563	98.8	56.9
Country where parent/guardian 1 was born	17,563	95.3	54.9
Highest educational attainment-parent/guardian 1	17,563	98.7	56.9
Relationship to child-parent/guardian 1	17,563	99.0	57.0
Homeschool			
Person providing child's home instruction	397	99.4	57.3
Child attends school/college/university for instruction (item 4)	397	99.0	57.0
Household characteristics			
Household size	17,563	99.3	57.2
Received WIC benefits	17,563	97.7	56.3
Received Food Stamps in past month	17,563	98.4	56.7
Received Section 8 housing assistance	17,563	96.8	55.8
Home tenure	17,563	98.0	56.5
Total household income range	17,563	95.4	54.9

¹ The total response rate for a given item is the product of the overall unit response rate for the survey and the item response rate for the item. SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education (PFI) Survey of the National Household Education Surveys Program, 2012.

Most items on the NHES data files have item response rates over 90 percent. Item response rates of less than 90 percent are in items that apply to only a small number of cases. Tables 5-10 and 5-11 show items with response rates below 90 percent on the ECPP and PFI surveys, respectively. As shown in these tables, several of the variables with response rates below 90 percent are "other specify" items. Nonresponse occurs on these items when respondents mark "other" as their response and then do not write a more specific answer in the "other specify" box.

Table 5-10. Items with weighted response rates below 90 percent on the ECPP survey

		Item response
Variable name	Variable description	rate
	Variable description	(percent)
Categorical or numeric response items		
RCHRS	Number of hours per week in relative care	76.7
RCCOST	Cost of relative care	88.1
RCUNIT	Unit of relative care cost	85.4
RCCSTHNX	Number of children cost of relative care covers	87.1
RCTLHR	Total hours of relative care with other relatives	85.8
NCUNIT	Unit of nonrelative care cost	89.8
NCTLHR	Total hours of nonrelative care with other nonrelatives	85.8
HDDEVIEPX	Parent helped develop Individualized Family Service Plan (IFSP) or Individualized Education Plan (IEP) for child	87.0
HDCOMMUX	Parent's satisfaction with ISPF/IEP provider's communication	88.7
HDTCHR	Parent's satisfaction with child's ISPF/IEP teacher	87.5
HDACCOMX	Parent's satisfaction with ISPF/IEP provider's ability to accommodate child's needs	89.0
HDCOMMITX	Parent's satisfaction with ISPF/IEP provider's commitment to help child learn	88.8
HDCGONE	Child no longer has condition	82.7
CMOVEAGE	Child's age when moved to US	85.1
Other specify response items		
RCUNITOS	Other specify response for unit of relative care cost	30.3
NCUNITOS	Other specify response for unit of nonrelative care cost	0.0
RELATIONOS	Other specify response for respondent's relationship to child	88.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPP) Survey of the National Household Education Surveys Program, 2012.

Items with weighted response rates below 90 percent on the PFI survey **Table 5-11.**

		Item response
Variable name	Vouighle description	rate
variable name	Variable description	(percent)
Categorical or numeric response items		
HSPUBLIC-HSCOLLEGE ¹	Type of school child attends for instruction (mark-all-that-apply public school/private school/college)	83.4
HSPUBLIC	Child attends public school for instruction	
HSPRIVATE	Child attends private school for instruction	
HSCOLLEGE	Child attends college for instruction	
HSSCHR	Number of hours per week child attends school for instruction	85.0
HDDEVIEPX	Parent helped develop Individualized Education Plan (IEP) for child	85.4
CMOVEAGE	Child's age when moved to US	87.6
Other specify response items		
HSWHOOSX	Other specify response for who homeschools the child	81.2
HSOTHEOSX	Other specify response for source of homeschool curriculum	44.0
SOTHSCOS	Other specify response for source of Internet instruction	87.5

¹ The items HSPUBLIC, HSPRIVATE, and HSCOLLEGE were combined for the calculation of the item response rate. These items were responses to a mark-all-that-apply question. SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education (PFI) Survey of the National Household Education Surveys Program, 2012.

Chapter 6. Imputation

In the NHES:2012, as in most surveys, responses were not obtained for some question items in the survey. There are numerous reasons for item nonresponse. Some respondents may not have known the answer to a question or simply did not wish to respond. Some respondents may have run out of time and left items at the end of the survey blank. Additionally, some respondents received short-form versions of the NHES questionnaires as a nonresponse follow-up strategy. Item nonresponse occurred for these respondents for items that were included on the full form but not on the short-form versions of the questionnaires.²¹

Item nonresponse may have also occurred because a respondent's responses were not internally consistent, and this inconsistency was discovered during the editing stage of data processing after the end of data collection. In many cases, items that were not internally consistent were set to "missing" during the editing stage. The NHES:2012 items that were set to missing during editing, that were missing due to nonresponse, or that were not asked on a short form were imputed.

The median item response rates for the NHES:2012 Early Childhood Program Participation (ECPP) and Parent and Family Involvement in Education (PFI) Surveys, were 96.4 percent and 97.9 percent, respectively. The ECPP had a maximum of 140 questions²² and only two of these items had a response rate below 70 percent.²³ The PFI survey was fielded as two different questionnaires, one focused on students enrolled in public or private school for kindergarten through twelfth grade and one focused on children homeschooled for kindergarten through twelfth grade or the equivalent. Items included on the PFI survey for enrolled students and items included on the PFI survey questionnaire for homeschooled students had a maximum of 114 questions²⁴ and none of these items had response rates below 70 percent. The PFI survey questionnaire for homeschooled students had a maximum of 92 questions²⁵ and only one of these items had

²¹ Short-form versions of the Early Childhood Program Participation (ECPP) Survey and the Parent and Family Involvement in Education (PFI) Survey for students enrolled in public or private schools for kindergarten through twelfth grade were sent as a final nonresponse mailing for some cases. The ECPP short-form contained 67 questions. The PFI short-form contained 50 questions.

²² One version of the ECPP contained an item asking the child's sex, this version was sent to cases that did not provide the child's sex on the screener questionnaire. Cases that provided the child's sex on the screener were sent a form that did not ask for the child's sex and contained 139 questions.

²³ The two ECPP questions with response rates below 70 percent, RCUNITOS and NCUNITOS, are character string variables that were not imputed.

²⁴ One version of the PFI questionnaire for enrolled students contained an item asking the child's sex, this version was sent to cases that did not provide the child's sex on the screener questionnaire. Cases that provided the child's sex on the screener were sent a form that did not ask for the child's sex and contained 113 questions.

²⁵ One version of the PFI questionnaire for homeschooled students contained an item asking the child's sex, this version was sent to cases that did not provide the child's sex on the screener questionnaire. Cases that provided the child's sex on the screener were sent a form that did not ask for the child's sex and contained 91 questions.

response rates below 70 percent.²⁶ Numeric and categorical data items with missing data were imputed; character string variables (such as countries of origin, languages, or "other/specify" responses) were not imputed. Imputation was done for two reasons. First, complete responses were needed for the variables used in developing the sampling weights. Second, users will be computing estimates employing a variety of methods, and complete responses should aid their analyses. For each data item for which any values were imputed, an imputation flag variable was created on the data file. Users can use the imputation flag to delete the imputed values, use alternative imputation procedures, or account for the imputation in computations of the reliability of the estimates produced from the dataset. More information on these flags is provided later in this chapter in section 6.3.

6.1 Imputation Methodology

Three approaches to imputation were used in the NHES:2012: unweighted sequential hot deck imputation, which was used for the majority of the missing data, that is, for all variables that were not required for Interview Status Recode (ISR) classification, as described in chapter 4; weighted random imputation, which was used for a small number of variables; and manual imputation, which was used in a very small number of cases for most variables.

Each of these approaches is described in the following sections. Variables that had unusually high levels of manual imputation are described in chapter 8, Data Considerations and Anomalies.

6.1.1 Hot Deck Imputation

Unweighted sequential hot deck imputation was used for most variables in the NHES. In this procedure, a nonmissing value for an item from one respondent was donated to a respondent with similar characteristics for whom the value for the item was missing. Two sets of variables were used in hot deck imputation: "boundary" variables and "sort" variables. Boundary variables were used to identify respondents considered similar enough to group donors for imputation. Sort variables were used to identify the best match within groups for donation and imputation. All respondents are placed into homogeneous cells based on the values of the boundary variables. Within each cell, the respondents are matched by the sort variables.

During sequential hot deck imputation, the last encountered respondent's data from within the same cell is substituted for the recipient's missing value when a missing response is encountered

²⁶ The single PFI-Homeschooled question with a response rates below 70 percent, HSOTHEOSX, is a character string variable that was not imputed.

for a particular data item. Sort order is crucial in sequential procedures as it governs who is the "nearest neighbor" suitable for imputation.

The boundary and sort variables used in previous NHES cycles were considered in order to arrive at a final set of standard imputation variables for the NHES:2012 and maintain consistency with past procedures. The boundary and sort variables were chosen because they are characteristics of households, respondents, or children that are likely to be associated with differences in item response propensities, such as parent(s) educational attainment, or are key variables in questionnaire paths and skip patterns, such as the child's grade and enrollment status. It is also important to use a parsimonious number of boundary and sort variables to generate enough homogenous donor cases for reliable imputation.

To ensure that the hot deck imputation programs functioned properly, several criteria for defining a complete case were built into the processing system. These criteria were based on the variables that were required in order to classify a case as complete during the ISR classification process, which is described in chapter 4, Data Processing. In order to be classified complete, a case must have a valid response for at least two boundary variables, one sort variable, and 10 percent of the remaining questionnaire items. Cases that did not meet these criteria were classified as incomplete and not included on the final data file. The boundary and sort variables listed below were used for the imputation of all variables in the NHES:2012:

• Boundary variables:

- QTYPE a variable that indicates which questionnaire type (ECPP, PFI-Homeschooled, PFI-Enrolled) was administered;
- o ALLGRADEX a variable derived specifically for imputation that indicates the grade/grade equivalent of the sampled child;²⁷
- CSEX sex of the sampled child;

O CSEA

- PARGRADEX a derived variable that indicates the highest education level attained by either parent in the household; and
- HHPARN12X a derived variable that indicates whether there are two parents in the household.

²⁷ This variable applies only to PFI enrolled and homeschooled students. For imputation, this variable was collapsed into three values: kindergarten through grade 4, grades 5 through 8, and grades 9 through 12.

• Sort variables:

- CENREG the Census region (Northeast, South, Midwest, West)²⁸ in which the household is located;
- TTLHHINC the household income category (\$0-\$10,000; \$10,001-\$20,000; \$20,001-\$30,000; \$30,001-\$40,000; \$40,001-\$50,000; \$50,001-\$75,000; \$75,001-\$100,000; \$100,001-\$150,000; \$150,000 or more); and
- OWNRNTHB whether the home is rented, owned, or occupied by another arrangement.

The boundary variable QTYPE and the sort variable CENREG were available for all cases. The other boundary and sort variables were either variables used as part of the final ISR classification (CSEX, TTLHHINC, and OWNRNTHB) or derived from variables used as part of the final ISR classification (ALLGRADEX, PARGRADEX, HHPARN12X). For derived boundary variables, the variables used to derive the boundary variables were required to have valid responses for a case to be classified as complete. The variables used to derive the boundary variable ALLGRADEX were: (1) GRADEAT and GRADEBT (child's grade on the PFI-Enrolled form) and (2) GRADEEQA and GRADEEQB (child's grade equivalent on the PFI-Homeschooled form). The variable PARGRADEX is derived from P1EDUC (the first parent's highest level of education) or P2EDUC (the second parent's highest level of education if there were two parents living in the household with the child). The variable HHPARN12X is derived from five variables P1REL (the first parent's relationship to the child), P1SEX (the first parent's sex), P2GUARD (whether or not there is a second parent in the household), P2REL (the relationship of the second parent to the child, if there is a second parent living in the household), and P2SEX (the second parent's sex, if there is a second parent living in the household). Two of these variables (P1REL and P2GUARD) were used as part of the ISR classification.

In some cases, different boundary variables were used in the imputation of variables in the NHES:2012; these variables are listed in exhibit 6-1.

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²⁸ The Census region variables are defined as follows: Northeast (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont); South (Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia); Midwest (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin); and West (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming).

Exhibit 6-1. Additional boundary variables rules used for imputation, by imputed variable: NHES:2012

Imputed variable	Description	Boundary variable	Description
TTLHHINC	Total income	INCOME	Frame income ¹
OWNRNTHB	Own/rent house	OWNRENT	Frame home ownership status ²
RCSTRTY	Child's age when care began from relative (years)	AGE2011	Child's age – ECPP only
NCSTRTY	Child's age when care began from nonrelative (years)	AGE2011	Child's age – ECPP only
CPSTRTY	Age of child when starting program (years)	AGE2011	Child's age – ECPP only
CMOVEAGE	Age of child when first moved to the United States	AGE2011	Child's age
P1EDUC	First parent/guardian highest grade level completed	PARGRADEX	This boundary variable was removed ³
P2EDUC	Second parent/guardian highest grade level completed	PARGRADEX	This boundary variable was removed ³

¹ The sample frame vendor, Marking Systems Group (MSG), appended demographic information on addresses included in the sample to the basic address information provided on the frame. Income was available on the frame as a continuous variable. It was coded by analysts into the same categories that are listed for income on the questionnaire.

After values had been imputed for all observations with missing values, the distribution of the item prior to imputation (i.e., the respondents' distribution) was compared to the post-imputation distributions of the imputed values alone and of the imputed values together with the observed values. For most items, the comparison revealed similar item distributions both before and after imputation.²⁹ This comparison is an important step in assessing the potential impact of item nonresponse bias and ensuring that the imputation procedure reduces this bias, particularly for items with relatively low response rates (less than 85 percent³⁰). Additionally, to prevent a single case from having an undue impact on the data, it could only be used as a donor a maximum of five times. Imputed values themselves could not be used as donors.

6.1.2 Weighted Random Imputation

For records that had missing values for the boundary variables discussed above, a different procedure was used for imputation, since hot deck imputation with a limited set of boundary

² The sample frame vendor, Marking Systems Group (MSG), appended demographic information on addresses included in the sample to the basic address information provided on the frame. The home ownership categories on the frame were 'Own' or 'Rent'.

³ PARGRADEX was derived from the higher of either P1EDUC or P2EDUC. However, if either P1EDUC or P2EDUC was missing, using PARGRADEX as a boundary variable meant that the imputed value could not possibly be higher than the current value. For this reason, PARGRADEX was not used as a boundary variable for the imputation of P1EDUC and P2EDUC.

²⁹ Generally, any impact outside of 1 or 2 percentage points was investigated further, based on the discretion of the analyst.

³⁰ For the PFI, these variables were: HSPUBLIC, HSPRIVATE, and HSCOLLEGE. For the ECPP, these variables were: RCHRS and HDCGONE.

variables tends to produce unreliable results. For these variables, a random imputation based on the pre-imputation statistical distribution of the variable was used to obtain a value. This distribution was based on Census region and questionnaire type. For example, the variable P1REL (which is used to derive HHPARN12X) had a 96.2 percent chance of being imputed as "1" (biological parent) for ECPP respondents in the West region. On the other hand, there was an 89.0 percent chance of imputing a "1" for P1REL for PFI respondents in the South region. This procedure was performed using the UNIFORM function in SAS to generate a random number, which was fitted to probabilities as described above. This procedure was not used for respondents for whom other items on the questionnaire could be used to determine values for missing boundary variables, a determination that was made during the analyst's review of the data. Weighted random imputation was used for less than 1.5 percent of the total completed cases. Of 25,456 completed cases across both the PFI and ECPP surveys, there were 296 cases missing a value for P1REL, 108 cases missing a value for P2GUARD (used to derive HHPARN12X), and 379 cases missing values for both P1EDUC and P2EDUC (used to derive PARGRADEX).

6.1.3 Manual Imputation

For some items, missing values were imputed manually rather than by using either the hot deck or weighted random imputation procedure. In the NHES:2012, manual imputation was performed in four instances: (1) if the child's grade was missing, (2) if the child's sex was missing, (3) to correct for inconsistent values following post-imputation data editing, and (4) to impute for a very small number of cases where no donors with matching boundary variable values could be found. Imputation in the first case, where the child's grade was missing, was performed by researching the age of the child. These cases were assigned a grade based on the most commonly reported grade for children of the same age. For cases where the child's sex was missing, the child's name was used to attempt to determine sex. If this was not possible, a random 50/50 imputation was performed to assign a sex to the child.

Manual imputation was also used to correct for inconsistent values following post-imputation data editing. Following imputation, edit programs were run to ensure that the imputed responses did not violate edit rules. When violations or inconsistencies were detected, manual imputation was used to re-impute. For example, if an age greater than the parent's age was randomly imputed for P1AGEMV (age of parent 1 when he or she moved to the United States) or P1AGEPAR (age of parent 1 when he or she first became a parent) the inconsistent imputed value was re-imputed using the distribution of the unimputed data; typically, a modal value was

imputed. In some cases, the overall mode was imputed, and in other cases, a modal value for a subgroup was imputed.

The final use of manual imputation was to impute for a very small number of cases where no donors with matching boundary variable values could be found. For these cases, the distribution of the item was used to assign an imputed value; typically, a modal value was imputed. In some cases, the overall mode was imputed, and in other cases, a modal value for a subgroup was imputed. A detailed list of variables that were manually imputed, with the number of cases and method of manual imputation, is included in chapter 8, Data Considerations and Anomalies.

6.1.4 Imputation of School Identification Number (SID)

The procedures used to assign the school identification variable (the NCES school identification number, from the 2010-11 Common Core of Data or 2009-10 Private School Universe Survey) to respondents based on write-in information (school name, address, etc.) are discussed in chapter 4, Data Processing. For any cases where a school ID could not be determined, either because the write-in information was not sufficient or because there was no write-in information at all, an imputation procedure similar to random weighted imputation was used to assign a school ID from one of the 15 schools printed on their questionnaire. The schools printed on each questionnaire were determined by the zip code of the sampled address and the age of the sampled child, and ordered starting with the school that was the closest to the sampled address. The probability of each school being selected for imputation was determined by the frequency distribution of valid cases across the list of schools. For example, if 47 percent of respondents selected the first school on the list, and 15 percent selected the second school, the probability of selection for those schools was set proportionally.

6.1.5 Imputation of Sort Variables

For some respondents, the sort variables TTLHHINC (total household income) and OWNRENTHB (home ownership status) were missing. These variables were imputed using a modified version of the same hot deck procedure described above. The income and home ownership status provided by the sample vendor in the sample frame were used as boundary variables for these cases.³¹

³¹ Where data were available from sources, household income reported on the questionnaire matched the sample file in 20.39 percent of cases. Home ownership status reported on the questionnaire matched the sample file in 86.17 percent of cases.

6.2 Post-imputation Processing

After the imputation was completed, the edit programs described in chapter 4 were run on the data to ensure that the imputed responses did not violate skip patterns or edit rules. If any violations occurred, the imputation program was adjusted and the imputation was rerun, or if only a few cases were affected, they were manually imputed. During the imputation of some items, specific edit programs were run immediately after imputation. For example, if a filter question was imputed with a value that made follow-up questions inapplicable, these edits set the subsequent items to "-1"(not applicable) to ensure that they were not imputed. For example, RCNOW in ECPP indicated whether or not a child was in a relative care arrangement. If it was imputed as "no," then the follow-up questions about characteristics of the relative care arrangement were not applicable and the responses to these items were set to "-1".

6.3 Imputation Flags

For each data item for which any values were imputed, an imputation flag variable was created. These flags are named F_<variable>. If the response for the item was not imputed, the imputation flag was set equal to 0. If the response was imputed, the flag was set to 1, 2, or 3. The value of the imputation flag indicates the specific procedure used to impute the missing value. The imputation flag was set to 1 if the missing value was imputed using the standard hot deck approach. If an item was imputed manually, the flag was set to 2. The imputation flag was set to 3 for cases that were imputed using weighted random imputation.

The imputation flags were created to enable users to identify imputed values. Users can employ the imputation flag to delete the imputed values, use alternative imputation procedures, or account for the imputation in computations of the reliability of the estimates produced from the dataset. For example, some users might wish to analyze the data with the missing values rather than the imputed values. If the imputation flag corresponding to the variable is equal to 1, 2, or 3, the user can replace the imputed response with a missing value to accomplish this goal. This method can also be used to replace the imputed value with a value imputed by a user-defined imputation approach.

Imputation can affect the precision of survey estimates, especially when large numbers of cases are imputed for a given measure (this is generally not the case in the NHES surveys). If the user wishes to account for the fact that some of the data were imputed when computing sampling errors for the estimates, the missing values can be imputed using multiple imputation methods or flagged so that variance procedures that reflect imputation variance can be used.

Chapter 7. Weighting and Standard Error Calculation

7.1 Weighting Methodology

The objective of the National Household Education Surveys Program of 2012 (NHES:2012) is to make inferences about the entire civilian, noninstitutionalized population for the two target populations described in the following paragraph. Weighting is necessary to account for differential probabilities of selection and to reduce potential bias owing to nonresponse and differential coverage of subpopulations. Although these weighting adjustments reduce bias, they increase the variances of survey estimates when applied. These aspects of weighting are addressed in Kish (1965). The weighting methodology developed for the NHES:2012 carefully balanced the bias reductions against the potential increases in variance.

The target populations for the NHES:2012 surveys are

- the U.S. noninstitutional population age 6 or younger (as of December 31, 2011) and not yet enrolled in kindergarten (Early Childhood Program Participation Survey [ECPP]) and
- the U.S. noninstitutional population age 20 or younger and enrolled in kindergarten through twelfth grade or homeschooled for the equivalent grades (Parent and Family Involvement in Education Survey [PFI]).

The weights were constrained such that the distribution of the NHES ECPP and PFI estimates matched select population estimates from the 2011 American Community Survey (ACS). In prior years, NHES used the Current Population Survey (CPS) estimates for control totals. The ACS was chosen for NHES:2012 because it had a larger sample size than CPS. This allowed for more accurate control totals and greater precision in the NHES person-level estimates.

The following sections describe the weighting and variance estimation methodologies used for NHES:2012. The computation of household-level weights used in computing person-level weights is described in the following section. Later sections describe the computation of the person-level weights for use in analyzing the survey data and the procedures for computing sampling errors.

7.2 Household-Level Weights

The NHES:2012 had two sequential phases: a first phase in which households were asked a few questions to determine the presence of eligible children (called the "screener") and a second phase in which households with eligible children were asked to complete more in-depth topical

questionnaires. (These phases are described in chapter 2.) Information from the first phase was used to create the household-level weights. Because the NHES:2012 is primarily concerned with information about eligible children, the household-level weights were calculated specifically as a basis for computing the person-level weights.

The household base weight (*HBWj*) is the product of two factors,

- the weight associated with the differential sampling of addresses based on the race/ethnicity stratum of the frame and
- differential sampling of Post Office (PO) box addresses that were designated as the only way to get mail (OWGM). (See chapter 2 for more detail on the differential sampling in NHES.)

The household-level base weight was then adjusted for screener nonresponse using the screener noninterview adjustment factor $(SNIAF_j)$.³² Calculation of the screener noninterview adjustment factor is described later in this chapter.

The procedures for computing the household-level weights are discussed below.

The first step was to compute a base weight for each sample address. For NHES:2012, the addresses were first stratified into three race/ethnicity strata to facilitate the oversampling of Black and Hispanic households. At this phase of selection, the probability of selection was computed for each address. The base weight, as shown in table 7-1, is the reciprocal of the address's probability of selection (the sampling fraction).

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³² See the NHES:2012 chapter on planning and development for descriptions of two past adjustments not needed for NHES:2012 owing to the change in mode. One adjustment was for multiple chances of selection if a households had multiple telephone numbers; the other was a poststratification adjustment, which attempted to conform the estimates to a population that included households with and without landline telephones.

Table 7-1. Base weight for the initial sampling of addresses: NHES:2012

Race/ethnicity stratum	Sampling fraction	Base weight
Black	20,291,932/41,600	487.79
Hispanic	13,817,860/31,200	442.88
Other	104,514,715/135,200	773.04

SOURCE: Marketing Systems Group's (MSG) address frame, based on the United States Postal Service Computerized Delivery Sequence File.

Next, to increase the efficiency of the mailing, PO box addresses that were not designated OWGM were undersampled by stratifying the sample into two address-group substrata. The non-OWGM PO boxes were believed to be less likely to respond to the screener because the addressees were likely receiving their mail at multiple locations. The group not undersampled consisted of both OWGM PO boxes and non-PO boxes. Addresses were subsampled differentially within each race/ethnicity stratum on the basis of whether they were designated non-OWGM PO boxes or not. At this phase of selection, the base weight was multiplied by the reciprocal of the address's probability of selection for the address-group substrata. The resulting base weight, denoted HBW_i , is shown in table 7-2.

Table 7-2. Sampling fractions and base weights for the subsampling of addresses: NHES:2012

	OWGM substratum		
Race/ethnicity stratum	Address Group 1 (Non-OWGM)	Address Group 2 (OWGM)	
Sampling fraction:	3/1	5.51/4.51	
Black	1463.36	595.94	
Hispanic	1328.64	541.08	
Other	2319.11	944.44	

SOURCE: Marketing Systems Group's (MSG) address frame, based on the United States Postal Service Computerized Delivery Sequence File.

The second step was to calculate the screener phase household nonresponse adjustment. Each sampled address was classified as a respondent (R), a nonrespondent (NR), an ineligible case (I), or a case of unknown eligibility (U). Ineligible cases were those returned by the postmaster with one of the following statuses: unit is vacant; undeliverable as addressed (UAA); insufficient address; unclaimed; no such street; no such street number; illegible address; and no mail receptacle. The following types of cases were also classified as ineligible on the basis of the postmaster's information: box closed—no order; forwarding order has expired; deceased; moved, left no address; and moved out of U.S.—no forwarding address. Although these latter ineligibility types are usually thought of as pertaining to individuals and the NHES:2012 questionnaires were not addressed to specific individuals, these types were assigned by postal workers using the

United States Postal Service (USPS) procedures. Even though these dispositions did not exactly apply to households, it was decided early in the NHES planning to carry over these dispositions into the NHES processing. Cases of unknown eligibility within a type of address are assumed to be eligible at the same rate as the known eligibility cases within the same type of address. The unknown eligibility cases are different from the nonrespondent cases in that no information about the validity of the address was obtained for unknown eligibility cases—no form was returned, and it is not known whether the address was eligible. For cases classified as nonrespondents, some type of response was received, such as a blank form or a note that the household would not participate. Nonrespondents are defined differently at the topical level than at the screener level. At the topical level, nonrespondents include all unreturned forms in addition to cases that explicitly refused to participate. Therefore, the term "eligible" in this context, therefore, refers to the capability of a household to respond to the screener questionnaire, such as the address belonging to an occupied, residential household. The proportion of eligible cases (R + NR) to total cases identified as eligible or ineligible (T-U)(where T is the weighted size of the nonresponse adjustment cell) is referred to as ee in the alternative response rate formula from the American Association for Public Opinion Research (AAPOR) Response Rate 3. The base weights of the nonrespondent cases and a portion of the unknown eligible cases are distributed to the base weights of the respondent cases within a nonresponse adjustment cell. Chi-Square Automatic Interaction Detection (CHAID) analysis was used to identify characteristics most associated with screener nonresponse.³³ Characteristics used in this analysis had to be available for both respondents and nonrespondents. These variables and their definitions are listed in exhibit 7-1. All variables used in the analysis were found on the vendor's frame except the variable "Questionnaire brand," which was assigned by Census before sample selection.

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³³ Chi-Square Automatic Interaction Detection (CHAID) is a categorical search algorithm that identifies characteristics associated with response propensity.

Exhibit 7-1. Variables used in the screener CHAID analysis

Variable	Definition	Response categories
Address vacancy status	Whether the address is vacant	1=vacant; 2=not vacant
Mailing address type	Whether the address is a street address, PO box address, high-rise building address, or rural-route address	0=route type information missing on sampling frame; 1=street; 2=PO box; 3=high rise; 4=rural route
OWGM	Whether a PO box address is the only address to get mail (OWGM)	1=OWGM; 2=non-OWGM
Drop point	Whether the address is a single postal delivery point for multiple housing units	1=drop point; 2=not a drop point
Seasonal address	Whether the address is seasonal	1=seasonal; 2=not seasonal; 3=educational seasonal
Dwelling type	Whether the address is a single-family or multi-unit structure	1=single-family; 2=multi-unit
Questionnaire brand	Whether the questionnaire had a Census Bureau or Department of Education logo	1=Census Bureau; 2=Department of Education
Home tenure	Whether the address was owned or rented by the household	1=owned or other; 2=rented
Educational attainment	Highest educational attainment of the head of household	0=educational information missing on sampling frame; 1=High school credential; 2=Some college; 3=Bachelor degree; 4=Graduate degree; 5= Less than high school credential
Race/ethnicity	Race or ethnicity of the head of household	0=race information missing on sampling frame; 1=White; 2=Black; 3=Hispanic; 4=Asian or Pacific Islander; 5=Other, unknown ¹
Marital status	Marital status of the head of household	0=marital status information missing on sampling frame; 1=single; 2=married
Age	Age of the head of household	0=age information missing on sampling frame; 1=0-17 years; 2=18-24 years; 3=25-34 years; 4=35-44 years; 5=45-64 years; 6=65+ years
Gender	Gender of the head of household	1=male; 2=female
Phone number	Existence of a telephone number on the sampling frame for the household	0=no phone number exists on sampling frame; 1=phone number exists
Variable	Definition	Response categories
Income	Household income	0=income information missing from sampling frame; 1=\$0-\$10,000; 2=\$10,001-\$20,000; 3=\$20,001- \$30,000; 4=\$30,001-\$40,000; 5=\$40,001-\$50,000; 6=\$50,001-\$60,000; 7=\$60,001-\$75,000; 8=\$75,001- \$100,000; 9=\$100,001-\$150,000; 10=\$150,001+
Number of adults	Number of adults in the household	0=information missing on sampling frame; 1=1 adult in the household; 2=2 adults in the household;

¹ Race/ethnicity categories were based on the vendor frame variable "Ethnicity" which combined race and ethnicity into one variable. "White" included these categories from the vendor's frame: Czech, Dutch, Eastern European, English, French, German, Greek, Irish, Italian, Jewish, Middle Eastern, Polish, Portuguese, Russian, Scandinavian, Scottish, Swiss, Ukrainian, and Western European. "Black" included African and African American. "Hispanic" included Hispanic. "Asian or Pacific Islander" included Asian, Chinese, Hawaiian, Indonesian, Japanese, Korean, Polynesian, and Vietnamese. "Other, unknown" included Miscellaneous Other, Native American, and unknown. SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

The screener noninterview adjustment factor, $SNIAF_{j(c)}$, applied to each responding household j in adjustment cell c, is

$$\begin{split} SNIAF_{j(c)} &= \frac{\sum_{j \in R} HBW_j + \sum_{j \in NR} HBW_j + ee_c \sum_{j \in U} HBW_j}{\sum_{j \in R} HBW_j}, \\ \text{where } ee_c &= \frac{\sum_{j \in R} HBW_j + \sum_{j \in NR} HBW_j}{\sum_j HBW_j - \sum_{j \in U} HBW_j} \end{split}$$

The screener nonresponse adjustment cells and response rates within the cells are shown in appendix D.

The final household-level weight for household j, HHW_j , is given by

$$HHW_j = HBW_j * SNIAF_{j(c)}.$$

7.3 Person-Level Weights for ECPP and PFI

A sampling algorithm was used to select one child in each household. The sampling was based on information collected in the screener questionnaire from the household member who responded to the screener. For the ECPP and PFI questionnaires, the eligibility of the sampled child was verified or updated when the parent/guardian who knew about the child responded to the ECPP or PFI questionnaire. Because sampling eligibility was defined in terms of the data collected in the screener, the weighting procedures were developed with possible misclassification (i.e., children sampled for the ECPP survey who were found to be eligible for the PFI survey and vice versa) taken into account so that the estimates did not incur bias because of misclassification. In order to calculate the person-level base weight correctly, the count of children eligible for the PFI and ECPP forms was reviewed for each case that switched forms. Cases switched forms when a household contacted the Census Bureau to request a different form that was appropriate for the household (a PFI form instead of an ECPP form or vice versa). The requested form was mailed to the household and the data were collected and processed in the same manner as for other cases using that same form. For cases where the household switched to a PFI form, the counter of children eligible for PFI was incremented by one and the counter of children eligible for ECPP was reduced by one. There were no cases where the household switched from a PFI form to an ECPP form. Then the person-level weighting adjustments described below were applied.

The household-level weight was used as the base weight for each of the person-level (ECPP and PFI) weights. The person-level weight for sampled person k in household j, $FEWT_{jk}$ for the

ECPP survey and $FPWT_{jk}$ for the PFI survey, is the product of the final household weight and five weight adjustment factors:

- Weight associated with sampling the person's domain (ECPP or PFI) in the given household, A_{ik}
- Weight associated with sampling the person from among all eligible persons in the given domain in the household, B_{ik}
- Weight associated with sampling a child in a joint custody arrangement at both parents' addresses C_{ik}
- Weight associated with the topical questionnaire (ECPP or PFI) unit nonresponse, $NIAF_k$ (noninterview adjustment factor)
- Adjustment associated with raking the person-level weights to Census Bureau estimates of the number of persons in the target population, RAF_k (ratio adjustment factor)

The procedures for computing the person-level weights are described as follows.

The first step in developing the person-level weights was to account for the probability of sampling the child's domain in the given household. Each household in the sample was randomly predesignated as either an ECPP household or a PFI household. This predesignation was used only when a household had children in both domains. In any household with a child/children in the eligible population for only one survey, one child was randomly selected in that domain. Because ECPP-eligible children made up a smaller portion of the population than did PFI-eligible children, differential sampling in households with children in both domains was applied to ensure a sufficient sample size for the ECPP survey. Among households with children eligible for both surveys, 70 percent were designated to the ECPP domain and 30 percent were designated to the PFI domain.

The weighting factor A_{jk} used to adjust for the probability of sampling each child domain for the ECPP and PFI surveys, is equal to 1 for households with all children eligible for only one topical questionnaire. One eligible child was always sampled from this domain. If the household had children eligible for both ECPP and PFI, and if the household had been designated for the ECPP questionnaire, then

$$A_{jk} = 10/7.$$

Otherwise, if the household was designated for the PFI questionnaire, then

 $A_{jk} = 10/3$. The second adjustment, which accounted for the probability of sampling child k from among all eligible children (as reported by the respondent) in the given domain in household j, is

$$B_{jk} = N_{jk}$$

where N_{jk} is the number of eligible children in household j in the same sampling domain as child k.

The second step was an adjustment that accounted for the possibility that a child in a joint custody arrangement could be sampled at both parents' addresses. For households responding that the sampled child usually lives elsewhere, the weight is

$$C_{jk} = 1/2$$

For each sampled child k in household j, the person-level base weight (sometimes referred to as the unadjusted person-level weight), UPW_{jk} , can be written as the product of the final household weight and the adjustments for within-household sampling. That is, for sampled child k in household j, the base weight is

$$UPW_{jk} = HHW_j * A_{jk} * B_{jk} * C_{jk}.$$

The third step was to adjust for persons (parents/guardians) who did not respond to the topical questionnaire. Each topical questionnaire case was classified as either a respondent (R) or a nonrespondent (NR), depending on whether or not the topical questionnaire was completed for the sampled child. The definition of nonrespondent cases differed between the screener and topical levels. At the topical level, nonrespondents included both refusal cases and cases that did not return the topical questionnaire. The unadjusted person-level weights (UPW) of the nonrespondents were distributed to the unadjusted person-level weights of the respondents within a nonresponse adjustment cell. The characteristics used to form the adjustment cells were characteristics for which information was available for both respondents and nonrespondents. The adjustment cells were determined by a separate CHAID analysis for each topical survey. The analysis identified combinations of characteristics (taken from the sample frame and the screener) associated with response propensity. For ECPP and PFI, the variables used are listed in exhibit 7-2.

Exhibit 7-2. Variables used in the ECPP and PFI CHAID analysis

Variable	Definition	Response categories	Source
RACE	Race/ethnicity stratum	1=Black stratum; 2=Hispanic stratum; 3=Other stratum	Sampling frame
QUESTIONNAIRE BRAND	Whether the questionnaire had a Census Bureau or Department of Education logo	1=Census Bureau; 2=Department of Education	Experimental condition
INCENTIVE	Incentive amount at first topical mailing	1=\$5; 2=\$15	Experimental condition
H20CHIL	Number of children 20 or younger in the household	0=0 children in the household ¹ ; 1=1 child in the household;; 5=5 children in the household; 6=6+ children in the household; 7=number of children information was missing ²	Screener data
INELIG_COLLEGE	Number of youth in the household age 20 or younger ineligible for the topical survey due to attending college	0=0 youth ineligible for the topical survey; 1=1 youth; 2=2 youth; 3=3+ youth	Screener data
CAGE (ECPP)	Child's age	0=age 0; 1=age 1;; 6=age 6; 7=age information was missing ³	Screener data
CAGE (PFI)	Child's age	0=age 0; 1=age 1;; 20=age 20; 21=age information was missing ⁴	Screener data
CENROLL ⁵	Child's school enrollment status	1=public/private/preschool; 2=homeschool; 3=not in school	Screener data
CSEX	Child's sex	0=sex information was missing; 1=male; 2=female	Screener data

¹ H20CHIL was a screener variable where the respondent was asked to fill in the number of children in the household. For a few screener forms, this question was answered with "0" even though the screener respondent filled in enough other information about children in the household that it was possible to select a child for one of the topical surveys.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

² For some screener forms, this question was left blank even though the screener respondent filled in enough other information about children in the household that it was possible to select a child for one of the topical surveys.

³ A child could be selected for a topical survey even though age was missing if there was enough other information about the child. For example, where age was missing but the screener indicated that the child was in preschool, the child was selected for the ECPP.

⁴ Four children with screener-collected age 0, two children with screener-collected age 2, and five children with screener-collected age 5 were selected for PFI due to the screener-reported enrollment status. In sampling the children for the PFI survey, more importance was given to the enrollment information than to the screener age. A PFI questionnaire was sent if a child was enrolled in kindergarten through 12th grade even if age was 0 through 4. If the screener age was correct and disqualified the child for the PFI, the household could contact the Census Bureau for the ECPP questionnaire.

⁵ Only the ECPP CHAID analysis program used the variable CENROLL to split data into cells. For the PFI CHIAD analysis, CENROLL was not significantly different from other categories, so the model determined not to use it.

Appendixes E and F show the nonresponse adjustment cells and response rates within the cells for ECPP and PFI. The nonresponse adjustment factor, $NIAF_k$, to be applied to each respondent k in adjustment cell c is as follows:

$$NIAF_{k(c)} = \frac{\sum_{h \in R_c \cup NR_c} UPW_h}{\sum_{h \in R_c} UPW_h}$$

Thus, for sampled person k in household j, the nonresponse adjusted person-level weight, NPW_{jk} , can be written as

$$NPW_{jk} = UPW_{jk} * NIAF_{k(c)}.$$

The final stage of person-level weighting was to rake the nonresponse adjusted person-level weights, *NPW*, to national control totals. Raking was proposed by Deming and Stephan (1940) as a way to ensure consistency between complete counts and population data (Deming and Stephan used sample data from the 1940 U.S. Census of Population). The raking procedure typically improves the reliability of survey estimates and also corrects for the bias that results from households or persons not covered by the survey. The raking procedure was carried out in a sequence of adjustments: first, the weights were adjusted to one marginal distribution (or dimension) and then to the second marginal distribution, and so on. One sequence of adjustments to the marginal distributions is known as a cycle or iteration. The procedure was repeated until convergence of weighted totals to all sets of marginal distributions was achieved. (See Deming and Stephan, 1940, for further details on raking and the convergence process.)

The raking of the person-level weights was required in order to align the person-level weights with the person-level control totals and adjust for differential coverage rates at the person level.

The raking procedure for the ECPP and PFI weights involved raking the nonresponse-adjusted person-level weights to national totals obtained using the number of children from the 2011 annual ACS estimates. CPS was used for raking in prior NHES administrations, but ACS was used for NHES:2012 because its sample size was larger than CPS, allowing for more accurate control totals and greater precision in the NHES estimates.

As shown in appendixes E and F, the dimensions used for raking were as follows: A cross of the child's race/ethnicity (Hispanic, Non-Hispanic Black only, Other) and household income (\$10,000 or less/\$10,001-\$20,000/\$20,001-\$30,000/\$30,001-\$40,000/\$40,001-\$50,000/\$50,001-\$60,000/\$60,001-\$75,000/\$75,001-\$100,000/\$100,001-\$150,000/\$150,001 or more) for ECPP and PFI

- A cross of household size (1 or 2, 3 or 4, 5+ persons) and child's age (0-2 years or 3-6 years) for ECPP; (5 years and under, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19 to 20 years) for PFI
- A cross of home tenure (rent, own, or other) and either parent's highest educational attainment (less than high school credential/high school credential or equivalent/some college up to and including a bachelor's degree/higher than a bachelor's degree) for ECPP and PFI

These raking dimensions were proposed because they included important analysis variables, and preliminary research showed that NHES distributions for these dimensions had a fair amount of variation compared with the ACS distributions for the same variables. Of the variables examined as part of the raking research (household income, household size, home tenure, highest educational attainment of either parent, Census region, and child's race/ethnicity, sex, and age), the chosen variables showed the most variability across their categories when each was examined alone. The variables were also crossed with each other and, again, the pairs that showed the most variability were chosen for the raking dimensions. Several of the variables and variable pairings were included in the preliminary analysis because they were used for raking in past NHES administrations. These included the race/ethnicity of child by household income and home tenure by educational attainment. It was decided not to rake on several variables and dimensions, such as sex by age of child, tenure by age of child, and Census region. The variable sex had limited variation across the two categories. Although age varied considerably across its categories, when this variable was crossed with sex, there was some variation but less than the dimension of age of child by household size. Little value was seen in keeping both dimensions that used the same variable, age of child in this case. For tenure by age of child, both variables had variation across their categories when observed alone. However, when tenure was crossed with highest educational attainment, more variation was observed than tenure by age of child. Also, when household size was crossed with age of child, more variation was observed than tenure by age of child; thus, tenure by age was dropped and the dimension with more variation was retained. It was decided not to use the region variable because there was very little variation across the four regions. Tables 7-3 and 7-4 show the final dimensions chosen for raking.

In NHES:2007, the race and ethnicity categories used for raking were Hispanic (regardless of race), non-Hispanic Black only, and Other. For NHES:2012, the ACS race and Hispanic origin

variables were recoded into the same three raking categories used for NHES:2007 (ACS has hundreds of categories for the variables race and Hispanic origin³⁴).

One issue that arose in raking the data from the NHES:2012 was the handling of age. Age groups in NHES had to be compared with equivalent age groups in the ACS; however, each survey collected age information differently and used different reference points. It was important that NHES subpopulations be consistent with the ACS subpopulation to which the weights were raked. Otherwise, inconsistencies in the definitions of the subpopulations would result in large weighting adjustments and inaccurate estimates. NHES:2012 collected month and year of birth for each sampled child. In the ACS, age was collected in reference to the date of the particular interview—there was no single reference date for the 2011 annual ACS estimates. For the purpose of creating ACS weights, age was treated as if it were the age on July 1, the midpoint of the data-collection year. For the NHES raking, ACS age was used as is without "aging" the sample because using ACS date of birth to "age" the ACS cases to a different month would be inconsistent with the ACS weights. Thus, the NHES ages were aged using the month and year of birth to July 1, 2012, to be comparable to the ACS age distribution of July 1, 2011. Because the zero-year category of NHES ECPP contained relatively few cases after aging, this category was collapsed with the one- and two-year categories. Also after aging, the ages of some children were greater than the age limit for the surveys: one ECPP child's age was changed to 7, over the age limit of 6 and 18 PFI youths' ages were changed to 21, over the age limit of 20. These records were placed in the age 3 to 6 category for ECPP and the age 19 and 20 category for PFI for the purposes of raking. The aged ages were derived only for the purposes of raking and comparing NHES age distributions with ACS age distributions.³⁵

Prior to raking, all variables used in the raking procedure were fully imputed (see chapter 6 for information on imputation procedures). Raked weights were formed by iteratively modifying the nonresponse adjusted person-level weights (*NPW*) so that they corresponded to the control totals. A table of estimates was formed using the nonresponse adjusted person-level weights. These weights were multiplied by the constant that forced the sum of the tabled values to equal the control totals along the first dimension. The revised table was then multiplied by the constant required so that the second dimension control totals were obtained, and the same process was repeated for all higher dimensions. When the last dimension was done, one iteration of raking

³⁴ American Community Survey and Puerto Rico Community Survey http://www.census.gov/acs/www/Downloads/data_documentation/CodeLists/2011_ACS_Code_Lists.pdf

³⁵ In prior NHES administrations, the approach involved aging all cases in the CPS and NHES sample to bring them to the same month in age. This approach is described in the NHES:2007 Methodology Report (Hagedorn et al., 2009).

was complete. Further iterations were employed until the estimates converged to within 1 of the control totals across all the dimensions.

The final ECPP person-level weight for sampled person k in household j is

$$FEWT_{jk} = NPW_{jk} * RAF_{k(d)}$$

where $RAF_{k(d)}$ is the raking adjustment factor for raking cell d, where person k has the attributes corresponding to the levels of the dimensions (i.e., response categories of the variables) of raking cell d.

The final PFI person-level weight for sampled person k in household j is

$$FPWT_{jk} = NPW_{jk} * RAF_{k(d)}$$

Table 7-3. Control totals for raking the Parent and Family Involvement in Education Survey NHES:2012 person-level weights: 2011 ACS

Dimensions used in raking	Control total
Total	53,437,931
Race/ethnicity by household income	
Hispanic	
\$10,000 or less	905,839
\$10,001-\$20,000	1,590,569
\$20,001-\$30,000	1,804,926
\$30,001-\$40,000	1,594,103
\$40,001-\$50,000	1,315,364
\$50,001-\$60,000	980,377
\$60,001-\$75,000	1,179,008
\$75,001-\$100,000	1,210,308
\$100,001-\$150,000	1,058,166
\$150,001- or more	566,270
Non-Hispanic Black only	
\$10,000 or less	1,061,041
\$10,001-\$20,000	1,151,452
\$20,001-\$30,000	1,043,356
\$30,001-\$40,000	847,002
\$40,001-\$50,000	692,217
\$50,001-\$60,000	522,086
\$60,001-\$75,000	630,499
\$75,001-\$100,000	670,856
\$100,001-\$150,000	613,698
\$150,001- or more	301,784
Other	
\$10,000 or less	1,297,239
\$10,001-\$20,000	1,915,383
\$20,001-\$30,000	2,237,175
\$30,001-\$40,000	2,449,895
\$40,001-\$50,000	2,574,049
\$50,001-\$60,000	2,500,527
\$60,001-\$75,000	3,805,216
\$75,001-\$100,000	5,266,219
\$100,001-\$150,000	6,311,632
\$150,001- or more	5,341,675

See notes at end of table.

Table 7-3. Control totals for raking the Parent and Family Involvement in Education Survey NHES:2012 person-level weights: 2011 ACS—Continued

Dimensions used in raking	Control total
Household size by age of child	
1-2 person household	
5 years and under	
6 years	
7 years	
8 years	
9 years	
10 years	
11 years	
12 years	
13 years	
14 years	
15 years	
16 years	
17 years	
18 years	
19 and 20 years	63,692
3-4 person household	
5 years and under	1,252,902
6 years	1,976,596
7 years	1,950,081
8 years	1,912,285
9 years	1,941,997
10 years	1,977,516
11 years	2,034,378
12 years	2,012,161
13 years	
14 years	2,128,662
15 years	
16 years	
17 years	
18 years	1,150,402
19 and 20 years	

See notes at end of table.

Table 7-3. Control totals for raking the Parent and Family Involvement in Education Survey NHES:2012 person-level weights: 2011 ACS—Continued

Dimensions used in raking	
5+ person household	
5 years and under	. 1,231,141
6 years	. 1,814,359
7 years	1,889,619
8 years	. 1,868,524
9 years	1,906,262
10 years	. 1,969,572
11 years	1,894,162
12 years	. 1,866,560
13 years	1,775,919
14 years	. 1,721,449
15 years	1,659,480
16 years	. 1,545,568
17 years	. 1,421,724
18 years	. 718,306
19 and 20 years	. 198,957
Home tenure by highest educational attainment of either parent	
Rent Lead the which calculated and acticles	2 040 060
Less than high school credential	
High school credential or equivalent	
Some college up to and including a bachelor's degree	
Higher than a bachelor's degree	. 958,100
Own or other	. 2,423,983
Less than high school credential	
High school credential or equivalent	
Some college up to a bachelor's degree	
Higher than a bachelor's degree	

SOURCE: U.S. Census Bureau, American Community Survey (ACS), 2011 1-year Public Use Microdata Sample (PUMS) File.

Table 7-4. Control totals for raking the Early Childhood Program Participation Survey NHES:2012 person-level weights: 2011 ACS

Dimensions used in raking	Control total
Total	21,674,724
Race/ethnicity by household income	
Hispanic	
\$10,000 or less	495,571
\$10,001-\$20,000	809,988
\$20,001-\$30,000	835,062
\$30,001-\$40,000	716,921
\$40,001-\$50,000	539,914
\$50,001-\$60,000	414,644
\$60,001-\$75,000	482,359
\$75,001-\$100,000	497,624
\$100,001-\$150,000	447,854
\$150,001- or more	229,550
Non-Hispanic Black only	
\$10,000 or less	602,326
\$10,001-\$20,000	479,527
\$20,001-\$30,000	384,950
\$30,001-\$40,000	315,648
\$40,001-\$50,000	220,032
\$50,001-\$60,000	187,479
\$60,001-\$75,000	217,309
\$75,001-\$100,000	211,838
\$100,001-\$150,000	183,688
\$150,001- or more	86,735
Other	
\$10,000 or less	675,556
\$10,001-\$20,000	891,955
\$20,001-\$30,000	1,005,696
\$30,001-\$40,000	1,099,020
\$40,001-\$50,000	1,130,070
\$50,001-\$60,000	1,045,697
\$60,001-\$75,000	1,533,364
\$75,001-\$100,000	2,035,507
\$100,001-\$150,000	2,190,286
\$150,001- or more	1,708,554

See notes at end of table.

Table 7-4. Control totals for raking the Early Childhood Program Participation Survey NHES:2012 person-level weights: 2011 ACS—Continued

Dimensions used in raking	Control total
Household size by age of child	
1-2 person household	
0-2 years	435,644
3-6 years	429,856
3-4 person household	
0-2 years	6,675,864
3-6 years	5,321,146
5+ person household	
0-2 years	4,496,713
3-6 years	4,315,501
Home tenure by highest educational attainment of either parent	
Rent	
Less than high school credential	1,970,397
High school credential or equivalent.	2,668,082
Some college up to a bachelor's degree	4,647,234
Higher than a bachelor's degree	670,911
Own or other	
Less than high school credential	769,516
High school credential or equivalent.	1,653,535
Some college up to a bachelor's degree	6,514,148
Higher than a bachelor's degree	2,780,901

SOURCE: U.S. Census Bureau, American Community Survey (ACS), 2011 1-year Public Use Microdata Sample (PUMS) File.

7.4 Methods for Computing Sampling Errors

Sampling error, the difference between the estimate from a sample and the true population parameter, results when data are collected from a sample rather than from a full population. In surveys with complex sample designs, such as NHES:2012, direct estimates of sampling errors, which assume a simple random sample, typically underestimate the variability in the estimates (Wolter 1985). The NHES:2012 sample design and weighting included procedures that deviated from the assumption of simple random sampling, such as oversampling in areas with higher concentrations of Blacks and Hispanics, sampling persons within households with differential sampling probabilities, and raking to control totals.

7.4.1 Replication Sampling Errors

One method for computing sampling errors to reflect these aspects of the sample design and weighting is the replication method. Replication involves splitting the entire sample into a set of groups, or replicates, based on the actual sample design of the survey. The survey estimates can then be computed for each replicate by creating replicate weights that mimic the actual sample design and estimation procedures used in the full sample. The variation in the estimates computed from the replicate weights can then be used to estimate the sampling errors of the estimates from the full sample.

As for past NHES surveys, a total of 80 replicates were defined for NHES:2012. Eighty replicates were chosen to provide reliable estimates of sampling errors with reasonable data processing costs. The specific replication procedure used for NHES:2012 was a jackknife replication method (Wolter 1985). It involved dividing the sample into 80 random subsamples (replicates) for the computation of the replicate weights. Before the replicate weighting began, the sample records were sorted by the race/ethnicity strata and the sampling order of the addresses (ZIP code plus four-digit ZIP code) within each stratum. To create the subsamples, the first household in the sort order and every 80th household thereafter was assigned a group number code=1. Therefore, the 1st, 81st, 161st, 241st household, ... was assigned to group 1. The second household and every 80th household thereafter was assigned group number code=2, so that the 2nd, 82nd, 162nd, 242nd, ... household was assigned to that group. Each replicate, therefore, contained the household the count started with and every 80th household thereafter. Households from the other 79 groups were not included in a particular replicate. In each replicate, a replicate weight was developed using the same weighting procedures used to develop the full sample weight (described in sections 7.2 and 7.3).

The jackknife variance estimator has the form

$$v(\hat{\theta}) = \frac{G-1}{G} \sum_{k=1}^{G} (\hat{\theta}_{(k)} - \hat{\theta})^2$$

where θ is the population parameter of interest; $\hat{\theta}$ is the estimate of θ based on the full sample; $\hat{\theta}_{(k)}$ is the estimate of θ based on the observations included in the *k*th replicate; and *G* is the total number of replicates (G = 80).

Replicate weights were created for both NHES:2012 surveys: ECPP and PFI. The replicate weights were included on the ECPP file as *FE1-FE80* and on the PFI file as *FP1-FP80*. To appropriately reflect the two-phase sampling of addresses, the final replicate base weights were computed in two steps, using the approach described in Kim, Navarro, and Fuller (2000). The procedures for forming the replicate weights for each of these surveys are described below. For further details about the replication methodology used to reflect the two-phase sampling, refer to Kim et al. (2000).

- 1) The sampled addresses in the phase 1 sample were divided into the three race/ethnicity strata used for the first phase of sampling. Within each of the three strata, the addresses were sorted in the same order that was used in the selection of the phase 1 sample.
- 2) Eighty replicates were formed using all sampled addresses. This was done by assigning the 1st, 81st, 161st, ... addresses in the list to replicate 1; the 2nd, 82nd, 162nd,... addresses in the list to replicate 2; ...; and the 80th, 160th, 240th,... addresses in the list to replicate 80.
- 3) The addresses were then assigned 80 weight variables (*REPBW01* through *REPBW80*) on the basis of the following procedures. The replicate phase 1 base weights were assigned to all sampled addresses by multiplying the full-sample base weight by either zero or 80/79. This procedure is the standard jackknife method of dropping one unit (in this case, a group of residential households with the same replicate number) and weighting up the remaining units to account for the dropped unit. For example, to construct replicate 1 base weights, a replicate base weight of 0 was assigned to residential households from *REPBW01*, and the base weights of all residential households in *REPBW02* through *REPBW80* were multiplied by a factor of 80/79. Next, the phase 2 sample (the addresses that were mailed a form) were assigned a final base weight by applying an adjustment for subsampling to the replicate phase 1 base weights within each of the phase 2 strata. Specifically, within each phase 2 stratum, the adjustment weights up the replicate base weights of phase 2 units to the total of the replicate base weights of the phase 1 units.

- 4) On the basis of the exact same weighting procedures described earlier in this chapter for each of the sets of full sample weights, the other adjustments (i.e., sampling adjustments, nonresponse adjustments, raking adjustments) were applied to every replicate phase 2 base weight for completed surveys. In other words, the weighting steps were applied 80 times.
- 5) The same criteria for raking convergence in the full sample weighting was also used for the replicate weights. The raking iterations were stopped when the replicate weights converged to within 1 of the control totals.

The replication procedure for NHES:2012 involved the calculation of the full sample weight and 80 replicate weights. The variation in the estimates was calculated by computing the estimate of interest once for each of these 81 weights. This variation was then used to estimate the sampling errors of the estimates from the full sample.

The computation of the sampling errors, using these replicate weights, can be done easily using the survey data analysis procedures (PROC SURVEYMEANS and PROC SURVEYREG) in SAS version 9.2 and above, the R Survey Package, or the Windows-based software packages WesVar (Westat 2000), SUDAAN (Shah et al. 1995), Stata, or AM Statistical Software. The replication method should be specified as JK1. Information on obtaining SAS can be found at http://www.sas.com/contact/intro.html, and information on obtaining the R Survey Package can be found at http://cran.fhcrc.org/web/packages/survey/index.html. The current version of WesVar (version 5) is available from Westat; information can be obtained at http://www.westat.com/Westat/expertise/information_systems/WesVar/. Information on obtaining SUDAAN can be found at http://www.rti.org/sudaan, and the AM software is available at http://www.stata.com.

7.4.2 Taylor Series Approximation

Another approach to the valid estimation of sampling errors for complex sample designs is to use a Taylor series approximation to compute sampling errors. To produce standard errors using a Taylor series program, such as SUDAAN (Shah et al. 1995), AM, Stata, SPSS Complex Samples Module, or the survey data analysis procedures (PROC SURVEYMEANS and PROC SURVEYREG) in SAS version 9.2, two variables are required in order to identify the stratum and the primary sampling unit (PSU). The stratum-level variable is the indicator of the variance estimation stratum from which the unit (address or sampled person) was selected. The PSU is an arbitrary numeric identification number for the unit within the stratum. For NHES:2012, the stratum variable signifies the race/ethnicity stratum that was used in the first phase of sampling;

the PSU variable was assigned sequentially on the basis of the selection order of the address within the race/ethnicity stratum. Software packages that use Taylor series linearization for variance estimation, such as SUDAAN, do not currently have the capability to compute variance estimates that reflect the effect that two-phase sampling has on the precision of the estimates. Thus, variance estimates computed using these Taylor series linearization packages are likely to be slight underestimates.

The PSU and stratum variables appear on each of the topical survey files. These variables can be used in SUDAAN to produce standard errors by specifying that the design is a "with replacement" sample (DESIGN = WR) and that the sampling levels are given by the appropriate stratum and PSU variables.

The PSU and stratum variables can also be used in SPSS Complex Samples Module to produce standard errors. Information on SPSS Complex Samples Module can be obtained at http://www-01.ibm.com/software/analytics/spss/products/statistics/complex-samples/.

Stata, another software package that uses Taylor series methods, also uses the PSU and stratum variables to define the units needed for computation. Information on the Stata survey commands is available at: http://www.stata.com/capabilities/survey-commands/

Data users should be aware that using different approaches or software packages in the calculation of standard errors may result in slightly different standard errors. Estimates of standard errors computed using the replication method and the Taylor series method are similar but not identical. For a discussion of this issue, see Broene and Rust (2000).

7.4.3 Approximate Sampling Errors

Although calculating the sampling errors using the methods described here is recommended for many applications, simple approximations of the sampling errors may be valuable for some purposes. Most statistical software packages compute standard errors of the estimates on the basis of simple random sampling assumptions. The standard error from this type of statistical software can be adjusted for the complexity of the sample design to approximate the standard error of the estimate under the actual sample design used in the survey. For example, the variance of an estimated proportion in a simple random sample is typically estimated using the estimated proportion (p) times its complement (l-p) divided by the sample size (n). The standard error is the square root of this quantity. This estimate can be adjusted to more closely approximate the standard error for the estimates from NHES:2012.

A simple approximation of the impact of the sample design on the standard errors of the estimates that has proved useful in previous NHES surveys and in many other surveys is to adjust the simple random sample standard error estimate by the root design effect (DEFT). The DEFT is estimated as the ratio of the standard error of the estimate computed using the replication method discussed above to the standard error of the estimate under the assumptions of simple random sampling. An average DEFT is computed by estimating the DEFT for a number of estimates and then averaging. A standard error for an estimate can then be approximated by multiplying the simple random sample standard error estimate by the average DEFT. Average DEFTs are computed for estimates from both of the surveys in NHES:2012. The recommended average DEFTs for NHES:1991-2012 appear in appendix G. The NHES:2012 average DEFTS are computed by race/ethnicity (Hispanic; Black, non-Hispanic; White, non-Hispanic; and All other, multiple races, non-Hispanic) and questionnaire interview path (infant, of preschooler, nultiple races, middle schooler, high schooler, and homeschooler).

In complex sample designs, such as NHES:2012, the DEFT is typically greater than 1 due to the differential weights attached to the observations. In NHES:2012, this factor contributed to making the average DEFT greater than 1.

The average DEFT computed for estimates in the ECPP and PFI surveys ranged from 1.30 to 2.76. For the ECPP file estimates, the average DEFT was 1.30 overall. For estimates by race/ethnicity, the average DEFT was 2.17 for the category, "All other races and multiple races, non-Hispanic" and 1.43 for the other race/ethnicity categories. For estimates by interview path, the average DEFT was 1.49 for infants (PATH = I) and 1.55 for children enrolled in preschool (PATH = N). Therefore, a DEFT of 1.30 is recommended to approximate the standard error of overall estimates in the ECPP interview file. For estimates by race/ethnicity a DEFT of 1.43 is recommended, with the exception of estimates of "All other races and multiple races, non-Hispanic" (2.17). For estimates by interview path, a DEFT of 1.52 is recommended.

For the PFI file estimates, the average DEFT was 1.46 overall. For estimates by interview path, the average DEFT was 2.76 for homeschooled children and 1.65 for the other interview path categories. For estimates by race/ethnicity, the average DEFT was 2.05 for the category, "All other races and multiple races, non-Hispanic" and 1.60 for the other race/ethnicity categories. Therefore, a DEFT of 1.46 is recommended to approximate the standard error of overall estimates in the PFI interview file. For estimates by interview path, a DEFT of 1.65 is

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³⁶ On the infant questionnaire path, questions were asked about children ages 0, 1, and 2.

³⁷ On the preschooler questionnaire path, questions were asked about children ages 3 to 6 who were not yet enrolled in kindergarten or homeschooled.

recommended, with the exception of homeschooled children (2.76); and for estimates by race/ethnicity, a DEFT of 1.60 is recommended, with the exception of "All other races and multiple races, non-Hispanic" (2.05).

As stated earlier, the average DEFT can be used to approximate the standard error for an estimate. An example of how to do this for a **percentage** estimate derived using a statistical package such as SAS³⁸ or SPSS is as follows. If a weighted estimate of 22 percent is obtained for some characteristic in the PFI file (suppose that 22 percent of children had parents who reported that they had visited a museum in the past month), then an approximate standard error can be developed in a few steps. First, obtain the simple random sample standard error for the estimate using the weighted estimate in the numerator and the unweighted sample size in the denominator: the standard error for this 22 percent statistic would be 0.31 percent. This is derived by taking the square root of $(22 \times 78)/17,563$. The weighted estimate (p) is 22 percent, 78 is 100 minus the estimated percent (1-p), and the unweighted sample size (n) is 17,563. The approximate standard error of the estimate from NHES:2012 is this quantity (the simple random sample standard error) multiplied by the DEFT for the PFI file estimates of 1.46. In this example, the estimated standard error would be 0.46 percent $(1.46 \times 0.31 \text{ percent})$.

The approximate standard error for a **mean** can be developed using a related procedure. The three steps required to do so are demonstrated using an example from the PFI file. First, the mean is estimated using the full sample weight and a standard statistical package such as SAS or SPSS. Second, the simple random sample standard error is obtained through a similar, but unweighted, analysis. Third, the standard error from the unweighted analysis is multiplied by the mean DEFT for the PFI file estimates to approximate the standard error of the estimate under the NHES:2012 design. For example, suppose the average number of times in this school year the parents/adult household members of children enrolled in grades kindergarten through 12 in regular school (excluding homeschooled children) have gone to meetings or participated in activities at the child's school is 7.1 and the simple random sampling standard error (unweighted) is 0.07. Then, the approximate standard error for the estimate would be 1.65 (the DEFT for items from the PFI-Enrolled interview) × 0.07 = 0.11.

Users who want to adjust the standard errors for estimates of parameters in regression models should follow a procedure similar to that discussed for means, above. Specifically, the estimates of the parameter in the model can be estimated using a weighted analysis in a standard statistical software package such as SAS or SPSS. A similar, but unweighted, analysis will provide the

³⁸ Here, the reference to "SAS" applies to SAS version 9.3.

simple random sample standard errors for these parameter estimates. The standard errors can then be multiplied by the DEFT to arrive at the adjusted standard error for the NHES:2012 design. For example, if a given parameter in a model involving items from the ECPP file has a weighted estimate of 2.33 and an unweighted simple random sample standard error of 0.45, then the adjusted standard error would be 1.30 (the DEFT for items from the ECPP interview) \times 0.45 = 0.59.

Alternatively, the final weight can be adjusted to reflect the DEFT before the parameter estimates are calculated in a standard statistical software package such as SAS or SPSS. To do this, first sum the values of the final weights for the sample of interest. For instance, for an analysis of all children enrolled in grades kindergarten through 12 (ALLGRADEX), sum the final weights for all 17,563 responding cases on the PFI file. Second, divide this sum by the number of cases to generate an average final weight. (In the example above, the number of cases is 17,563.) Third, multiply the average final weight by the square of the DEFT for the population of interest. (In the example above, the average final weight would be multiplied by the square of 1.46, or 2.13.) Fourth, divide the final weight by the adjusted average weight and save the quotient as a new final weight. (In the example above, the new final weight is equal to the final weight divided by the product of 2.13 and the average final weight.) Finally, weight the analysis by this new final weight. The standard errors generated in the analysis will approximate the standard errors correctly adjusted for design effects.

It should be noted that direct computation of the standard errors, rather than the approximation technique outlined above, is always recommended when the statistical significance of statements of difference would be affected by small differences in the estimated standard errors.

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Chapter 8. Data Considerations and Anomalies

The purpose of this section is to bring the user's attention to certain data considerations and data anomalies of the Early Childhood Program Participation Survey (ECPP) and the Parent and Family Involvement in Education Survey (PFI) of the 2012 National Household Education Survey (NHES:2012), and to describe the nature of those considerations and anomalies. Furthermore, where appropriate, this section attempts to identify possible means of considering them when analyzing the data. In most surveys, some real or apparent inconsistencies are observed. These may result from questionnaire design issues, outlier cases, respondent interpretations of the questions, or other factors. Those listed here were identified during the editing and review of these data and represent anomalies known at the time this manual was prepared. Other anomalies may exist in the data.

8.1 Data Considerations

Data considerations are features of the data file of which users should be aware. In general, these are features of the questionnaire, survey procedures, or data file conventions that are documented here for the purpose of bringing them to the attention of analysts.

8.1.1 Change in data collection mode from prior years

From 1991 to 2007 the NHES was conducted by telephone interviewers using list-assisted random-digit-dial (RDD) and computer assisted telephone interview (CATI) methodologies. After the 2007 collection the NHES was redesigned in order to improve response rates and population coverage. The new NHES data collection methodology used an address-based sample and self-administered paper and pencil surveys delivered and returned through the mail. Information on the NHES:2012 sample design and data collection is presented in chapters 2 and 3, respectively. The mode change required revisions to item wording and may affect the comparability of estimates from NHES data from 1991-2007 to those from NHES:2012 data. Data users should take the potential impact of the change in data collection mode into consideration when comparing estimates from the NHES:2012 to estimates from prior years.

8.1.2 Short Form Questionnaires

In an effort to increase overall response rates, some respondents were sent versions of the PFI or ECPP questionnaire that included fewer items. The items that were not included on these short forms were imputed for these respondents and slightly increased the rate of imputation for these

items. There were 61 (0.77%) ECPP and 124 (0.71%) PFI cases that returned short form questionnaires.

8.1.3 Important Information about School-Level Derived Variables

Data about all public schools are collected annually through the Common Core of Data (CCD), and data about almost all private schools are collected every two years through the Private School Survey (PSS). Data from these files are merged onto child records in NHES to provide information about the children's schools. At the time that data from the CCD and PSS data files were merged with the NHES data, CCD data from the 2010-11 academic school year and PSS data from the 2009–2010 academic school year were the most recent data available. The data from these years are the data included in the PFI data file. Since the NHES data collection took place during the 2011–2012 academic school year, some of the school-level characteristic information extracted from the CCD or PSS data files and merged with NHES data may have changed. Therefore, data users might want to use the NCES School ID (SID), available in the PFI restricted-use data file, to merge the NHES data with data from more recent versions of the CCD and PSS data files, to recreate some of the school-level derived variables included in the data files.

8.1.4 Non-imputation of CCD and PSS Data

Unlike data from the NHES survey questionnaires, no imputation was performed for data from the CCD or PSS data files that were merged with the NHES data. Therefore, if there were inapplicable or missing values in the variables extracted from the CCD or PSS data files, they remained inapplicable or missing for the school-level derived variables after the data were merged with the NHES data. These are coded '-2 - Inapplicable in CCD file' or '-9 - Data are missing for school.' These could have been schools with no school membership, for example, shared-time schools or the result of school misreport. Users interested in identifying the reason for a CCD inapplicable code for a particular case would need to obtain the restricted-use data file, which contains the SID, and match the school to CCD universe files for more information.

8.1.5 Household composition variables

Additional editing procedures were performed on household composition data collected in the NHES. This includes the variable HHTOTALX, which is the total number of people living in the household. It also includes the individual relationship variables detailing how each household member relates to the sampled child: brothers (HHBROS), sisters (HHSISS), aunts

(HHAUNTS), uncles (HHUNCLS), grandmothers (HHGMAS), grandfathers (HHGPAS), cousins (HHCSNS), parent's girlfriend/boyfriend/partner (HHPRTNRS), other relatives (HHORELS), and other non-relatives (HHONRELS), plus the sampled child and parent(s)/guardian(s). First, values of HHTOTALX greater than 8 were top-coded to 8. This topcoding was used to protect the confidentiality of respondents. In cases where the sum of the individual composition variables exceeded 8, the individual composition variables were set to missing and imputed. In these cases, the imputation ensured that the sum of the imputed relationship variables plus the parent(s) and the sampled child was equal to HHTOTALX. Additionally, there were a significant number of cases (approximately 14%) where HHTOTALX did not equal the sum of the individual composition variables. There were two processes used to address this inconsistency, depending on whether HHTOTALX was greater or less than the sum of the individual composition variables. In cases where HHTOTALX exceeded the sum of the individual composition variables, a new variable – HHUNID (Unidentified household members) - was set to the difference so that analysts could see the number of household members that the respondent counted in the total that were not identified by type, such as brother, sister, grandmother, etc. In cases where HHTOTALX was less than the sum of the individual composition variables, HHTOTALX was adjusted to equal the sum of these variables. These adjustments were performed for both PFI and ECPP cases.

8.1.6 Missing race data for Hispanic persons

In some cases, questionnaire data for the sampled child or one of the parents would indicate that the individual was Hispanic, but race was not marked. New variables (CHISPRM, P1HISPRM, P2HISPRM for child, parent 1, and parent 2 respectively) were created to define these individuals as 'Hispanic – race not reported'. These individuals have a value of 'No' for the five races listed on the questionnaires. These adjustments were performed for both PFI and ECPP cases.

8.1.7 Age Considerations

All parent/guardian age variables have been top-coded at age 90, and age when a parent/guardian first became a parent to any child has been bottom-coded at age 12 to protect respondent confidentiality.

Also, for some ECPP cases, the birth month and year provided for the child was later than the date at which the NHES questionnaire was received and processed. For these cases, the birth year was changed from 2012 to 2011 and the month was retained.

8.1.8 Homeschooled Students

We believe that some homeschooled students' parents may have indicated on the 2012 NHES screener that the homeschooled child was in public or private school rather than being homeschooled. First, because of the complexity involved in verifying the homeschooling status of children in the household, there were fewer questions confirming homeschooling status on the mail screener instruments than there had been in telephone screener instruments from past NHES administrations. Second, the self-administered mail surveys did not benefit from having an interviewer to help mediate respondent questions. For these reasons, the screening operation for eligibility for the homeschool topical questionnaire in 2012 was less effective than it had been in previous administrations of the NHES. Additionally, because of the NHES mail design, it is possible that a student's school status changed between the initial household screener and the mailing of the topical survey from enrolled in school to homeschooled. It is also possible that the screener respondent and the topical respondent were different people and may have reported differently for children or youth in the household.

To account for possible measurement error in the screener, a question was asked on the PFI-Enrolled questionnaire to ascertain whether the student was homeschooled for some classes and should have actually received the homeschooling questionnaire. Because NCES believes that some students whose parents indicated that their child was homeschooled on the PFI-Enrolled questionnaires should have been originally screened as a child eligible for the PFI-Homeschool questionnaire rather than the PFI-Enrolled questionnaire, NCES recommends that students represented as enrolled students but whose parents indicated on the PFI-Enrolled questionnaire that the child is homeschooled should be counted as homeschooled students. However, when students reported on the PFI-Enrolled questionnaire are included in the homeschooling rate and count, their weights should be adjusted downward to account for the likelihood that some enrolled respondents indicated as homeschooled actually do not fit NCES's definition of homeschooling for reporting purposes. NCES recommends that when estimating the homeschooling rate, analysts include all the respondents to the PFI-Enrolled questionnaire that marked that the child is homeschooled along with all respondents to the PFI-Homeschool questionnaire in the analytic sample, but adjust the weight of the PFI-Enrolled questionnaire respondents by .78. Adjusting the weight of these responses effectively reduces the number of children in the population of U.S. homeschoolers that the PFI-Enrolled questionnaire survey respondents represent by an amount estimated to be the actual rate of homeschoolers among the enrolled respondents who marked that the child was homeschooled. Standard errors for estimates of total homeschoolers must also be adjusted by multiplying the replicate weights on the PFI file

(FPWT1-FPWT80) by .78 for students who were marked as homeschooled on the PFI-Enrolled questionnaire.

Though NCES recommends that analysts use the modifications described above to estimate the total homeschooling rate and count in 2012, there are limitations to its use. Respondents to the PFI-Enrolled questionnaire who indicated that the child was homeschooled did not receive any detailed questions about homeschooling experiences, so analyses about homeschooling characteristics cannot use respondents to the PFI-Enrolled questionnaire and should not use the adjustments described above. Similarly, NCES does not recommend that analysts use data from the PFI-Enrolled respondents to analyze demographics of homeschoolers because some characteristics of respondents to the PFI-Enrolled questionnaire who marked that they were homeschooled are statistically significantly different from part-time homeschoolers on the PFI-Homeschool questionnaire and from homeschoolers from NHES:2007.

For more information about calculating homeschooling estimates, please see Homeschooling in the United States:2012 (Redford and Battle forthcoming).

8.1.9 Manual Imputation

For a small number of cases, due to donor restrictions described in chapter 6, the hot deck imputation programs were unable to find a donor for certain variables. For these cases, manual imputation was used. This was done using a mean or mode value, or the modal value of a specific subgroup. Cases that were manually imputed were assigned an imputation flag value (F_<variable>) of '2'.

8.2 Data Anomalies

Data anomalies include responses out of the expected range and real or apparent inconsistencies in the data. The following anomalies are documented here for the purpose of bringing them to the analyst's attention.

8.2.1 Mothers' and Fathers' Specific Relationships to Subject Children

There are several cases where the detailed relationships of mothers and fathers to the subject children are unusual. For example, in one case, the child was reported to have birth mothers and foster fathers at home. There was one child reported to have a birth father and a foster mother at home. Data users interested in foster parent relationships should consider how to treat these cases in their analyses.

8.2.2 Age and Grade Mismatch for Sampled Children

There are some cases of the PFI file where age and grade do not appear to plausibly match. These include, for example, a 12-year-old in 12th grade, a 17-year-old in first grade, a 16-year-old in 3rd grade, and children over age 8 in Kindergarten. In these cases, the questionnaire was examined to ensure the data reflected the respondent's answer and was not the result of a keying error and therefore was left as is.

8.2.3 Parent Reports of Type of School Child Attends vs. School Classification from the Common Core of Data (CCD) or Private School Universe Survey (PSS) Databases

There are 488 cases in the PFI data file where a parent reported that his/her child attended a public school (SCPUBPRI) while data from the CCD or PSS for the school identified by the parent (S12PBPV) indicates that the child actually attended a private school. Conversely, there are 684 cases in the PFI data file where a parent reported that his/her child attended a private school (SCPUBPRI) while data from the CCD or PSS (S12PBPV) indicate that he/she actually attended a public school. Reported data for these cases were not changed. These anomalies could have been due to parent misreporting of the type of school his/her child attends, misidentification of the school by the parent, problems with the school type data from either the CCD or PSS, or other unknown factors.

8.2.4 Reports of Civil Unions and Domestic Partnerships in the Spanish Questionnaires

The Spanish translation of civil unions and domestic partnerships may have been confusing to some respondents. The translation affected reporting on the marital/partner status questions in the parent sections of all Spanish-version questionnaires. The translation error led to significantly higher reports of civil unions or domestic partnerships in the Spanish versions than what would reasonably be expected in the population and compared to the English versions. This error was accounted for in data editing by recoding responses of civil and domestic partnership to "married" when the questionnaire was completed in Spanish and there were two parents/guardians in the household who were of the opposite sex. This occurred for 34 cases on the ECPP file and 42 cases on the PFI file.

8.2.5 Imputation of Child's Place of Birth

On both the PFI and ECPP data files, values of child's place of birth (CPLCBRTH) that were imputed using hot-deck imputation are skewed toward a child being born in another country compared to reported values. However, the change in the overall percentage distribution is

minimal, so the NHES-standard hot-deck procedure was retained for this variable. On the ECPP data file approximately 3.8 percent of cases were imputed for this variable and on the PFI data file approximately 2.7 percent of cases were imputed for this variable. Analysts who seek to examine child's place of birth in their research may wish to evaluate the missing data and consider other imputation methods if desired.

Reference

Redford, J. and Battle, D. (forthcoming). Homeschooling in the United States:2012 (NCES 2015-019). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Chapter 9. Guide to the Data File and Codebook

This section describes the content of the public-use and restricted-use data files constructed for the Early Childhood Program Participation Survey (ECPP) and the Parent and Family Involvement in Education Survey (PFI) of the 2012 National Household Education Surveys Program (NHES:2012).³⁹ The ECPP files include data from forms completed by parents or guardians of 7,893 children between the ages of 0 and 6 who were not yet enrolled in kindergarten. The PFI files include data from surveys completed by parents or guardians of 17,563 children and youth enrolled in kindergarten through 12th grade or homeschooled for these grades. The ECPP and PFI files contain data from all completed surveys. There is one record for each child. The files are organized so that logically related sets of variables are grouped together. The data items are listed in the files in the following order: system variables, questionnaire item variables, child health variables, household and family variables, derived variables based on questionnaire items, Zip Code Tabulation Area (ZCTA) level variables, variables derived from CCD and PSS (PFI only), other operational and screener variables, weighting and variance estimation variables, and imputation and edit flag variables. All variables that appear on the public-use data file also appear in the restricted-use data file; the restricted-use file contains additional variables, as described below.

Lists of all the variables in the public-use ECPP and PFI data files are in appendix B. The VARIABLE NAME column displays the unique identifier for each variable in the data file. The VARIABLE LABEL column displays a short description associated with the variable. The FORMAT column indicates if a variable has a numeric ("N") or a character ("C") format. The LENGTH column indicates the number of columns of data the variable takes up on the data file. The length descriptor also includes the number of digits found after the decimal point for non-integer numeric variables (e.g., weight variables). The position of the variable on the file is indicated in the START and END columns.

The value "-1" for any variable on the file indicates that a case was part of a legitimate skip and therefore not eligible for the variable. For example, if the respondent answered that the child was born in the United States (CPLCBRTH), she or he would not be asked how old the child was when he/she first moved to the United States (CMOVEAGE), and that variable would contain a value of "-1" for the case. On the restricted-use files, missing write-in (other, specify) variables were not imputed. For these variables, missing values were coded as "-9".

³⁹Additional documentation about the NHES:2012 restricted-use data files is provided along with the restricted-use data files.

The NHES public-use data files are provided free-of-charge and are available on the Internet at http://nces.ed.gov/nhes. They will also be made available online through the NCES Education Data Analysis Tool (EDAT) at www.nces.ed.gov/edat. A license is required to obtain the restricted-use data file. Go to the NCES Web site at http://nces.ed.gov/pubsearch/licenses.asp to learn more about obtaining a restricted-use license.

The subsequent sections provide descriptions and values of the derived variables on the NHES:2012 data files. These are grouped by type and presented in the order in which they appear on the data files. The questionnaire variables are not described here; the questionnaires can be found in appendix A.

9.1 System Variables

BASMID is the 12-digit ID number for each case.

RCVDATE is the date on which the PFI or ECPP questionnaire was received.

9.2 Child Health Variables

DISABLTYX indicates whether the sampled child has a disability, based upon items HDLEARNX, HDINTDIS, HDSPEECHX, HDDISTRBX, HDDEAFIMX, HDBLINDX, HDORTHOX, and HDOTHERX. It is not based on the items HDAUTISMX, HDPDDX, HDADDX, HDDELAYX, or HDTRBRAIN (items concerning autism, attention deficit disorder, pervasive developmental disorder, developmental delay, or traumatic brain injury).

The values for DISABLTYX are:

- 1 = Currently has a disability
- 2 = Does not currently have a disability

DISBLTY2X indicates whether the sampled child has a disability based upon all items in the series HDLEARNX-HDOTHERX. It includes the variables from which DISABILTYX was derived, HDLEARNX, HDINTDIS, HDSPEECHX, HDDISTRBX, HDDEAFIMX, HDBLINDX, HDORTHOX, and HDOTHERX plus the additional items HDAUTISMX, HDADDX, HDPDDX, HDDELAYX, and HDTRBRAIN.

The values for DISBLTY2X are:

- 1 = Currently has a disability
- 2 = Does not currently have a disability

9.3 Household and Family Variables

PAR1EDUC indicates the educational attainment of the child's resident parent or guardian identified in the "Parent 1" section of the questionnaire. This variable was derived from P1EDUC.

The values of PAR1EDUC are:

- 1 = Less than high school credential
- 2 = High school graduate or equivalent
- 3 = Vocational/technical education after high school or some college
- 4 = College graduate
- 5 = Graduate or professional school

PAR1EMPL indicates the employment status of the child's resident parent or guardian identified in the "Parent 1" section of the questionnaire. This variable was derived from P1EMPL, P1HRSWK, and P1LKWRK.

The values of PAR1EMPL are:

- 1 = Working 35 hours or more per week
- 2 = Working less than 35 hours per week
- 3 =Looking for work
- 4 =Not in the labor force

PAR2EDUC indicates the educational attainment of the child's resident parent or guardian identified in the "Parent 2" section of the questionnaire. This variable was derived from P2GUARD and P2EDUC.

The values of PAR2EDUC are:

- -1 = No second parent/guardian identified for the subject child in the household
- 1 = Less than high school credential
- 2 = High school graduate or equivalent
- 3 = Vocational/technical education after high school or some college
- 4 = College graduate
- 5 = Graduate or professional school

PAR2EMPL indicates the employment status of the child's resident parent or guardian identified in the "Parent 2" section of the questionnaire. This variable was derived from P2GUARD, P2EMPL, P2HRSWK and P2LKWRK.

The values of PAR2EMPL are:

- -1 = No second parent/guardian identified for the subject child in the household
- 1 = Working 35 hours or more per week
- 2 = Working less than 35 hours per week
- 3 = Looking for work
- 4 =Not in the labor force

PAR1FTFY indicates if the resident parent identified in the "Parent 1" section of the questionnaire currently works full time and has worked 12 months during the past year. While this measure has some limitations since it is not known if the parent was employed full time (35 hours per week or more) for the entire year, it is consistent with a measure created from the Current Population Survey (CPS) to classify parents as full time, full year labor force participants.⁴⁰ This variable was constructed using PAR1EMPL and P1MTHSWRK.

The values of PAR1FTFY are:

- 1 = Full time and full year
- 2 =Less than full time or less than full year
- 3 =Not employed during past year

PAR2FTFY indicates if the resident parent identifies in the "Parent 2" section if the questionnaire currently works full time and has worked 12 months during the past year. While this measure has some limitations since it is not known if the parent was employed full time (35 hours per week or more) for the entire year, it is consistent with a measure created from the CPS to classify parents as full time, full year labor force participants. This variable was constructed using P2GUARD, PAR2EMPL, and P2MTHSWRK.

The values for PAR2FTFY are:

- -1 = No second parent/guardian identified for the subject child in the household
- 1 = Full time and full year
- 2 =Less than full time or less than full year
- 3 = Not employed during past year

PAR1TYPE indicates whether the resident parent identified in the "Parent 1" section of the questionnaire is a birth, adoptive, step, or foster mother or father or a female or male guardian or partner of the parent of the subject child. This variable is derived from P1REL and P1SEX

The values for PAR1TYPE are:

- 1 = Birth or adoptive mother
- 2 = Birth or adoptive father
- 3 =Step or foster mother
- 4 =Step or foster father
- 5 = Grandmother or other female guardian
- 6 = Grandfather or other male guardian

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⁴⁰ Full time year-round workers are defined as all people age 16 years old and older who usually worked 35 hours or more per week for 50 to 52 weeks in the past twelve months.

PAR2TYPE indicates whether the resident parent identified in the "Parent 2" section of the questionnaire is a birth, adoptive, step, or foster mother or father or a female or male guardian or partner of the parent of the subject child. This variable is derived from P2GUARD, P2REL and P2SEX.

The values for PAR2TYPE are:

- -1 = No second parent/guardian identified for the subject child in the household
- 1 = Birth or adoptive mother
- 2 = Birth or adoptive father
- 3 =Step or foster mother
- 4 =Step or foster father
- 5 = Grandmother or other female guardian
- 6 = Grandfather or other male guardian

HHPARNX designates the subject child's parents or guardians who reside in the household. It denotes a two-parent family with opposite-sex parents, a one-parent family, or a family with nonparent guardians. This measure was derived from PAR1TYPE and PAR2TYPE (both derived earlier). Although HHPARNX does not include same- or opposite-sex partners of parents in its derivation, the HHPARNX variable was included to facilitate comparison to previous NHES collections.

The values for HHPARNX are:

- 1 = Mother (birth, adoptive, step, or foster) and father (birth, adoptive, step, or foster)
- 2 = Mother (birth, adoptive, step, or foster) only
- 3 = Father (birth, adoptive, step, or foster) only
- 4 = Nonparent guardian(s)

HHPAR12X designates the subject child's parents or guardians who reside in the household. It denotes a two-parent family, a one-parent family, or a family with nonparent guardians. This measure was derived from PAR1TYPE and PAR2TYPE (both derived earlier). Households comprised of opposite-sex parents or same-sex parents or partners of parents are included in the two-parent household category in this derived variable.

The values for HHPARN12X are:

- 1 = Mother (birth, adoptive, step, foster, or female partner of parent) and father (birth, adoptive, step, foster, or male partner of parent), or two same-sex parents
- 2 = Mother (birth, adoptive, step, or foster) only
- 3 = Father (birth, adoptive, step, or foster) only
- 4 = Nonparent guardian(s)

NUMSIBSX is a counter variable that indicates the total number of siblings with whom the sampled child lives. The responses to variables HHBROS and HHSISS are counted for this variable.

FAMILYX consists of a set of family type categories using both parent and sibling information. It was created using HHPARN1X and NUMSIBSX, which are other derived variables. Nonparent guardians are included in the "other" category. Nonparent guardians are persons other

than mothers and fathers (birth, adoptive, step, or foster), such as grandparents, aunts, or uncles. Households comprised of same-sex parents or partners of parents are not included in the two-parent household categories in this derived variable. Although FAMILYX does not include same- or opposite-sex partners of parents in its derivation, this variable is included to facilitate comparison to previous NHES collections.

The values for FAMILYX are:

- 1 = Two parents and sibling(s)
- 2 = Two parents, no sibling
- 3 =One parent and sibling(s)
- 4 =One parent, no sibling
- 5 = Other

FAMILY12X consists of a set of family type categories using both parent and sibling information. It was created using HHPARN12X and NUMSIBSX, which are other derived variables. Nonparent guardians are included in the "other" category. Nonparent guardians are persons other than mothers and fathers (birth, adoptive, step, or foster, and same-sex parents or partners of parents), such as grandparents, aunts, or uncles. Households comprised of opposite-sex parents or same-sex parents or partners of parents are included in the two-parent household category in this derived variable.

The values for FAMILY12X are:

- 1 = Two parents and sibling(s)
- 2 = Two parents, no sibling
- 3 =One parent and sibling(s)
- 4 =One parent, no sibling
- 5 = Other

HHTOTALX is based on respondent reports and indicates the total number of household members.

HHUNDR6Xis the counter-derived variable that indicates the number of household members younger than age 6. The variable is derived from AGE2011, CHAGE1, CHAGE2, CHAGE3, and CHAGE4.

HHUNDR10X is the counter-derived variable that indicates the number of household members younger than age 10. The variable is derived from AGE2011, CHAGE1, CHAGE2, CHAGE3, and CHAGE4.

HHUNDR16X is the counter-derived variable that indicates the number of household members younger than age 16. The variable is derived from AGE2011, CHAGE1, CHAGE2, CHAGE3, and CHAGE4.

HHUNDR18X is the counter-derived variable that indicates the number of household members younger than age 18. The variable is derived from AGE2011, CHAGE1, CHAGE2, CHAGE3, and CHAGE4.

LANGUAGEX indicates the knowledge and/or use of English by the parent(s)/guardian(s) in the household. LANGUAGEX was created using the variables P1FRLNG, P1SPEAK, P2GUARD, P2FRLNG, and P2SPEAK.

The values for LANGUAGEX are:

- 1 = Both/only parent(s) learned English first or currently speak(s) English in the home
- 2 = One of two parents learned English first or currently speaks English in the home
- 3 = No parent learned English first and both/only parent(s) currently speak(s) a non-English language in the home

PARGRADEX indicates the highest level of education for the subject child's parents or nonparent guardians who reside in the household. This measure was derived from PAR1EDUC and PAR2EDUC (derived earlier).

The values for PARGRADEX are:

- 1 = Less than high school credential
- 2 = High school graduate or equivalent
- 3 = Vocational/technical education after high school or some college
- 4 = College graduate
- 5 = Graduate or professional school

RACEETHN denotes both the race and ethnicity of the child. If the respondent designated the child's ethnicity as Hispanic, RACEETHN is Hispanic regardless of whether RACE was classified as White, Black, or another race. This measure was derived from CWHITE, CBLACK, CAMIND, CASIAN, CPACI, and CHISPAN.

The values for RACEETHN are:

- 1 = White, non-Hispanic
- 2 = Black, non-Hispanic
- 3 = Hispanic
- 4 = All other races and multiple races, non-Hispanic

RACEETH2 indicates the race and ethnicity of the child with more detail than RACEETHN. Specifically, Asian/Pacific Islander origin is categorized separately in this derived variable. This measure was derived from CWHITE, CBLACK, CAMIND, CASIAN, CPACI, and CHISPAN.

The values for RACEETH2 are:

- 1 = White, non-Hispanic
- 2 = Black, non-Hispanic
- 3 = Hispanic
- 4 = Asian or Pacific Islander, non-Hispanic
- 5 = All other races and multiple races, non-Hispanic

9.4 Derived ECPP-Specific Variables

ANYCAREX indicates whether the child currently participates in any nonparental care or program arrangements. ANYCARE was created using the variables RCNOW, NCNOW, and CPNNOWX.

The values for ANYCAREX are:

- 1 = Currently participates in any care or program arrangement
- 2 = Does not currently participate in any care or program arrangement

ANYCARE2X indicates whether the child currently participates in any nonparental care or program arrangements <u>at least once each week</u>. ANYCARE2X was created using the variables RCWEEK, NCWEEK, and CPWEEKX.

The values for ANYCARE2X are:

- 1 = Currently participates in any care or program arrangement that occurs at least once each week
- 2 = Does not currently participate in any care or program arrangement that occurs at least once each week

CAREHOURX is the total number of hours per week spent in nonparental care arrangements or programs at least once a week. Children whose only arrangements take place less often than once a week are coded 0 hours on this variable, as are children in no care or program arrangements. CAREHOURX was derived for ECPP using RCHRS, RCTLHR, NCHRS, NCTLHR, CPHRS, and CPTLHR.

CPARRNEWX is the categorical variable that indicates the number of center-based program arrangements in which a sampled child participates at least once a week. CPARRNEWX is derived using CPWEEKX and CPOTHC.

The values for CPARRNEWX are:

- 0 = Does not currently participate in center-based care arrangement
- 1 = Currently participates in one center-based care arrangement
- 2 = Currently participates in two or more center-based care arrangements

MOSTHRSX indicates the primary nonparental care or program arrangement in which the child spends the most hours per week. Children whose only arrangements take place less often than once a week are coded 0 on this variable. MOSTHRSX was derived using RCWEEK, RCHRS, RCOTHC, RCTLHR, NCWEEK, NCHRS, NCOTHC, NCTLHR, CPWEEKX, CPHRS, CPOTHC, and CPTLHR. If the arrangement with the most hours was a relative or nonrelative care arrangement, RCPLACE and NCPLACE were used to determine whether the care took place in the child's home or another home.

The values for MOSTHRSX are:

- -1 = No nonparental care arrangement/program
- 1 = Relative care in child's home
- 2 =Relative care in another home
- 3 = Nonrelative care in child's home
- 4 = Nonrelative care in another home
- 5 =Center-based program
- 6 =Equal hours in 2 or more types of care

NCARRNEWX is the categorical variable that indicates the number of nonrelative care arrangements in which a sampled child participates at least once a week. NCARRNEWX is derived using NCWEEK and NCOTHC.

The values for NCARRNEWX are:

- 0 = Does not currently participate in nonrelative care arrangement
- 1 = Currently participates in one nonrelative care arrangement
- 2 = Currently participates in two or more nonrelative care arrangements

RCARRNEWX is the categorical variable that indicates the number of relative care arrangements in which a sampled child participates at least once a week. RCARRNEWX is derived using RCWEEK and RNCOTHC.

The values for RCARRNEWX are:

- 0 = Does not currently participate in relative care arrangement
- 1 = Currently participates in one relative care arrangement
- 2 = Currently participates in two or more relative care arrangements

9.5 Derived PFI-Specific Variables

ALLGRADEX identifies the grade level of children in graded schools, and the grade level equivalent for children in ungraded schools, special education programs, or who are homeschooled.

The values for ALLGRADEX are:

- K = Kindergarten
- 1 = First grade or equivalent
- 2 = Second grade or equivalent
- 3 = Third grade or equivalent
- 4 = Fourth grade or equivalent
- 5 = Fifth grade or equivalent
- 6 = Sixth grade or equivalent
- 7 = Seventh grade or equivalent
- 8 = Eighth grade or equivalent
- 9 = Ninth grade or equivalent/freshman
- 10 = Tenth grade or equivalent/sophomore
- 11 = Eleventh grade or equivalent/junior
- 12 = Twelfth grade or equivalent/senior
- U = Ungraded/no equivalent

9.5.1 Derived Variables from CCD/PSS

Each child enrolled in school on the PFI file contains variables derived from the 2010-2011 Common Core of Data (CCD) and the 2009-2010 Private School Survey (PSS). Children who received the homeschooled questionnaire have a value of "-1" for each of these variables. A code of -2 is used when the CCD file indicated that the variable is not applicable for that students' particular school. NHES did not use any PSS data in derived variables for which there were inapplicable cases.

S12CHART classifies the public school that the subject child attends as charter, magnet or regular public school, or other public school. All homeschooled and private school students were assigned a value of -1 for this variable. The measure was derived from PATH (interview completion code), and CHARTR, MAGNET, & TYPE (variables from the CCD not on the NHES data files).

The values for S12CHART are:

- 1 = Charter School
- 2 = Magnet or Regular Public School
- 3 = Other Public School
- -1 = Homeschooled or private school student
- -9 = Data are missing for school

S12NUMST categorizes the total number of students at the subject child's school. The measure was derived from PATH, MEMBER (a variable from the CCD not on the NHES data files), and NUMSTUDS (a variable from the PSS not on the NHES data files). A variable named

NBRSTDNS was derived to indicate the number of students in the sampled child's school based on whether the sampled child is in a public school (MEMBER) or a private school (NUMSTUDS). The variable NBRSTDNS was then used to create the breakdowns listed below for the variable S12NUMST though only the latter variable is on the NHES data files.

The values for S12NUMST are:

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1 = Under 300
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2 = 300 - 599

3 = 600 - 999

4 = 1,000 - 2,499

5 = 2,500 or more

-1 = Homeschooled student

-2 = Inapplicable in the CCD universe file

-9 = Data are missing for school

S12PBPV classifies the subject child's school as public or private. The measure was derived from PATH and a flag variable created to indicate whether data were extracted from the CCD data file or the PSS data file.

The values for S12PBPV are:

- 1 = Public (school is on CCD)
- 2 = Private (school is on PSS)
- -1 = Homeschooled student

S12SAMSX classifies the private school that the subject child attends according to its coeducational status. All homeschooled and public school students were assigned a value of -1 for this variable. The measure was derived from PATH and P335 (a variable from the PSS not on the NHES data files).

The values for S12SAMSX are:

- 1 = All male
- 2 = All female
- 3 = Co-ed
- -1 = Homeschooled or public school student
- -9 = Data are missing for school

S12TITL1 classifies the public school that the subject child attends according to whether it operates a school-wide Title 1 program. All homeschooled, and private school students were assigned a value of -1 for this variable. The measure was derived from PATH and STITLI (a variable from the CCD not on the NHES data files).

The values for S12TITL1 are:

- 1 = Yes
- 2 = No
- -1 = Homeschooled or private school student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12TYPE classifies the type of school the subject child attends. Categories 1 through 3 pertain to private school students. All public school students were assigned a value of 4 for this variable. The measure was derived from PATH and RELIG (a variable from the PSS not on the NHES data files).

The values for S12TYPE are:

- 1 = Catholic
- 2 = Other religious
- 3 = Nonsectarian
- 4 = Public
- -1 = Homeschooled student
- -9 = Data are missing for school

SCHLGRAD classifies the type of school the subject child attends based on the highest and lowest grades in the school. Values for SLOW and SHIGH were obtained from the CCD/PSS data files (GSLO, LOGR2010 & GSHI, HIGR2010 – variables not on the NHES data files).

The values for SCHLGRAD are:

- 1 = Early childhood programs (low grade nursery school (N), transitional kindergarten (T), kindergarten (K), pre-first grade (P); high grade N, T, K, P)
- 2 = Elementary school (low grade N, K, T, P, 1 to 3; high grade 1 to 8)
- 3 = Middle/junior high school (low grade 4 to 9; high grade 4 to 9)
- 4 = High school (low grade 7 to 12; high grade 10 to 12)
- 5 =Combined grades school
- -1 = Homeschooled student or school is ungraded
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

The following variables appear on the restricted-use file only:

S12CENRG classifies the school location into census region using Federal Information Processing Standards (FIPS) codes to establish the regions. The measure was derived from FIPS, STFIPS, & LSTATE10 (variables indicating the FIPS/State code of the school extracted from the CCD and PSS, not on the NHES data file) and appears only on the restricted file.

The values for S12CENRG are:

- 1 = Northeast
- 2 = South
- 3 = Midwest
- 4 = West
- -1 = Homeschooled student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12CHFLG is a flag variable that specifies whether the school data for the variable S12CHART came from the CCD data or from parent reports. All homeschooled and private school students were assigned a value of -1 for this variable. The variable appears only on the restricted file.

The values for S012CHFLG are:

- 1 = Data from CCD
- 2 = Data from parent report
- -1 = Homeschooled or private school student

S12FRRDL categorizes the public school that the subject child attends according to the percentage of students eligible for free or reduced-price lunches. All homeschooled and private schools students were assigned a value of -1 for this variable. The measure was derived from PATH, and TOTFRL & MEMBER (variables from the CCD not on the NHES data file). A variable named PCTFRRDL was calculated by dividing TOTFRL by MEMBER. The variable PCTFRRDL was then used to create the percentage breakdowns listed below for the variable S12FRRDL though only the latter variable is on the NHES data file and appears only on the restricted file.

The values for S12FRRDL are:

- 1 =Fewer than 1%
- 2 = 1% to fewer than 5%
- 3 = 5% to fewer than 25%
- 4 = 25% or more
- -1 = Homeschooled or private school student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12FTET categorizes the total number of employed teachers at the subject child's school, as measured by full-time equivalents (FTE). The measure was derived from PATH, FTE04 (a variable from the CCD not on the NHES data file), and NUMTEACH (a variable from the PSS not on the NHES data file). A variable named NBRTCHRS was derived to indicate the number of employed teachers, measured by FTE, in the sampled child's school based on whether the sampled child is in a public school (FTE) or a private school (NUMTEACH). The variable NBRTCHRS was then used to create the breakdowns, by quartiles, listed below for the variable S12FTET though only the latter variable is on the NHES data file and appears only on the restricted file

The values for S12FTET are:

- 1 = Under 28.5
- 2 = 28.5 to fewer than 43.2
- 3 = 43.2 to fewer than 70
- 4 = 70 or more
- -1 = Homeschooled student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12HASG4 classifies the school that the subject child attends according to whether or not it has grade 4. The measure was derived from PATH, GSLO & GSHI (variables from the CCD not on the NHES data file) and LOGR2010 & HIGR2010 (variables from the PSS not on the NHES data file) and appears only on the restricted file.

The values for S12HASG4 are:

- 1 = Yes
- 2 = No
- -1 = Homeschooled student or school is ungraded
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12HASG8 classifies the school that the subject child attends according to whether or not it has grade 8. The measure was derived from PATH, GSLO & GSHI (variables from the CCD not on the NHES data file) and LOGR2010 & HIGR2010 (variables from the PSS not on the NHES data file) and appears only on the restricted file.

The values for S12HASG8 are:

- 1 = Yes
- 2 = No
- -1 = Homeschooled student or school is ungraded
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12HASG12 classifies the school that the subject child attends according to whether or not it has grade 12. The measure was derived from PATH, GSLO & GSHI (variables from the CCD not on the NHES data file) and LOGR2010 & HIGR2010 (variables from the PSS not on the NHES data file) and appears only on the restricted file.

The values for S12HASG12 are:

- 1 = Yes
- 2 = No
- -1 = Homeschooled student or school is ungraded
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12HASGK classifies the school that the subject child attends according to whether or not it has kindergarten. The measure was derived from PATH, GSLO & GSHI (variables from the CCD not on the NHES data file) and LOGR2010 & HIGR2010 (variables from the PSS not on the NHES data file) and appears only on the restricted file.

The values for S12HASGK are:

- 1 = Yes
- 2 = No
- -1 = Homeschooled student or school is ungraded
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12LOCL classifies the zip code of the subject child's school by community type. The measure was derived from PATH, LOCALE (a variable from the CCD not on the NHES data file), and LOCALE (a variable from the PSS not on the NHES data file) and appears only on the restricted file.

The values for S12LOCL are:

- 11 = Large city
- 12 = Midsize city
- 13 = Small city
- 21 = Large suburb
- 22 = Midsize suburb
- 23 = Small suburb
- 31 = Fringe town
- 32 = Distant town
- 33 = Remote town
- 41 = Fringe rural
- 42 = Distant rural
- 43 = Remote rural
- -1 = Homeschooled student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12MAGN classifies the public school that the subject child attends as a magnet or non-magnet school. All homeschooled and private school students were assigned a value of -1 for this variable. The measure was derived from PATH and MAGNET (a variable from the CCD not on the NHES data file) and appears only on the restricted file.

The values for S12MAGN are:

- 1 = Yes
- 2 = No
- -1 = Homeschooled or private school student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12NMFLG is a flag variable that specifies whether the school data for the variable S12NUMST came from the CCD/PSS data or from parent reports. All homeschooled students were assigned a value of -1 for this variable. The measure was derived from PATH and NEW_SCHL and appears only on the restricted file.

The values for S12NMFLG are:

- 1 = Data from CCD/PSS
- 2 = Data from parent report
- -1 = Homeschooled student

S12PBTYP classifies the public school that the subject child attends by type. All homeschooled and private school students were assigned a value of -1 for this variable. The measure was

derived from PATH and TYPE (a variable from the CCD not on the NHES data file) and appears only on the restricted file.

The values for S12PBTYP are:

- 1 = Regular school
- 2 =Special education school
- 3 = Vocational school
- 4 = Other/alternative
- -1 = Homeschooled or private school student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12PCTB categorizes the school that the subject child attends according to the percentage of students who are Black/African American, non-Hispanic. The measure was derived from PATH, BLACK & MEMBER (variables from the CCD not on the NHES data file), and P325 & NUMSTUDS (variables from the PSS not on the NHES data file). A variable named PCTBLACK was calculated by dividing BLACK by MEMBER and by dividing P325 by NUMSTUDS. The variable PCTBLACK was then used to create the percentage breakdowns listed below for the variable S12PCTB though only the latter variable is on the NHES data file.

The values for S12PCTB are:

- 1 =Fewer than 1%
- 2 = 1% to fewer than 5%
- 3 = 5% to fewer than 25%
- 4 = 25% or more
- -1 = Homeschooled student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12PCTH categorizes the school that the subject child attends according to the percentage of students who are Hispanic of any race. The measure was derived from PATH, HISP & MEMBER (variables from the CCD not on the NHES data file), and P320 & NUMSTUDS (variables from the PSS not on the NHES data file). A variable named PCTHISPN was calculated by dividing HISP by MEMBER and by dividing P320 by NUMSTUDS. The variable PCTHISPN was then used to create the percentage breakdowns listed below for the variable S12PCTH though only the latter variable is on the NHES data file. S12PCTH appears only on the restricted file.

The values for S12PCTH are:

- 1 =Fewer than 1%
- 2 = 1% to fewer than 5%
- 3 = 5% to fewer than 25%
- 4 = 25% or more
- -1 = Homeschooled student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

S12PVTYP classifies the private school that the subject child attends by type. All homeschooled and public school students were assigned a value of -1 for this variable. The measure was derived from PATH and P415 (a variable from the PSS not on the NHES data file). S12PVTYP appears only on the restricted file.

The values for S12PVTYP are:

- 1 = Regular elementary or secondary
- 2 = Montessori
- 3 = Special program emphasis
- 4 = Special education
- 6 = Alternative
- 7 = Early childhood program/day care center
- -1 = Homeschooled or public school student
- -9 = Data are missing for school

S12S_TRT categorizes the student/teacher FTE ratio at the subject child's school. The measure was derived from PATH, MEMBER, FTE (a variable from the CCD not on the NHES data file), and NUMSTUDS & NUMTEACH (variables from the PSS not on the NHES data file). A variable named ST_RATIO was derived to indicate the student/teacher FTE ratio in the sampled child's school based on whether the sampled child is in a public school (MEMBER/FTE) or a private school (NUMSTUDS /NUMTEACH). The variable ST_RATIO was then used to create the breakdowns, by quartiles, listed below for the variable S12S_TRT though only the latter variable is on the NHES data file. S12S_TRT appears only on the restricted file.

The values for S12S_TRT are:

- 1 = Under 13.8
- 2 = 13.8 to fewer than 15.8
- 3 = 15.8 to fewer than 18.1
- 4 = 18.1 or more
- -1 = Homeschooled student
- -2 = Inapplicable in the CCD universe file
- -9 = Data are missing for school

SCHGDFLG is a flag variable that specifies whether the school data for the variable SCHLGRAD came from the CCD/PSS data or from parent reports. All homeschooled students were assigned a value of -1 for this variable. The measure was derived from PATH and NEW SCHL and appears only on the restricted file.

The values for SCHGDFLG are:

- 1 = Data from CCD/PSS
- 2 = Data from parent report
- -1 = Homeschooled student

9.6 ZCTA-Level Variables

These variables provide information on the characteristics of the Zip Code Tabulation Area (ZCTA) in which the child's household is located, using data from the 2007-2011 American Community Survey (ACS).

CENREG identifies the census region in which the subject child lives. This variable was drawn from the household address as provided on the sampling frame.

The values for CENREG are:

- 1 = Northeast (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont)
- 2 = South (Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia)
- 3 = Midwest (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)
- 4 = West (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

ZIP18PO2 is a linked-derived variable that categorizes the percentage of families in the subject's ZCTA who have children under age 18 and had incomes in the 2007-2011 ACS below the poverty line.

The values for ZIP18PO2 are:

- 1 = Less than 5 percent
- 2 = 5 to 9 percent
- 3 = 10 to 19 percent
- 4 = 20 percent or more

ZIPBLH12 is a linked-derived variable that categorizes the percentage of persons in the subject's ZCTA in the 2007-2011 ACS who were Black or Hispanic.

The values for ZIPBLHI2 are:

- 1 = Less than 6 percent
- 2 = 6 to 15 percent
- 3 = 16 to 40 percent
- 4 = 41 percent or more

ZIPLOCL is a locale variable that classifies the residential ZCTA into a set of community types. This variable was derived using the respondent's ZCTA and Census data.

The values for ZIPLOCL are:

- 11 = Large city
- 12 = Midsize city
- 13 = Small city
- 21 = Large suburb
- 22 = Midsize suburb
- 23 = Small suburb
- 31 = Fringe town
- 32 = Distant town
- 33 = Remote town
- 41 = Fringe rural
- 42 = Distant rural
- 43 = Remote rural

The following variables appear on the restricted-use file only:

BLHISCNT gives the number of persons in the subject's ZCTA who were of Hispanic origin or Black or African American alone in the 2007-2011 ACS. This variable was derived from P007004 and P007010 and appears only on the restricted file.

FAM18POV gives the number of families in the subject's ZCTA with related children under 18 years of age and income in the 2007-2011 ACS below the poverty level. This variable was derived from P090004, P090011, and P090017 and appears only on the restricted file.

PCT18POV gives the percentage of families in the subject's ZCTA with related children under 18 years of age and income in the 2007-2011 ACS below the poverty level. This variable was derived from P090001 and FAM18POV and appears only on the restricted file.

PCTBLHIS gives the percentage of persons in the subject's ZCTA who were of Hispanic origin or Black or African American alone. This variable was derived from P007001 and BLHISCNT and appears only on the restricted file.

REGION was derived from the respondent's state and is the U.S. Department of Education region and appears only on the restricted file.

The values for REGION are:

- 1 = Northeast (Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont)
- 2 = Southeast (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia)
- 3 = Central (Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin)
- 4 = West (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, Wyoming)

RSTATE is the state in which the respondent resides. The variable was obtained from the sampling frame and was based on the respondent's ZIP Code and appears only on the restricted file

P007001 gives the total number of persons in the subject's ZCTA in the 2007-2011 ACS and appears only on the restricted file.

P007004 gives the number of persons in the subject's ZCTA in the 2007-2011 ACS who were Black or African American alone, and have no Hispanic origins and appears only on the restricted file.

P007010 gives the number of persons in the subject's ZCTA in the 2007-2011 ACS who were of Hispanic or Latino origin and appears only on the restricted file.

P090001 gives the total number of families in the subject's ZCTA in the 2007-2011 ACS and appears only on the restricted file.

P090004 gives the number of married-couple families in the subject's ZCTA living below the poverty line in the 2007-2011 ACS and who had related children under 18 years of age and appears only on the restricted file.

P090011 gives the number of families in the subject's ZCTA living below the poverty line in the 2007-2011 ACS that were headed by males, with no wife present, and had related children under 18 years of age and appears only on the restricted file.

P090017 gives the number of families in the subject's ZIP Code living below the poverty line in the 2007-2011 ACS, that were headed by females, with no husband present, and had related children under 18 years of age and appears only on the restricted file.

9.7 Other Derived, Operational, and Screener Variables

PATH indicates the questionnaire path.

The values for PATH are:

E = Elementary school

H = Homeschooler

M = Middle school

S = Senior high

I = Infant

N = Preschool

ENGLSPAN indicates whether the topical questionnaire was completed in English or Spanish.

The values for ENGLSPAN are:

- 1 = Questionnaire was completed in English
- 2 = Questionnaire was completed in Spanish

AGE2011 is the age of the child/youth as of December 31, 2011.

CSEX is the sex of the sampled child/youth.

The values of CSEX are:

1 = MALE

2 = FEMALE

CHAGE1 indicates the age in years of the first nonsampled child in the household.

CHAGE2 indicates the age in years of the second nonsampled child in the household.

CHAGE3 indicates the age in years of the third nonsampled child in the household.

CHAGE4 indicates the age in years of the fourth nonsampled child in the household.

CHSEX1 indicates the sex of the first nonsampled child in the household.

The values of CHSEX1 are:

1 = MALE

2 = FEMALE

CHSEX2 indicates the sex of the second nonsampled child in the household.

The values of CHSEX2 are:

1 = MALE

2 = FEMALE

CHSEX3 indicates the sex of the third nonsampled child in the household.

The values of CHSEX3 are:

1 = MALE

2 = FEMALE

CHSEX4 indicates the sex of the fourth nonsampled child in the household.

The values of CHSEX4 are:

1 = MALE

2 = FEMALE

CHENRL1 indicates the enrollment status of the first nonsampled child in the household.

CHENRL2 indicates the enrollment status of the second nonsampled child in the household.

CHENRL3 indicates the enrollment status of the third nonsampled child in the household.

CHENRL4 indicates the enrollment status of the fourth nonsampled child in the household.

CHGRD1 indicates the grade of the first nonsampled child in the household.

CHGRD2 indicates the grade of the second nonsampled child in the household.

CHGRD3 indicates the grade of the third nonsampled child in the household.

CHGRD4 indicates the grade of the fourth nonsampled child in the household.

9.8 Weighting and Variance Estimation Variables

The full child-level weight variables in the NHES:2012 data files are FEWT (ECPP) and FPWT (PFI). These are the variables that should be used as the weight to estimate the characteristics of children and youth. These weights contain all of the adjustments for the probabilities of selection, nonresponse, and undercoverage as described in chapter 7 of this manual. The restricted-use files also contain a child-level base weight (UPW), described further in chapter 7.

The 80 replicate weights, FEWT1 to FEWT80 (ECPP) and FPWT1 to FPWT80 (PFI), are the next variables in this section. These replicate weights can be used by various statistical software packages, such as, SUDAAN, Stata, and AM, to produce estimates of the sampling errors of the estimates. More details on how the replicate weights were created and how they can be used are given in chapter 7.

9.9 Imputation and Edit Flag Variables

Item nonresponse occurred when some, but not all, of the responses were missing from an otherwise cooperating respondent. To help users of the NHES:2012 data, the missing data were imputed, that is, obtained from a donor case using statistical procedures. For each variable with imputed data on the NHES public-use and restricted-use data files, an imputation flag variable was created. If there is no imputation flag, then no imputation was performed on that variable. This flag can be used to identify imputed values. Chapter 6 discusses the meaning of values assigned to the imputation flags.

The naming convention for the imputation flag variables is to add "F_" to the beginning of the name of each variable. For example, the imputation flag for CSEX is F_CSEX. The imputation flags appear on the file in the same order as the variables to which they refer.

The restricted-use file also includes edit flag variables. During processing of the NHES data, some variables were edited to ensure consistency within the questionnaire. These flags were only created for variables that were edited during processing. If the variable was not edited, there is no edit flag on the file. These processes are described in chapter 4, Data Processing. The naming convention for edit flag variables is to add "EF" to the beginning of the name of each variable.

For example, the edit flag for RCNOW is EF_RCNOW. The edit flags appear on the file in the same order as the variables to which they refer.

9.10 Numeric and Character Variables

All of the variables in the NHES:2012 public-use data files have numeric formats except RCVDATE, PATH, ALLGRADEX, and HSMOSTX.

The NHES:2012 restricted-use data files also include "other, specify" text variables for items including language, race, country or territory of birth, etc., which are character variables. The variables RSTATE, SID, and ZCTA are also character variables included only on the restricted-use data file.

Chapter 10. Nonresponse Bias Analysis

The theory of sampling that is the basis for the majority of surveys conducted for the federal government assumes that accurate responses are obtained for all of the sampled units. However, surveys have always had some level of nonresponse, thus violating this assumption; moreover, the level of nonresponse has been increasing for the past two decades (National Research Council 2013). To the extent that those who respond to surveys and those who do not are different in important ways, there is a potential for nonresponse biases in estimates from survey data, and understanding the relationship between response rates and nonresponse bias has become even more important. One approach to understanding the relationship is to conduct nonresponse bias studies. This chapter documents the nonresponse bias analyses conducted for the 2012 National Household Education Surveys Program (NHES:2012). The goal of the research is to investigate the potential for nonresponse bias in estimates from the NHES:2012 surveys. This analysis is similar to analyses undertaken to evaluate the potential for nonresponse bias in the NHES:2005.

This chapter contains a discussion of the relationship between unit and item response rates and nonresponse bias that includes an analysis of characteristics associated with unit response propensities; a comparison of estimates based on nonresponse adjusted weights and base weights; a comparison of the NHES:2012 estimates to those from external data sources; an assessment of means or distributions for items with and without imputed values; and a discussion of using extreme assumptions to assess the potential for item nonresponse bias. A summary of the findings is provided in section 10.4.

10.1 Relationship Between Response Rates and Nonresponse Bias

The estimates from the NHES:2012 surveys are subject to potential bias because of unit nonresponse to the screener and the topical surveys—the Early Childhood Program Participation (ECPP) Survey and the Parent and Family Involvement in Education (PFI) Survey—as well as nonresponse to specific items. Generally speaking, the primary approach to minimizing nonresponse bias is to plan and implement data collection procedures aimed at achieving high cooperation rates. For the NHES:2012, such procedures included advance mailings to the respondents, recontacting households by mail using alternative strategies, and monetary incentives. However, because some unit nonresponse occurs even with the best strategies, weighting adjustments are necessary to minimize potential unit nonresponse bias.

The term "bias" has a specific technical definition in the survey context. Bias is the expected difference between an estimate of a characteristic from the survey and the actual population value. For example, if all households were included in the survey's sample and all responded, the survey estimate would equal the population value.⁴¹ However, if all households were included in the sample, but some did not respond (unit nonresponse is nonzero), the difference between the estimate from the survey and the actual population value would be the bias due to unit nonresponse. Since the NHES is based on a sample, the bias is defined as the expected or average value of this difference over all possible samples.

As outlined in the *NCES Statistical Standards* (U.S. Department of Education 2002), the degree of nonresponse bias is a function of two factors: the nonresponse rate and how much the respondents and nonrespondents differ on survey variables of interest. The mathematical formula to estimate bias for a sample mean of variable *y* is as follows:

$$B(\overline{y}_R) = \overline{y}_R - \overline{y}_T = \left(\frac{n_M}{n_T}\right) (\overline{y}_R - \overline{y}_M)$$

where

 \bar{y}_T = the estimated mean based on all base-weighted eligible sample cases

 \bar{y}_{R} = the estimated mean based only on base-weighted respondent cases

 \overline{y}_{M} = the estimated mean based only on base-weighted nonrespondent cases

 n_M = the base-weighted number of nonrespondents

 n_R = the base-weighted number of respondents

 n_T = the base-weighted number of eligible cases (i.e., $n_T = n_R + n_M$)

If the nonresponding units (households or people) are highly similar to the responding units, the unit nonresponse bias might be very small and be deemed to be insignificant for the purpose of the study. For example, consider a sample of kindergarteners drawn from two kindergarten classrooms. When the survey taker arrives, one class is in its classroom and the other class is on a field trip. If the children are randomly assigned to one of the two classes, then the group that is absent is highly similar to the group that is present. On the other hand, if the nonresponding units are different in their characteristics from the responding units, the impact on the study can be substantial. For example, if the children were divided into the two classes based on their reading

⁴¹ This chapter does not discuss other types of error, such as measurement error. These errors could cause the estimate to differ from the population value even if all the households were in the sample and all responded.

and math ability, then the nonrespondents (the children on the field trip) would be substantially different from the children present in the classroom.

If the unit nonresponse rate is low relative to the magnitude of the estimates, then the unit nonresponse bias in the estimates might be small, even if the differences in the characteristics between respondents and nonrespondents are relatively large. For example, if the unit nonresponse rate is 2 percent, then estimates of characteristics that are for more than 30 percent of the population may not be greatly affected by nonresponse, even if the differences in these characteristics between respondents and nonrespondents are relatively large. If the estimate is for a small domain or subgroup (of about 5 or 10 percent of the population), then even a relatively low overall rate of nonresponse can result in important biases if the differences between respondents and nonrespondents are large.

As the above examples illustrate, nonresponse bias could have a substantial impact on the study if either the difference between respondents and nonrespondents or the nonresponse rate is relatively large. For this reason, in order to compare the bias across all variables, the estimates of bias can be transformed into estimates of relative bias, a ratio of the bias to the mean characteristic estimate. Relative bias is independent of the distributions of particular variables. The relative bias for an estimated mean using only the respondent data, \bar{y}_R , is calculated using the following formula:

$$RelB(\overline{y}_R) = \frac{B(\overline{y}_R)}{\overline{y}_R}$$

Relative bias can be estimated for characteristics available for respondents and nonrespondents.

10.2 Unit Nonresponse Bias Analysis

NCES Statistical Standard 4-4 requires analysis of unit nonresponse bias for any survey stage with a base-weighted response rate of less than 85 percent. Section 10.2.1 of the unit bias analysis includes comparisons between characteristics of the full sample population and those of the respondent population. Section 10.2.2 presents the comparisons with estimates using the weights before and after the nonresponse weighting adjustments in order to evaluate the extent to which the adjustments reduced nonresponse bias. In addition, section 10.2.3 includes a comparison of the NHES:2012 estimates with estimates from the Current Population Survey (CPS), the American Community Survey (ACS), and prior NHES collections to evaluate the reasonableness of the NHES:2012 estimates.

10.2.1 Analysis of Characteristics Associated With Unit Response Propensities

The unit nonresponse bias analysis conducted for the screener used the NHES sampling frame variables plus variables available from sources that could be linked to the frame to compare the full sample population with the respondent population. The variables used in the screener analysis are listed in exhibit 10-1. While the screener unit of analysis was addresses, the topical ECPP and PFI surveys use eligible children as the unit of analysis. Information from the NHES address sample frame was used to evaluate possible nonresponse bias related to household level nonresponse at the screener level. Some information about the address was also used to study potential nonresponse bias in the topical surveys in conjunction with information provided on the screening instruments. The variables used for the topical survey unit nonresponse bias analysis are presented in Exhibit 10-2.

Exhibit 10-1. Sampling frame address-level variables used in the NHES:2012 unit nonresponse bias analysis conducted for the screener

Variables from U.S. Postal Service files:

- Type of postal route (street address/P.O. box/high rise building/rural route)
- Dwelling type (multi/single unit)
- Vacancy status
- Seasonal address type (seasonal/educational seasonal/not seasonal)
- Drop point address type (whether mail receptacle is for multiple housing units)
- P.O box address flagged as only way to get mail (OWGM)

Variable obtained from sample vendor:

 Ability to match address to phone number (whether a phone number existed for the address) Variables appended by sample vendor from external data source (e.g., the Experian consumer file):

- Gender of head of household
- Age of head of household
- Marital status of head of household
- · Ethnicity of head of household
- Education of head of household
- Household income
- Home tenure
- Number of adults in household

Operational variables based on external data sources including the Claritas database and 2000 decennial Census data:

- Bilingual screener package mailed (whether household was sent a bilingual screener package)
- Race/ethnicity stratum: percent ethnicity in Census tracts (stratum 1: tracts containing 25 percent or more Black persons; stratum 2: tracts containing 40 percent or more persons of Hispanic origin; stratum 3: remaining tracts)

NOTE: The Claritas database and Experian consumer files are commercial databases used to provide supplemental information about addresses in the address file.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

Exhibit 10-2. Variables used in the NHES:2012 unit nonresponse bias analysis conducted for the topical surveys

Sampled child's age

Sampled child's sex
Sampled child's grade
Sampled child's enrollment status
Number of children age 20 or younger in household

Ethnicity of head of household
Race/ethnicity stratum: percent ethnicity in Census tracts
(stratum 1: tracts containing 25 percent or more Black
persons; stratum 2: tracts containing 40 percent or
more persons of Hispanic origin; stratum 3: remaining
tracts)

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

The first step in the nonresponse bias analysis was to determine whether the percentages of respondents for the variables listed in exhibit 10-1 differ from the percentages of the eligible sample. Specifically, a significance test was used to estimate whether the difference between the base-weighted respondent percentage and the base-weighted eligible sample percentage was different from zero at the 5 percent level of significance. Base weights are weights that adjust only for the sampled unit's probability of selection. These estimates were not yet adjusted for nonresponse. The standard error of difference was computed directly using the NHES:2012 replicate base weights and takes into account the correlations between the two estimates. The relative bias was computed for every category of the variables in the nonresponse bias analysis, using the difference between the base-weighted respondent percentage and the base-weighted eligible sample percentage. The absolute and relative bias before nonresponse adjustment is presented on the left-hand side of tables 10-2 through 10-4 below.

The second step was to compute the screener nonresponse adjustment. The nonresponse adjustment included the following sample frame variables in the nonresponse model: address type, single/multi-family unit, vacancy status, seasonal address status, only way to get mail (OWGM) status, drop point status, questionnaire logo, home tenure, household income, ability to match address to phone number, number of adults in household, age of head of household, ethnicity of head of household, education of head of household, gender of head of household, and marital status of head of household. The address type information on the sample frame is primarily from the United States Postal Service (USPS) Computerized Delivery Sequence File (CDSF). Household demographic information was derived from a variety of sources that the sample frame vendor used to match the household's address to characteristics of the residents of the address. The nonresponse adjustments, which are included in the final analytic weights (see chapter 7 on weighting), are designed to significantly reduce unit nonresponse bias for the variables included in the models. To the extent that questionnaire variables are associated with the variables included in the models, the end result should be a reduction in bias in estimates for these questionnaire variables.

Third, after computing the nonresponse adjustment, any remaining bias was estimated for the sampling frame variables, and statistical tests were performed to check the remaining significant nonresponse bias. Again, the relative bias was computed for all categories of all variables, this time using the difference between the nonresponse-adjusted respondent percentage and the base-weighted eligible sample percentage as the numerator and the nonresponse-adjusted respondent percentage as the denominator. These figures are displayed on the right-hand side of tables 10-2 through 10-4. The bias was summarized by calculating the mean and median of the relative bias figures across all variables and is displayed in table 10-1.

In this analysis, the statistical significance of differences in estimates was investigated only for those differences having practical significance; in this case, differences of at least 1 percentage point were judged to be of practical significance, since effects other than unit nonresponse bias may contribute in part to the differences in the estimates. Sample records found to be ineligible for the NHES were excluded from the analysis. (See chapter 7 for NHES:2012 eligibility criteria.) In addition, the data used for the analysis were not raked. In the weighting process, raking adjustments are performed after the nonresponse adjustments. Using the weights that include raking in this analysis would confound the analysis of the bias. Examining the estimates using weights just before and just after nonresponse adjustment provides focused analysis on the extent to which the nonresponse adjustment reduced bias. Because the raking adjustment may reduce the residual nonresponse bias, this analysis may understate the net bias reduction accomplished in the weighting process.

Overall, much of the potential nonresponse bias was reduced through the weighting procedures. The nonresponse weighting adjustments reduced the amount of potential bias in the estimates of the survey respondents (table 10-1). In the pre-adjustment screener estimates, more than half of the estimates analyzed showed statistically significant as well as practical differences between the base-weighted respondents and the base-weighted eligible sample population. In the post-adjusted screener estimates, the percentage of estimates with practical and significant differences was reduced to 29.2 percent.

Table 10-1 shows similar reductions for the estimates in the topical surveys, as well as in the absolute relative bias means and medians, after the nonresponse adjustments. The percentage of estimates with survey and sample differences greater than 1 percentage point was reduced to approximately 6 percent and 4 percent, respectively, in the ECPP and PFI surveys. The median relative bias was reduced to 1.5 percent and 0.8 percent, respectively.

Table 10-1. Summary of the NHES:2012 unit-level nonresponse bias analysis

	Befor	re nonresponse we	eight adjustments	After r	nonresponse weig	ght adjustments
Survey	Mean estimated absolute relative bias (percent)	Median estimated absolute relative bias (percent)	Percent of estimates with practical and significant difference ¹	Mean estimated absolute relative bias (percent)	Median estimated absolute relative bias (percent)	Percent of estimates with practical and significant difference ¹
Screener	11.5	10.6	55.6	5.2	3.2	29.2
ECPP	9.8	4.5	21.9	6.2	1.5	6.3
PFI	10.9	2.4	7.0	7.5	0.8	3.5

¹ This category refers to the percentage of estimates for which there are practical as well as significant differences between the respondent and the eligible sample populations. A *t* test was used to test for significant differences. "Practical difference" is defined here as a difference of more than 1.0 percentage point between the percentages for the respondent and the eligible sample populations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

Tables 10-2 through 10-4 show the relative bias in estimates between the respondent and the eligible sample populations for every category of the variables in the unit nonresponse bias analysis. [Note to reviewers: t-test results for tables 10-2, 10-3, and 10-4 are presented in the spreadsheet NHES12 T-test Tables Chapter 10]

Table 10-2. Estimates of unit nonresponse bias for various sample characteristics from the NHES:2012 screener

			Before nonres	ponse adjustm	ent				After non	response adj	justment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base- weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Total	99,426	143,227	100	100	0	0	0	100	0	0	0	
Ethnicity ³ of head of household												
0: Missing	31,402	49,705	32.4	35.6	-3.2	-9.8	0.09	34.4	-1.2	-3.4	0.06	-62.9
1: White	47,156	61,882	49.9	45.8	4.1	8.1	0.09	47.2	1.4	3.0	0.06	-65.0
2: Black	7,577	12,052	5.7	6.4	-0.7	-11.6	0.04	6.2	-0.2	-3.5	0.03	-67.7
3: Hispanic	7,454	11,731	6.1	6.6	-0.6	-9.6	0.04	6.4	-0.2	-3.2	0.03	-64.5
4: Asian or Pacific Islander	2,480	3,393	2.5	2.3	0.1	4.9	0.03	2.4	0.1	3.9	0.02	-21.0
5: Other	3,357	4,464	3.5	3.3	0.2	7.0	0.04	3.4	0.1	2.6	0.03	-64.2
Race/ethnicity stratum ⁴												
1: Black	16,675	27,412	12.0	13.9	-1.9	-16.1	0.06	12.8	-1.1	-8.9	0.06	-41.4
2: Hispanic	13,305	21,474	8.7	9.9	-1.2	-14.1	0.05	9.3	-0.6	-6.6	0.05	-50.3
3: Other, unknown	69,446	94,341	79.3	76.1	3.2	4.0	0.07	77.9	1.7	2.2	0.07	-44.8
Household income												
Missing	10,767	20,091	11.6	15.0	-3.4	-29.5	0.08	13.8	-1.2	-8.8	0.05	-64.5
\$0 to 10,000	2,438	3,948	2.3	2.6	-0.3	-11.4	0.03	2.5	-0.1	-2.8	0.03	-73.9
\$10,001 to 20,000	5,336	8,584	5.2	5.8	-0.6	-11.1	0.04	5.6	-0.1	-2.5	0.04	-75.9
\$20,001 to 30,000	8,298	13,092	7.6	8.3	-0.7	-8.9	0.05	8.2	-0.1	-1.6	0.05	-80.9
\$30,001 to 40,000	9,299	13,929	8.7	9.0	-0.3	-3.8	0.05	9.0	#	-0.5	0.05	-85.2
\$40,001 to 50,000	9,744	13,829	9.4	9.2	0.1	1.3	0.05	9.4	0.2	2.1	0.04	60.1
\$50,001 to 60,000	9,347	12,959	9.2	8.9	0.3	3.8	0.05	8.8	-0.1	-0.6	0.04	-85.1
\$60,001 to 75,000	11,528	15,526	11.6	10.9	0.7	6.3	0.05	11.0	0.1	0.6	0.04	-90.9
\$75,001 to 100,000	13,651	17,819	14.1	12.8	1.3	9.0	0.05	13.4	0.6	4.4	0.04	-53.2
\$100,001 to 150,000	12,740	15,841	13.5	11.7	1.8	13.0	0.05	12.3	0.5	4.3	0.04	-70.0
\$150,001 or more	6,278	7,609	6.8	5.8	1.0	15.2	0.03	6.0	0.3	4.3	0.03	-74.6

Table 10-2. Estimates of unit nonresponse bias for various sample characteristics from the NHES:2012 screener—Continued

			Before nonre	sponse adjustr	nent				After nor	response ad	justment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base- weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Route type												
1: Street	77,321	106,586	75.9	72.1	3.8	5.0	0.07	73.3	1.2	1.6	0.05	-68.6
2: High rise	18,650	30,653	17.2	19.4	-2.3	-13.2	0.07	19.1	-0.4	-2.0	0.03	-83.5
3: P.O. box	3,230	5,677	6.7	8.2	-1.5	-22.5	0.07	7.4	-0.8	-11.1	0.05	-45.5
4: Rural route	225	311	0.2	0.2	#	3.6	0.01	0.2	#	5.0	0.01	39.5
Education of head of household												
0: Missing	34,848	55,116	36.0	39.5	-3.5	-9.8	0.09	38.1	-1.4	-3.6	0.06	-61.4
5: Less than high school credential	10,522	16,153	9.7	10.2	-0.5	-5.5	0.05	10.2	-0.1	-0.6	0.04	-88.4
1: High school credential	17,213	23,186	17.2	16.1	1.1	6.6	0.06	16.6	0.5	3.0	0.06	-56.6
2: Some college	17,300	24,143	17.2	16.6	0.5	3.0	0.06	16.8	0.2	1.1	0.05	-64.2
3: Bachelor's degree 4: Graduate	11,963	15,279	12.2	10.9	1.3	10.9	0.05	11.3	0.4	3.3	0.04	-72.4
degree	7,580	9,350	7.8	6.7	1.1	13.9	0.05	7.1	0.4	5.4	0.04	-64.8
Drop point status ⁵												
1: Drop point	1,295	2,086	1.2	1.3	-0.1	-10.4	0.02	1.2	-0.1	-6.5	0.02	-35.6
2: Augmented drop point	263	431	0.2	0.3	#	-14.0	0.01	0.2	#	-6.6	0.01	-49.5
3: Not a drop point	97,868	140,710	98.6	98.4	0.2	0.2	0.02	98.5	0.1	0.1	0.02	-38.6

Table 10-2. Estimates of unit nonresponse bias for various sample characteristics from the NHES:2012 screener—Continued

			Before nonre	sponse adjustr	nent				After no	nresponse ac	ljustment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base- weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Home Tenure												
0: Missing	15,280	27,745	16.2	20.4	-4.2	-26.1	0.09	18.8	-1.6	-8.5	0.06	-62.3
1: Own	67,153	87,531	68.1	61.7	6.4	9.4	0.08	63.7	2.0	3.2	0.04	-68.5
2: Rent	16,993	27,951	15.7	17.9	-2.1	-13.6	0.08	17.5	-0.4	-2.4	0.05	-80.7
Dwelling Type	•	ŕ										
0: Missing	3,230	5,677	6.7	8.2	-1.5	-22.5	0.07	7.4	-0.8	-11.1	0.05	-45.5
1: Single-family unit	75,590	103,352	74.3	70.1	4.2	5.7	0.08	71.4	1.3	1.8	0.05	-69.6
2: Multi-unit	20,606	34,198	19.0	21.7	-2.7	-14.2	0.07	21.2	-0.5	-2.2	0.03	-83.0
Gender of head of household	,	,										
0: Missing or unknown	12,821	23,553	13.5	17.2	-3.7	-27.4	0.08	15.9	-1.3	-8.2	0.06	-64.7
1: Male	59,727	80,304	60.2	56.1	4.1	6.8	0.09	57.5	1.4	2.4	0.07	-65.8
2: Female	26,878	39,370	26.3	26.7	-0.4	-1.4	0.07	26.6	-0.1	-0.3	0.07	-77.1
Presence of phone number												
0: Phone number missing	50,806	81,090	51.9	57.5	-5.6	-10.7	0.09	55.6	-1.9	-3.4	0.04	-65.6
1: Phone number exists	40.600		40.4									
Marital status of head of household	48,620	62,137	48.1	42.5	5.6	11.6	0.09	44.4	1.9	4.3	0.04	-65.6
0: Missing	26,868	42,776	27.7	30.8	-3.1	-11.2	0.08	29.8	-1.0	-3.4	0.06	-67.7
1: Single	21,595	33,494	20.1	21.5	-1.4	-6.9	0.08	21.1	-0.4	-1.8	0.07	-73.2
2: Married	50,963	66,957	52.2	47.7	4.5	8.6	0.08	49.1	1.4	2.8	0.05	-69.4
Vacancy status of address	,	,										
1: Vacant	1,266	2,377	1.4	1.9	-0.5	-32.6	0.04	1.3	-0.6	-46.5	0.03	29.3
2: Not vacant	98,160	140,850	98.6	98.1	0.5	0.5	0.04	98.7	0.6	0.6	0.03	29.3

Table 10-2. Estimates of unit nonresponse bias for various sample characteristics from the NHES:2012 screener—Continued

			Before nonre	esponse adjustr	ment				After no	nresponse a	djustment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base- weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Age of head of household	•	•		¥				•				
0: Missing	31,482	53,534	31.7	37.3	-5.7	-17.9	0.09	35.5	-1.8	-5.1	0.07	-67.8
2: 18 to 24	1,498	2,396	1.4	1.6	-0.2	-10.7	0.02	1.5	-0.1	-4.9	0.03	-52.2
3: 25 to 34	6,063	9,181	6.0	6.3	-0.3	-5.2	0.05	6.1	-0.1	-1.9	0.05	-62.1
4: 35 to 44	10,847	15,764	10.9	11.0	-0.1	-1.0	0.06	11.1	0.1	1.1	0.04	5.6
5: 45 to 64	30,959	40,579	31.2	28.5	2.8	8.8	0.07	29.3	0.8	2.7	0.05	-71.1
6: 65 or older	18,577	21,773	18.9	15.4	3.5	18.4	0.06	16.5	1.1	6.6	0.03	-68.4
Seasonal status of address	-,	,										
1: Seasonal delivery	640	758	0.7	0.5	0.1	17.7	0.01	0.7	0.1	20.4	0.01	19.4
2: No seasonal delivery	98,692	142,310	99.2	99.3	-0.1	-0.1	0.01	99.2	-0.1	-0.1	0.01	38.9
3: Educational seasonal	94	159	0.1	0.1	#	-16.3	0.01	0.1	#	0.1	0.01	-99.4
Bilingual screener package mailed												
1: Bilingual package mailed	39,552	74,702	35.8	48.4	-12.6	-35.1	0.10	37.1	-11.3	-30.4	0.11	-10.2
2: Regular package mailed	59,874	68,525	64.2	51.6	12.6	19.6	0.10	62.9	11.3	17.9	0.11	-10.2
Only way to get mail (OWGM)	39,674	08,323	04.2	31.0	12.0	19.0	0.10	02.9	11.3	17.9	0.11	-10.2
1: OWGM P.O. boxes	711	1,144	0.7	0.8	-0.1	-11.6	0.02	0.8	#	-4.2	0.02	-61.3
2: Non-OWGM P.O. boxes	2,519	4,533	6.0	7.4	-1.4	-23.8	0.07	6.7	-0.8	-11.9	0.05	-44.6
3: All other addresses	96,196	137,550	93.3	91.8	1.5	1.6	0.07	92.6	0.8	0.9	0.05	-45.5

Table 10-2. Estimates of unit nonresponse bias for various sample characteristics from the NHES:2012 screener—Continued

			Before nonre	esponse adjustr	nent				After no	nresponse a	djustment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base- weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Number of adults in household												
Missing	10,875	20,296	11.7	15.1	-3.4	-29.5	0.08	13.9	-1.2	-8.8	0.05	-64.5
1	33,242	50,704	32.6	34.4	-1.8	-5.5	0.10	33.7	-0.7	-2.0	0.08	-62.9
2	30,789	40,768	31.2	28.6	2.5	8.1	0.08	29.5	0.9	2.9	0.08	-66.1
3	14,397	18,502	14.5	12.9	1.6	10.9	0.06	13.5	0.6	4.5	0.06	-61.3
4	6,184	7,867	6.2	5.5	0.7	11.7	0.04	5.7	0.3	4.6	0.03	-63.8
5	2,626	3,377	2.6	2.3	0.3	10.9	0.02	2.5	0.1	4.8	0.02	-58.5
6	973	1,270	1.0	0.9	0.1	9.1	0.02	0.9	#	3.1	0.02	-68.6
7	276	366	0.3	0.2	#	8.0	0.01	0.3	#	3.1	0.01	-62.8
8	64	77	0.1	0.1	#	17.0	#	0.1	#	9.9	#	-46.3

[#] Rounds to zero.

¹ "Standard error of difference" is a statistical index of the probability that a difference between the percentages of two samples is greater than zero.

² "Percent relative difference" shows the difference between percent relative bias before nonresponse adjustment and percent relative bias after nonresponse adjustment.

³ The ethnicity of the head of household included these categories from the vendor's frame: (1) Czech, Dutch, Eastern European, English, French, German, Greek, Irish, Italian, Jewish, Middle Eastern, Polish, Portuguese, Russian, Scandinavian, Scotch, Swiss, Ukrainian, and Western European, which were categorized as White for the purposes of this analysis; (2) African and African American, which were categorized as Black; (3) Hispanic, which was categorized as Hispanic; (4) Asian, Chinese, Hawaiian, Indonesian, Japanese, Korean, Polynesian, and Vietnamese, which were categorized as Asian or Pacific Islander; and (5) miscellaneous other. Native American, and unknown, which were categorized as "Other, unknown."

⁴ Race/ethnicity stratum is the percent ethnicity in Census tracts (stratum 1 is tracts containing 25 percent or more Black persons; stratum 2 is tracts containing 40 percent or more persons of Hispanic origin; and stratum 3 is all the remaining tracts). Both the race/ethnicity stratum (which was obtained by the vendor from Census data) and ethnicity of the head of household (which was obtained by the vendor from the Experian file) are included in tables 2 through 4.

⁵ A drop point address is an address that is a single postal delivery point for multiple housing units. An augmented drop point address includes a unit designation (e.g., an apartment number). SOURCE: U.S. Department of Education, National Center for Education Statistics, Screener Data File, National Household Education Surveys Program (NHES), 2012.

Table 10-3. Estimates of unit nonresponse bias for various sample and survey characteristics from the NHES:2012 ECPP survey

			Before non	response adjusti	ment				After noni	response ac	ljustment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base- weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Total Ethnicity ³ of head of household	7,893	9,919	100	100	0	0	0	100	0	0	0	
Missing	2,299	3,114	30.2	32.6	-2.4	-8.0	0.37	30.4	-2.2	-7.2	0.38	-9.2
1: White	3,572	4,222	46.7	43.6	3.1	6.7	0.33	45.8	2.1	4.7	0.33	-31.2
2: Black	540	732	5.7	6.2	-0.5	-8.7	0.14	6.1	-0.1	-1.6	0.14	-80.5
3: Hispanic4: Asian or Pacific	893	1,159	10.2	10.8	-0.6	-5.6	0.20	10.7	-0.1	-0.8	0.20	-85.4
Islander	312	376	3.8	3.6	0.1	3.7	0.11	3.7	0.1	2.0	0.11	-45.8
5: Other, unknown Race/ethnicity stratum ⁴	277	316	3.4	3.2	0.2	7.0	0.11	3.3	0.2	4.8	0.11	-32.9
1: Black	1,269	1,743	12.6	13.9	-1.3	-10.7	0.21	13.9	#	#	#	-100.0
2: Hispanic	1,354	1,825	12.5	13.6	-1.1	-8.8	0.22	13.6	#	#	#	-100.0
3: Other	5,270	6,351	75.0	72.5	2.4	3.2	0.28	72.5	#	#	#	-100.0
Enrollment status of sampled child												
Missing 1: Public/ private/	234	334	3.2	3.6	-0.4	-12.3	0.14	3.3	-0.3	-8.0	0.15	-32.5
preschool	2,613	3,167	32.9	31.6	1.4	4.1	0.28	31.5	#	-0.1	0.16	-98.7
2: Homeschool	74	92	1.1	1.1	-0.1	-4.8	0.08	1.1	-0.1	-5.3	0.08	8.3
3: Not in school	4,972	6,326	62.8	63.7	-0.9	-1.4	0.29	64.1	0.3	0.5	0.21	-62.3
Gender of sampled child												
Missing	115	173	1.7	2.1	-0.4	-22.5	0.15	1.8	-0.3	-19.2	0.15	-12.3
1: Male	4,034	5,056	51.2	51.2	#	#	0.33	50.9	-0.3	-0.6	0.31	1934.7
2: Female	3,744	4,690	47.1	46.7	0.4	0.8	0.32	47.3	0.6	1.4	0.30	70.7

Table 10-3. Estimates of unit nonresponse bias for various sample and survey characteristics from the NHES:2012 ECPP survey—Continued

			Before noni	response adjust	ment				After nor	response a	djustment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base- weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Age of sampled child												
Missing	18	26	0.2	0.2	#	-6.0	0.03	0.2	#	-4.5	0.03	-23.9
0 years	1,378	1,759	16.9	17.4	-0.5	-3.0	0.26	17.0	-0.3	-2.0	0.19	-32.1
1 year	1,171	1,440	14.7	14.4	0.3	2.3	0.25	14.5	0.2	1.3	0.21	-44.2
2 years	1,581	2,022	19.8	20.1	-0.4	-2.0	0.27	20.0	-0.1	-0.7	0.27	-63.8
3 years	1,559	1,945	19.7	19.4	0.3	1.4	0.24	19.8	0.4	1.9	0.25	36.9
4 years	1,582	1,966	20.5	20.3	0.2	1.0	0.28	20.3	#	#	0.25	-97.8
5 years	593	744	8.1	8.0	0.1	1.3	0.16	8.0	-0.1	-0.7	0.14	-47.9
6 years	11	17	0.1	0.2	#	-14.7	0.02	0.1	#	-14.9	0.02	0.9
Number of children in household												
Missing	269	380	3.6	4.0	-0.5	-13.7	0.17	4.0	0.0	-1.0	0.14	-91.6
0	5	11	0.1	0.1	-0.1	-108.5	0.05	0.1	-0.1	-99.6	0.05	-4.1
1	2,788	3,408	24.0	23.1	0.9	3.9	0.24	23.2	0.1	0.6	0.09	-85.2
2	2,881	3,540	39.5	38.4	1.1	2.7	0.31	38.6	0.2	0.5	0.12	-80.6
3	1,264	1,639	20.5	20.9	-0.4	-2.0	0.24	20.9	#	#	0.12	-98.7
4	469	608	8.2	8.3	-0.1	-1.3	0.17	8.4	0.2	1.9	0.12	50.1
5	147	230	2.9	3.5	-0.7	-24.4	0.16	3.2	-0.3	-10.3	0.16	-52.4
6 or more	70	103	1.4	1.6	-0.2	-17.9	0.14	1.6	-0.1	-3.6	0.15	-76.8

[#] Estimate rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPP) Data File, National Household Education Surveys Program (NHES), 2012.

¹ "Standard error of difference" is a statistical index of the probability that a difference between the percentages of two samples is greater than zero.

² "Percent relative difference" shows the difference between percent relative bias before nonresponse adjustment and percent relative bias after nonresponse adjustment.

³ The ethnicity of the head of household included these categories from the vendor's frame: (1) Czech, Dutch, Eastern European, English, French, German, Greek, Irish, Italian, Jewish, Middle Eastern, Polish, Portuguese, Russian, Scandinavian, Scotch, Swiss, Ukrainian, and Western European, which were categorized as White for the purposes of this analysis; (2) African and African American, which were categorized as Black; (3) Hispanic, which was categorized as Hispanic; (4) Asian, Chinese, Hawaiian, Indonesian, Japanese, Korean, Polynesian, and Vietnamese, which were categorized as Asian or Pacific Islander; and (5) miscellaneous other, Native American, and unknown, which were categorized as "Other, unknown."

⁴ Race/ethnicity stratum is the percent ethnicity in Census tracts (stratum 1 is tracts containing 25 percent or more Black persons; stratum 2 is tracts containing 40 percent or more persons of Hispanic origin; stratum 3 is all the remaining tracts). Both the race/ethnicity stratum (which was obtained by the vendor from Census data) and ethnicity of the head of household (which was obtained by the vendor from the Experian file) are included in tables 2 through 4.

Table 10-4. Estimates of unit nonresponse bias for various sample and screener characteristics from the NHES:2012 PFI survey

			Before non	response adjustmer	nt				After noi	response adju	ıstment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base-weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Total	17,563	22,008	100	100	0	0	0	100	0	0	0	
Ethnicity ³ of head of household												
Missing	4,429	5,856	25.5	27.5	-2.0	-7.7	0.24	25.6	-1.9	-7.3	0.24	-4.9
1: White	8,328	9,952	48.2	45.7	2.5	5.1	0.23	47.2	1.5	3.1	0.22	-39.6
2: Black	1,370	1,855	6.6	7.1	-0.6	-9.0	0.14	7.1	#	-0.4	0.13	-95.6
3: Hispanic 4: Asian or Pacific	2,131	2,787	12.3	12.7	-0.4	-3.3	0.17	12.8	#	0.4	0.16	-87.9
Islander 5: Other,	625	753	3.5	3.3	0.2	6.2	0.08	3.4	0.2	4.9	0.08	-21.6
unknown Ethnicity stratum ⁴	680	805	4.0	3.7	0.3	7.5	0.08	3.9	0.2	5.3	0.08	-31.2
1: Black	2,771	3,755	12.4	13.7	-1.3	-10.6	0.19	13.7	#	#	#	-100.0
2: Hispanic	2,764	3,688	12.4	13.3	-0.9	-7.3	0.16	13.3	#	#	#	-100.0
3: Other Enrollment status of sampled child	12,028	14,565	75.3	73.1	2.2	2.9	0.20	73.1	#	#	#	-100.0
Missing 1:Public/private	219	329	1.8	1.9	-0.2	-10.1	0.07	1.8	-0.1	-5.8	0.07	-40.8
school 2: Homeschool instead of	16,906	21,064	95.5	95.1	0.4	0.4	0.11	95.4	0.3	0.3	0.11	-26.0
school	394	501	2.6	2.6	#	0.1	0.08	2.6	#	0.4	0.08	256.2
3: Not in school	44	114	0.1	0.3	-0.2	-154.0	0.03	0.1	-0.2	-125.8	0.03	-8.1

Table 10-4. Estimates of unit nonresponse bias for various sample and screener characteristics from the NHES:2012 PFI survey—Continued

			Before non	response adjustme	nt				After no	nresponse adji	ıstment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base-weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Grade of sampled child												
Missing Kindergarten /	610	895	3.6	4.2	-0.6	-16.9	0.12	3.7	-0.5	-14.5	0.13	-12.4
pre-K	1,121	1,453	7.8	8.0	-0.2	-2.1	0.14	7.9	-0.1	-0.7	0.12	-65.3
1	1,022	1,277	6.9	6.8	0.1	1.4	0.13	6.9	0.1	1.4	0.11	5.7
2	1,066	1,323	7.6	7.4	0.1	1.8	0.16	7.6	0.1	1.8	0.14	1.6
3	1,146	1,418	7.5	7.3	0.2	2.3	0.12	7.4	0.1	1.8	0.12	-22.3
4	1,117	1,405	7.2	7.3	#	-0.5	0.13	7.2	#	-0.3	0.13	-33.5
5	1,203	1,484	7.7	7.5	0.1	1.9	0.11	7.6	0.1	1.8	0.13	-4.5
6	1,273	1,577	7.3	7.3	#	-0.4	0.13	7.2	-0.2	-2.4	0.10	514.1
7	1,330	1,633	7.5	7.3	0.1	1.9	0.11	7.4	#	0.6	0.09	-67.7
8	1,332	1,661	7.2	7.2	0.1	1.0	0.11	7.2	#	0.2	0.10	-77.9
9	1,456	1,810	7.7	7.7	0.1	1.0	0.12	7.6	-0.1	-0.8	0.10	-22.2
10	1,582	1,959	7.9	7.7	0.2	2.4	0.11	7.8	0.1	1.2	0.09	-48.5
11	1,650	2,022	7.2	7.1	0.1	0.9	0.11	7.3	0.1	1.7	0.09	98.0
12	1,655	2,091	7.0	7.3	-0.3	-3.6	0.10	7.3	0.1	0.7	0.09	-79.0
Gender of sampled child												
Missing	77	111	0.5	0.6	-0.1	-16.2	0.06	0.6	-0.1	-12.4	0.06	-20.8
1: Male	9,071	11,393	51.1	51.4	-0.2	-0.5	0.23	51.1	-0.3	-0.5	0.17	6.3
2: Female	8,415	10,504	48.3	48	0.3	0.7	0.23	48.3	0.3	0.7	0.17	-0.9

Table 10-4. Estimates of unit nonresponse bias for various sample and screener characteristics from the NHES:2012 PFI survey—Continued

			Before non	response adjustmer	ıt				After no	nresponse adji	ıstment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base-weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Age of sampled child												
Missing	194	293	1.2	1.4	-0.2	-21.0	0.06	1.4	#	-0.6	0.06	-96.7
0	#	3	#	#	#	#	#	#	#	#	#	#
2	#	2	#	#	#	#	#	#	#	#	#	#
3	2	5	#	#	#	-137.4	0.01	#	#	-126.0	0.01	-3.7
4	26	40	0.2	0.2	#	-7.2	0.03	0.2	#	-0.1	0.03	-98.7
5	638	824	4.5	4.6	-0.1	-1.9	0.11	4.5	#	-0.9	0.10	-52.7
6	1,005	1,288	6.9	7.0	-0.1	-1.3	0.13	6.9	#	-0.5	0.10	-63.9
7	1,082	1,335	7.4	7.2	0.2	2.4	0.14	7.3	0.1	2.0	0.12	-16.2
8	1,127	1,378	7.5	7.3	0.3	3.5	0.12	7.5	0.2	3.1	0.11	-13.1
9	1,094	1,378	7.3	7.3	#	-0.2	0.12	7.3	-0.1	-1.0	0.12	375.7
10	1,206	1,519	7.5	7.6	-0.1	-1.2	0.13	7.6	#	-0.5	0.07	-62.1
11	1,258	1,528	7.6	7.5	0.1	1.9	0.12	7.5	0.1	0.8	0.07	-58.6
12	1,327	1,644	7.8	7.6	0.2	2.4	0.12	7.5	#	-0.6	0.07	-76.9
13	1,381	1,721	7.6	7.6	#	-0.1	0.14	7.6	#	-0.4	0.09	204.6
14	1,396	1,718	7.4	7.3	0.1	1.3	0.12	7.3	#	-0.5	0.08	-62.4
15	1,531	1,878	7.7	7.5	0.2	2.9	0.10	7.5	#	-0.3	0.05	-91.1
16	1,618	2,023	7.7	7.7	0.1	0.7	0.10	7.8	0.1	1.2	0.09	80.5
17	1,740	2,144	7.5	7.6	-0.1	-0.7	0.12	7.5	#	-0.3	0.09	-58.5
18	778	1,006	3.4	3.6	-0.2	-5.8	0.07	3.6	#	0.7	0.05	-87.7
19	112	191	0.5	0.7	-0.2	-47.8	0.05	0.6	-0.1	-23.8	0.05	-40.5
20	48	90	0.2	0.3	-0.1	-46.0	0.03	0.2	-0.1	-22.9	0.03	-40.9

Table 10-4. Estimates of unit nonresponse bias for various sample and screener characteristics from the NHES:2012 PFI survey—Continued

			Before non	response adjustmen	ıt				After noi	response adju	ıstment	
Characteristic	Unweighted respondents	Unweighted eligible sample	Base- weighted respondents (percentage)	Base-weighted eligible sample (percentage)	Estimated bias	Percent relative bias	Standard error of difference ¹	Weighted respondents (percentage)	Estimated bias	Percent relative bias	Standard error of difference	Percent relative difference ²
Number of children age 20 or younger in household												
Missing	632	879	3.8	4.2	-0.4	-11.6	0.11	3.9	-0.3	-8.0	0.12	-28.8
0	7	10	#	#	#	-26.3	#	#	#	-25.4	#	-2.8
1	6,372	7,977	18.3	18.1	0.1	0.8	0.14	18.2	0.1	0.4	0.07	-49.8
2	6,793	8,331	38.3	37.4	0.9	2.4	0.21	37.5	0.1	0.3	0.11	-88.7
3	2,658	3,335	24.3	24.1	0.2	0.9	0.19	24.5	0.4	1.8	0.18	95.2
4	745	982	9.8	10.2	-0.4	-4.2	0.16	10.1	-0.1	-0.8	0.17	-80.5
5 6 or more	193	275	3.6	4.1	-0.4	-11.0	0.17	3.8	-0.3	-7.0	0.17	-34.6
children	163	219	2.0	2.0	#	-1.4	0.11	2.0	#	2.1	0.10	55.8

[#] Rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education (PFI) Data File, National Household Education Surveys Program (NHES), 2012.

¹ "Standard error of difference" is a statistical index of the probability that a difference between the percentages of two samples is greater than zero.

² "Percent relative difference shows the difference between percent relative bias before nonresponse adjustment and percent relative bias after nonresponse adjustment.

³ The ethnicity of the head of household included these categories from the vendor's frame: (1) Czech, Dutch, Eastern European, English, French, German, Greek, Irish, Italian, Jewish, Middle Eastern, Polish, Portuguese, Russian, Scandinavian, Scotch, Swiss, Ukrainian, and Western European, which were categorized as White for the purposes of this analysis; (2) African and African American, which were categorized as Black; (3) Hispanic, which was categorized as Hispanic; (4) Asian, Chinese, Hawaiian, Indonesian, Japanese, Korean, Polynesian, and Vietnamese, which were categorized as Asian or Pacific Islander; (5) miscellaneous other, Native American, and unknown, which were categorized as "Other, unknown."

⁴ Race/ethnicity stratum is the percent ethnicity in Census tracts (stratum 1 is tracts containing 25 percent or more Black persons; stratum 2 is tracts containing 40 percent or more persons of Hispanic origin; stratum 3 is all the remaining tracts). Both the race/ethnicity stratum (which was obtained by the vendor from Census data) and ethnicity of the head of household (which was obtained by the vendor from the Experian file) are included in tables 2 through 4.

10.2.2 A Comparison of Estimates Based on Nonresponse Adjusted and Base Weights

In addition to the analysis presented in tables above, based on the topical survey responses, selected child and family characteristics were examined in order to determine the effects of the unit nonresponse adjustment on the ECPP and PFI components of the NHES:2012. This analysis (shown in table 10-5 for the ECPP survey and table 10-6 for the PFI survey) compares estimates constructed using the unit nonresponse-adjusted weights and the base weights. Additionally, key survey estimates of the child's development and care and of the child's school were computed by the child's race/ethnicity separately for the ECPP and PFI surveys, using the nonresponse-adjusted weights and the base weights (see table 10-7 for the ECPP estimates and table 10-8 for the PFI estimates). Separate estimates for subgroups formed by race/ethnicity are considered in this analysis because they are key analytic subgroups.

For characteristics of the child and the child's family, significant differences were observed between base-weighted and adjusted percentages for the White, non-Hispanic race/ethnicity category in both the ECPP and the PFI. [NHES12 T-test Tables Chapter 10, table 10-5, test number 1 and table 6 test, number 1] Significant differences were also observed for the \$50,000 or less household income category in the ECPP. [NHES12 T-test Tables Chapter 10, table 10-5, test number 2] In the comparisons of ECPP key estimates for the questionnaire items, significant differences were observed for CPNNOWX (the question asking whether the child was currently attending a day care center, preschool, or prekindergarten) in most of the race/ethnicity subgroups as well as overall. [NHES12 T-test Tables Chapter 10, table 10-7, test numbers 1-10]. These estimates (out of 450 examined) were the only topical estimates that showed a difference greater than 1 percentage point between the adjusted and base-weighted percentages of respondents. The fact that measurable differences were observed for only a small number of items suggests that none of these variables were powerful predictors of unit response propensity. Therefore, the unit nonresponse adjustment had little effect on the potential bias, but it is possible that there was little to be removed.

Table 10-5. Comparison of estimates from the NHES:2012 ECPP survey based on nonresponse-adjusted weights and base weights, by child and family characteristics

	Nonresponse a	Base-weighted			
		Standard		Standard	
Characteristic	Percent	error	Percent	error	
Questionnaire path					
Infant	55	0.6	55	0.7	
Preschool	45	0.6	45	0.7	
Census region ¹					
Northeast	16	0.5	16	0.5	
South	36	0.7	35	0.7	
Midwest	23	0.6	24	0.6	
West	25	0.5	25	0.5	
Race/ethnicity of child					
White, non-Hispanic	56	0.6	57	0.7	
Black, non-Hispanic	9	0.3	9	0.3	
Hispanic	22	0.6	21	0.6	
Other ²	12	0.5	13	0.4	
Sex of child					
Male	52	0.7	52	0.7	
Female	48	0.7	48	0.7	
Parents' education					
High school, but no credential	7	0.3	7	0.3	
High school or GED	14	0.5	13	0.5	
Vocational/some college	30	0.7	29	0.7	
Bachelor's degree	22	0.5	23	0.5	
Graduate or professional	27	0.6	28	0.6	
Parents' language					
Both parents speak English	86	0.4	87	0.4	
One parent speaks English	3	0.2	3	0.2	
Neither parent speaks English	10	0.4	10	0.4	

Table 10-5. Comparison of estimates from the NHES:2012 ECPP survey based on nonresponse-adjusted weights and base weights, by child and family characteristics—Continued

	Nonresponse	Base-weighted			
Characteristic	Percent	Standard error	Percent	Standard error	
Family structure					
Two parents and sibling(s)	58	0.5	58	0.6	
Two parents, no sibling	20	0.4	21	0.4	
One parent and sibling(s)	11	0.4	11	0.4	
One parent, no sibling	8	0.3	8	0.3	
Other	2	0.2	2	0.2	
Household income					
\$50,000 or less	48	0.6	47	0.6	
\$50,0001to 100,000	29	0.5	30	0.5	
\$100,001 to 150,000	13	0.4	13	0.4	
\$150,001 or more	10	0.4	10	0.4	

¹ The Northeast Census region contains Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania. The South region contains Delaware, the District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas. The Midwest region contains Indiana, Illinois, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. The West region contains Arizona, Colorado, Idaho, Nevada, New Mexico, Montana, Utah, Wyoming, Alaska, California, Hawaii, Oregon, and Washington.

² "Other" includes children who are Asian or Pacific Islanders, or multiracial and not of Hispanic ethnicity or who are not Hispanic, White, Black. NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPP) Survey of the National Household Education Surveys Program (NHES), 2012.

Table 10-6. Comparison of estimates from the NHES:2012 PFI survey based on nonresponse-adjusted weights and base weights, by child and family characteristics

	Nonrespor	nse adjusted	ed Base-weighted			
		Standard		Standard error		
Characteristic	Percent	error	Percent			
Questionnaire path						
Elementary school	45	0.5	45	0.5		
Homeschool	3	0.2	3	0.2		
Middle school	22	0.4	22	0.4		
Senior high	30	0.4	30	0.4		
Census region ¹						
Northeast	17	0.4	17	0.3		
South	36	0.4	36	0.4		
Midwest	22	0.4	23	0.4		
West	24	0.4	24	0.4		
Race/ethnicity of child						
White, non-Hispanic	55	0.5	57	0.5		
Black, non-Hispanic	11	0.3	10	0.3		
Hispanic	22	0.4	22	0.4		
Other ²	11	0.3	11	0.3		
Sex of child						
Male	51	0.5	51	0.5		
Female	49	0.5	49	0.5		
Parents' education						
High school, but no credential	9	0.3	9	0.3		
High school or GED	14	0.4	13	0.4		
Vocational/some college	32	0.4	32	0.4		
Bachelor's degree	20	0.3	21	0.3		
Graduate or professional	25	0.4	25	0.4		
Parents' language						
Both parents speak English	86	0.4	87	0.4		
One parent speaks English	3	0.2	3	0.2		
Neither parent speaks English	10	0.3	10	0.3		

Table 10-6. Comparison of estimates from the NHES:2012 PFI survey based on nonresponse-adjusted weights and base weights, by child and family characteristics—Continued

	Nonrespo	Base-weighted			
Characteristic	Percent	Standard error	Percent	Standard error	
Family structure					
Two parents and sibling(s)	61	0.4	61	0.4	
Two parents, no sibling	10	0.2	11	0.2	
One parent and sibling(s)	18	0.4	18	0.4	
One parent, no sibling	7	0.2	7	0.2	
Other	4	0.2	3	0.2	
Household income					
\$50,000 or less	45	0.4	44	0.5	
\$50,0001 to 100,000	30	0.4	30	0.4	
\$100,001 to 150,000	13	0.3	14	0.3	
\$150,001 or more	12	0.3	12	0.3	

¹ The Northeast Census region contains Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania. The South region contains Delaware, the District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas. The Midwest region contains Indiana, Illinois, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. The West region contains Arizona, Colorado, Idaho, Nevada, New Mexico, Montana, Utah, Wyoming, Alaska, California, Hawaii, Oregon, and Washington.

² "Other" includes children who are Asian or Pacifica Islanders or multiracial and not of Hispanic ethnicity or who are not Hispanic, White,

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education (PFI) Survey of the National Household Education Surveys Program (NHES), 2012.

Table 10-7. Comparison of estimates of selected key items from the NHES:2012 ECPP survey based on nonresponse-adjusted weights and base weights, by race/ethnicity

	Race/ethnicity																			
		Overall			White, non-Hispanic				Black, non-Hispanic			Hispanic				Other race/ethnicity ¹				
	Nonresp adjust		Base-weig	ghted	Nonrespo adjuste		Base-weig	ghted	Nonrespo adjuste		Base-weig	ghted	Nonrespo adjuste		Base-weig	hted	Nonrespo adjuste		Base-weig	ghted
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Child receiving any nonparental care																				
Yes	65	0.7	66	0.7	66	0.9	67	0.9	71	2.0	72	2.1	60	1.4	60	1.4	65	1.7	66	1.7
No Child receiving relative care	35	0.7	34	0.7	34	0.9	33	0.9	29	2.0	28	2.1	40	1.4	40	1.4	35	1.7	34	1.7
Yes	27	0.6	27	0.6	25	0.7	25	0.7	36	2.0	36	2.0	31	1.4	31	1.4	26	1.5	26	1.5
No Child receiving nonrelative care	73	0.6	73	0.6	75	0.7	75	0.7	64	2.0	64	2.0	69	1.4	69	1.4	74	1.5	74	1.5
Yes	16	0.5	16	0.5	18	0.8	18	0.8	13	1.3	12	1.3	12	0.9	12	0.9	14	1.3	14	1.3
No Child receiving center-based care	84	0.5	84	0.5	82	0.8	82	0.8	87	1.3	88	1.3	88	0.9	88	0.9	86	1.3	86	1.3
Yes	39	0.7	40	0.7	41	0.9	42	0.9	43	2.0	44	2.1	31	1.2	32	1.2	39	1.7	41	1.7
No Recognizes all colors	61	0.7	60	0.7	59	0.9	58	0.9	57	2.0	56	2.1	69	1.2	68	1.2	61	1.7	59	1.7
Yes	72	0.7	73	0.7	79	0.8	79	0.8	61	2.6	61	2.5	56	1.6	57	1.6	76	1.8	77	1.7
No Can count higher than 10	28	0.7	27	0.7	21	0.8	21	0.8	39	2.6	39	2.5	44	1.6	43	1.6	24	1.8	23	1.7
Yes	55	0.9	55	0.9	58	1.1	58	1.1	61	2.5	62	2.5	43	1.6	43	1.6	59	2.3	59	2.3
No Knows all letters	45	0.9	45	0.9	42	1.1	42	1.1	39	2.5	38	2.5	57	1.6	57	1.6	41	2.3	41	2.3
Yes	30	0.7	31	0.7	31	1.0	32	1.0	35	2.7	35	2.7	20	1.1	21	1.2	39	1.9	40	1.8
No	70	0.7	69	0.7	69	1.0	68	1.0	65	2.7	65	2.7	80	1.1	79	1.2	61	1.9	60	1.8

Table 10-7. Comparison of estimates of selected key items from the NHES:2012 ECPP survey based on nonresponse-adjusted weights and base weights, by race/ethnicity—Continued

				_								Race/et	hnicity							
		Ove	erall	_	Wh	ite, nor	n-Hispanic		Bla	ack, nor	-Hispanic			Hisp	anic		Oth	ner race/	ethnicity1	
	Nonrespo adjuste		Base-weig	hted	Nonrespo adjuste		Base-weig	ghted	Nonrespo adjuste		Base-weig	ghted	Nonrespo adjuste		Base-weig	hted	Nonrespo adjuste		Base-weig	ghted
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Can write own name																				
Yes	42	0.7	42	0.8	44	1.0	45	1.0	40	2.4	41	2.4	36	1.6	37	1.6	41	2.2	42	2.2
No Developmentally delayed	58	0.7	58	0.8	56	1.0	55	1.0	60	2.4	59	2.4	64	1.6	63	1.6	59	2.2	58	2.2
Yes	3	0.3	3	0.3	4	0.4	4	0.4	4	0.7	4	0.7	3	0.4	3	0.4	3	0.7	3	0.7
No Specific learning disability	97	0.3	97	0.3	96	0.4	96	0.4	96	0.7	96	0.7	97	0.4	97	0.4	97	0.7	97	0.7
Yes	2	0.2	2	0.2	2	0.3	2	0.3	3	0.8	3	0.8	2	0.4	2	0.4	2	0.5	2	0.5
No Health impairment	98	0.2	98	0.2	98	0.3	98	0.3	97	0.8	97	0.8	98	0.4	98	0.4	98	0.5	98	0.5
Yes	10	0.5	10	0.5	10	0.6	10	0.6	13	1.4	13	1.4	9	0.9	9	0.9	8	1.1	8	1.1
No Has good choices for child care/ early childhood programs	90	0.5	90	0.5	90	0.6	90	0.6	87	1.4	87	1.4	91	0.9	91	0.9	92	1.1	92	1.1
Yes	60	0.6	61	0.6	65	0.8	66	0.8	62	2.1	62	2.1	49	1.2	49	1.2	56	1.9	57	1.9
No	16	0.5	16	0.5	15	0.7	15	0.7	21	1.5	21	1.5	17	0.9	16	0.9	17	1.4	16	1.3
Don't know Number of times child read to in past week	24	0.6	23	0.6	20	0.7	20	0.6	17	1.7	17	1.6	35	1.4	34	1.4	27	2.0	27	1.9
Not at all	9	0.4	9	0.3	5	0.4	5	0.4	13	1.5	12	1.4	16	1.0	15	0.9	12	1.3	12	1.3
1 or 2 times	11	0.4	10	0.4	7	0.5	7	0.5	14	1.4	14	1.4	17	1.2	17	1.1	12	1.2	12	1.2
3 or more times	81	0.6	81	0.5	88	0.7	88	0.7	73	2.0	74	2.0	67	1.3	68	1.2	76	1.6	76	1.6

Table 10-7. Comparison of estimates of selected key items from the NHES:2012 ECPP survey based on nonresponse-adjusted weights and base weights, by race/ethnicity—Continued

												Race/et	hnicity							
		Ov	erall	_	Wh	ite, nor	n-Hispanic		Bla	ack, nor	n-Hispanic			Hisp	anic		Oth	er race	ethnicity ¹	
	Nonrespo adjuste		Base-weig	hted	Nonrespo adjuste		Base-weig	ghted	Nonrespo adjuste		Base-weig	hted	Nonrespo adjuste		Base-weig	hted	Nonrespo adjuste		Base-weig	ghted
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Someone in family taught letters, words, or numbers																				
Not at all	10	0.4	10	0.4	10	0.5	10	0.5	10	1.3	9	1.3	10	0.9	10	0.9	10	1.2	10	1.2
1 or 2 times	27	0.5	26	0.5	25	0.7	25	0.7	23	1.6	22	1.6	33	1.3	33	1.3	24	1.5	24	1.5
3 or more times	63	0.6	63	0.6	64	0.8	64	0.8	68	2.0	68	2.0	57	1.4	58	1.4	66	1.6	66	1.6

¹ "Other race/ethnicity" includes children who are Asian or Pacific Islander, or multiracial and not of Hispanic ethnicity or who are not Hispanic, White, Black. NOTE: s.e. is standard error. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPP) Survey of the National Household Education Surveys Program (NHES), 2012.

Table 10-8. Comparison of estimates of selected key items from the NHES:2012 PFI survey based on nonresponse-adjusted weights and base weights, by race/ethnicity

												Race/e	thnicity							
		Ove	erall		W	hite, nor	n-Hispanic				n-Hispanic				oanic		Ot	her race	e/ethnicity1	
	Nonres				Nonres	1			Nonres				Nonres				Nonres			
		justed	Base-we			justed	Base-we			justed	Base-we			justed	Base-we			justed	Base-we	
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Child's parents participate in 3 or more activities in the child's school																				
Yes	79	0.4	79	0.4	82	0.4	82	0.4	77	1.2	78	1.2	73	1.0	73	1.0	77	1.2	77	1.2
No	21	0.4	21	0.4	18	0.4	18	0.4	23	1.2	22	1.2	27	1.0	27	1.0	23	1.2	23	1.2
School tells family how child is doing in school																				
Yes	56	0.4	56	0.4	57	0.7	57	0.7	57	1.4	57	1.4	51	0.9	51	0.8	55	1.4	55	1.4
No	44	0.4	44	0.4	43	0.7	43	0.7	43	1.4	43	1.4	49	0.9	49	0.8	45	1.4	45	1.4
School provides information about how to help child with homework																				
Yes	40	0.5	40	0.5	40	0.7	40	0.7	43	1.6	43	1.6	37	1.0	37	1.0	41	1.3	41	1.4
No	60	0.5	60	0.5	60	0.7	60	0.7	57	1.6	57	1.6	63	1.0	63	1.0	59	1.3	59	1.4
School provides information about why child is in groups/classes																				
Yes	38	0.4	38	0.4	40	0.7	40	0.7	40	1.4	40	1.4	34	0.8	34	0.8	39	1.4	39	1.4
No	62	0.4	62	0.4	60	0.7	60	0.7	60	1.4	60	1.4	66	0.8	66	0.8	61	1.4	61	1.4
School provides information on how to help prepare child for college/ vocational school																				
Yes	22	0.4	22	0.4	21	0.6	21	0.6	24	1.4	24	1.3	24	0.8	24	0.8	20	1.2	20	1.2
No	78	0.4	78	0.4	79	0.6	79	0.6	76	1.4	76	1.3	76	0.8	76	0.8	80	1.2	80	1.2

Table 10-8. Comparison of estimates of selected key items from the NHES:2012 PFI survey based on nonresponse-adjusted weights and base weights, by race/ethnicity—Continued

												Race/e	thnicity							
			erall		Wl	nite, no	n-Hispanic				n-Hispanic		·		oanic				e/ethnicity1	
	Nonres				Nonres				Nonres				Nonres				Nonres			
		justed	Base-we	_		usted	Base-we			justed	Base-wei	_		justed	Base-we			justed	Base-we	_
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
School provides information about parents' expected role																				
Yes	44	0.5	44	0.5	46	0.7	46	0.7	47	1.6	47	1.5	38	0.9	38	0.9	43	1.5	43	1.5
No	56	0.5	56	0.5	54	0.7	54	0.7	53	1.6	53	1.5	62	0.9	62	0.9	57	1.5	57	1.5
Child's parents told child a story in the last week																				
Yes	57	0.4	57	0.5	60	0.6	60	0.6	52	1.5	52	1.5	53	0.9	53	1.0	59	1.3	59	1.3
No	43	0.4	43	0.5	40	0.6	40	0.6	48	1.5	48	1.5	47	0.9	47	1.0	41	1.3	41	1.3
Child's parents did arts and crafts with child in the last week																				
Yes	45	0.4	45	0.5	44	0.6	44	0.6	45	1.6	45	1.6	47	1.0	47	1.0	47	1.3	47	1.3
No	55	0.4	55	0.5	56	0.6	56	0.6	55	1.6	55	1.6	53	1.0	53	1.0	53	1.3	53	1.3
Child's parents talked with child about family history/ ethnicity in the last week																				
Yes	53	0.5	52	0.5	43	0.7	43	0.7	69	1.4	70	1.4	65	1.0	65	1.0	62	1.7	62	1.7
No	47	0.5	48	0.5	57	0.7	57	0.7	31	1.4	30	1.4	35	1.0	35	1.0	38	1.7	38	1.7
Child's parents and child visited a library in the last week																				
Yes	40	0.4	40	0.4	38	0.6	38	0.6	49	1.5	49	1.5	38	1.1	38	1.1	47	1.5	47	1.5
No	60	0.4	60	0.4	62	0.6	62	0.6	51	1.5	51	1.5	62	1.1	62	1.1	53	1.5	53	1.5
Child's parents and child went to a concert/live show in the last week																				
Yes	32	0.5	32	0.5	34	0.6	34	0.6	33	1.5	33	1.4	27	1.1	27	1.1	32	1.3	32	1.3
No	68	0.5	68	0.5	66	0.6	66	0.6	67	1.5	67	1.4	73	1.1	73	1.1	68	1.3	68	1.3

Table 10-8. Comparison of estimates of selected key items from the NHES:2012 PFI survey based on nonresponse-adjusted weights and base weights, by race/ethnicity—Continued

												Race/e	thnicity							
		Ove	erall		Wl	nite, noi	n-Hispanic		Bla	ack, no	n-Hispanic				oanic		Ot	her race	e/ethnicity1	
	Nonres	ı			Nonres				Nonres				Nonres				Nonres			
		justed	Base-we			usted	Base-wei			justed	Base-we			justed	Base-we			justed	Base-we	ighted
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Child's parents and child visited a museum/ gallery/historical site in the last week																				
Yes	22	0.4	22	0.4	23	0.5	23	0.5	20	1.0	20	1.0	20	0.9	20	0.9	23	1.3	23	1.3
No	78	0.4	78	0.4	77	0.5	77	0.5	80	1.0	80	1.0	80	0.9	80	0.9	77	1.3	77	1.3
Child's parents and child visited a zoo/aquarium in the last week																				
Yes	18	0.3	18	0.3	15	0.4	15	0.4	20	1.3	20	1.2	24	0.9	24	0.9	19	1.3	19	1.3
No	82	0.3	82	0.3	85	0.4	85	0.4	80	1.3	80	1.2	76	0.9	76	0.9	81	1.3	81	1.3
Child's parents and child went to a sporting event in the last week																				
Yes	42	0.5	42	0.5	44	0.7	44	0.7	44	1.5	44	1.4	39	1.1	39	1.1	34	1.4	34	1.4
No	58	0.5	58	0.5	56	0.7	56	0.7	56	1.5	56	1.4	61	1.1	61	1.1	66	1.4	66	1.4
Parents check to see that child's homework gets done																				
Never	4	0.2	4	0.2	5	0.3	4	0.2	2	0.3	2	0.3	3	0.3	3	0.3	4	0.6	4	0.6
Rarely	8	0.3	8	0.3	9	0.4	8	0.4	6	0.8	6	0.8	6	0.6	7	0.6	8	0.9	8	0.8
Sometimes	23	0.4	23	0.4	24	0.6	24	0.6	21	1.3	21	1.3	23	0.8	22	0.8	22	1.2	22	1.2
Always	65	0.5	65	0.5	63	0.6	63	0.6	70	1.5	70	1.4	68	1.0	68	1.0	66	1.3	66	1.3
Parents expects child to earn a college degree or higher																				
Yes	71	0.4	71	0.4	71	0.6	71	0.6	64	1.3	65	1.3	72	0.9	72	0.9	78	1.2	78	1.2
No	29	0.4	29	0.4	29	0.6	29	0.6	36	1.3	35	1.3	28	0.9	28	0.9	22	1.2	22	1.2
Child has a disability																				
Yes	23	0.5	23	0.5	25	0.6	25	0.6	24	1.2	24	1.1	18	0.9	18	0.9	18	1.2	18	1.1
No	77	0.5	77	0.5	75	0.6	75	0.6	76	1.2	76	1.1	82	0.9	82	0.9	82	1.2	82	1.1

Table 10-8. Comparison of estimates of selected key items from the NHES:2012 PFI survey based on nonresponse-adjusted weights and base weights, by race/ethnicity—Continued

												Race/e	thnicity							
		Ov	erall		W	nite, no	n-Hispanic		Bl	ack, no	n-Hispanic		•	His	panic		Ot	her race	e/ethnicity1	
	Nonres	sponse			Nonres	ponse			Nonres	ponse			Nonres	ponse			Nonres	ponse		
	ad	ljusted	Base-we	ighted		justed	Base-we	ighted		justed	Base-wei	ighted	ad	justed	Base-we	ighted		justed	Base-we	ighted
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
School type																				
Public	89	0.3	89	0.3	86	0.4	86	0.4	94	0.6	93	0.6	94	0.4	94	0.4	92	0.6	92	0.6
Private	8	0.3	8	0.3	10	0.4	10	0.4	5	0.5	5	0.5	5	0.4	5	0.4	7	0.6	7	0.6
Homeschool	3	0.2	3	0.2	4	0.3	4	0.3	1	0.3	1	0.3	1	0.2	1	0.2	1	0.3	1	0.3
School size																				
Under 300	11	0.3	11	0.3	12	0.5	12	0.5	12	0.9	11	0.8	8	0.5	8	0.5	9	0.9	9	0.9
300-599	32	0.4	32	0.4	33	0.6	33	0.6	33	1.5	32	1.5	27	0.8	27	0.8	31	1.6	31	1.6
600999	29	0.4	29	0.4	27	0.5	27	0.5	29	1.6	29	1.6	34	0.9	34	1.0	28	1.6	28	1.6
1,000-2,499	23	0.4	23	0.4	21	0.5	21	0.5	22	1.2	22	1.2	25	0.8	25	0.8	26	1.3	26	1.3
2.500 or more	3	0.1	3	0.1	2	0.2	2	0.2	3	0.4	3	0.4	5	0.3	5	0.3	4	0.4	4	0.4
Homeschooled student	3	0.2	3	0.2	4	0.3	4	0.3	1	0.3	1	0.3	1	0.2	1	0.2	1	0.3	1	0.3
Data missing for school	#	†	#	†	#	†	#	†	1	0.3	1	0.3	#	†	#	†	1	0.3	1	0.3

[†] Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education (PFI) Survey of the National Household Education Surveys Program (NHES), 2012.

[#] Rounds to zero.

^{1 &}quot;Other race/ethnicity" includes children who are Asian or Pacific Islander, or multiracial and not of Hispanic ethnicity or who are not Hispanic, White, Black.

NOTE: s.e. is standard error. Detail may not sum to totals because of rounding.

10.2.3 A Comparison of NHES:2012 Estimates With Estimates From External Data Sources

In addition to the nonresponse bias analyses presented above, the assessment of nonresponse bias also included a comparison of the NHES:2012 estimates with estimates from prior NHES collections, the Current Population Survey (CPS), and the American Community Survey (ACS), which contain the same or comparable items. Tables displaying these comparisons appear in appendix C.

Most of the comparisons do not show statistically significant differences that are of substantive importance (defined as differences of 5 percentage points or more). The five percentage point threshold was used because it is a reasonable threshold for NHES:2012 estimates given the sample design. It is also important to keep in mind that the most recent ECPP and PFI data collections took place 7 years and 5 years, respectively, prior to the NHES:2012; therefore, changes in the population over time are likely. Additionally, the NHES underwent a mode change from telephone to mail, which could impact the comparison of estimates in unknown ways.

Differences of 5 percentage points or more between the combined NHES:2012 ECPP and PFI and the 2011 CPS were observed in estimates for one child in the household (table C-1). [NHES12 T-test Tables Chapter 10, Appendix C Tables, test 1] Tables C-2A through C-2D show estimates and standard errors for the NHES and CPS by age and grade. Tables C-2E and C-2F show the differences in percentages between the NHES and CPS estimates. Some differences can be expected in age by grade between the NHES and CPS based on the time of data collection. The NHES grades were reported in January to July, 2013 while CPS grades are reported in October, 2012. Some children move up a grade between fall and spring school terms. The comparison of estimates shows some differences in single year of age by grade, however, as shown in tables C-2A and C-2C, almost all children in the 2-year modal age for a grade are in the appropriate grade (for example, 95 percent of children in first grade in both the CPS and NHES are ages 6 or 7).

Differences between the NHES:2012 ECPP and the 2011 ACS were observed in estimates of household income for Whites above \$60,000 (table C-6). [NHES12 T-test Tables Chapter 10, Appendix C Tables, test 2] Differences between the NHES:2012 PFI and the 2011 ACS were observed in estimates of household income above \$60,000 for two race/ethnicity categories:

175

⁴² When estimates are presented as number of students or children, numbers were converted to percentages to evaluate differences.

Asian/Pacific Islanders and children of other racial/ethnic backgrounds (table C-8). [NHES12 T-test Tables Chapter 10, Appendix C Tables, tests 3-4]

The NHES:2012 ECPP and the NHES:2005 ECPP differed in the estimates of the percentage of preschoolers participating in relative and nonrelative care arrangements overall and by race/ethnicity (tables C-10 and C-11). [NHES12 T-test Tables Chapter 10, Appendix C Tables, tests 5-14] Further differences between these two surveys were found in the percentage of preschoolers with low household incomes participating in center-based programs (table C-12), the percentage of preschoolers in homes with both a mother or female guardian and father or male guardian present, and in the percentage of preschoolers' parents whose educational attainment was less than high school or a high school education (table C-13). [NHES12 T-test Tables Chapter 10, Appendix C Tables, tests 15-18]. There were a number of differences in parents' educational attainment by race/ethnicity between 2012 and 2005 (table C-14). [NHES12 T-test Tables Chapter 10, Appendix C Tables, tests 19-24, 28-30]. Additionally, there were substantive differences in the number of children who were not read to at least once a week (table C-15), and children with a speech impairment (table C-16). [NHES12 T-test Tables Chapter 10, Appendix C Tables, tests 31 and 32].

The observed substantive differences between the NHES:2012 PFI and the NHES:2007 PFI were in estimates of the percentage of students' parents with less than a high school education and graduate school education (table C-17). [NHES12 T-test Tables Chapter 10, Appendix C Tables, tests 33-34] Considering the education attainment of children's parents by child race/ethnicity, table C-18 identifies several differences. For Black, Hispanic, and Asian children, the 2012 estimates suggest a higher percentage had parents with less than a high school diploma than in 2007. For Black children, the 2012 estimates suggest a smaller percentage had parents with a high school diploma than in 2007. Additionally, for White and Asian children, the 2012 estimates suggest a smaller percentage had parents with a graduate school education than in 2007. [NHES12 T-test Tables Chapter 10, Appendix C Tables, tests 35-40] Tables C-20 to C-22 show the percentage of students' parents who participated in fundraising for the school is lower in 2012 compared to 2007 (table C-20); the percentage of students with any disability is lower in 2012 compared to 2007 (table C-21); and the percentage of students enrolled in an assigned school is higher in 2012 compared to 2007 while the percentage of children in chosen schools is lower than in 2007 (table C-22). [NHES12 T-test Tables Chapter 10, Appendix C Tables, tests 42-45]

10.3 Item Nonresponse Bias Analysis

In the NHES ECPP and PFI surveys, as in most surveys, the responses to some data items are not obtained for all interviews. There are numerous reasons for item nonresponse. Some respondents do not know the answer for the item or do not wish to respond for other reasons. Item nonresponse may also be encountered because responses provided by the respondent are not internally consistent. In such cases, the items that are not internally consistent are set to missing and imputed. In self-administered mail surveys (such as those used in the NHES:2012), respondents might inadvertently skip items that should have been answered. This section contains an evaluation of the potential for bias due to item nonresponse.

Section 10.3.1 examines the potential for item nonresponse bias by imposing extreme assumptions on the item nonrespondents. Because item nonresponse bias may be viewed as a function of both the item nonresponse rate and the extent to which item nonrespondents differ from item respondents, bounds on the item nonresponse bias may be obtained by imposing extreme assumptions on the item nonrespondents. Extreme assumptions are created by imputing values that fall in the tails of the original distribution (for example, in the 5th or 95th percentiles).

10.3.1 Comparison of Extreme Imputed and Unimputed Values

In order to assess possible nonresponse bias for items from each topical interview, sets of imputed values were generated by imposing extreme assumptions on the item nonrespondents. This analysis was conducted on items for which the item response rate fell below 90 percent, excluding items where an analytic metric could not be created. These were items that required a verbatim text response and items that captured the cost and periodicity of various child care arrangements. Verbatim text responses tend to be too idiosyncratic for a given respondent to act as an eligible response option for a nonrespondent. For variables that captured the cost and unit of various child care arrangements, such as RCCOST/RCUNIT and NCCOST/NCUNIT, extreme imputed value variables were not created because the cost extremes depend on the unit, which is unknown.⁴³ For most items, two sets of imputed values—one based on a "low" assumption and one based on a "high" assumption—were created. For continuous variables, a "low" imputed value variable was created by setting missing values to the value at the 5th percentile of the original distribution; a "high" imputed value variable was created by setting

⁴³ Additionally, extreme values were not created for the variable HDCGONE because missing data for this variable were determined only in conjunction with HDLEARN, HDPLAY, HDOUT, and HDFRNDS, all of which had item response rates above 90 percent.

missing values to the value at the 95th percentile of the original distribution.⁴⁴ For dichotomous and polytomous variables, a "low" imputed value variable was created by setting missing values to the lowest value in the original distribution, and a "high" imputed value variable was created by setting missing values to the highest value in the original distribution. Both the "low" imputed value variable distributions and the "high" imputed value variable distributions were compared to the original distributions.

The purpose of creating extreme assumption variables and comparing them to the original distributions is to place bounds on the potential for item nonresponse bias through the use of "worst case" scenarios. Because the distributions of many of the variables included in this evaluation are highly skewed, the extreme assumptions imposed here may, in many cases, be unrealistic. Also, in general, there is a very high correlation between estimates when comparing the extreme imputed value variables to the original variables, since these estimates are based on the same sets of cases and the data for respondents did not change. Only a small portion of the two distributions are different (less than 20 percent) because the item response rates for all the variables in this analysis are above 80 percent and, therefore, most of the values compared are the same. Because of the high level of overlap between the response distribution in the unimputed and imputed versions of variables, the two are highly correlated. As a result, even small differences may be statistically significant, so it is important to also consider the practical or substantive significance of such differences.

Extreme imputed value variables were created for eight variables from the ECPP survey. As described earlier, extreme imputed value variables were created by setting missing values to the lowest value in the distribution and the highest value in the distribution for dichotomous and polytomous variables or the 5th and 95th percentile values for continuous variables. The original and "low" imputed value variable distributions were compared, as were the original and "high" imputed value variable distributions (see table 10-9). Among the ECPP variables considered, measurable differences were observed for some categories of most of the variables tested. Differences were observed between the original and "high" extreme values for the "very dissatisfied" response option for HDCOMMUX, HDTCHR, HDACCOMX, and HDCOMMITX. [NHES12 T-test Tables Chapter 10, Table 10-9, Tests 91, 96, 101, 106] For these variables, the original distribution is highly skewed toward "low" values (responses of "very satisfied" and "somewhat satisfied"), so the extreme assumptions used here are likely to be unrealistic.

⁴⁴ For continuous variables, raw frequency distributions showing all valid variable values are presented in tables 10-13 and 10-14.

For the variable RCTLHR, differences were found between the "low" and original values for children receiving 2 hours of relative care and between the original and "high" values for children receiving 36 hours of relative care. [NHES12 T-test Tables Chapter 10, Table 10-9, Tests 53 and 156] Similarly, for the variable NCTLHR, differences were found between the "low" and original values for children receiving 2 hours of nonrelative care and between the original and "high" values for children receiving 40 hours of nonrelative care. [NHES12 T-test Tables Chapter 10, Table 10-9, Tests 30 and 129] The variable CMOVEAGE also showed measurable differences between the original and "high" values for children aged 3. [NHES12 T-test Tables Chapter 10, Table 10-9, Test 83]. The variable HDDEVIEPX also showed measureable differences for the "high" values, however, the original distribution is highly skewed, so the extreme assumptions used here are likely to be unrealistic [NHES12 T-test Tables Chapter 10, Table 10-9, Tests 86 and 87].

Extreme imputed value variables were formulated for six variables from the PFI survey. Both "low" and "high" extreme imputed value variables were created as described earlier. The original distributions were compared to the "low" and "high" imputed value variable distributions (see table 10-10). Among the PFI variables considered, measurable differences were observed for some categories of most of the variables tested. Differences were observed for the dichotomous variables HSCOLLEGE, and HDDEVIEPX. However, for HSCOLLEGE and HDDEVIEPX, the original distribution is highly skewed, so the extreme assumptions used here are likely to be unrealistic. [NHES12 T-test Tables Chapter 10, Table 10-10, Tests 5, 6, 60, and 61] For the variable HSSCHR, which is only valid for homeschooled children, differences were found between the original and "low" variables for children receiving 1 hour of in-school instruction as well as "high" variables for children receiving 40 hours of in-school instruction. [NHES12 T-test Tables Chapter 10, Table 10-10, Tests 9 and 83] The variable CMOVEAGE also showed measurable differences between the "low" and original variables for children less than 1 year of age when they moved to the United States and the original and the "high" variables for children age 12 when they moved to the United States. [NHES12 T-test Tables Chapter 10, Table 10-10, Tests 34 and 97]

Table 10-9. Comparison of NHES:2012 ECPP original and extreme imputed value variable estimates, for items with low and high extreme imputed value variables

Variable	Low imputed value estimate (percent)	Standard error	Original estimate (percent)	Standard error	High imputed value estimate (percent)	Standard error
Total hours of relative care with	ч /		· · · · · · · · · · · · · · · · · · ·		· · · · · ·	
other relatives (RCTLHR)						
0 hours	0!	0.2	0!	0.3	0!	0.2
1 hours	2!	0.9	2!	1.0	2!	0.9
2 hours	17	2.5	3	0.9	2	0.8
3 hours	5	1.4	6	1.7	5	1.4
4 hours	3	0.9	4	1.0	3	0.9
5 hours	4	1.0	4	1.1	4	1.0
6 hours	4	1.1	4	1.3	4	1.1
7 hours	2	0.9	3	1.1	2	0.9
8 hours	12	1.9	14	2.2	12	1.9
9 hours	3	1.1	3	1.3	3	1.1
10 hours	10	2.5	12	2.9	10	2.5
11 hours	1!	0.5	1!	0.6	1!	0.5
12 hours	3	0.8	3	0.9	3	0.8
13 hours	1!	0.6	1!	0.7	1!	0.6
14 hours	1!	0.7	1!	0.7	1!	0.0
15 hours	4	1.6	5	1.9	4	1.6
16 hours	7	1.7	8	2.0	7	1.7
17 hours	#	#	#	2.0 #	#	#
18 hours	3	1.1	3	1.3	3	1.1
19 hours	#	#	#	#	#	#
20 hours	4	1.4	5	1.6	4	1.4
21 hours	0!	0.2	0!	0.3	0!	0.2
22 hours	0!	0.2	0!	0.3	0!	0.2
23 hours	#	U.2 #	#	U.3 #	#	#
24 hours	5	1.6		1.9	5	1.6
24 hours 25 hours	3 1!	0.3	6 1!	0.4	3 1!	0.3
	#	U.3 #	1! #	0. 4 #	1! #	U.3 #
26 hours	#	#	#	#	#	#
27 hours 28 hours	#	#	#	#	#	#
	II		# #			#
29 hours	# 4	#		# 1.3	# 4	#
30 hours		1.1	4			1.1
31 hours	#	#	#	#	#	# #
32 hours	#	#	#	#	#	
33 hours	#	#	#	#	#	#
34 hours	0!	0.4	0!	0.4	0!	0.4
35 hours	1!	0.7	1!	0.8	1!	0.7
36 hours	1	0.6	2	0.8	16	2.4
37 hours	#	#	#	#	#	#
38 hours	0!	0.3	0!	0.3	0!	0.3
39 hours	#	#	#	#	#	#
40 hours	2	0.5	2	0.6	2	0.5

Table 10-9. Comparison of NHES:2012 ECPP original and extreme imputed value variable estimates, for items with low and high extreme imputed value variables—Continued

v. · 11	Low imputed value estimate	Standard	Original estimate	Standard	High imputed value estimate	Standard
Variable	(percent)	error	(percent)	error	(percent)	error
Total hours of nonrelative care with						
other nonrelatives (NCTLHR) 0 hours	#	#	#	#	#	#
	2!		2!		2!	
1 hours		1.1 4.6	2! 4!	1.3 3.3		1.1 2.8
2 hours 3 hours	18 6	4.6 2.8	4! 8	3.3	4! 6	2.8
4 hours	3!	1.8	4!	2.2	3!	1.8
5 hours	8	2.9	9	3.4	8	2.9
6 hours	6!	2.9	7	3.3	6!	2.9
7 hours	4	1.8	4	2.1	4	1.8
8 hours	7	3.0	8	3.6	7	3.0
9 hours	#	#	#	#	#	#
10 hours	7	2.7	8	3.1	7	2.7
11 hours	#	#	#	#	#	#
12 hours	5!	2.6	6!	3.1	5!	2.6
13 hours	#	#	#	#	#	#
14 hours	#	#	#	#	#	#
15 hours	2!	1.7	3!	2.0	2!	1.7
16 hours	#	#	#	#	#	#
17 hours	#	#	#	#	#	#
18 hours	#	#	#	#	#	#
19 hours	#	#	#	#	#	#
20 hours	4!	3.1	5!	3.6	4!	3.1
21 hours	#	#	#	#	#	#
22 hours	4!	3.7	4!	4.3	4!	3.7
23 hours	#	#	#	#	#	#
24 hours	#	#	#	#	#	#
25 hours	3!	1.5	3	1.7	3!	1.5
26 hours	#	#	#	#	#	#
27 hours	1!	1.3	2!	1.5	1!	1.3
28 hours	2!	1.3	2!	1.5	2!	1.3
29 hours	#	#	#	#	#	#
30 hours	3!	1.6	3!	1.8	3!	1.6
31 hours	#	#	#	#	#	#
32 hours	#	#	#	#	#	#
33 hours	2!	1.9	2!	2.2	2!	1.9
34 hours	#	#	#	#	2: #	#
35 hours	1!	0.8	1!	0.9	1!	0.8
36 hours	3!	2.1	3!	2.5	3!	2.1
37 hours	3! #	2.1 #	3! #	2.5 #	3! #	2.1 #
38 hours	#	#	#	#	#	#
39 hours 40 hours	1! 10	1.0 3.3	1! 12	1.1 3.8	1! 24	1.0 4.6

Table 10-9. Comparison of NHES:2012 ECPP original and extreme imputed value variable estimates, for items with low and high extreme imputed value variables—Continued

	Low imputed value estimate	Standard	Original estimate	Standard	High imputed value estimate	Standard
Variable	(percent)	error	(percent)	error	(percent)	error
Parent helped develop Individualized Family Service						
Plan (IFSP) or Individualized						
Education Plan (IEP) for child						
(HDDEVIEPX)						
Yes	87	1.9	85	2.1	74	2.6
No	13	1.9	15	2.1	26	2.6
Parent's satisfaction with ISPF/IEP	13	1.7	13	2.1	20	2.0
provider's communication						
(HDCOMMUX)						
Very satisfied	65	3.2	61	3.5	54	3.3
Somewhat satisfied	25	2.7	28	3.0	25	2.7
Somewhat dissatisfied	4	1.4	5	1.5	4	1.4
Very dissatisfied	3	0.9	4	1.0	14	2.1
Does not apply	2	0.8	3	0.9	2	0.8
Parent's satisfaction with child's						
ISPF/IEP teacher (HDTCHR)						
Very satisfied	70	3.3	65	3.5	57	3.3
Somewhat satisfied	20	2.7	23	3.0	20	2.7
Somewhat dissatisfied	3	1.1	4	1.3	3	1.1
Very dissatisfied	2	0.7	2	0.8	14	2.1
Does not apply	5	1.3	6	1.5	5	1.3
Parent's satisfaction with ISPF/IEP						
provider's ability to						
accommodate child's needs						
(HDACCOMX)						
Very satisfied	65	3.1	61	3.3	54	3.0
Somewhat satisfied	21	2.8	24	3.0	21	2.8
Somewhat dissatisfied	5	1.4	5	1.6	5	1.4
Very dissatisfied	4	1.0	4	1.1	15	2.2
Does not apply	5	1.3	6	1.4	5	1.3
Parent's satisfaction with ISPF/IEP						
provider's commitment to help						
child learn (HDCOMMITX)						
Very satisfied	74	2.7	71	3.0	63	3.1
Somewhat satisfied	16	2.4	18	2.7	16	2.4
Somewhat dissatisfied	5	1.3	5	1.4	5	1.3
Very dissatisfied	3	0.8	3	1.0	14	2.3
Does not apply	2	0.9	3	1.0	2	0.9

Comparison of NHES:2012 ECPP original and extreme imputed value **Table 10-9.** variable estimates, for items with low and high extreme imputed value variables—Continued

Variable	Low imputed value estimate (percent)	Standard error	Original estimate (percent)	Standard error	High imputed value estimate (percent)	Standard error
Child's age when moved to U.S.						
(CMOVEAGE)						
Less than one year old	57	3.7	49	4.0	42	3.5
One year old	21	3.0	24	3.4	21	3.0
Two years old	12	2.9	14	3.4	12	2.9
Three years old	9	2.0	11	2.4	24	3.1
Four years old	1	0.6	2	0.7	1	0.6
Five years old	0!	0.4	0!	0.5	0!	0.4

[!] Interpret data with caution; coefficient of variation is 50 percent or more.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPP) Survey of the National Household Education Surveys Program (NHES), 2012.

Table 10-10. Comparison of NHES:2012 PFI original and extreme imputed value variable estimates, for items with low and high extreme imputed value variables

Variable	Low imputed value estimate (percent)	Standard error	Original estimate (percent)	Standard error	High imputed value estimate (percent)	Standard error
Child attends private school for instruction						
(HSPUBLIC)						
Yes/Marked	66	4.6	60	5.1	50	5.2
No/Not marked	34	4.6	40	5.1	50	5.2
Child attends college for instruction (HSPRIVATE)						
Yes/Marked	39	5.3	27	4.8	22	4.2
No/Not marked	61	5.3	73	4.8	78	4.2
Homeschool type of school - College (HSCOLLEGE)						
Yes/Marked	28	5.5	14	4.4	12	3.7
No/Not marked	72	5.5	86	4.4	88	3.7

Table 10-10. Comparison of NHES:2012 PFI original and extreme imputed value variable estimates, for items with low and high extreme imputed value variables—Continued

Variable Number of hours per week child attends school for instruction (HSSCHR)	(percent)	error	(percent)	Standard error	estimate (percent)	Standard error
sahaal for instruction (USSCUP)			(percent)	CITOI	(percent)	CITOI
1 hour	19	4.9	4!	3.2	4!	2.7
2 hours	10	3.8	12	4.5	10	3.8
3 hours	6	2.6	7	3.0	6	2.6
4 hours	9	4.2	11	4.9	9	4.2
5 hours	5!	2.6	6	3.1	5!	2.6
6 hours	3	1.5	4	1.8	3	1.5
7 hours	#	1.5 #	#	1.6	3 #	1.5
8 hours	5	$2.2^{"}$	6	2.6	5	2.2
9 hours	#	2.2 #	#	2.0 #	#	2.2 #
10 hours	1!	0.8	1!	0.9	1!	0.8
11 hours	#	U.8 #	1! #	U.9 #	1! #	U.8 #
12 hours	6!	3.0	7. [#]	3.7	6!	3.0
13 hours	0!	0.4	0!	0.4	0!	0.4
14 hours	#	0. 4 #	#	#	#	#
15 hours	2!	1.2	3!	1.5	2!	1.2
16 hours	2! #	1.2 #	3! #	1.3	∠! #	#
17 hours	#	#	#	#	#	#
18 hours	1!	0.5	1!	0.6	1!	0.5
19 hours	1!	0.5	1!	0.6	1!	0.5
20 hours	10	4.4	12	5.0	10	4.4
21 hours	#	#	#	3.0 #	#	#
22 hours	#	#	#	#	#	#
23 hours	1!	0.8	1!	0.9	1!	0.8
24 hours	#	U.8 #	#	U.9 #	1! #	0.8 #
25 hours	5!	2.8	6!	3.2	5!	2.8
26 hours	#	2.8 #	#	3.2 #	J: #	2.6 #
27 hours	#	#	#	#	#	#
28 hours	2!	1.8	2!	2.1	2!	1.8
29 hours	#	#	2! #	2.1 #	2! #	#
30 hours	4!	2.0	4!	2.3	4!	2.0
31 hours	#	2.0 #	#	2.3 #	#	2.0 #
32 hours	#	#	#	#	#	#
33 hours	#	#	#	#	#	#
34 hours	#	#	#	#	#	#
35 hours	4	1.8	5	2.1	4	1.8
36 hours	0!	0.4	0!	0.4	0!	0.4
37 hours	2!	1.8	2!	2.1	2!	1.8
38 hours	2! #			2.1 #		#
39 hours	#	# #	# #	#	# #	#
40 hours	2!	1.4	[#] 2!	1.6	17	4.1
	2! #		∠! #	1.0		
41 hours	#	# #	# #	#	#	#
42 hours	# #	# #	# #	# #	# #	# #
43 hours	# #	# # #	# # #	# #	# #	# #
44 hours 45 hours	# 2!	2.3	# 3!	2.8	# 2!	2.3

Table 10-10. Comparison of NHES:2012 PFI original and extreme imputed value variable estimates, for items with low and high extreme imputed value variables—

Continued

Variable	Low imputed value estimate (percent)	Standard error	Original estimate (percent)	Standard error	High imputed value estimate (percent)	Standard error
Parent helped develop Individualized Education Plan (IEP) for child (HDDEVIEPX) Yes No	87	0.9	85	1.1	72	1.3
	13	0.9	15	1.1	28	1.3

[#] Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education (PFI) Survey of the National Household Education Surveys Program (NHES), 2012.

10.4 Summary of Nonresponse Bias Findings

The potential for nonresponse bias is an important concern to survey methodologists and data analysts. This chapter has included assessments of the potential for both unit and item nonresponse bias in the NHES:2012 screener and topical (ECPP and PFI) surveys.

The analysis of unit nonresponse bias showed evidence of bias based on the distributions of the sample characteristics for the survey respondents compared to the full eligible sample. However, this bias was greatly reduced by the nonresponse weighting adjustments. In the post-adjusted screener estimates, the number of estimates showing measurable and practical differences was reduced by half. The percentage of estimates with measurable survey and sample differences greater than 1 percentage point was reduced in each of the topical surveys by the nonresponse weighting adjustments—from 22 to 6 percent in the ECPP survey and from 7 to 4 percent in the PFI survey.

When key survey estimates generated with base-weighted and nonresponse-adjusted weights were compared, only a small number of measurable differences were observed. This suggests that none of these variables were powerful predictors of unit response. Therefore, the unit nonresponse adjustment had little effect on the potential bias, but it is also possible that there was little bias to be removed.

It is also possible that nonresponse bias may still be present in other variables that were not studied. For this reason, it is important to consider other methods of examining unit nonresponse bias. One such method is benchmarking, or comparing final NHES survey estimates to estimates

[!] Interpret data with caution; coefficient of variation is 50 percent or more.

from external sources. Benchmarking is routinely done during the preparation of the NHES data files. When estimates from the NHES:2012 surveys were compared to external estimates—from the Current Population Survey (CPS), the American Community Survey (ACS), and previous administrations of NHES—some measurable differences were found. However, the majority of the differences were between estimates from the NHES:2012 and previous administrations of the NHES, 5 to 7 years prior to the current one; therefore, changes in the population over time are likely. Additionally, the NHES underwent a mode change from telephone to mail, which also could impact the comparison of estimates in unknown ways.

The analysis of item nonresponse bias revealed that only eight items (three from the screener, three from the ECPP survey, and two from the PFI survey) had item response rates below 85 percent. The high item response for almost all of the survey items indicates that the potential for item nonresponse bias is extremely low.

The comparison of means or distributions based on extreme assumptions to the original means or distributions did reveal some differences. If the item nonrespondents are extremely different from the respondents, the potential for bias exists in the ECPP variables HDCOMMUX, HDTCHR, HDACCOMX, HDCOMMITX, and HDDEVIEPX and in the PFI variables HSPUBLIC, HSPRIVATE, HSCOLLEGE, and HDDEVIEPX. However, the original distributions of these variables are skewed; therefore, the extreme assumptions used here are likely to be unrealistic. Other measurable differences that were observed in extremes are likely the result of high correlations between the two sets of values or a large range of values in the original distributions.

Reference

National Research Council. (2013). *Nonresponse in Social Science Surveys: A Research Agenda*. Roger Tourangeau and Thomas J. Plewes, Eds. Panel on a Research Agenda for the Future of Social Science Data Collection, Committee on National Statistics. Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

Appendix A. Questionnaires

U.S. Department of Education

A: Your address was randomly selected from among all of the home addresses in the nation. It was selected using scientific sampling methods to represent other households in the U.S.

Q: Why don't you ask more questions about education in this questionnaire?

A: The purpose of this questionnaire is to find out if anyone in your household is eligible for the next stage of the survey. If so, we will send a second questionnaire that will ask about educational experiences of a member of your household.

Q: If there are no children or anyone currently in school in my household, should I respond?

A: Yes, you should respond to this survey. Once you return the questionnaire, the study will be able to see if anyone in your household is eligible for the next and final survey. If no one is eligible, you will not receive another survey.

Q: Why should I take part in this study? Do I have to do this?

A: This survey is the only way that the Department of Education can learn about children's care, early learning activities, and schooling from your perspective. You represent thousands of other households like yours, and you cannot be replaced. Your answers and opinions are very important to the success of this study. You may choose not to answer any or all questions in this survey. In order for the survey to be representative, it is important that you complete and return this questionnaire. Those who do not return the survey will not be represented in key statistics used by policymakers and researchers.

Q: How will the information I provide be used? Will my privacy be protected?

A: Your responses will be combined with those of others to produce statistical summaries and reports. Your individual data will not be reported. Your answers may be used only for statistical purposes and may not be disclosed or used, in identifiable form for any other purpose except as required by law (Section 9573, 20 U.S. Code).

Q: How much time will it take?

A: On average, it should take 3 minutes for you to respond, including the time for reviewing instructions and completing and reviewing the collection of information.

Q: Who is sponsoring the study? Is this study conducted by the Federal Government?

A: The National Center for Education Statistics, within the Department of Education, is authorized to conduct this study (Section 9543, 20 U.S. Code). This study has been approved by the Office of Management and Budget, the office that reviews all federally sponsored surveys. The approval number assigned to this study is 1850-0768. You may send any comments about this survey, including its length, to the Federal Government. Write to: Andrew Zukerberg, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9036, Washington, DC 20006-5650. You may send email to NHES@census.gov. If you have any questions about the study, contact us toll-free at 1-888-840-8353.

National Household Education Survey

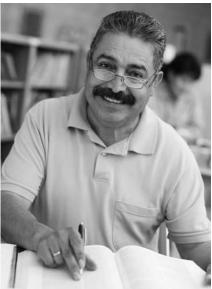












The National Center for Education Statistics is authorized to conduct this survey under Section 9543, 20 U.S. Code. Your participation is voluntary. Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (Section 9573, 20 U.S. Code). The information you provide will be combined with information from other participants to produce statistical summaries and reports.

NHES-11BE(INFO)(VARS)

(12/17/2012)



National Household Education Survey

U.S. Department of Education National Center for Education Statistics

Start Here

The Department of Education is studying households with youth or children age 20 or younger. Each household is different, and we need your response so we can send you a survey that is right for your household.

- ► Return this form even if there are no youth or children in this household after marking the correct box in item 1.
- This survey should be filled out by an adult household member living at this address.
- ▶ Please use a blue or black pen if available.
- 1. Are there any youth or children age 20 or <u>younger</u> living in this household?

Do not include those living in college housing.

■ □ Yes

□ No **→ GO TO box A at the** bottom.

2. How many youth or children age 20 or younger live in this household?

number age 20 or younger

Continue answering questions 3 through 7 for each youth or child living in this household.

Start with the youngest youth or child who is age 20 or younger.	Youth / Child 1 ▼	Youth / Child 2 ▼	Youth / Child 3 ▼	Youth / Child 4 ▼	Youth / Child 5 ▼
3. What is his or her first name, initials, or nickname?					
First names will be used only to ask you questions about the education of a specific child.	First name/initials/nickname				
4. How old is this child in years? .1	Mark for babies less than 1 year old	Mark for babies less than 1 year old	Mark for babies less than 1 year old	Mark for babies less than 1 year old	Mark for babies less than 1 year old
	age in years				
5. What is this child's sex?1	1 Male	1 Male	1	Male	1
2	2 Female	2 Female	2 Female	2 □ Female	2 □ Female
6. Is this child currently in	Public or private school, or preschool,				
2	Homeschool instead of school for some or all classes, or	Homeschool instead of school for some or all classes, or	Homeschool instead of school for some or all classes, or	Homeschool instead of school for some or all classes, or	Homeschool instead of school for some or all classes, or
3	Not in school?	3 Not in school?	•	•	Not in school?
	→ GO TO youth/child 2	→ GO TO youth/child 3.	GO TO youth/child 4.	→ GO TO youth/child 5.	➡ Return Survey.
7. What is this child's current grade or equivalent?1	1 Preschool	1 Preschool	1 ☐ Preschool	1 ☐ Preschool	1 Preschool
2	Z Kindergarten	2 Kindergarten	Z Kindergarten	Z Kindergarten	2
	write grade 1 through 12				
3	College or vocational school	3 College or vocational school	College or vocational school	College or vocational school	College or vocational school
4	4 □ None of these	4 □ None of these	4 ☐ None of these	4 ☐ None of these	4 None of these
► Please verify you have listed the	e 5 youngest youth or chil	dren living in this household	l in columns 1 through 5 ab	ove.	

A: If you marked in question 1 that no one in your household is age 20 or younger, please stop here and return this survey to us in the enclosed envelope. It is important that we receive a response from every household selected for this study. Thank you for your time.

▶ Thank you. Please return this form in the postage-paid envelope provided or mail it to:

U.S. Census Bureau ATTN: DCB 60-A (7198) 1201 E. 10th Street Jeffersonville, IN 47132-0001

Toll-free number for questions: 1-888-840-8353

The National Household Education Survey

Our Children's Future: A Survey of Young Children's Care and Education



Thank you for he ping us with this survey. Based on the information we received from your household in your last survey, we're asking you to complete this final step.

Sponsored by

U.S. Department of Education
National Center for Education Statistics

191



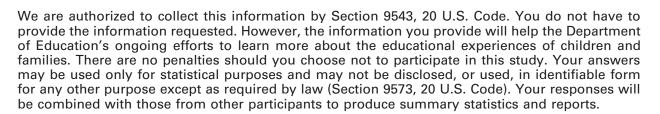
NHES-21AE(INFO)(VARS)

Instructions

- ◆ In response to the survey you answered earlier, we recorded that the child/youth listed below has not yet started kindergarten. If this child is attending public or private school or is homeschooled for kindergarten through 12th grade or equivalent, please call us at the toll-free number below so we can be sure you received the correct survey.
- These questions should be filled in by a parent or guardian who knows about:

Please answer all the survey questions thinking about this child or youth.

- ◆ To answer a question, simply mark **X** the box that best represents your answer.
- ◆ Please use a black or blue pen, if available to complete this survey.
- ♦ If this questionnaire has been sent to the wrong household or the child/youth listed above does not live here, please call to let us know.
- ◆ Our toll-free number is 1-888-840-8353.



This survey is estimated to take an average of 20 minutes, including time for reviewing instructions and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Andrew Zukerberg, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9036, Washington, DC 20006-5650. Do not return the completed form to this address.



2421203

1. Childhood Care and Programs

- Thank you for your help with the previous survey your household completed.
- Answer all the survey questions thinking about the child listed helow:
- ► Care Your Child Receives from Relatives

These questions ask about different types of child care this child may now receive on a <u>regular basis</u> from someone other than his/her parents or guardians.

- Is this child now receiving care from a relative other than a parent or guardian on a <u>regular basis</u>, for example, from grandparents, brothers or sisters, or any other relatives?
 - 2 No GO TO question 17

r 1 ☐ Yes RCNOW

2. Are any of these care arrangements regularly scheduled at least once a week?

2 No GO TO question 17

−1 □ Yes *RCWEEK*

3. These next questions are about the care that this child receives from the relative who provides the most care. How is that relative related to this child?

Mark \mathbf{X} ONE only.

1 Grandmother/Grandfather

2 Aunt/Uncle

3 □ Brother/Sister **RCTYPE**

4 ☐ Another relative

4. How old is the relative who provides the most care to this child?

RCAGE

age

5. Is this care provided in your home or another home?

1 Own home

RCPLACE

2 Other home

3 🗆 Both

6. How many <u>days</u> each <u>week</u> does this child receive care from this relative?

days each week

RCDAYS

7. How many hours each week does this child receive care from this relative?

hours each week Ro

RCHRS

How old was this child in years and months when this particular regular care arrangement with this relative began?

years

3

months

RCSTRTM

RCSTRTY

9. What language does this relative speak most when caring for this child?

1 □ English

2 Spanish

RCSPEAK

A language other than English or Spanish

4 ☐ English and Spanish equally

5 English and another language equally



a. Sick but does not have a fever? b. Sick and has a fever? c. SCKFV 11. Is there any charge or fee for the care this child receives from this relative, paid either by you or some other person or agency? 12. Do any of the following people, programs, or organizations help pay for this relative to care for this child? Mark W ONE box for each item below. a. A relative of this child outside your household who provides money specifically for that care, not including general oil disupport. B. Temporary Assistance for Needy Families, or TANF. C. Another social service, welfare, or child care agency welfare, or child care agency at a tax-free spending account for child care. B. Someone else C. Someone else C. Someone else C. Someone else C. One this child have any other care arrangements with a relative on a regular basis? 2 No GO TO question 17 1 Yes RCOTHC 10. Hour valve week RCTLHR Write '0' if your household does not psy this relative for care. RCONIT S. Sick and has a fever? C. Someone else C. Day C. Another social service, welfare, or child care agency welfare, or child care agency at the content of the care agency welfare, or child care agency at the content of the care agency welfare, or child care agency at the content of the care agency welfare, or child care agency at the content of the care agency welfare, or child care agency at the content of the care agency welfare, or child care agency at the content of the care agency and the care agency at the content of the care agency at the content of the care agency at the car	10. Will this relative care for this child when the child is No Yes	13. How much does your household pay for this relative to care for this child, not counting any money that may be received from others to help pay for care?
b. Sick and has a fever?	a fever?	Write '0' if your household does not pay this
paid either by you or some other person or agency? 2 No 60 TO question 15 12. Do any of the following people, programs, or organizations help pay for this relative to care for this child? Mark No No box for each item below. a. A relative of this child outside your household who provides money specifically for that care, not including general child support. BCREL B. Temperary Assistance for Needy Families, or TANF. Another social service, welfare, or child care agency. RCSSAC d. An employer, not including a tax-free spending account for child care. B. Someone else B	b. Sick and has a fever? 2 1 RCSKFV 11. Is there any charge or fee for the care	The cost
2 Day 12. Do any of the following people, programs, or organizations help pay for this relative to care for this child? Mark None box for each item below. a. A relative of this child outside your household who provides money specifically forthat care, not including general child support. B. Temporary Assistance for Needy Families, or TANF. RCTANF C. Another social service, welfare, or child care agency. RCSSAC d. An employer, not including a tax-free spending account for child care. RCEMPL e. Someone else RCOTHER 1 Day 3 Week 4 Month 5 eac Other – Specify: This child only 2 children from your household is this amount for, including this child? 1 This child only 2 children RCCSTHNX 3 children 4 children 5 or more children 15. Does this child have any other care arrangements with a relative on a regular basis? 2 No GO TO question 17 1 Yes RCOTHC 16. How many total hours each week does this child spend in those other care arrangements with relatives?	paid either by you or some other person	
12. Do any of the following people, programs, or organizations help pay for this relative to care for this child? Mark None box for each item below. a. A relative of this child outside your household who provides money specifically for that care, not including general child support. B. CREL B. Temporary Assistance for Needy Families, or TANF. C. Another social service, welfare, or child care agency welfare, or child care agency welfare, or child care agency for child care. B. COTHER B. Someone else B. COTHER C. Someone else B. COTHER C. Does this child have any other care arrangements with a relative on a regular basis? C. No many total hours each week does this child spend in those other care arrangements with relatives?	2 No GO TO question 15	
12. Do any of the following people, programs, or organizations help pay for this relative to care for this child? Mark ONE box for each item below.	r 1 □ Yes RCFEE	
or organizations help pay for this relative to care for this child? Mark X ONE box for each item below. a. A relative of this child outside your household who provides money specifically for that care, not including general child support. HCREL D. Temporary Assistance for Needy Families, or TANF. RCTANF C. Another social service, welfare, or child care agency. RCSSAC d. An employer, not including a tax-free spending account for child care. RCEMPL e. Someone else RCOTHER The part of this child have any other care arrangements with a relative on a regular basis? 1	12 Do any of the following people programs	
a. A relative of this child outside your household who provides money specifically for that care, not including general child support RCREL b. Temporary Assistance for Needy Families, or TANF. RCTANF c. Another social service, welfare, or child care agency. RCESSAC d. An employer, not including a tax-free spending account for child care	or organizations help pay for this relative	
outside your household who provides money specifically for that care, not including general child support. RCREL b. Temporary Assistance for Needy Families, or TANF. RCTANF c. Another social service, welfare, or child care agency. RCSSAC d. An employer, not including a tax-free spending account for child care. RCEMPL e. Someone else RCOTHER Other — Specify: Other — Specification: Other — Specificati	Mark 🛛 ONE box for each item below.	6 Every 2 weeks RCUNITOS
specifically for that care, not including general child support. RCREL b. Temporary Assistance for Needy Families, or TANF. RCTANF c. Another social service, welfare, or child care agency. RCSSAC d. An employer, not including a tax-free spending account for child care. RCEMPL e. Someone else RCOTHER 1 1 1 1 1 1 1 1 1 1 1 1 1	outside your household No Yes	Other — Specify:
child support	specifically for that care,	
Needy Families, or TANF	child support	
c. Another social service, welfare, or child care agency. RCSSAC d. An employer, not including a tax-free spending account for child care	Needy Families, or TANF	
d. An employer, not including a tax-free spending account for child care	c. Another social service, welfare, or child care agency.	
for child care RCEMPL e. Someone else RCOTHER 5 or more children 5 or more children 5 or more children 15. Does this child have any other care arrangements with a relative on a regular basis? 2 No GO TO question 17 The Yes RCOTHC 16. How many total hours each week does this child spend in those other care arrangements with relatives?	d. An employer, not including	
15. Does this child have any other care arrangements with a relative on a regular basis? 2 No FOOTHC 16. How many total hours each week does this child spend in those other care arrangements with relatives?	for child care	4 children
15. Does this child have any other care arrangements with a relative on a regular basis? 2 No GO TO question 17 Yes RCOTHC 16. How many total hours each week does this child spend in those other care arrangements with relatives?	e. Someone else	5
16. How many total hours each week does this child spend in those other care arrangements with relatives?	NCOTILII (arrangements with a relative on a regular
16. How many total hours each week does this child spend in those other care arrangements with relatives?		2 No GO TO question 17
this child spend in those other care arrangements with relatives?		r 1 □ Yes RCOTHC
hours each week RCTLHR		this child spend in those other care
		hours each week RCTLHR

Care Your Child Receives from Non-relatives	22. How many <u>hours</u> each <u>week</u> does this child receive care from this person?
The next questions ask about any care this child receives from someone not related to him/her, either in your home or someone else's home. This includes home child care	hours each week NCHRS 23. How old was this child in years and months when this particular regular care arrangement with this person began?
providers or neighbors, but not day care centers or preschools. 17. Is this child now receiving care in your home or another home on a regular basis from someone who is not related	years months NCSTRTM NCSTRTY 24. Was this care provider someone you already knew?
to him/her? 2 No GO TO question 35	2 No NCALKNE
T1 Yes NCNOW	1 Yes 25. Is this child's care provider age 18 or
★18. Are any of these care arrangements regularly scheduled at least once a	older? No NCAGE
week? 2 No GO TO question 35	1 Yes
T ¹ □ Yes NCWEEK	26. What language does this care provider speak most when caring for this child?
19. These next questions are about the care that this child receives from someone who is not related to him/her who provides the most care.	2
Is this care provided in your own home or in another home?	4 ☐ English and Spanish equally
1 Own home	5 English and another language equally
2 Other home NCPLACE 3 Both	27. Will this care provider care for this child when this child is No Yes
20. Does this person who cares for this child live in your household?	a. Sick but does not have a fever?
2 □ No <i>NCINHH</i> 1 □ Yes	b. Sick and has a fever? 2 1 NCSKFV
21. How many <u>days</u> each <u>week</u> does this child receive care from this person?	
days each week NCDAYS	



How much does your household pay for 31. this person to care for this child, not counting any money that may be received from others to help pay for care? Write '0' if your household does not pay this non-relative for care. .00 **NCCOST** Is that amount per... **NCUNIT** Hour Dav Week Month Every 2 weeks Other — Specify: **NCUNITOS** How many children from your household is this amount for, including this child? This child only 2 children **NCCSTHNX** 3 children 4 children 5 or more children 33. Does this child have any other homebased care arrangements on a regular basis with someone who is not a relative? Do not include arrangements at day care centers or preschools. No -**GO TO** question 35

NCOTHC

How many total <u>hours</u> each <u>week</u> does this child spend in those other care arrangements with non-relatives?

hours each week NCTLHR

Yes



► Day Care Centers and Preschool	39. Where is this program located?
Programs Your Child Attends	Mark X ONE only. CPPLACEX
	1 In a church, synagogue, or other place
The most susptions call shout any day	1 In a church, synagogue, or other place of worship
The next questions ask about any day care centers and early childhood programs	2 In a public elementary or secondary
that this child attends. This does not include care provided in a private home.	school
care provided in a private nome.	3 In a private elementary or secondary school
35. Is this child now attending a day care center, preschool, or prekindergarten	4 ☐ At a college or university
not in a private home?	
2 No GO TO question 54	5 At a community center
F1 ☐ Yes CPNNOWX	6 At a public library
T ¹ Yes CPNNOWX	7 In its own building, office space, or
36. Does this child go to a day care center,	storefront
preschool, or prekindergarten, at least once each week?	8 Some other place – Specify:
2 No GO TO question 54	CPPLACOSX
T 1 ☐ Yes CPWEEKX	40. Is this program run by a church, synagogue, or other religious group?
★ 37. The next questions ask about the	No CPSPRLG
program where this child spends the	
most time.	1 Yes
Is this child's current <u>program</u> a day care program, a preschool program, or a	41. Is this program located at your workplace or this child's other parent's workplace?
prekindergarten program?	
1 Day care	2 No CPWORK
2 Preschool CPTYPE	1 Yes
3 □ Prekindergarten	42. How many <u>days</u> each <u>week</u> does this
	child go to this program?
38. Is this program a Head Start or Early Head Start program?	days each week CPDAYS
Head Start and Early Head Start are	43. How many hours each week does this child go to this program?
federally sponsored preschool programs primarily for children from low-income	
families.	hours each week CPHRS
2 N-	44. How old was this child in years and
2 No	months when he/she started going to this particular program?
1 Yes CPHEADST	
3 Don't know	years months CPSTRTM
	CPSTRTY



49.

Do any of the following people, programs,

or organizations help pay for this child to

No

Yes

□ 2 □ 1

□ 2 □ 1

□ 2 □ 1

□ 2 □ 1

2

45. What language does this child's main

care provider or teacher at this program



2. Finding and Choosing **Care for Your Child**

54. Has this child ever attended a Head Start or Early Head Start program?

Head Start and Early Head Start are federally sponsored preschool programs primarily for children from low-income

- **PCEVRHDX**
- 55. What is the main reason your household wanted a care program for this child in

Mark X ONE only. MAINRESN

- To provide care when a parent was at
- To prepare child for school
- **3** To provide cultural or language learning
- **4** To make time for running errands or
- **5** Some other reason
- **6** Did not have care in the past year



56. Do you feel there are good choices for child care or early childhood programs where you live?	c. The reliability of the arrangement? 1 Not at all important
2 No PPCHOIC	2 A little important DRELY
1 □ Yes	3
3 Don't know	4 □ Very important
57. How much difficulty did you have finding the type of child care or early childhood program you wanted for this child?	d. The learning activities at the arrangement?
Have not tried to find care GO TO question 59	 1 Not at all important 2 A little important DLERN
Did not find the child care program you wanted	3 Somewhat important
3 A lot of difficulty PPDIFCLT	4 Very important
4 ☐ Some difficulty	e. The child spending time with other kids his her age?
5 A little difficulty	1 □ Not at all important
6 □ No difficulty	A little important DCHIL
58. How important was each of these reasons when you chose the child care	Somewhat important
arrangement or program where this child spends the most time?	4 □ Very important
a. The location of the arrangement?	f. The times during the day that this caregiver is able to provide care?
1 □ Not at all important	1 ☐ Not at all important
A little important	2 A little important DHROP
3 Somewhat important	3
4 Very important	4
b. The cost of the arrangement?1 Not at all important	g. The number of other children in the child's care group?
2 A little important DCOST	1 Not at all important
3 ☐ Somewhat important	2 A little important DNBGRP
4 □ Very important	3 ☐ Somewhat important
	4 □ Very important



3. Family Activities	c. Sang songs with this child?
	1 Not at all FOSANG
The next questions ask about this child's	2 all 1 or 2 times
activities with family members in the past week or month.	3 or more times
59. About how many books does this child	d. Worked on arts and crafts with this child?
have of his/her own, including those shared with brothers or sisters?	1 Not at all FOCRAFTSX
	2
number of books HABOOKS	3
60. How many times have you or someone in your family <u>read</u> to this child <u>in the past</u> week?	63. In the past month have you or someone in your family visited a library with this
1 Not at all GO TO question 62	child?
FOREADTOXA	2 No FOLIBRAY
times FOREADTOXB	1 Yes
61. About how many minutes on each of those times did you or someone in your	64. In the past month, have you or someone in your family visited a bookstore with
family read to this child?	this child?
minutes FORDDAYX	No FOBOOKST
62. In the past week, how many times has anyone in your family done the following	1 ☐ Yes 65. In the past week, how many days has
things with this child?	65. In the past week, how many days has your family eaten the evening meal together?
a. Told this child a story? (Do not include reading to this child.)	Write '0' if none.
1 Not at all FOSTORYX	days FODINNERX
2	days FODINNERX
3 or more times	Continue with section 4 on the next page.
b. Taught this child letters, words, or numbers?	
1 Not at all FOWORDSX	
2	
3 a or more times	



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4. Things Your Child May be Learning

These next questions ask about things that different children do at different ages. These things may or may not be true for this child.

66. Is this child under 2 years old or is he/she 2 years old or older?

Under 2 years	\rightarrow	GO	то	question	74
Olldon 2 youro				•	

2 years or older **CHLDAGE2***

67. Can this child identify the colors red, yellow, blue, and green by name?

1 □ No

2 ☐ Yes, some of them **DPCOLOR**

3 Yes, all of them

68. Can this child recognize the letters of the alphabet?

1 🗆 No

2 Yes, some of them **DPLETTER**

3 ☐ Yes, most of them

4 Yes, all of them

69. How high can this child count?

1 This child cannot count **DPCOUNT**

2 Up to 5

3 □ Up to 10

4 Up to 20

5 Up to 50

6 □ Up to 100 or more

* An asterisk indicates that the variable does not appear on the data file

70. Can this child write his/her first name, even if some of the letters are backwards?

2 No **DPNAME**

1 □ Yes

71. Does this child ever read or pretend to read storybooks on his/her own?

2 No GO TO question 74

r 1 ☐ Yes HAPRETRD

72. Does this child actually read the words written in the book, or does he/she look at the book and pretend to read?

1 Pretends to read

HAWORDSX

Actually reads the written words

Does both

GO TO question 74

73. When this child pretends to read a book, does it sound like a connected story, or does he/she tell what is in each picture without much connection between them?

1 ☐ Sounds like connected story

2 Tells what's in each picture

3 ☐ Does both **HACONECTX**

4 □ Does neither

► Continue with section 5, question 74 on the next page.



36
21
121
5

7'	5. This Child's Health 4. In general, how would you describe this child's health? 1	76. 2 1 3	(If child is under 3 years old) Has a health, education, or early intervention professional told you this child is "at-risk" for a substantial developmental delay? No HDDLYRSK Yes Child is age 3 or older Did you mark yes to any condition in
			question 75 or question 76?
7	5. Has a health, education, or early intervention professional told you that this child has any of the following conditions? Mark ONE box for each item below. No Yes V a. A specific learning disability	78. 2 79.	No
	lasting 6 months or more 2 1 HDOTHERX		An asterisk indicates that the variable does not appear on the data file



80. Are any of these services provided through an Individualized Family

Service Plan (IFSP) or an Individualized

	C.		ity	to to	ac	con			or scl			s	
	1		V	ery	sati	sfie	d	HD	ACC	OIV	IX		
	2		S	ome	ewh	at s	atis	fied					
	3		S	ome	wh	at c	lissa	tisfie	d				
	4		V	ery	diss	satis	sfied						
	5		_				برامد						
						t ap					,		
	a.								or scl			n?	
	1		V	ery	sati	sfie		HD	CON	<i>1</i> МІ	T)	•	
	2		S	ome	nyve	at s	atis	fied					
	3		Si	ome	wh	at c	lissa	tisfie	d				
	4		V	ery	diss	satis	sfied						
	5		D	റക്ക	not	t ap	nlv						
33.			l e	duc	cati	on		ses	lled or se			?	
1		Ye	s										
84.	his thi	heings	r a ?	bili	ty t	o d	o aı	ny of	inte the	foll	ow		1
1				no C G (has	cond	dition	No ▼		Yes	
	a. b.	Lear HD Part othe	LE icip er d	AF pate child	?/V e in drer	pla	 y wi	 th 			2		1
	c.	Go	on	out		s					2		1
			/ 45 - 1										
	d.	Mak HD	ce 1								2		1

85.	6. Child's Background In what month and year was this child	90.	Since September, has this child usually lived at this address or another address (for example, because of a joint custody arrangement)? CLIVELSW
	born?		Do not include vacation properties.
		1	Child usually lived at this address
86.	month year CDOBMM CDOBYY Where was this child born?	91.	
1	One of the 50 United States or the District of Columbia		most at home? CSPEAKX Mark X ONE only.
	GO TO question 88 CPLCBRTH	1	☐ Child has not
2	One of the U.S. territories (Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, or Mariana Islands)	2	
3		3	
87.	How old was this child when he/she first moved to the 50 United States or the District of Columbia?	5	
		6	English and another language equally
	CMOVEAGE	92.	s this child currently enrolled in
88.	Is this child of Spanish, Hispanic, or		English as a second language, bilingual education, or an English immersion program?
	Latino origin?	2	□ No CENGLPRG
2	No CHISPAN	_	
1	Yes Yes	1	☐ Yes
89.	What is this child's race? You may mark one or more races.	•	Continue with section 7 on the next page.
	CAMIND		
1	· =		
1	CPACI		
1	White CWHITE		
89b	. What is this child's sex?		
1	Male CSEX		
2	Pemale Female		



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		7. Child's Family	96.	What was the <u>first</u> language this parent or guardian learned to speak?
PARENT 1 LIVING IN HOUSEHOLD			Mark X ONE only. P1FRLNG	
Answer questions 93 to 109 about yourself if you are the child's parent or guardian.			1	☐ English GO TO question 98
If you are not the child's parent or guardian, answer			2	Spanish
questions 93 to 109 about one of this child's parents or guardians living in the household.			3	A language other than English or Spanish
93. Is this parent or guardian the child's			4	☐ English and Spanish equally
1		Biological parent	5	☐ English and another language equally
2		Adoptive parent P1REL	97.	What language does this person speak
3	П	Stepparent	071	most at home <u>now</u> ?
4				Mark X ONE only: P1SPEAK
		Foster parent	1	□ English ○
5	Ш	Grandparent	2	Spanish
6		Other guardian	3	
94.	ls ti	his person male or female?	4	English and Spanish equally
1		Male P1SEX	<u>~</u>	
2		Female		English and another language equally
95.	Wha	at is the current marital or partner	98.	Where was this parent or guardian born?
	stat	tus of this parent or guardian?	1	One of the 50 United States or the District of Columbia
_	Mar	k X ONE only. P1MRSTA		GO TO question 100
1	Ш	Married		
2		In a registered domestic partnership or civil union	2	One of the U.S. territories P1PLCBRTH (Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, or Mariana Islands)
3		Living with a partner	3	
4		Separated	99.	How old was this person when he or she
5		Divorced		first moved to the 50 United States or the District of Columbia?
6		Widowed		
7		Never married		P1AGEMV age
			100	Is this person of Spanish, Hispanic, or
				Latino origin?
			2	□ No P1HISPAN
			1	☐ Yes

101. What is this person's race? You may mark one or more races.	104. Which of the following best describes this person's employment status?
1 American Indian or Alaska Native	Mark X ONE only. P1EMPL
P1AMIND 1 Asian P1ASIAN	1 Employed for pay or income
1 Black or African American P1BLACK	2 Self-employed
	3 Unemployed or
P1PACI	out of work GO TO question 106
1 White P1WHITE	Full-time student
102. What is the highest grade or level of school that this parent or guardian	5 Stay at home parent
completed?	6 Retired
Mark X ONE only. P1EDUC	7 Disabled or
1	unable to work
2 High school, but no diploma	105. (If employed or self-employed) About how many hours per week does he or she
3 High school diploma or equivalent (GED)	usually work for pay or income, counting all jobs?
4 Uocational diploma after high school	
5 Some college, but no degree	GO TO question 107
6 ☐ Associate's degree (AA, AS)	106. (If unemployed or out of work) Has this
7 Bachelor's degree (BA, BS)	parent or guardian been actively looking for work in the past 4 weeks?
Some graduate or professional education, but no degree	2 No P1LKWRK
9 Master's degree (MA, MS)	1 Yes
10 Doctorate degree (PhD, EdD)	107. In the past 12 months, how many months (if any) has this person worked
11 Professional degree beyond	for pay or income?
bachelor's degree (MD, DDS, JD, LLB) 103. Is he or she currently attending or	
enrolled in a school, college, university,	months P1MTHSWRK
or adult learning center, or receiving vocational education or job training?	108. How old is this person?
2 □ No <i>P1ENRL</i>	
1 □ Yes	age P1AGE
- 103	109. How old was this person when he or she
	first became a parent to <u>any</u> child?
	age P1AGEPAR
	1 Don't know P1AGEPARDK

PARENT 2 LIVING IN HOUSEHOLD	114. What was the <u>first</u> language this parent
Answer questions 110 to 127 about a second parent or guardian living in the household.	or guardian learned to speak? Mark X ONE only. P2FRLNG
110. Is there a second parent or guardian	
living in this household?	1 English GO TO question 116
2 No GO TO question 128	2 Spanish
r 1 □ Yes P2GUARD	A language other than English or Spanish
★ 111. Is this person the child's	4 English and Spanish equally
1 ☐ Biological parent P2REL	5 English and another language equally
2 Adoptive parent	115. What language does this person speak most at home now?
3 Stepparent	Mark X ONE only. \ P2SPEAK
4 Foster parent	1 English
5 Grandparent	2 Spanish
6 Other guardian	3 A language other than English or Spanish
112. Is this person male or female?	4 English and Spanish equally
1 Male P2SEX	English and another language equally
2 Female	116. Where was this parent or guardian born?
	1 ☐ One of the 50 United States or the
113. What is the current marital or partner status of this parent or guardian?	District of Columbia
Mark X ONE only. P2MRSTA	GO TO question 118
1 Married	2 One of the U.S. territories
In a registered domestic partnership or civil union	(Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, or Mariana Islands)
3 Living with a partner	3 Another country P2PLCBRTH
4 □ Separated	117. How old was this person when he or she first moved to the 50 United States or
5 Divorced	the District of Columbia?
6 ☐ Widowed	
7 Never married	age P2AGEMV
	118. Is this person of Spanish, Hispanic, or Latino origin?
	2 No P2HISPAN
	1 □ Yes



119. What is this person's race? You may mark one or more races.	122. Which of the following best describes this person's employment status?
1 American Indian or Alaska Native	Mark X ONE only. P2EMPL
1 Asian <i>P2ASIAN</i>	1 Employed for pay or income 2 Self-employed
1 Black or African American P2BLACK	2 Self-employed 3 Unemployed or
Native Hawaiian or other Pacific Islander P2PACI	out of work GO TO question 124
1 White P2WHITE	Full-time student
120. What is the highest grade or level of school that this parent or guardian completed?	5 Stay at home parent GO TO question 125
Mark X ONE only. P2EDUC	6 Retired
1	Disabled or unable to work
High school, but no diploma	123. (If employed or self-employed) About how many hours per week does he or she
3 High school diploma or equivalent (GED)	usually work for pay or income, counting all jobs?
4 Vocational diploma after high school	GO TO question 125
5 Some college, but no degree	nours P2HRSWK
6 ☐ Associate's degree (AA, AS) 7 ☐ Bachelor's degree (BA, BS)	124. (If unemployed or out of work) Has this parent or guardian been actively looking for work in the past 4 weeks?
8 Some graduate or professional education, but no degree	2 No P2LKWRK
9	1 Yes
10 ☐ Doctorate degree (PhD EdD)	125. In the past 12 months, how many months (if any) has this person worked for pay or income?
Professional degree beyond bachelor's degree (MD, DDS, JD, LLB)	
121. Is he or she currently attending or enrolled in a school, college, university,	months P2MTHSWRK
or adult learning center, or receiving vocational education or job training?	126. How old is this person?
2 □ No <i>P2ENRL</i>	
1 □ Yes	age P2AGE
	127. How old was this person when he or she first became a parent to <u>any</u> child?
	age P2AGEPAR
	1 ☐ Don't know P2AGEPARDK



8. Your Household	130. How are you related to this child? Mark X ONE only. RELATION
128. Including yourself, how many total people live in this household?	■ Mother (birth, adoptive, step, or foster)
people HHTOTALX	2
129. Other than the parents or guardians	3 Aunt
already reported, how many of the following people live in the household with this child?	4 ☐ Uncle 5 ☐ Grandmother
Example: Brother(s)	5 ☐ Grandmother6 ☐ Grandfather
Write '0' if none. This child's Number	7 Parent's girlfriend/boyfriend/partner
	8 Other relationship – Specify:
Brother(s)	
Sister(s)	RELATIONOS 131. Which (anguage(s) are spoken at home by the adults in this household?
Aunt(s)	Mark 🕱 all that apply.
Uncle(s)	English HHENGLISH
HHUNCLS Crandmathar(a)	Spanish or Spanish Creole HHSPANISH 3 French (including Patois, Creole, Cajun)
Grandmother(s)	French (including Patois, Creole, Cajun) HHFRENCH Chinese HHCHINESE
Grandfather(s)	5 Other languages – Specify:
Cousin(s)	
Parent's girlfriend/ boyfriend/partner	HHOTHLANG HHOTHLANGOS
Other relative(s)	Continue with question 132 on the next page.
HHORELS	
Other non-relative(s)	



Mark X ONE box for each item below.	Write '0' if less than 1 year.
No Yes	
▼ ▼	years at this address YRSADDR
a. Temporary Assistance for Needy Families, or TANF 2 1 1 HWELFTAN b. Your state welfare or	135. Is this house Mark X ONE only. OWNRNTH
family assistance program 2 1 1 HWELFST	Owned or being bought by someone in this household,
c. Women, Infants, and Children, or WIC	2 Rented by someone in this household, o
d. Food Stamps 2 1	3 ☐ Occupied by some other arrangement?
HFOODST e. Medicaid	136. Other than this address, does anyone in this household currently receive mail at another address including P.O. Boxes?
Program (CHIP)	2 No OTHMADDR*
### ##################################	137. Do you have access to the Internet at this address?
Include your own income. TTLHHINC	No HVINTRNT
Include money from jobs or other earnings pensions, interest, rent, Social Security payments, and so on.	1 Yes
1 □ \$0 to \$10,000	138. Is there at least one telephone inside this home that is currently working and not a cell phone?
2	2 No <i>LANDLINE</i> *
3 □ \$20,001 to \$30,000	1 □ Yes
4 □ \$30,001 to \$40,000	139. Do you have a working cell phone?
5 🗆 \$40,001 to \$50,000	2 □ No HVCELLPH *
6 □ \$50,001 to \$60,000	1 □ Yes
7	- 100
8	
9 🗆 \$100,001 to \$150,000	
0 □ \$150,001 or more	



* An asterisk indicates that the variable does not appear on the data file

Thank you.

Please return this questionnaire in the postage-paid envelope provided. If you have lost the envelope, mail the completed questionnaire to:

U.S. Census Bureau ATTN: DCB 60-A (7198) 1201 E. 10th Street Jeffersonville, IN 47132-0001



Commonly Asked Questions

Q: How did you get my address?

A: Your address was randomly selected from among all of the home addresses in the nation. It was selected using scientific sampling methods to represent other households in the United States.

Q: How did you get my child's name and age?

A: When you returned the initial National Household Education Survey to us, we randomly chose one child to ask additional questions about. We are interested in understanding your child's experiences with care and early education.

Q: Why should I take part in this study? Do I have to do this?

A: You represent thousands of other households like yours, and you cannot be replaced. Your answers and opinions are very important to the success of this study. You may choose not to answer any or all questions in this survey. In order for the survey to be representative, it is important that you complete and return this questionnaire. Those who do not return the survey will not be represented in key statistics used by policymakers and researchers.

Q: How will the information I provide be used? Will my privacy be protected?

A: Your responses will be combined with those of others to produce statistical summaries and reports. Your individual data will not be reported. Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (Section 9573, 20 U.S. Code).

Q: I have more than one child in my household. Will I receive additional surveys for the other children in my household?

A: No, each household will receive a survey for only one child, even if there are multiple children living in the household. In households with multiple children, one child was randomly selected to be included in the study.

Q: How will my response help the Department of Education?

A: The Department of Education wants to understand the care and early education of children. This survey is the only way that the Department of Education can learn about the types of care and early learning activities children receive. Your responses will be combined with those from other households to inform educators, policymakers, schools, and universities about changes in the condition of education in the United States. Reports from past surveys can be found at www.nces.ed.gov/nhes.

Q: Who is sponsoring the study? Is this study conducted by the Federal Government?

A: The National Center for Education Statistics, within the Department of Education, is authorized to conduct this study (Section 9543, 20 U.S. Code). This study has been approved by the Office of Management and Budget, the office that reviews all federally sponsored surveys. The approval number assigned to this study is 1850-0768. You may send any comments about this survey, including its length, to the Federal Government. Write to: Andrew Zukerberg, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9036, Washington, DC 20006-5650. You may send email to NHES@census.gov. If you have any questions about the study, contact us toll-free at 1-888-840-8353.



The National Household Education Survey

A Survey About Homeschooling in America







Thank you for he ping us with this survey. Based on the information we received from your household in your last survey, we're asking you to complete this final step.

Sponsored by

U.S. Department of Education

National Center for Education Statistics



NHES-31AE(INFO)(VARS) (12/17/2012)

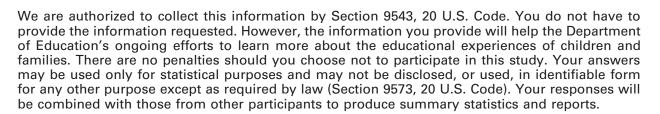
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Instructions

- ◆ In response to the survey you answered earlier, we recorded that the child/youth listed below is currently homeschooled for at least some classes. If this child attends public or private school instead of homeschooling, or is not homeschooled for kindergarten through 12th grade or equivalent, please call us at the toll-free number below so we can be sure you received the correct survey.
- These questions should be filled in by a parent or guardian who knows about:

Please answer all the survey questions thinking about this child or youth.

- ◆ To answer a question, simply mark the box that best represents your answer.
- ◆ Please use a black or blue pen, if available, to complete this survey.
- ♦ If this questionnaire has been sent to the wrong household or the child/youth listed above does not live here, please call to let us know.
- ◆ Our toll-free number is 1-888-840-8353.



This survey is estimated to take an average of 20 minutes, including time for reviewing instructions and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Andrew Zukerberg, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9036, Washington, DC 20006-5650. Do not return the completed form to this address.



1. Child's Homeschooling Thank you for your help with the previous survey your household completed. **Answer all the survey questions** thinking about the child listed below: Who is the person that mainly provides 1. this child's home instruction? Mother **HSWHOX** 2 Father 3 Grandparent Brother/sister **5** Another person ■ Who is that? **HSWHOOSX** Is any of this child's home instruction 2. provided by a private tutor or teacher? No **HSTUTOR** Yes Is any of this child's instruction provided by a local homeschooling group or co-op? 3. No Yes 4. Does this child attend a public or private school or a college or university for **HSCOLL** instruction? GO TO question 7 No — Yes

5.		Whatte		ype o ?	f sch	ool(s	s) do	es	this	chi	ld	
		Mai	rk 🛭	K all	that a	apply.						
	1		Pu	blic so	chool	(K - 1	12)	HS	SPL	IBL	IC	
	1		Pri	vate s	choo	I (K -	12)	H	SPR	IV.	\TE	
	1		Co	llege, S CO I	comi	munit	y co	lleg	e, o	r uni	versi	ity
6.		usu not	ally inc	any <u>l</u> / go t clude ies.	oas	choo	l fo	r in	stru	ctio	n? E	00
				L	_	4	HS	cc	UD			
				hours	s (пэ	3C	ПN			
				6)						
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	1	~										
<u> </u>												

7. What grade or year would this child be in if he/she was attending school? Mark X ONE only.	11. Thinking about sources of curriculum or books you use to homeschool this child, please tell us about <u>all</u> the sources that apply to you.
1 Kindergarten GRADEEQA	Since September, have you used materials from
	Mark X ONE box for each item below.
Grade (1 through 12) GRADEEOB	No Yes
8. These next questions ask you to <u>estimate</u> the amount of time you homeschool this child.	a. A public library?. <i>HS.CLIBRX</i> .
a. How many days each week is this child homeschooled? <i>HSDAYS</i>	b. A homeschooling catalog, publisher, or individual who specializes in homeschooling materials? <i>HSCHSPUBX</i>
days each week	c. Another educational
b. About how many total hours <u>each</u> <u>week</u> is he/she homeschooled?	d. A homeschooling
hours per week	e. A church, synagogue, or
9. Since September, has this child	other religious organization?
participated in activities with other children who are homeschooled? HSKACTIV	**Sour local public school or school district? **HSCPUBLX**.
2	g. A private school? HSCPRIVX 2 1
1 Yes	h. A bookstore or other store (including online)?. <i>HS.CRELX</i> 2 1
10. Which of the following statements best describes the teaching style used to homeschool this child?	i. Websites, excluding retailers? .
Mark X ONE only.	j. Other source — Specify: —
1 We strictly follow a formal curriculum.	
We mostly follow a formal curriculum, but also use informal learning (i.e. child-led learning, "teaching moments").	12. In the past year, have you or another family member taken any courses, either online or in-person, to help you prepare your child's home instruction? HSCOURS
3 We mostly use informal learning, but sometimes use a formal curriculum.	1 No
4 We always use informal learning, and never follow a formal curriculum.	2 Yes, both online and in-person
	3 ☐ Yes, online only
	4 Yes, in-person only

courses o people ou	neschooled children take ver the Internet taught by tside the household. Is this iving any instruction this way?	16.	. Thinking about typical grade levels, for which grades was this child schooled at home for at least some classes or subjects?
2 □ No -	GO TO question 16		Mark 🗶 all that apply.
1 □ Yes	HSINTNET		Include the current year.
1 2 103			Elementary through Middle School
14. Is that ins following	truction provided by any of the places?	1	1 Kindergarten (Including transitional K and
	Il that apply.		Pre-first grade) HOMEKX
1 □ Your I	ocal public school HSINTPUB	1	1 First grade <i>HOME1</i>
	rter school HSINTCH	1	1 ☐ Second grade <i>HOME2</i>
	er public school HSINTAPB	1	1 Third grade HOME3
	ate school HSINTPRI	1	1 ☐ Fourth grade HOME4
	ege, community college, or	1	1 Fifth grade HOME5
- / (0011	rsity HSINTCOL	1	1 Sixth grade HOME6
1 Offere	d by my state HSINTST	1	1 Seventh grade HOME7
	place else — Specify:	(A)	Eighth grade HOME8
		11/	High School
	тотноз	// 1	1 Ninth grade - freshman HOME9
15. Is there a instructio	charge or fee for that n? HSFEE	1	
2 □ No			
1 □ Yes		1	- Eleventar grade jamer Herriza
¹		1	Twelfth grade - senior HOME12



17.	There	are ma
17.	paren child	ts choo en. Did
		X ONE
	IVIAIK	N ONE
	sch	u are co nool envi
	b. Yo	er pressu SAFET u are dis ademic in
	c. Yo	nools? SDISSA u prefer home so
	pro HS d. Yo	ovide reli RELGO u prefer home so
	e. Thi	ovide mo SMORA is child hea ental hea
	f. Thi	s lasted s ore? SDISAB is child h ess that
	fro HS g. Thi	m going SILLX is child heds that
	h. Yo	nool can' SSPCLN u are int ntraditio
	i. Yo	children' SALTX u have a meschoo ecify: —
	Ор	cony. —

М	ark $\overline{\mathbf{X}}$ ONE box for each item b	pelov	N.	
	_	No		Yes
		\blacksquare		\blacksquare
a.	You are concerned about the			
	school environment, such as			
	safety, drugs, or negative peer pressure?		2	
	HSSAFETYX			
b.	You are dissatisfied with the			
	academic instruction at other			
	schools?		2	
	HSDISSATX			
C.				
	at home so that you can		2	П
	provide religious instruction? HSRELGON			
Н	You prefer to teach this child			
u.	at home so that you can		_	
	provide moral instruction?	ш	2	
	HSMORAL			
e.				
	mental health problem that			
	has lasted six months or		2	П
	more?		_	
f.	This child has a temporary			
1.	illness that prevents him/her			
	from going to school?		2	
	HSILLX			
g.	This child has other special		~	\ /
	needs that you feel the		6	\searrow
	school can't or won't meet?	R	1	
L	HSSPCLNDX		17,	,
h.	You are interested in a nontraditional approach	11	<i>></i>	
	to children's education?	Ť	2	
	HSALTX			
i.	You have another reason for			
	homeschooling your child?	ш	2	Ш
	Specify: — HSOTHERX			

18.	Of the reasons your family chose to homeschool this child, which <u>one</u> would you say is the most important to you?		
	Write the letter from question 17 for the most important reason you chose to homeschool your child. HSMOSTX		
	letter from question 17		
19.	How far do you expect this child to go in		

his/her education? **HSFUTUREX** Mark X ONE only. 1 Complete less than a high school diploma 2 Graduate from high school Attend a vocational or technical school after high school 3 Attend wo or more years of college Earn a bachelor's degree Farn a graduate degree or professional degree beyond a bachelor's



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20.	bee foll bee inst	nking about all years this in homeschooled, which owing subject areas has in taught during his or he truction?		
1		Art	HSART	
1		Music	HSMUSIC	
1		Basic algebra (Algebra I)	HSALG1	
1		Advanced algebra (Algebra	a II) HSALG2	
1		Geometry	HSGEOM	4
1		Calculus	HSCALC	
1		Probability	HSPROB	
1		Scientific inquiry or experi	ments	
1		HSSCIEN Earth sciences or geology	HSGEOL	
1		Biology	HSBIOL	
1		Chemistry or physics	HSCHEM	
1		Geography	HSGEOG	
1		English or literature	HSENGL	
1		Computer science (e.g., coprogramming)	HSCOMSCI	
1		Social science, history social	ial studies	
1		HSHIST Foreign language	HSFOLANG	
•		ntinue with section 2, the next page.	question 21	



2. Family Activities

23.	In the past month, has anyone in your family done the following things with this child?			
	Mark X ONE box for each item	<i>below.</i> No Yes		
		* *		
	a. Visited a library	2 0 1		
	b. Visited a bookstore	2 1		
	c. Gone to a play, concert, or other live show	. 2 1		
	d. Visited an art gallery, museum, or historical site FOMUSEUMX ()	. 🗆 2 🗆 1		
	e. Visited a zoo or aquarium	_		
	f. Attended an event sponsored by a community, religious, or ethnic group	2 _ 1		
	g. Attended an athletic or porting event outside of			
	scrool in which this child was not a player	. 🗆 2 🗆 1		
24	Does your family participate in	in the		
	activities or meetings of a <u>local</u> homeschooling association, co-op,			
	or other local homeschool gro	oup?		
2	□ No GO TO question 26	HSASSNX		
1	Yes			
25.	Since September, how many thas your family gone to meeting participated in the activities ohomeschooling association, conter local homeschool group	ings or of a local o-op, or		
	number of times			
26.	Is your family or someone in y household a member of a <u>national nation</u> ?	ional		
2	□ No			
1	Yes			

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3. Child's Health	29. Did you mark yes to any condition in
	question 28?
27. In general, how would you describe this child's health?	No GO TO question 37
1 Excellent HDHEALTH	Yes HDANYCON*
2 Very good	30. Is this child receiving services for his/her condition?
3 □ Good	2 No GO TO question 35
4 □ Fair	
5 □ Poor	Yes HDRECSER
28. Has a health or education professional told you that this child has any of the	31. Are these services provided by any of the following sources?
following conditions?	Mark X ONE box for each item below.
Mark X ONE box for each item below.	No Yes
No Yes ▼ ▼	
a. A specific learning disability	a. Your local school district
hDLEARNX b. An intellectual disability	social service agency
HDINTDIS	A doctor, clinic, or other health care provider
c. A speech or language impairment	HDDOCTORX 32. Are any of these services provided
d. A serious emotional disturbance	through an Individualized Education Program (IEP)?
HDDISTRBX e. Deafness or another hearing	2 No GO TO question 35
impairment	F1 ☐ Yes HDIEP
f. Blindness or another visual impairment not corrected 2 1	The Ties
HDBLINDX	33. Did any adult in your household work with the service provider or school to
g. An orthopedic impairment 2 1 1 HDORTHOX	develop or change this child's IEP?
h. Autism	2 No HDDEVIEPX
i. Pervasive Developmental Disorder (PDD)	1 □ Yes
HDPDDX j. Attention Deficit Disorder,	
HDADDX	
k. A developmental delay	
I. Traumatic brain injury	
m. Another health impairment lasting 6 months or more	
HDOTHERX	
	* An asterisk indicates that the
	variable does not appear on the data file



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34. During this school year, how satisfied or	35. Is this child currently enrolled in any
dissatisfied have you been with the following aspects of this child's IEP?	special education classes or services?
a. The service provider's or school's communication with your family?	2 □ No <i>HDSPCLED</i> 1 □ Yes
1	36. Does this child's condition interfere with
2 Somewhat satisfied	his/her ability to do any of the following things?
3 Somewhat dissatisfied	Mark X ONE box for each item below.
4 □ Very dissatisfied	1 Child no longer has condition HDCGONE No Yes
5 Does not apply	▼ ▼
b. The child's special needs teacher or therapist?	a. Learn . HDLEARN
1	or other organized activities
2 Somewhat satisfied	c. Attend school on a regular basis HDOUT 2 1
3 Somewhat dissatisfied	Make friends <i>HDFRNDS</i> 2 1
4 ☐ Very dissatisfied	Continue with section 4, question 37
5 Does not apply	on the next page.
c. The service provider's or school's ability to accommodate this child's special needs?	
1 Very satisfied HDACCOMX	
2 Somewhat satisfied	
3 Somewhat dissatisfied	
4 □ Very dissatisfied	
5 Does not apply	
d. The service provider's or school's commitment to help this child learn?	
1	
2 Somewhat satisfied	
3 Somewhat dissatisfied	
4	
5 Does not apply	

4. Child's Background 37. In what month and year was this child	42. For this school year, does this child usually live at this address or another address (for example, because of a joint custody arrangement)? CLIVELSW
born?	Do not include vacation properties.
	1 Child usually lives at this address
month year CDOBMM CDOBYY 38. Where was this child born?	2 Child usually lives at another address
1 One of the 50 United States or the	43. What language does this child speak most at home? <i>CSPEAKX</i>
District of Columbia	Mark X ONE only.
GO TO question 40	1 Child is not able to speak GO TO section 5
One of the U.S. territories (Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, or Mariana Islands)	2 English
3 Another country CPLCBRTH	3 ☐ Spanish 4 ☐ A language other than English or Spanish
39. How old was this child when he/she first moved to the 50 United States or the District of Columbia?	5 English and Spanish equally
District of Columbia:	6 English and another language equally
age CMOVEAGE	44. Is this child currently enrolled in English as a second language, bilingual
40. Is this child of Spanish, Hispanic, or Latino origin?	education, or an English immersion program?
2 No CHISPAN	2 No CENGLPRG
1 Yes	1
41. What is this child's race? You may mark one or more races.	Continue with section 5, on the next page.
1 American Indian of Alaska Native	one pago.
1 Asian CASIAN	
1 Black or African American <i>CBLACK</i>	
1 Native Hawaiian or other Pacific Islander	
1 White CWHITE	
41b. What is this child's sex? <i>CSEX</i>	
1 □ Male	
2 Female	



		5. Child's Family
Answ	er q	IT 1 LIVING IN HOUSEHOLD uestions 45 to 61 about yourself if you are so parent or guardian.
quest	tions	e not the child's parent or guardian, answe s 45 to 61 about one of this child's parents ans living in the household.
45.	ls t	his parent or guardian the child's
1		Biological parent P1REL
2		Adoptive parent
3		Stepparent
4		Foster parent
5		Grandparent
6		Other guardian
46.	ls t	his person male or female?
1		Male P1SEX
2		Female
47.		at is the current marital or partner tus of this parent or guardian?
		rk X ONE only. P1MRSTA
1		Married
2		In a registered domestic partnership or civil union
3		Living with a partner
4		Separated
5		Divorced
6		Widowed
7		Never married

48.	1A/L	at was the first language this navent		
+0.	What was the <u>first</u> language this parent or guardian learned to speak?			
	Mai	rk X ONE only. P1FRLNG		
1		English GO TO question 50		
2		Spanish		
3		A language other than English or Spanish		
4		English and Spanish equally		
5		English and another language equally		
49.	Wha	at language does this person speak		
	mo	st at home now?		
	Mai	rk X ONE only. P1SPEAK		
1		English		
2		Spanish		
3		A language other than English or Spanish		
4	A	English and Spanish equally		
5		English and another language equally		
50.	Where was this parent or guardian born?			
ア・ 1		One of the 50 United States or the		
·		District of Columbia		
	L	GO TO question 52		
2		One of the U.S. territories		
		(Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, or Mariana Islands)		
3		Another country P1PLCBRTH		
51.	Ηον	w old was this person when he or she		
		t moved to the 50 United States or District of Columbia?		
	Ш	D4 4 0 5 4 4 4		
	ag			
52.	Is t	his person of Spanish, Hispanic, or ino origin?		
2		No P1HISPAN		
1		Yes		

53 .	What is this person's race? You may mark one or more races.	56. Which of the following best describes this person's employment status?
1	American Indian or Alaska Native P1AMIND	Mark X ONE only. P1EMPL 1 □ Employed for pay or income
1	□ Asian <i>P1ASIAN</i>□ Black or African American <i>P1BLACK</i>	2 Self-employed
1	Native Hawaiian or other Pacific Islander P1PACI White P1WHITE	3 ☐ Unemployed or out of work GO TO question 58 4 ☐ Full-time student
54.	What is the highest grade or level of school that this parent or guardian completed?	5 Stay at home parent GO TO question 59
	Mark X ONE only. P1EDUC	6 Retired
1	8th grade or less	Disabled or unable to work
2	High school, but no diploma	57. (If employed or self-employed) About how
3	High school diploma or equivalent (GED)	many hours <u>per week</u> does he or she <u>usually</u> work for pay or income, counting
4	☐ Vocational diploma after high school	all jobs?
5	Some college, but no degree	GO TO question 59
6	Associate's degree (AA, AS)	hours P1HRSWK
7	Bachelor's degree (BA, BS)	58. (If unemployed or out of work) Has this parent or guardian been actively looking
8	Some graduate or professional education, but no degree	for work in the past 4 weeks? 2 No P1LKWRK
9	☐ Master's degree (MA, MS)	1 Yes
10		59. <u>In the past 12 months</u> , how many
11	Professional degree beyond bachelor's degree (MD, DDS, JD, LLB)	months (if any) has this person worked for pay or income?
55.	Is he or she currently attending or enrolled in a school, college, university, or adult learning center, or receiving vocational education or job training?	months P1MTHSWRK
2	□ No P1ENRL	
1	Yes	



66.	What was the <u>first</u> language this parent or guardian learned to speak?	70 .	Is this person of Spanish, Hispanic, or Latino origin?	
	Mark X ONE only. P2FRLNG	2		No P2HISPAN
1	English GO TO question 68	1		Yes
2	Spanish	71.		at is this person's race? You may
3	☐ A language other than English or Spanish		ma	rk one or more races.
4	English and Spanish equally	1		American Indian or Alaska Native P2AMIND
5	English and another language equally	1		Asian P2ASIAN
67.	What language does this person speak most at home now? <i>P2SPEAK</i>	1		Black or African American P2BLACK
	Mark X ONE only.	1	H	Native Hawaiian or other Pacific Islander P2PACI White P2WHITE
1	English	72.	Wh	at is the highest grade or level of
2	Spanish	,	sch	nool that this parent or guardian
3	A language other than English or Spanish		Ma	rk X ONE only. P2EDUC
4	English and Spanish equally	1		8th grade or less
5	☐ English and another language equally	2	M.	High school, but no diploma
68.	Where was this parent or guardian born?))3		High school diploma or equivalent (GED)
1	One of the 50 United States or the District of Columbia	4		Vocational diploma after high school
	GO TO question 70	5		Some college, but no degree
2	One of the U.S. territories	6		Associate's degree (AA, AS)
	(Puerto Rico, Guam, American Samoa, U.S. Virgin Islands/or Mariana Islands)	7		Bachelor's degree (BA, BS)
3		8		Some graduate or professional education, but no degree
69.	How old was this person when he or she first moved to the 50 United States or	9		Master's degree (MA, MS)
	the District of Columbia?	10		Doctorate degree (PhD, EdD)
		11		Professional degree beyond bachelor's degree (MD, DDS, JD, LLB)
	age P2AGEMV			223.1310. 0 409.00 (), 220, 02, 220



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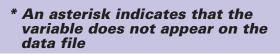
73.	Is he or she currently attending or enrolled in a school, college, university, or adult learning center, or receiving vocational education or job training?	77.	In the past 12 months, how many months (if any) has this person worked for pay or income?
2	No P2ENRL		
1	□ Yes		months P2MTHSWRK
74.	Which of the following best describes this person's employment status?	78.	How old is this person?
	Mark X ONE only. P2EMPL		age P2AGE
1	☐ Employed for pay or income	79.	
2	Self-employed		first became a parent to any child?
3	Unemployed or GO TO question 76		age P2AGEPAR
4	Full-time student		
5	Stay at home parent GO TO question 77	1	Done know P2AGEPARDK
6		•	Continue with section 6, question 80
7	Disabled or unable to work	P	on the next page.
75.	(If employed or self-employed) About how many hours per week does he or she usually work for pay or income, counting all jobs? GO TO question 77 hours P2HRSWK) *	
76.	(If unemployed or out of work) Has this parent or guardian been actively looking for work in the past 4 weeks?		
2	No P2LKWRK		
1	□ Yes		



6. Your Household	82. How are you related to this child? Mark X ONE only. RELATION
80. Including yourself, how many total people live in this household?	1 Mother (birth, adoptive, step, or foster)
	2
people HHTOTALX	3 □ Aunt
81. Other than the parents or guardians already reported, how many of the following people live in the household	4 Uncle
with this child?	5 Grandmother
Example: Brother(s)	6 Grandfather
Write '0' if none. This child's Number	7 Parent's girlfriend/boyfriend/partner
Brother(s)	8 Other relationship – Specify: ¬
HHBROS	
Sister(s)	83. Which anguage(s) are spoken at home by the adults in this household?
Aunt(s)	Mark 🔀 all that apply.
HHAUNTS	English HHENGLISH
Uncle(s)	Spanish or Spanish Creole HHSPANISH
Grandmother(s)	French (including Patois, Creole, Cajun) HHFRENCH
Grandfather(s)	1 Chinese HHCHINESE
HHGPAS	1 ☐ Other languages – Specify:
Cousin(s)	HHOTHLANGOS
Parent's girlfriend/ boyfriend/partner	Continue with question 84 on the
Other relative(s)	next page.
HHORELS	
Other non-relative(s)	



84.	In the past 12 months, did your ever receive benefits from any of following programs?			86.	How many years have you lived at this address? YRSADDR Write '0' if less than 1 year.
	Mark X ONE box for each item be	elow. No Yes			years at this address
	a. Temporary Assistance for Needy Families, or TANF	_ 2 _	1	87.	,
	b. Your state welfare or family assistance program HWELFST	□ 2 □	1	1	Owned or being bought by someone in this household,
	c. Women, Infants, and Children, or WIC . HWIC	□ 2 □	1	2	
	d. Food Stamps . HFOODST		1	3	Occupied by some other arrangement?
	e. Medicaid . <i>HMEDICAID</i> f. Child Health Insurance	□ 2 □	1	88.	Other than this address, does anyone in this household currently receive mail at another address including P.O. Boxes?
	Program (CHIP). H.CHIP	□ 2 □	1	2	□ No OTHMADDR *
	g. Section 8 housing assistance HSECN8	□ 2 □	1	1	☐ Yes
85.	85. Which category best fits the total income of all persons in your household over the past 12 months?			89.	Do you have access to the Internet at this address?
	Include your own income. TTLHI	HINC		2	HVINTRNT
	Include money from jobs or other of pensions, interest, rent, Social Secupayments, and so on.		/:	1	Yes
1	□ \$0 to \$10,000	(>	Is there at least one telephone inside this home that is currently working and not a cell phone?
2	\$10,001 to \$20,000		7/1	2	
3	\$20,001 to \$30,000			1	□ Yes
4))		91.	Do you have a working cell phone?
5				2	□ No
6				1	☐ Yes HVCELLPH*
7	_				
9					
10	, , , , , , , , , , , , , , , , , , , ,				





Thank you.

Please return this questionnaire in the postage-paid envelope provided. If you have lost the envelope, mail the completed questionnaire to:

U.S. Census Bureau ATTN: DCB 60-A (7198) 1201 E. 10th Street Jeffersonville, IN 47132-0001



Commonly Asked Questions

Q: How did you get my address?

A: Your address was randomly selected from among all of the home addresses in the nation. It was selected using scientific sampling methods to represent other households in the United States.

Q: How did you get my child's name and age?

A: When you returned the initial National Household Education Survey to us, we randomly chose one child to ask additional questions about. We are interested in understanding your child's experiences with homeschooling.

Q: Why should I take part in this study? Do I have to do this?

A: You represent thousands of other households like yours, and you cannot be replaced. Your answers and opinions are very important to the success of this study. You may choose not to answer any or all questions in this survey. In order for the survey to be representative, it is important that you complete and return this questionnaire. Those who do not return the survey will not be represented in key statistics used by policymakers and researchers.

Q: How will the information I provide be used? Will my privacy be protected?

A: Your responses will be combined with those of others to produce statistical summaries and reports. Your individual data will not be reported. Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (Section 9573, 20 U.S. Code).

Q: I have more than one child in my household Will I receive additional surveys for the other children in my household?

A: No, each household will receive a survey for only one child, even if there are multiple children living in the household. In households with multiple children, one child was randomly selected to be included in the study.

Q: How will my response help the Department of Education?

A: The Department of Education wants to understand the condition of education in the United States. This survey is the only way that the Department of Education can learn about homeschooling from your perspective. It is the Department of Education's primary source of information on homeschooling in America. Your responses will be combined with those from other households to inform educators, policymakers, schools, and universities about changes in the condition of education in the United States. Reports from past surveys can be found at www.nces.ed.gov/nhes.

Q: Who is sponsoring the study? Is this study conducted by the Federal Government?

A: The National Center for Education Statistics, within the Department of Education, is authorized to conduct this study (Section 9543, 20 U.S. Code). This study has been approved by the Office of Management and Budget, the office that reviews all federally sponsored surveys. The approval number assigned to this study is 1850-0768. You may send any comments about this survey, including its length, to the Federal Government. Write to: Andrew Zukerberg, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9036, Washington, DC 20006-5650. You may send email to NHES@census.gov. If you have any questions about the study, contact us toll-free at 1-888-840-8353.



The National Household Education Survey

A Survey about Students' and Families' Experience with Their Schools



Thank you for helping us with this survey. Based on the information we received from your household in your last survey, we're asking you to complete this final step.

Sponsored by

U.S. Department of Education National Center for Education Statistics



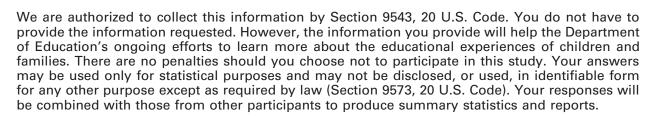
NHES-41BE(INFO)(VARS)

Instructions

- ◆ In response to the survey you answered earlier, we recorded that the child/youth listed below attends school. If this child is homeschooled instead of attending public or private school, or if this child has not yet started kindergarten, please call us at the toll-free number below so we can be sure you received the correct survey.
- ◆ These questions should be filled in by a parent or guardian who knows about:

Please answer all the survey questions thinking about this child or youth.

- ◆ To answer a question, simply mark **X** the box that best represents your answer.
- ◆ Please use a black or blue pen, if available to complete this survey.
- ♦ If this questionnaire has been sent to the wrong household or the child/youth listed above does not live here, please call to let us know.
- ◆ Our toll-free number is 1-888-840-8353.



This survey is estimated to take an average of 20 minutes, including time for reviewing instructions and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Andrew Zukerberg, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9036, Washington, DC 20006-5650. Do not return the completed form to this address.



1. Child's Schooling Thank you for your help with the previous survey your household completed. **Answer all the survey questions** thinking about the child listed below: What is this child's current grade or year 1. of school? If this child is not assigned a specific grade, mark or write the grade he/she would be in at a school with regular grades. Child has not yet started kindergarten Please STOP now and call 1-888-840-8353 so we can verify that you received the correct survey. 2 Full-day kindergarten **GRADEAT** 3 Partial-day kindergarten GRADEBT grade (1 through 12) 2. Is this child being schooled at home instead of at school for some classes or subjects? HOMESCHLX No Yes 3. What type of school does this child attend? Private, Catholic **SCPUBPRI** Private, religious GO TO question 6 but not Catholic Private, not religious Public school 4. Is it his/her regularly assigned school? **SCHOICEX** No Yes

5.		ls tl	nis sch	ool a charter school?	
	2		No	SCHRTSCHL	
	1		Yes		
6.		neig	ghborh	ove to your current ood so that this child cou her current school? SNEIG	
	2		No		
	1		Yes		
7.		cho this	ose wh child to may in	public school district let nich public school you was to attend? SPUBC	nt CHOIX
	2	ano	ther pul sferring rict.	a public school, transferring plic school within the district to a public school outside of	, or
<	1		No Ses	,	
T	3	7 _{[D}	Don't k	now	
8)	>	Did chil		ensider other schools for t	this
	2		No —	GO TO question 10	
Г	1		Yes	SCONSIDR	
♦		see the	k infor	y between schools, did yo mation on the performand s you were considering, li s, dropout rates, and so o	ce of ike
	2		No	SPERFORM	
	1		Yes		
10	-	cho	ice, tha	ool this child attends your at is, the school you want im/her to attend?	
	2		No	S1STCHOI	
	1		Yes		
11				beginning of this school y aild been in the same scho	
	2		No	SSAMSC	
	1		Yes		

In which month did this child start at his/her current school this school year?

17.	Since the beginning of this school year, how many days has this child been absent from school? SEABSNT		
		days	
18.	Sin	ce starting kindergarten, has this ld repeated any grades? SEREPEAT	
2		No GO TO question 20	
Γ1		Yes	
↓ 19.	10/L	et avode ev avodes did be/she venest?	
13.		at grade or grades did he/she repeat? rk X all that apply.	
	Ele	mentary through Middle school	
1		Kindergarter SEREPTK	
1		First grade SEREPT1	
1		Second grade SEREPT2	
1	A	Trird grade SEREPT3	
A		Fourth grade SEREPT4	
		Fifth grade SEREPT5	
<i></i>		Sixth grade SEREPT6	
1		Seventh grade SEREPT7	
1		Eighth grade SEREPT8	
	Hig	h school	
1		Ninth grade - freshman SEREPT9	
1		Tenth grade - sophomore SEREPT10	
1		Eleventh grade - junior SEREPT11	
1		Twelfth grade - senior SEREPT12	
•		ntinue with question 20 on the	

2. Families & School 28. Since the beginning of this school year, has any adult in this child's household done any of the following things at this child's school? Mark X ONE box for each item below. Yes a. Attended a school or class event, such as a play, dance, sports event, or science fair. . **FSSPORTX** b. Served as a volunteer in this child's classroom or □ 2 □ 1 elsewhere in the school... **FSVOL** c. Attended a general school meeting, for example, an open house, or a back-to-school night. FSMTNG... d. Attended a meeting of the parent-teacher organization □ 2 □ 1 or association . FSPT.M.T.NG. . . e. Gone to a regularly scheduled parent-teacher conference with this child's teacher. . FSATCNFN. . . f. Participated in fundraising for the school. FSFUNDRS. g. Served on a school committee . . FSCOMMTE h. Met with a guidance counselor in person. **FSCOUNSL'R** During this school year, how many times has any adult in the household gone to meetings or participated in activities at this child's school? number of times FSFREQ

- During this school year, has your family received any of the following:
 - a. Notes or emails specifically about this child from his/her teachers or school **FSNOTESX** administrators?
 - No
 - Yes
 - b. Newsletters, memos, emails, or notices addressed to all parents?
 - Nο

FSMEMOSX

- Yes
- c. Phone calls specifically about this child from his/her teachers or school administrators?
- Mo

FSPHONCHX

- How well has this child's school been doing the following things during this school year?
 - a. Letting you know how this child is doing in school between report cards.
 - Very well

FSSPPERF

- Just okay
- Not very well
- Does not do it at all
- b. Providing information about how to help this child with homework.
- Very well

FSSPHW

- Just okay
- Not very well
- Does not do it at all



c. Providing information about why this child is placed in particular groups or classes.	
olussos.	a. The school this child attends this year?
1 ☐ Very well FSSPCOUR	1 ☐ Very satisfied FCSCHOOL
2 Ust okay	2 Somewhat satisfied
3 Not very well	3 ☐ Somewhat dissatisfied
4 □ Does not do it at all	4 □ Very dissatisfied
d. Providing information on your expected role at this child's school.	b. The teachers this child has this year?
1 Very well FSSPROLE	1 ☐ Very satisfied FCTEACHR
2 ☐ Just okay	2 Somewhat satisfied
3 ☐ Not very well	3 Somewhat dissatisfied
4 □ Does not do it at all	4 Very dissatisfied
e. Providing information on how to help	c. The academic standards of the school?
this child plan for college or vocational school.	
1 Very well FSSPCOLL	Somewhat satisfied
2	3 Somewhat dissatisfied
3 ☐ Not very well	4 □ Very dissatisfied
4 □ Does not do it at all	d. The order and discipline at the school?
	1 Very satisfied FCORDER
5 Does not apply	2 Somewhat satisfied
	3 Somewhat dissatisfied
	4 Very dissatisfied
	e. The way that school staff interacts with parents?
	1 ☐ Very satisfied FCSUPPRT
	2 Somewhat satisfied
	3 Somewhat dissatisfied
	4 Very dissatisfied



	24	3. Homework How often does this child do homework	36.	How often does any adult in your household check to see that this child's homework is done?
	31.	at home, at an after-school program, or somewhere else outside of school?	1	Never FHCHECKX
	1	Less than once a week FHHOME	2	Rarely
	2	☐ 1 to 2 days a week	3	Sometimes
	3	☐ 3 to 4 days a week	4	I □ Always
	4	5 or more days a week	37.	During this school year, about how many days in an average week does anyone in
	5	Never GO TO section 4.		your household help this child with his/her homework?
	6		1	Less than once a week
;	32.	In an average week, how many hours does this child spend on homework outside of school? FHWKHRS	2	
		outside of school? FRIVIAINS	4	
		number of hours per week	5	
	33.	How do you feel about the amount of homework this child is assigned?		
	1	☐ The amount is about right		Continue with section 4, question 38, on the next page.
	2	☐ It's too much FHAMOUNT	•	
	3	☐ It's too little		
;	34.	How does this child feel about the amount of homework he or she is assigned?		
	1	☐ The amount is about right		
	2	☐ It's too much FHCAMT		
	3	☐ It's too little		
;	35.	Is there a place in your home that is set aside for this child to do homework?		
	2	□ No FHPLACE		
	1	☐ Yes		
	3	Child does not do homework at home		





Yes

□ 2 □ 1

□ 2 □ 1

□ 2 □ 1

2

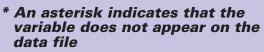
□ 2 □ 1

□ 2 □ 1

□ 2 □ 1

90
1321
244

5. Child's Health	43.	Did you mark <u>yes</u> to any condition in question 42?
41. In general, how would you describe this child's health? HDHEALTH		□ No GO TO question 51
1 Excellent	Ţ	☐ Yes <i>HDANYCON*</i>
2 Very good	44.	Is this child receiving services for his/her condition?
3 ☐ Good	2	P. No GO TO question 49
4	Γ1	☐ Yes HDRECSER
42. Has a health or education professional told you that this child has any of the	45.	the following sources?
following conditions?		Mark X ONE box for each item below.
Mark X ONE box for each item below.		_ No Yes
No Yes ▼ ▼		Vou lead school district
a. A specific learning disability		a. Your local school district
b. An intellectual disability (mental retardation) 2		HDGOVTX
thintpis c. A speech or language impairment .HDSPEECHX 2 1		health care provider
d. A serious emotional disturbance . <i>HDDISTRBX</i>	4 6.	Are any of these services provided through an Individualized Education Program (IEP)?
e. Deafness or another hearing impairment . HDDEAFIMX .	2	P. No GO TO question 49
f. Blindness or another visual impairment not corrected.	I ¹	Yes HDIEP
with glassesHDBLINDX) 2	47.	Did any adult in your household work with the service provider or school to
g. An orthopedic impairment 2 1 1 HDORTHOX	2	develop or change this child's IEP?
h. Autism. <i>HDAUTISMX</i>	2	No HDDEVIEPX
i. Pervasive Developmental Disorder (PDD). <i>HDPDDX</i>	1	Yes
j. Attention Deficit Disorder, ADD or ADHD . <i>HDADDX</i>		
k. A developmental delay		
I. Traumatic brain injury		
m. Another health impairment lasting 6 months or more		





di	ssati	g this school year, how satisfied or isfied have you been with the ring aspects of this child's IEP?	49. 2	special education classes or services?
a.		service provider's or school's nmunication with your family?	1	No HDSPCLED Yes
1		Very satisfied HDCOMMUX	50.	Does this child's condition interfere with his/her ability to do any of the following
2		Somewhat satisfied		things?
3		Somewhat dissatisfied		Mark X ONE box for each item below.
4		Very dissatisfied	1	Child no longer has condition HDCGONE No Yes
5		Does not apply		▼ ▼
b.		child's special needs teacher or rapist?		a. Learn . HDLEARN
1		Very satisfied HDTCHR		b. Participate in sports, clubs, or other organized activities
2		Somewhat satisfied		c. Attend school on a regular basis HDOUT
3		Somewhat dissatisfied		d. Make friends . HDFRNDS
4		Very dissatisfied		
5		Does not apply		Continue with section 6, question 51, on the next page.
C.	abil	e service provider's or school's lity to accommodate this child's cial needs?	•	
1		Very satisfied HDACCOMX		
2		Somewhat satisfied		
3		Somewhat dissatisfied		
4		Very dissatisfied		
5		Does not apply		
d.		service provider's or school's nmitment to help this child learn?		
1		Very satisfied HDCOMMITX		
2		Somewhat satisfied		
3		Somewhat dissatisfied		
4		Very dissatisfied		
5		Does not apply		



6. Child's Background 51. In what month and year was this child	56. For this school year, does this child usually live at this address or another address (for example, because of a joint custody arrangement)? CLIVELSW
born?	Do not include vacation properties.
	1 ☐ Child usually lives at this address
month year CDOBMM CDOBYY	2 Child usually lives at another address
52. Where was this child born? CPLCBRTH	57. What language does this child speak
One of the 50 United States or the District of Columbia	most at home? CSPEAKX Mark X ONE only.
	Mark None only.
GO TO question 54	1 Child is not able to speak GO TO section 7
One of the U.S. territories (Puerto Rico, Guam, American Samoa,	2 English
U.S. Virgin Islands, or Mariana Islands) Another country	3 Spanish
FO Hamaldon di Lilla di Co	4 A language other than English or Spanish
53. How old was this child when he/she first moved to the 50 United States or the District of Columbia?	5 English and Spanish equally
	6 English and another language equally
age CMOVEAGE	58. Is this child currently enrolled in English as a second language, bilingual
	education, or an English immersion
54. Is this child of Spanish, Hispanic, or Latino origin?	program?
2 No	2 No CENGLPRG
1 Yes CHISPAN	1 Yes
55. What is this child's race? You may mark one or more races.	Continue with section 7 on the next page.
1 American Indian of Alaska Native CAMIND	
1 Asian CASIAN	
1 Black or African American CBLACK	
1 Native Hawaiian or other Pacific Islander	
1 White CWHITE	
55b. What is this child's sex? CSEX	
1 □ Male	
- — Maio	
2 Female	



7. Child's Family	62.		nat was the <u>first</u> language this parent guardian learned to speak?
PARENT 1 LIVING IN HOUSEH Answer questions 59 to 78 about yourself the child's parent or guardian.			English GO TO question 67
If you are not the child's parent or guardia questions 59 to 78 about one of this child or guardians living in the household.			Spanish A language other than English or Spanish
59. Is this parent or guardian the chi	ld's		English and Spanish equally
1 Biological parent	ţ	5 🗆	English and another language equally
2 Adoptive parent P1REL	63.		nat language does this person speak
3 Stepparent			rk X ONE only. P1SPEAK
4 □ Foster parent	1		English GO TO question 67
5 ☐ Grandparent		2 🗆	Spanish
6 Other guardian	3	3 🗆	A language other than English or Spanish
60. Is this person male or female? 1 Male P1SEX	4	B	English and Spanish equally
1 Male <i>P1SEX</i> 2 Female			English and another language equally
61. What is the current marital or pa	64.		w difficult is it for this person to rticipate in activities at this child's
status of this parent or guardian		sch	nool because he/she speaks a guage other than English? <i>P1DIFFI</i>
Mark X ONE only. P1MRSTA			Very difficult
1 Married) · · · · · · · · · · · · · · · · · · ·	2 🗆	Somewhat difficult
In a registered domestic partner or civil union	ship	3 🗆	Not at all difficult
3 Living with a partner	65.		es the school have interpreters who
4 Separated			eak this person's native language for etings or parent-teacher conferences?
5 Divorced	2	2 🗆	No P1SCINT
6 Widowed	1		Yes
7 □ Never married	66.	suc	es the school have written materials, ch as newsletters or school notices, at are translated into this person's



person's

native language?

P1WRMTL

2 No

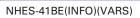
1 Yes



73. Which of the following best describes this person's employment status?	PARENT 2 LIVING IN HOUSEHOLD Answer questions 79 to 99 about a second parent or guardian living in the household.
Mark X ONE only. P1EMPL	
1 Employed for pay or income	79. Is there a second parent or guardian living in this household?
2 Self-employed	2 No GO TO question 100
3 Unemployed or out of work GO TO question 75	T ¹ □ Yes P2GUARD
4 Full-time student	80. Is this person the child's
5 Stay at home	1 Biological parent P2REL
parent GO TO question 76	2 Adoptive parent
6 Retired	(1
7 Disabled or unable to work	3 Stepparent
74. (If employed or self-employed) About how	Foster parent
many hours <u>per week</u> does he or she usually work for pay or income, counting	5 Grandparent
all jobs?	6 Other guardian
GO TO question 76	81. Is this person male or female?
hours P1HRSWK	Male P2SEX
75. (If unemployed or out of work) Has this parent or guardian been actively looking	2 Female
for work in the past 4 weeks?	82. What is the current marital or partner
2 □ No P1LKWRK	status of this parent or guardian?
1 □ Yes	Mark X ONE only. P2MRSTA
76. In the past 12 months, how many	1
months (if any) has this person worked for pay or income?	In a registered domestic partnership or civil union
	3 ☐ Living with a partner
months P1MTHSWRK	4 □ Separated
77. How old is this person?	5 Divorced
	6 ☐ Widowed
age P1AGE	
78. How old was this person when he or she	7 Never married
first became a parent to <u>any</u> child?	
age P1AGEPAR	
1 Don't know P1AGEPARDK	



83. What was the <u>first</u> language this parent or guardian learned to speak?	88. Where was this parent or guardian born?
Mark X ONE only. P2FRLNG	One of the 50 United States or the District of Columbia
1 English GO TO question 88	GO TO question 90
2 Spanish	2 □ One of the U.S. territories
3 A language other than English or Spanish	(Puerto Rico, Guam, American Samoa, U.S. Virgin Islands, or Mariana Islands)
4 English and Spanish equally	3 Another country P2PLCBRTH
5 English and another language equally	89. How old was this person when he or she
84. What language does this person speak most at home <u>now</u> ?	first moved to the 50 United States or the District of Columbia?
Mark X ONE only. P2SPEAK	
1 English GO TO question 88	age P2AGEMV
2 Spanish	90. Is this person of Spanish, Hispanic, or Latino origin?
3 A language other than English or Spanish	2 No P2HISPAN
4 English and Spanish equally	1 Des
5 English and another language equally	91. What is this person's race? You may
85. How difficult is it for this person to	mark one or more races.
participate in activities at this child's school because he/she speaks a	1 American Indian or Alaska Native P2AMIND
language other than English? 1 Very difficult P2DIFFI	1 Asian <i>P2ASIAN</i>
	1 Black or African American P2BLACK
	1 Native Hawaiian or other Pacific Islander
	1 White P2WHITE
86. Does the school have interpreters who speak this person's native language for	Continue with assertion 02 on the
meetings or parent teacher conferences?	Continue with question 92 on the next page.
No 1200111	
1 Yes	
87. Does the school have written materials, such as newsletters or school notices, that are translated into this person's native language?	
2 No P2WRMTL	
1 □ Yes	



92	What is the highest grade or level of school that this parent or guardian completed?	94.	Which of the following best describes this person's employment status?
	Mark X ONE only. P2EDUC		Mark X ONE only. P2EMPL
		1	☐ Employed for pay or income
	1 8th grade or less	2	☐ Self-employed
	High school, but no diploma	3	☐ Unemployed or ▶
	High school diploma or equivalent (GED)		out of work
	4 U Vocational diploma after high school	4	Full-time student
	5	5	Stay at home parent
	6 Associate's degree (AA, AS)	6	Retired
	7 Bachelor's degree (BA, BS)	7	Disabled or unable to work
	Some graduate or professional education, but no degree	95.	(If employed or self-employed) About how
	9 ☐ Master's degree (MA, MS)		many hours per week does he or she usually work for pay or income, counting
1	O Doctorate degree (PhD, EdD)		all jobs?
1	Professional degree beyond bachelor's degree (MD, DDS, JD, LLB)		hours P2HRSWK
93	enrolled in a school, college, university or adult learning center, or receiving	96.	(If unemployed or out of work) Has this parent or guardian been actively looking for work in the past 4 weeks?
	vocational education or job training?	2	□ No P2LKWRK
	2 No P2ENRL	1	☐ Yes
	1 Yes	97.	In the past 12 months, how many months (if any) has this person worked for pay or income?
			months P2MTHSWRK
		98.	How old is this person?
			age P2AGE
		99.	How old was this person when he or she first became a parent to any child?
			age P2AGEPAR
		1	□ Don't know P2AGEPARDK

Continue with section 8, question 100, on the next page.

8. Your Household 102. How are you related to this child? Mark X ONE only. RELATION
100. Including yourself, how many total people live in this household? 1 Mother (birth, adoptive, step, or foster)
People HHTOTALX 2 □ Father (birth, adoptive, step, or foster)
101. Other than the parents or guardians
already reported, how many of the following people live in the household
with this child? 5 Grandmother
Example: Brother(s) 2 Grandfather
Write '0' if none. This child's Number 7 Parent's girlfriend/boyfriend/partner
8 Other relationship – Specify:
Brother(s) HHBROS
Sister(s) . HHSISS
Aunt(s). HHAUNTS
English HHENGLISH
Uncle(s) . HHUNCLS Spanish or Spanish Creole HHSPANI
Grandmother(s)
HHGMAS 1 Chinese HHCHINESE
Grandfather(s)
HHGPAS Cousin(s) . HHCSNS .
boyfriend/partner
HHPRTNRS Continue with question 104 on the next page.
Other relative(s)
Other non-relative(s)
HHONRELS



104. In the past 12 months, did your family ever receive benefits from any of the	106. How many years have you lived at this address? VRSADDR
following programs?	
Mark X ONE box for each item below.	Write '0' if less than 1 year.
No Yes	vegre at this address
▼ ▼	years at this address
a. Temporary Assistance for Needy Families, or TANF	107. Is this house
hwelftan b. Your state welfare or	Mark ONE only. OWNRNTHB
family assistance program	1 Owned or being bought by someone
c. Women, Infants, and	in this household,
Children, or WIC	2 Rented by someone in this household, or
d. Food Stamps HFOODST	3 ☐ Occupied by some other arrangement?
Madissid MMEDICAID	109 Other than this address does anyone in
e. Medicaid . HMEDICAID	108. Other than this address, does anyone in this household currently receive mail at
f. Child Health Insurance Program (CHIP)	another address including P.O. Boxes?
	2 No OTHINADDR*
g. Section 8 housing assistance 2 1	1 🗆 Yes
HSECN8 105. Which category best fits the total	
income of all persons in your household over the past 12 months?	109. Do you have access to the Internet at this address?
Include your own income. TTLHHINC	
Include money from jobs or other earnings,	No HVINTRNT
pensions, interest, rent, Social Security	1 Yes
payments, and so on.	110. Is there at least one telephone inside this
1	home that is currently working and not a cell phone?
2 □ \$10,001 to \$20,000	
3 □ \$20,001 to \$30,000	No LANDLINE *
	1 Yes
4 \$30,001 to \$40,000	111. Do you have a working cell phone?
5 \$40,001 to \$50,000	2 □ No HVCELLPH*
6 □ \$50,001 to \$60,000	
7	1 Yes
_	
8	Continue with question 112 on the
9	next page.
10 \$150,001 or more	
	* An asterisk indicates that the
	variable does not appear on the data file



112. We would like to identify this child's school so we can include information about the school in our study. $SCHOOL^*$

Using the list of schools below, mark $\overline{\mathbf{X}}$ the box next to the school this child attends. If this child's school is not in this list, GO TO question 113.

	School Name ▼	Address ▼	City ▼
1			
2			
3		1	
4			
5			
6			
7		<u>)</u> *	
8			
9			
10			
	<u> </u>		
11			
12			
13			
14			
15			

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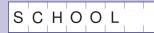
* An asterisk indicates that the variable does not appear on the data file



If you found and marked this child's school in the list provided in question 112, then SKIP this question and return your survey in the postage-paid envelope. Otherwise, continue with question 113.

113. To help us identify the school this child attends, write the name and address of this child's school in the spaces below.

Please use block or capital letters, for example:



SCHLNAME* a. School name



SCHOOL NAME

b. School street address

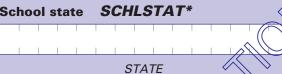


NUMBER AND STREET ADDRES

SCHLCITY* c. School city



d. School state SCHLSTAT



e. School zip code **SCHLZIP***



* An asterisk indicates that the variable does not appear on the data file

Please return this questionnaire in the postage-paid envelope provided. If you have lost the envelope, mail the completed questionnaire to:

U.S. Census Bureau **ATTN: DCB 60-A (7198)** 1201 E. 10th Street Jeffersonville, IN 47132-0001



Commonly Asked Questions

Q: How did you get my address?

A: Your address was randomly selected from among all of the home addresses in the nation. It was selected using scientific sampling methods to represent other households in the United States.

Q: How did you get my child's name and grade?

A: When you returned the initial National Household Education Survey to us, we randomly chose one child to ask additional questions about. We are interested in understanding your child's experiences with schooling.

Q: Why should I take part in this study? Do I have to do this?

A: You represent thousands of other households like yours, and you cannot be replaced. Your answers and opinions are very important to the success of this study. You may choose not to answer any or all questions in this survey. In order for the survey to be representative, it is important that you complete and return this questionnaire. Those who do not return the survey will not be represented in key statistics used by policymakers and researchers.

Q: How will the information I provide be used? Will my privacy be protected?

A: Your responses will be combined with those of others to produce statistical summaries and reports. Your individual data will not be reported. Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (Section 9573, 20 U.S. Code).

Q: I have more than one child in my household Will I receive additional surveys for the other children in my household?

A: No, each household will receive a survey for only one child, even if there are multiple children living in the household. In households with multiple children, one child was randomly selected to be included in the study.

Q: How will my response help the Department of Education?

A: The Department of Education wants to understand the condition of education in the United States. This survey is the only way that the Department of Education can learn about schooling from your perspective. Your responses will be combined with those from other households to inform educators, policymakers, schools, and universities about changes in the condition of education in the United States. Reports from past surveys can be found at www.nces.ed.gov/nhes.

Q: Who is sponsoring the study? Is this study conducted by the Federal Government?

A: The National Center for Education Statistics, within the Department of Education, is authorized to conduct this study (Section 9543, 20 U.S. Code). This study has been approved by the Office of Management and Budget, the office that reviews all federally sponsored surveys. The approval number assigned to this study is 1850-0768. You may send any comments about this survey, including its length, to the Federal Government. Write to: Andrew Zukerberg, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9036, Washington, DC 20006-5650. You may send email to NHES@census.gov. If you have any questions about the study, contact us toll-free at 1-888-840-8353.



Appendix B. Data File Layout and Position Order

Table B-1. Public-Use Data File Layout in Position Order, ECPP:2012

Order	Variable name	Variable label	Format	Length	Start column	End column
1	BASMID	Unique Child Identifier	N	12	1	12
2	RCVDATE	Survey Date	С	8	13	20
3	PATH	D-Questionnaire path	С	1	21	21
4	RCNOW	Regular care from relative	N	2	22	23
5	RCWEEK	2. Care from relative regularly scheduled	N	2	24	25
6	RCTYPE	3. Relative related to child	N	2	26	27
7	RCAGE	4. Age of relative care provider	N	2	28	29
8	RCPLACE	5. Care in home or another home	N	2	30	31
9	RCDAYS	6. Days a week child receives care from relative	N	2	32	33
10	RCHRS	7. Hours a week child receives care from relative	N	2	34	35
11	RCSTRTY	8. Child's age when care began from relative (Years)	N	2	36	37
12	RCSTRTM	8. Child's age when care began from relative (Months)	N	2	38	39
13	RCSPEAK	9. Language spoken by relative when caring for child	N	2	40	41
14	RCSKNFV	10. Relative care for child sick without a fever	N	2	42	43
15	RCSKFV	10. Relative care for child sick with a fever	N	2	44	45
16	RCFEE	11. Charge for care by relative	N	2	46	47
17	RCREL	12. Outside relative pays for care by relative	N	2	48	49
18	RCTANF	12. TANF pays for care by relative	N	2	50	51
19	RCSSAC	12. Other social service pays for care by relative	N	2	52	53
20	RCEMPL	12. Employer pays for care by relative	N	2	54	55
21	RCOTHER	12. Someone else pays for care by relative	N	2	56	57
22	RCCOST	13. Amount household pays for care by relative	N	5	58	62
23	RCUNIT	13. Unit of time for cost of relative care	N	2	63	64
24	RCCSTHNX	14. Number of children in household amount covers for relative care	N	2	65	66
25	RCOTHC	15. Other regular care arrangements	N	2	67	68
26	RCTLHR	16. Hours each week spent in other care	N	2	69	70
27	NCNOW	17. Care from non-relative	N	2	71	72
28	NCWEEK	18. Care from non-relative regularly scheduled	N	2	73	74
29	NCPLACE	19. Care in own home	N	2	75	76
30	NCINHH	20. Care provider live in household	N	2	77	78
31	NCDAYS	21. Days a week child receives non-relative care	N	2	79	80
32	NCHRS	22. Hours a week child receives non-relative care	N	2	81	82
33	NCSTRTY	23. Child's age when care began from non-relative (Years)	N	2	83	84
34	NCSTRTM	23. Child's age when care began from non-relative (Months)	N	2	85	86
35	NCALKNE	24. Care provider already known	N	2	87	88
36	NCAGE	25. Care provider 18 or older	N	2	89	90
37	NCSPEAK	26. Language spoken by non-relative when caring for child	N	2	91	92
38	NCSKNFV	27. Non-relative care for child sick without a fever	N	2	93	94
39	NCSKFV	27. Non-relative care for child sick with a fever	N	2	95	96
40	NCRCMDPT	28. Recommend care provider to another	N	2	97	98
41	NCFEE	29. Charge for care by non-relative	N	2	99	100
42	NCREL	30. Relative pays for care by non-relative	N	2	101	102
43	NCTANF	30. TANF pays for care by non-relative	N	2	103	104
44	NCSSAC	30. Other social service pays for care by non-relative	N	2	105	106
45	NCEMPL	30. Employer pays for care by non-relative	N	2	107	108
46	NCOTHER	30. Someone else pays for care by non-relative	N	2	109	110
47	NCCOST	31. Amount household pays for care by non-relative	N	5	111	115
48	NCUNIT	31. Unit of time for cost of non-relative care	N	2	116	117
49	NCCSTHNX	32. Number of children in household amount covers for non-relative care	N	2	118	119
50	NCOTHC	33. Other home-based care	N	2	120	121
51	NCTLHR	34. Total hours per week in care with non-relative	N	2	122	123
52	CPNNOWX	35. Attending program not in private home	N	2	124	125
53	CPWEEKX	36. Attend program at least once a week	N	2	126	127
54	CPTYPE	37. Kind of program	N	2	128	129
55	CPHEADST	38. Kind of program, HS or EHS	N	2	130	131

Order	Variable name	Variable label	Format	Length	Start column	End column
56	CPPLACEX	39. Program location	N	2	132	133
57	CPSPRLG	40. Program run by religious group	N	2	134	135
58	CPWORK	41. Program location at workplace	N	2	136	137
59	CPDAYS	42. Days a week child attends program	N	2	138	139
60	CPHRS	43. Hours each week child attends program	N	2	140	141
61	CPSTRTY	44. Age of child when starting program (Years)	N	2	142	143
62	CPSTRTM	44. Age of child when starting program (Months)	N	2	144	145
63	CPSPEAK	45. Language spoken by program provider when caring for child	N	2	146	147
64	CPRCMDPT	46. Recommend program to another	N	2	148	149
65	CPTEST	47. Provide Hearing, speech, vision testing	N	2	150	151
66	CPPHYSE	47. Provide physical examinations	N	2	152	153
67	CPDENTA	47. Provide dental examinations	N	2	154	155
68	CPDISAB	47. Provide testing for learning problems	N	2	156	157
69	CPSKNFV	47. Provide care when child is sick without fever	N	2	158	159
70	CPSKFV	47. Provide care when child is sick with fever	N	2	160	161
71	CPFEE	48. Charge for program	N	2	162	163
72	CPREL	49. Relative pays for care by program	N	2	164	165
73	CPTANF	49. TANF pays for care by program	N	2	166	167
74	CPSSAC	49. Other social service pays for care by program	N	2	168	169
75	CPEMPL	49. Employer pays for care by program	N	2	170	171
76	CPOTHER	49. Someone else pays for care by program	N	2	172	173
77	CPCOST	50. Amount household pays for program care	N	5	174	178
78	CPUNIT	50. Unit of time for cost of program care	N	2	179	180
79	CPCSTHNX	51. Number of children in household amount covers for program	N	2	181	182
80	CPOTHC	52. Other care arrangements	N	2	183	184
81	CPTLHR	53. Total hours per week at daycare/preschool	N	2	185	186
82	PCEVRHDX	54. Ever attended HS or EHS	N	2	187	188
83	MAINRESN	55. Reason for wanting program	N	2	189	190
84	PPCHOIC	56. Good choice of program	N	2	191	192
85	PPDIFCLT	57. Difficulty finding program	N	2	193	194
86	DCLOA	58. Importance of location	N	2	195	196
87	DCOST	58. Importance of cost	N	2	197	198
88	DRELY	58. Importance of reliability	N	2	199	200
89	DLERN	58. Importance of learning activities	N	2	201	202
90	DCHIL	58. Importance of child interaction with other kids	N	2	203	204
91	DHROP	58. Importance of caregiver availability	N	2	205	206
92	DNBGRP	58. Importance of number of children in group	N	2	207	208
93	HABOOKS	59. Books child owns	N	3	209	211
94	FOREADTOXA	60. Has not read to child in past week	N	2	212	213
95	FOREADTOXB	60. Time spent reading to child	N	2	214	215
96	FORDDAYX	61. Minutes spent each time reading to child	N	2	216	217
97	FOSTORYX	62. In the past week, times child has been told a story	N	2	218	219
98	FOWORDSX	62. In the past week, times child has been taught	N	2	220	221
99	FOSANG	62. In the past week, times sang with child	N	2	222	223
100	FOCRAFTSX	62. In the past week, time spent on arts and crafts	N	2	224	225
101	FOLIBRAY	63. Visited a library in the past month	N	2	226	227
102	FOBOOKST	64. Visited a bookstore in the past month	N	2	228	229
103	FODINNERX	65. Eaten the evening meal together in past week	N	2	230	231
104	DPCOLOR	67. Identify colors by name	N	2	232	233
105	DPLETTER	68. Recognize letters of alphabet	N	2	234	235
106	DPCOUNT	69. Counting skills	N	2	236	237
107	DPNAME	70. Ability to write first name	N	2	238	239
108	HAPRETRD	71. Read by him/herself	N	2	240	241
109	HAWORDSX	72. Read the words or pretend to read	N	2	242	243
110	HACONECTX	73. Connected story when pretending to read	N	2	244	245

Order	Variable name	Variable label	Format	Length	Start column	End column
111	HDHEALTH	74. Health of child	N	2	246	247
112	HDLEARNX	75. Learning disability	N	2	248	249
113	HDINTDIS	75. Intellectual disability	N	2	250	251
114	HDSPEECHX	75. Speech or language impairment	N	2	252	253
115	HDDISTRBX	75. Serious emotional disturbance	N	2	254	255
116	HDDEAFIMX	75. Deafness or other hearing impairment	N	2	256	257
117	HDBLINDX	75. Blindness or other visual impairment	N	2	258	259
118	HDORTHOX	75. Orthopedic impairment	N	2	260	261
119	HDAUTISMX	75. Autism	N	2	262	263
120	HDPDDX	75. Pervasive Developmental Disorder	N	2	264	265
121	HDADDX	75. Attention Deficit Disorder	N	2	266	267
122	HDDELAYX	75. Developmental Delay	N	2	268	269
123	HDTRBRAIN	75. Traumatic Brain Injury	N	2	270	271
124	HDOTHERX	75. Another health impairment	N	2	272	273
125	HDDLYRSK	76. At-risk for delay	N	2	274	275
126	HDRECSER	78. Receiving services for condition	N	2	276	277
127	HDSCHLX	79. Local school district provides services	N	2	278	279
128	HDGOVTX	79. Local health or service agency provides services	N	2	280	281
129	HDDOCTORX	79. Doctor, clinic, or other provider provides services	N	2	282	283
130	HDIEP	80. Services provided by IEP or IFSP	N	2	284	285
131	HDDEVIEPX	81. Develop/change IEP	N	2	286	287
132	HDCOMMUX	82. Satisfied with service provider communication	N	2	288	289
133	HDTCHR	82. Satisfied with special needs teacher/therapist	N	2	290	291
134	HDACCOMX	82. Satisfied with ability to accommodate child's needs	N	2	292	293
135	HDCOMMITX	82. Satisfied with commitment to help child	N	2	294	295
136	HDSPCLED	83. Enrollment in special education classes	N	2	296	297
137	HDCGONE	84. Condition gone	N	2	298	299
138	HDLEARN	84. Condition interferes with learning	N	2	300	301
139	HDPLAY	84. Condition interferes with participation in play	N	2	302	303
140	HDOUT	84. Condition interferes with going on outings	N	2	304	305
141	HDFRNDS	84. Condition interferes with making friends	N	2	306	307
142	CDOBMM	85. Month born	N	2	308	309
143	CDOBYY	85. Year born	N	4	310	313
144	CPLCBRTH	86. Country where child born	N	2	314	315
145	CMOVEAGE	87. Age of child when first moved to US	N	2	316	317
146	CHISPAN	88. Child Spanish, Hispanic, or Latino	N	2	318	319
147	CAMIND	89. Child Race, American Indian	N	2	320	321
148	CASIAN	89. Child Race, Asian	N	2	322	323
149	CBLACK	89. Child Race, Black	N	2	324	325
150	CPACI	89. Child Race, Hawaiian or Pacific Islander	N	2	326	327
151	CWHITE	89. Child Race, White	N	2	328	329
152	CHISPRM	89. Child Hispanic, race not reported	N	2	330	331
153	CSEX	89. Child Sex	N	2	332	333
154	CLIVELSW	90. Where child lived since September	N	2	334	335
155	CSPEAKX	91. Language spoken by child at home	N	2	336	337
156	CENGLPRG	92. Enrolled in language program	N	2	338	339
157	P1REL	93. Relation of first parent/guardian to child	N	2	340	341
158	P1SEX	94. First parent/guardian Male/Female	N	2	342	343
159	P1MRSTA	95. First parent/guardian marital Status	N	2	344	345
160	P1FRLNG	96. First parent/guardian first language	N	2	346	347
161	P1SPEAK	97. Language spoken most often at home by first parent/guardian	N	2	348	349
162	P1PLCBRTH	98. Country where first parent/guardian born	N	2	350	351
163	P1AGEMV	99. Age of first parent/guardian when first moved to US	N	2	352	353
164	P1HISPAN	100. First parent/guardian of Spanish, Hispanic, or Latino origin	N	2	354	355
165	P1AMIND	101. First parent/guardian Race, American Indian	N	2	356	357

Order	Variable name	Variable label	Format	Length	Start column	End column
166	P1ASIAN	101. First parent/guardian Race, Asian	N	2	358	359
167	P1BLACK	101. First parent/guardian Race, Black	N	2	360	36
168	P1PACI	101. First parent/guardian Race Hawaiian	N	2	362	363
169	P1WHITE	101. First parent/guardian Race, White	N	2	364	365
170	P1HISPRM	101. First parent/guardian Race -Hispanic, race not reported	N	2	366	367
171	P1EDUC	102. First parent/guardian highest grade level completed	N	2	368	369
172	P1ENRL	103. First parent/guardian attending school	N	2	370	371
173	P1EMPL	104. First parent/guardian employment Status	N	2	372	373
174	P1HRSWK	105. First parent/guardian hours worked per week	N	2	374	375
175	P1LKWRK	106. First parent/guardian looking for work	N	2	376	377
176	P1MTHSWRK	107. First parent/guardian months worked	N	2	378	379
177	P1AGE	108. First parent/guardian age	N	2	380	381
178	P1AGEPAR	109. First parent/guardian age when became parent	N	2	382	383
179	P1AGEPARDK	109. First parent/guardian age when became parent (Don't know)	N	2	384	385
180	P2GUARD	110. Second parent/guardian	N	2	386	387
181	P2REL	111. Relation of second parent/guardian to child	N	2	388	389
182	P2SEX	112. Second parent/guardian Male/Female	N	2	390	391
183	P2MRSTA	113. Second parent/guardian marital Status	N	2	392	393
184	P2FRLNG	114. Second parent/guardian first language	N	2	394	395
185	P2SPEAK	115. Language spoken most often at home by second parent/guardian	N	2	396	397
186	P2PLCBRTH	116. Country where second parent/guardian born	N	2	398	399
187	P2AGEMV	117. Age of second parent/guardian when first moved to US	N	2	400	401
188	P2HISPAN	118. Second parent/guardian of Spanish, Hispanic, or Latino origin	N	2	402	403
189	P2AMIND	119. Second parent/guardian Race, American Indian	N	2	404	405
190	P2ASIAN	119. Second parent/guardian Race, Asian	N	2	406	407
191	P2BLACK	119. Second parent/guardian Race, Black	N	2	408	409
192	P2PACI	119. Second parent/guardian Race Hawaiian	N	2	410	411
193	P2WHITE	119. Second parent/guardian Race, White	N	2	412	413
194	P2HISPRM	119. Second parent/guardian race - Hispanic, race not reported	N	2	414	415
195	P2EDUC	120. Second parent/guardian highest grade level completed	N	2	416	417
196	P2ENRL	121. Second parent/Guardian attending school	N	2	418	419
197	P2EMPL	122. Second parent/guardian employment Status	N	2	420	421
198	P2HRSWK	123. Second parent/guardian hours worked per week	N	2	422	423
199	P2LKWRK	124. Second parent/guardian looking for work	N	2	424	425
200	P2MTHSWRK	125. Second parent/guardian months worked	N	2	426	427
201	P2AGE	126. Second parent/guardian age	N	2	428	429
202	P2AGEPAR	127. Second parent/guardian age when became parent	N	2	430	431
203	P2AGEPARDK	127. Second parent/guardian age when became parent (Don't Know)	N	2	432	433
204	HHTOTALX HHBROS	128. Total people in household	N	2	434	435 437
205	HHSISS	129. Brothers 129. Sisters	N	2	436	437
206	HHAUNTS	129. Aunts	N	2	438 440	441
207	HHUNCLS	129. Uncles	N	2		443
208 209	HHGMAS	129. Grandmothers	N N	2	442 444	445
	HHGPAS	129. Grandfathers		2		445
210	HHCSNS	129. Cousins	N	2	446 448	447
211 212	HHPRTNRS	129. Parent's girlfriend/boyfriend/partner	N N	2	450	451
212	HHORELS	129. Other relatives	N N	2	450	453
213 214	HHONRELS	129. Other non-relatives	N N	2	452 454	455
21 4 215	RELATION	130. Respondent relation to child	N N	2	454 456	455 457
216	HHENGLISH	130. Respondent relation to child 131. Language spoken at home - English	N N	2	458	459
	HHSPANISH	131. Language spoken at nome - English 131. Language spoken at home - Spanish	N N	2	458 460	461
217 218	HHFRENCH	131. Language spoken at nome - Spanish 131. Language spoken at home - French	N N	2	460	463
210	HHCHINESE		N N	2	464	465
∠ 13	THIOTHNESE	131. Language spoken at home - Chinese	IN	2	466	467

Order	Variable name	Variable label	Format	Length	Start column	End column
221	HWELFTAN	132. Received TANF in past 12 months	N	2	468	469
222	HWELFST	132. Received welfare or family assistance in past 12 months	N	2	470	471
223	HWIC	132. Received WIC in past 12 months	N	2	472	473
224	HFOODST	132. Received Food stamps in past 12 months	N	2	474	475
225	HMEDICAID	132. Received Medicaid in past 12 months	N	2	476	477
226	HCHIP	132. Received CHIP in past 12 months	N	2	478	479
227	HSECN8	132. Received Section 8 in past 12 months	N	2	480	481
228	TTLHHINC	133. Total income	N	2	482	483
229	YRSADDR	134. Years at address	N	2	484	485
230	OWNRNTHB	135. Own/rent house	N	2	486	487
231	HVINTRNT	137. Internet access	N	2	488	489
232	DISABLTYX	D-Child currently has disability	N	2	490	491
233	DISBLTY2X	D-Child has disability including autism, add, and pdd	N	2	492	493
234	PAR1EDUC	D-Educational attainment of child's parent or guardian	N	2	494	495
235	PAR1EMPL	D-Work status of child's parent or guardian	N	2	496	497
236	PAR1FTFY	D-Parent 1 or Guardian 1 works full time	N	2	498	499
237	PAR1TYPE	D-Specific relationship of parent/guardian 1 to child	N	2	500	501
238	PAR2EDUC	D-Educational attainment of child's parent 2 or guardian 2	N	2	502	503
239	PAR2EMPL	D-Work status of child's parent 2 or guardian 2	N	2	504	505
240	PAR2FTFY	D-Parent 2 or Guardian 2 works full time	N	2	506	507
241	PAR2TYPE	D-Specific relationship of parent/guardian 2 to child	N	2	508	509
242	HHPARNX	D-Parents in household	N	2	510	511
243	HHPARN12X	D-Parents in household including same sex parents/partners	N	2	512	513
244	NUMSIBSX	D-Number of child's siblings	N	2	514	515
245	FAMILYX	D-Family type	N	2	516	517
246	FAMILY12X	D-Family type including same sex parents/partners	N	2	518	519
247	HHUNDR6X	D-Number of household members younger than age 6	N	2	520	521
248	HHUNDR10X	D-Number of household members younger than age 10	N	2	522	523
249	HHUNDR16X	D-Number of household members younger than age 16	N	2	524	525
250	HHUNDR18X	D-Number of household members younger than age 18	N	2	526	527
251	HHUNID	D-Other household member, not identified	N	2	528	529
252	LANGUAGEX	D-English spoken most by parents including same sex partners	N	2	530	531
253	PARGRADEX	D-Parent/guardian highest education	N	2	532	533
254	RACEETHN	D-Race and ethnicity of child	N	2	534	535
255	RACEETH2	D-Detailed race and ethnicity of child	N	2	536	537
256	ANYCAREX	D-Child participates in any nonparental care or program arrangements	N	2	538	539
257	ANYCARE2X	D-Child has nonparental care at least once a week	N	2	540	541
258	CAREHOURX	D-Total hours a week child is in nonparental care	N	3	542	544
259	CPARRNEWX	D-Number of center-based programs at least once a week	N	2	545	546
260	MOSTHRSX	D-Care arrangement in which the child spends the most hours per week	N	2	547	548
261	NCARRNEWX	D-Number of nonrelative arrangements at least once a week	N	2	549	550
262	RCARRNEWX	D-Number of relative care arrangements at least once a week	N	2	551	552
263	CENREG	D-Census region where child lives	N	2	553	554
264	ZIP18PO2	D-Percent of families in zipcode with children <18 below the poverty line	N	2	555	556
265	ZIPBLHI2	D-Percent of persons in zipcode who were Black or Hispanic	N	2	557	558
266	ZIPLOCL	D-Zip code classification by community type	N	2	559	560
267	ENGLSPAN	D-Questionnaire in English or Spanish	N	2	561	562
268	AGE2011	D-Age of child as of Dec 31, 2011	N	2	563	564
269	CHAGE1	D-Age of 1st nonsampled child	N	2	565	566
270	CHAGE2	D-Age of 2nd nonsampled child	N	2	567	568
271	CHAGE3	D-Age of 3rd nonsampled child	N	2	569	570
272	CHAGE4	D-Age of 4th nonsampled child	N	2	571	572
273	CHSEX1	D-Sex of 1st nonsampled child	N	2	573	574
274	CHSEX2	D-Sex of 2nd nonsampled child	N	2	575	576
275	CHSEX3	D-Sex of 3rd nonsampled child	N	2	577	578

Order	Variable name	Variable label	Format	Length	Start column	End column
276	CHSEX4	D-Sex of 4th nonsampled child	N	2	579	580
277	CHENRL1	D-Enrollment status of 1st nonsampled child	N	2	581	582
278	CHENRL2	D-Enrollment status of 2nd nonsampled child	N	2	583	584
279	CHENRL3	D-Enrollment status of 3rd nonsampled child	N	2	585	586
280	CHENRL4	D-Enrollment status of 4th nonsampled child	N	2	587	588
281	CHGRD1	D-Grade of 1st nonsampled child	N	2	589	590
282	CHGRD2	D-Grade of 2nd nonsampled child	N	2	591	592
283	CHGRD3	D-Grade of 3rd nonsampled child	N	2	593	594
284	CHGRD4	D-Grade of 4th nonsampled child	N	2	595	596
285	EPSU	PSU for Taylor Series Var Est	N	6	597	602
286	ESTRATUM	Stratum for Taylor Series Var Est	N	1	603	603
287	FEWT	FINAL INTV WEIGHT	N	9.3	604	612
288	FEWT1	FINAL INTV REPLICATE WEIGHT, FEWT1	N	9.3	613	621
289	FEWT2	FINAL INTV REPLICATE WEIGHT, FEWT2	N	9.3	622	630
290	FEWT3	FINAL INTV REPLICATE WEIGHT, FEWT3	N	9.3	631	639
291	FEWT4	FINAL INTV REPLICATE WEIGHT, FEWT4	N	9.3	640	648
292	FEWT5	FINAL INTV REPLICATE WEIGHT, FEWT5	N	9.3	649	657
293	FEWT6	FINAL INTV REPLICATE WEIGHT, FEWT6	N	9.3	658	666
294	FEWT7	FINAL INTV REPLICATE WEIGHT, FEWT7	N	9.3	667	675
295	FEWT8	FINAL INTV REPLICATE WEIGHT, FEWT8	N	9.3	676	684
296	FEWT9	FINAL INTV REPLICATE WEIGHT, FEWT9	N	9.3	685	693
297	FEWT10	FINAL INTV REPLICATE WEIGHT, FEWT10	N	9.3	694	702
298	FEWT11	FINAL INTV REPLICATE WEIGHT, FEWT11	N	9.3	703	711
299	FEWT12	FINAL INTV REPLICATE WEIGHT, FEWT12	N	9.3	712	720
300	FEWT13	FINAL INTV REPLICATE WEIGHT, FEWT13	N	9.3	721	729
301	FEWT14	FINAL INTV REPLICATE WEIGHT, FEWT14	N	9.3	730	738
302	FEWT15	FINAL INTV REPLICATE WEIGHT, FEWT15	N	9.3	739	747
303	FEWT16	FINAL INTV REPLICATE WEIGHT, FEWT16	N	9.3	748	756
304	FEWT17	FINAL INTV REPLICATE WEIGHT, FEWT17	N	9.3	757	765
305	FEWT18	FINAL INTV REPLICATE WEIGHT, FEWT18	N	9.3	766	774
306	FEWT19	FINAL INTV REPLICATE WEIGHT, FEWT19	N	9.3	775	783
307	FEWT20	FINAL INTV REPLICATE WEIGHT, FEWT20	N	9.3	784	792
308	FEWT21	FINAL INTV REPLICATE WEIGHT, FEWT21	N	9.3	793	801
309	FEWT22	FINAL INTV REPLICATE WEIGHT, FEWT22	N	9.3	802	810
310	FEWT23	FINAL INTV REPLICATE WEIGHT, FEWT23	N	9.3	811	819
311	FEWT24	FINAL INTV REPLICATE WEIGHT, FEWT24	N	9.3	820	828
312	FEWT25	FINAL INTV REPLICATE WEIGHT, FEWT25	N	9.3	829	837
313	FEWT26	FINAL INTV REPLICATE WEIGHT, FEWT26	N	9.3	838	846
314	FEWT27	FINAL INTV REPLICATE WEIGHT, FEWT27	N	9.3	847	855
315	FEWT28	FINAL INTV REPLICATE WEIGHT, FEWT28	N	9.3	856	864
316	FEWT29	FINAL INTV REPLICATE WEIGHT, FEWT29	N	9.3	865	873
317	FEWT30	FINAL INTV REPLICATE WEIGHT, FEWT30	N	9.3	874	882
318	FEWT31	FINAL INTV REPLICATE WEIGHT, FEWT31	N	9.3	883	891
319	FEWT32	FINAL INTV REPLICATE WEIGHT, FEWT32	N	9.3	892	900
320	FEWT33	FINAL INTV REPLICATE WEIGHT, FEWT33	N	9.3	901	909
321	FEWT34	FINAL INTV REPLICATE WEIGHT, FEWT34	N	9.3	910	918
322	FEWT35	FINAL INTV REPLICATE WEIGHT, FEWT35	N	9.3	919	927
323	FEWT36	FINAL INTV REPLICATE WEIGHT, FEWT36	N	9.3	928	936
324	FEWT37	FINAL INTV REPLICATE WEIGHT, FEWT37	N	9.3	937	945
325	FEWT38	FINAL INTV REPLICATE WEIGHT, FEWT38	N	9.3	946	954
326	FEWT39	FINAL INTV REPLICATE WEIGHT, FEWT39	N	9.3	955	963
327	FEWT40	FINAL INTV REPLICATE WEIGHT, FEWT40	N	9.3	964	972
328	FEWT41	FINAL INTV REPLICATE WEIGHT, FEWT41	N	9.3	973	981
329	FEWT42	FINAL INTV REPLICATE WEIGHT, FEWT42	N	9.3	982	990
330	FEWT43	FINAL INTV REPLICATE WEIGHT, FEWT43	N	9.3	991	999

Order	Variable name	Variable label	Format	Length	Start column	End column
331	FEWT44	FINAL INTV REPLICATE WEIGHT, FEWT44	N	9.3	1000	1008
332	FEWT45	FINAL INTV REPLICATE WEIGHT, FEWT45	N	9.3	1009	1017
333	FEWT46	FINAL INTV REPLICATE WEIGHT, FEWT46	N	9.3	1018	1026
334	FEWT47	FINAL INTV REPLICATE WEIGHT, FEWT47	N	9.3	1027	1035
335	FEWT48	FINAL INTV REPLICATE WEIGHT, FEWT48	N	9.3	1036	1044
336	FEWT49	FINAL INTV REPLICATE WEIGHT, FEWT49	N	9.3	1045	1053
337	FEWT50	FINAL INTV REPLICATE WEIGHT, FEWT50	N	9.3	1054	1062
338	FEWT51	FINAL INTV REPLICATE WEIGHT, FEWT51	N	9.3	1063	1071
339	FEWT52	FINAL INTV REPLICATE WEIGHT, FEWT52	N	9.3	1072	1080
340	FEWT53	FINAL INTV REPLICATE WEIGHT, FEWT53	N	9.3	1081	1089
341	FEWT54	FINAL INTV REPLICATE WEIGHT, FEWT54	N	9.3	1090	1098
342	FEWT55	FINAL INTV REPLICATE WEIGHT, FEWT55	N	9.3	1099	1107
343	FEWT56	FINAL INTV REPLICATE WEIGHT, FEWT56	N	9.3	1108	1116
344	FEWT57	FINAL INTV REPLICATE WEIGHT, FEWT57	N	9.3	1117	1125
345	FEWT58	FINAL INTV REPLICATE WEIGHT, FEWT58	N	9.3	1126	1134
346	FEWT59	FINAL INTV REPLICATE WEIGHT, FEWT59	N	9.3	1135	1143
347	FEWT60	FINAL INTV REPLICATE WEIGHT, FEWT60	N	9.3	1144	1152
348	FEWT61	FINAL INTV REPLICATE WEIGHT, FEWT61	N	9.3	1153	1161
349	FEWT62	FINAL INTV REPLICATE WEIGHT, FEWT62	N	9.3	1162	1170
350	FEWT63	FINAL INTV REPLICATE WEIGHT, FEWT63	N	9.3	1171	1179
351 352	FEWT64 FEWT65	FINAL INTV REPLICATE WEIGHT, FEWT64	N N	9.3 9.3	1180 1189	1188 1197
353	FEWT66	FINAL INTV REPLICATE WEIGHT, FEWT65	N N	9.3	1198	1206
354	FEWT67	FINAL INTV REPLICATE WEIGHT, FEWT66 FINAL INTV REPLICATE WEIGHT, FEWT67	N N	9.3	1207	1215
355	FEWT68	FINAL INTV REPLICATE WEIGHT, FEW167 FINAL INTV REPLICATE WEIGHT, FEW168	N N	9.3	1216	1213
356	FEWT69	FINAL INTV REPLICATE WEIGHT, FEW 100	N N	9.3	1215	1233
357	FEWT70	FINAL INTV REPLICATE WEIGHT, FEWT70	N	9.3	1234	1242
358	FEWT71	FINAL INTV REPLICATE WEIGHT, FEWT71	N	9.3	1243	1251
359	FEWT72	FINAL INTV REPLICATE WEIGHT, FEWT72	N	9.3	1252	1260
360	FEWT73	FINAL INTV REPLICATE WEIGHT, FEWT73	N	9.3	1261	1269
361	FEWT74	FINAL INTV REPLICATE WEIGHT, FEWT74	N	9.3	1270	1278
362	FEWT75	FINAL INTV REPLICATE WEIGHT, FEWT75	N	9.3	1279	1287
363	FEWT76	FINAL INTV REPLICATE WEIGHT, FEWT76	N	9.3	1288	1296
364	FEWT77	FINAL INTV REPLICATE WEIGHT, FEWT77	N	9.3	1297	1305
365	FEWT78	FINAL INTV REPLICATE WEIGHT, FEWT78	N	9.3	1306	1314
366	FEWT79	FINAL INTV REPLICATE WEIGHT, FEWT79	N	9.3	1315	1323
367	FEWT80	FINAL INTV REPLICATE WEIGHT, FEWT80	N	9.3	1324	1332
368	F_RCNOW	IMPUTATION FLAG FOR RCNOW	N	2	1333	1334
369	F_RCWEEK	IMPUTATION FLAG FOR RCWEEK	N	2	1335	1336
370	F_RCTYPE	IMPUTATION FLAG FOR RCTYPE	N	2	1337	1338
371	F_RCAGE	IMPUTATION FLAG FOR RCAGE	N	2	1339	1340
372	F_RCPLACE	IMPUTATION FLAG FOR RCPLACE	N	2	1341	1342
373	F_RCDAYS	IMPUTATION FLAG FOR RCDAYS	N	2	1343	1344
374	F_RCHRS	IMPUTATION FLAG FOR RCHRS	N	2	1345	1346
375	F_RCSTRTY	IMPUTATION FLAG FOR RCSTRTY	N	2	1347	1348
376	F_RCSTRTM	IMPUTATION FLAG FOR RCSTRTM	N	2	1349	1350
377	F_RCSPEAK	IMPUTATION FLAG FOR RCSPEAK	N	2	1351	1352
378	F_RCSKNFV	IMPUTATION FLAG FOR RCSKNFV	N	2	1353	1354
379	F_RCSKFV	IMPUTATION FLAG FOR RCSKFV	N	2	1355	1356
380	F_RCFEE	IMPUTATION FLAG FOR RCFEE	N	2	1357	1358
381	F_RCREL	IMPUTATION FLAG FOR RCREL	N	2	1359	1360
382	F_RCTANF	IMPUTATION FLAG FOR RCTANF	N	2	1361	1362
383	F_RCSSAC	IMPUTATION FLAG FOR RCSSAC	N	2	1363	1364
384	F_RCEMPL	IMPUTATION FLAG FOR RCEMPL	N	2	1365	1366
385	F_RCOTHER	IMPUTATION FLAG FOR RCOTHER	N	2	1367	1368

Order	Variable name	Variable label	Format	Length	Start column	End column
386	F_RCCOST	IMPUTATION FLAG FOR RCCOST	N	2	1369	1370
387	F_RCUNIT	IMPUTATION FLAG FOR RCUNIT	N	2	1371	1372
388	F_RCCSTHNX	IMPUTATION FLAG FOR RCCSTHNX	N	2	1373	1374
389	F_RCOTHC	IMPUTATION FLAG FOR RCOTHC	N	2	1375	1376
390	F_RCTLHR	IMPUTATION FLAG FOR RCTLHR	N	2	1377	1378
391	F_NCNOW	IMPUTATION FLAG FOR NCNOW	N	2	1379	1380
392	F_NCWEEK	IMPUTATION FLAG FOR NCWEEK	N	2	1381	1382
393	F_NCPLACE	IMPUTATION FLAG FOR NCPLACE	N	2	1383	1384
394	F_NCINHH	IMPUTATION FLAG FOR NCINHH	N	2	1385	1386
395	F_NCDAYS	IMPUTATION FLAG FOR NCDAYS	N	2	1387	1388
396	F_NCHRS	IMPUTATION FLAG FOR NCHRS	N	2	1389	1390
397	F_NCSTRTY	IMPUTATION FLAG FOR NCSTRTY	N	2	1391	1392
398	F_NCSTRTM	IMPUTATION FLAG FOR NCSTRTM	N	2	1393	1394
399	F_NCALKNE	IMPUTATION FLAG FOR NCALKNE	N	2	1395	1396
400	F_NCAGE	IMPUTATION FLAG FOR NOORE	N	2	1397	1398
401	F_NCSPEAK	IMPUTATION FLAG FOR NOSPEAK	N	2	1399	1400
402	F_NCSKNFV	IMPUTATION FLAG FOR NOSKNEV	N	2	1401	1402
403	F_NCSKFV	IMPUTATION FLAG FOR NORMARE	N	2	1403	1404
404	F_NCRCMDPT	IMPUTATION FLAG FOR NOTES	N	2	1405	1406
405	F_NCFEE	IMPUTATION FLAG FOR NOTEE	N	2	1407	1408
406 407	F_NCREL	IMPUTATION FLAG FOR NCTANE	N N	2	1409 1411	1410 1412
407	F_NCTANF	IMPUTATION FLAG FOR NCSSAC	N N	2	1413	1414
409	F_NCSSAC F_NCEMPL	IMPUTATION FLAG FOR NCSSAC IMPUTATION FLAG FOR NCEMPL	N N	2	1415	1416
410	F_NCOTHER	IMPUTATION FLAG FOR NCOTHER	N N	2	1417	1418
411	F_NCCOST	IMPUTATION FLAG FOR NCCOST	N N	2	1419	1420
412	F_NCUNIT	IMPUTATION FLAG FOR NCUNIT	N	2	1421	1422
413	F_NCCSTHNX	IMPUTATION FLAG FOR NCCSTHNX	N	2	1423	1424
414	F NCOTHC	IMPUTATION FLAG FOR NCOTHC	N	2	1425	1426
415	F_NCTLHR	IMPUTATION FLAG FOR NCTLHR	N	2	1427	1428
416	F_CPNNOWX	IMPUTATION FLAG FOR CPNNOWX	N	2	1429	1430
417	F_CPWEEKX	IMPUTATION FLAG FOR CPWEEKX	N	2	1431	1432
418	F_CPTYPE	IMPUTATION FLAG FOR CPTYPE	N	2	1433	1434
419	F_CPHEADST	IMPUTATION FLAG FOR CPHEADST	N	2	1435	1436
420	F CPPLACEX	IMPUTATION FLAG FOR CPPLACEX	N	2	1437	1438
421	F_CPSPRLG	IMPUTATION FLAG FOR CPSPRLG	N	2	1439	1440
422	F_CPWORK	IMPUTATION FLAG FOR CPWORK	N	2	1441	1442
423	F_CPDAYS	IMPUTATION FLAG FOR CPDAYS	N	2	1443	1444
424	F_CPHRS	IMPUTATION FLAG FOR CPHRS	N	2	1445	1446
425	F_CPSTRTY	IMPUTATION FLAG FOR CPSTRTY	N	2	1447	1448
426	F_CPSTRTM	IMPUTATION FLAG FOR CPSTRTM	N	2	1449	1450
427	F_CPSPEAK	IMPUTATION FLAG FOR CPSPEAK	N	2	1451	1452
428	F_CPRCMDPT	IMPUTATION FLAG FOR CPRCMDPT	N	2	1453	1454
429	F_CPTEST	IMPUTATION FLAG FOR CPTEST	N	2	1455	1456
430	F_CPPHYSE	IMPUTATION FLAG FOR CPPHYSE	N	2	1457	1458
431	F_CPDENTA	IMPUTATION FLAG FOR CPDENTA	N	2	1459	1460
432	F_CPDISAB	IMPUTATION FLAG FOR CPDISAB	N	2	1461	1462
433	F_CPSKNFV	IMPUTATION FLAG FOR CPSKNFV	N	2	1463	1464
434	F_CPSKFV	IMPUTATION FLAG FOR CPSKFV	N	2	1465	1466
435	F_CPFEE	IMPUTATION FLAG FOR CPFEE	N	2	1467	1468
436	F_CPREL	IMPUTATION FLAG FOR CPREL	N	2	1469	1470
437	F_CPTANF	IMPUTATION FLAG FOR CPTANF	N	2	1471	1472
438	F_CPSSAC	IMPUTATION FLAG FOR CPSSAC	N	2	1473	1474
439	F_CPEMPL	IMPUTATION FLAG FOR CPEMPL	N	2	1475	1476
440	F_CPOTHER	IMPUTATION FLAG FOR CPOTHER	N	2	1477	1478

Order	Variable name	Variable label	Format	Length	Start column	End column
441	F_CPCOST	IMPUTATION FLAG FOR CPCOST	N	2	1479	1480
442	F_CPUNIT	IMPUTATION FLAG FOR CPUNIT	N	2	1481	1482
443	F_CPCSTHNX	IMPUTATION FLAG FOR CPCSTHNX	N	2	1483	1484
444	F_CPOTHC	IMPUTATION FLAG FOR CPOTHC	N	2	1485	1486
445	F_CPTLHR	IMPUTATION FLAG FOR CPTLHR	N	2	1487	1488
446	F_PCEVRHDX	IMPUTATION FLAG FOR PCEVRHDX	N	2	1489	1490
447	F_MAINRESN	IMPUTATION FLAG FOR MAINRESN	N	2	1491	1492
448	F_PPCHOIC	IMPUTATION FLAG FOR PPCHOIC	N	2	1493	1494
449	F_PPDIFCLT	IMPUTATION FLAG FOR PPDIFCLT	N	2	1495	1496
450	F_DCLOA	IMPUTATION FLAG FOR DCLOA	N	2	1497	1498
451	F_DCOST	IMPUTATION FLAG FOR DCOST	N	2	1499	1500
452	F_DRELY	IMPUTATION FLAG FOR DRELY	N	2	1501	1502
453	F_DLERN	IMPUTATION FLAG FOR DLERN	N	2	1503	1504
454	F_DCHIL	IMPUTATION FLAG FOR DCHIL	N	2	1505	1506
455	F_DHROP	IMPUTATION FLAG FOR DHROP	N	2	1507	1508
456	F_DNBGRP	IMPUTATION FLAG FOR DNBGRP	N	2	1509	1510
457	F_HABOOKS	IMPUTATION FLAG FOR HABOOKS	N	2	1511	1512
458	F_FOREADTOXB	IMPUTATION FLAG FOR FOREADTOXB	N	2	1513	1514
459	F_FOREADTOXA	IMPUTATION FLAG FOR FOREADTOXA	N	2	1515	1516
460	F_FORDDAYX	IMPUTATION FLAG FOR FORDDAYX	N	2	1517	1518
461	F_FOSTORYX	IMPUTATION FLAG FOR FOSTORYX	N	2	1519	1520
462	F_FOWORDSX	IMPUTATION FLAG FOR FOWORDSX	N	2	1521	1522
463	F FOSANG	IMPUTATION FLAG FOR FOSANG	N	2	1523	1524
464	F_FOCRAFTSX	IMPUTATION FLAG FOR FOCRAFTSX	N	2	1525	1526
465	- F_FOLIBRAY	IMPUTATION FLAG FOR FOLIBRAY	N	2	1527	1528
466	F_FOBOOKST	IMPUTATION FLAG FOR FOBOOKST	N	2	1529	1530
467	F_FODINNERX	IMPUTATION FLAG FOR FODINNERX	N	2	1531	1532
468	F DPCOLOR	IMPUTATION FLAG FOR DPCOLOR	N	2	1533	1534
469	F DPLETTER	IMPUTATION FLAG FOR DPLETTER	N	2	1535	1536
470	F_DPCOUNT	IMPUTATION FLAG FOR DPCOUNT	N	2	1537	1538
471	F_DPNAME	IMPUTATION FLAG FOR DPNAME	N	2	1539	1540
472	F_HAPRETRD	IMPUTATION FLAG FOR HAPRETRD	N	2	1541	1542
473	F_HAWORDSX	IMPUTATION FLAG FOR HAWORDSX	N	2	1543	1544
474	F HACONECTX	IMPUTATION FLAG FOR HACONECTX	N	2	1545	1546
475	F_HDHEALTH	IMPUTATION FLAG FOR HDHEALTH	N	2	1547	1548
476	F HDDLYRSK	IMPUTATION FLAG FOR HDDLYRSK	N	2	1549	1550
477	F_HDRECSER	IMPUTATION FLAG FOR HDRECSER	N N	2	1551	1552
478	F_HDSCHLX	IMPUTATION FLAG FOR HDSCHLX	N	2	1553	1554
479	F_HDGOVTX	IMPUTATION FLAG FOR HDGOVTX	N	2	1555	1556
480	F_HDDOCTORX	IMPUTATION FLAG FOR HDDOCTORX	N N	2	1557	1558
481	F_HDIEP	IMPUTATION FLAG FOR HDIEP	N	2	1559	1560
	_			2		
482	F_HDDEVIEPX	IMPUTATION FLAG FOR HDDEVIEPX	N		1561	1562
483	F_HDCOMMUX	IMPUTATION FLAG FOR HDCOMMUX	N	2	1563	1564
484	F_HDTCHR	IMPUTATION FLAG FOR HDTCHR	N	2	1565	1566
485	F_HDACCOMX	IMPUTATION FLAG FOR HDACCOMX	N	2	1567	1568
486	F_HDCOMMITX	IMPUTATION FLAG FOR HDCOMMITX	N	2	1569	1570
487	F_HDSPCLED	IMPUTATION FLAG FOR HDSPCLED	N	2	1571	1572
488	F_HDCGONE	IMPUTATION FLAG FOR HDCGONE	N	2	1573	1574
489	F_HDLEARN	IMPUTATION FLAG FOR HDLEARN	N	2	1575	1576
490	F_HDPLAY	IMPUTATION FLAG FOR HDPLAY	N	2	1577	1578
491	F_HDOUT	IMPUTATION FLAG FOR HDOUT	N	2	1579	1580
492	F_HDFRNDS	IMPUTATION FLAG FOR HDFRNDS	N	2	1581	1582
493	F_CDOBMM	IMPUTATION FLAG FOR CDOBMM	N	2	1583	1584
494	F_CDOBYY	IMPUTATION FLAG FOR CDOBYY	N	2	1585	1586
495	F_CPLCBRTH	IMPUTATION FLAG FOR CPLCBRTH	N	2	1587	1588

Order	Variable name	Variable label	Format	Length	Start column	End column
496	F_CMOVEAGE	IMPUTATION FLAG FOR CMOVEAGE	N	2	1589	1590
497	F_CHISPAN	IMPUTATION FLAG FOR CHISPAN	N	2	1591	1592
498	F_CAMIND	IMPUTATION FLAG FOR CAMIND	N	2	1593	1594
499	F_CASIAN	IMPUTATION FLAG FOR CASIAN	N	2	1595	1596
500	F_CBLACK	IMPUTATION FLAG FOR CBLACK	N	2	1597	1598
501	F_CPACI	IMPUTATION FLAG FOR CPACI	N	2	1599	1600
502	F_CWHITE	IMPUTATION FLAG FOR CWHITE	N	2	1601	1602
503	F_CSEX	IMPUTATION FLAG FOR CSEX	N	2	1603	1604
504	F_CLIVELSW	IMPUTATION FLAG FOR CLIVELSW	N	2	1605	1606
505	F_CSPEAKX	IMPUTATION FLAG FOR CSPEAKX	N	2	1607	1608
506	F_CENGLPRG	IMPUTATION FLAG FOR CENGLPRG	N	2	1609	1610
507	F_P1REL	IMPUTATION FLAG FOR P1REL	N	2	1611	1612
508	F_P1SEX	IMPUTATION FLAG FOR P1SEX	N	2	1613	1614
509	F_P1MRSTA	IMPUTATION FLAG FOR P1MRSTA	N	2	1615	1616
510	F_P1FRLNG	IMPUTATION FLAG FOR P1FRLNG	N	2	1617	1618
511	F_P1SPEAK	IMPUTATION FLAG FOR PISPEAK	N	2	1619	1620
512	F_P1PLCBRTH	IMPUTATION FLAG FOR P1PLCBRTH	N	2	1621	1622
513	F_P1AGEMV	IMPUTATION FLAG FOR P1AGEMV	N	2	1623	1624
514	F_P1HISPAN	IMPUTATION FLAG FOR P1HISPAN	N	2	1625	1626
515	F_P1AMIND	IMPUTATION FLAG FOR PLANIAN	N	2	1627	1628
516	F_P1ASIAN	IMPUTATION FLAG FOR PARIAN	N	2	1629	1630
517	F_P1BLACK	IMPUTATION FLAG FOR P1BLACK	N	2	1631	1632
518	F_P1PACI	IMPUTATION FLAG FOR P1PACI	N	2	1633	1634
519	F_P1WHITE	IMPUTATION FLAG FOR PAYEDUG	N	2	1635	1636
520 521	F_P1EDUC	IMPUTATION FLAG FOR P1EDUC	N N	2	1637 1639	1638
521	F_P1ENRL F_P1EMPL	IMPUTATION FLAG FOR P1ENRL IMPUTATION FLAG FOR P1EMPL	N N	2	1641	1640 1642
523	F P1HRSWK	IMPUTATION FLAG FOR P1HRSWK	N N	2	1643	1644
524	F P1LKWRK	IMPUTATION FLAG FOR P1LKWRK	N	2	1645	1646
525	F P1MTHSWRK	IMPUTATION FLAG FOR P1MTHSWRK	N	2	1647	1648
526	F_P1AGE	IMPUTATION FLAG FOR P1AGE	N	2	1649	1650
527	F P1AGEPAR	IMPUTATION FLAG FOR P1AGEPAR	N	2	1651	1652
528	F P1AGEPARDK	IMPUTATION FLAG FOR P1AGEPARDK	N	2	1653	1654
529	F P2GUARD	IMPUTATION FLAG FOR P2GUARD	N	2	1655	1656
530	F_P2REL	IMPUTATION FLAG FOR P2REL	N	2	1657	1658
531	F_P2SEX	IMPUTATION FLAG FOR P2SEX	N	2	1659	1660
532	F_P2MRSTA	IMPUTATION FLAG FOR P2MRSTA	N	2	1661	1662
533	F_P2FRLNG	IMPUTATION FLAG FOR P2FRLNG	N	2	1663	1664
534	F_P2SPEAK	IMPUTATION FLAG FOR P2SPEAK	N	2	1665	1666
535	F_P2PLCBRTH	IMPUTATION FLAG FOR P2PLCBRTH	N	2	1667	1668
536	F_P2AGEMV	IMPUTATION FLAG FOR P2AGEMV	N	2	1669	1670
537	F_P2HISPAN	IMPUTATION FLAG FOR P2HISPAN	N	2	1671	1672
538	F_P2AMIND	IMPUTATION FLAG FOR P2AMIND	N	2	1673	1674
539	F_P2ASIAN	IMPUTATION FLAG FOR P2ASIAN	N	2	1675	1676
540	F_P2BLACK	IMPUTATION FLAG FOR P2BLACK	N	2	1677	1678
541	F_P2PACI	IMPUTATION FLAG FOR P2PACI	N	2	1679	1680
542	F_P2WHITE	IMPUTATION FLAG FOR P2WHITE	N	2	1681	1682
543	F_P2EDUC	IMPUTATION FLAG FOR P2EDUC	N	2	1683	1684
544	F_P2ENRL	IMPUTATION FLAG FOR P2ENRL	N	2	1685	1686
545	F_P2EMPL	IMPUTATION FLAG FOR P2EMPL	N	2	1687	1688
546	F_P2HRSWK	IMPUTATION FLAG FOR P2HRSWK	N	2	1689	1690
547	F_P2LKWRK	IMPUTATION FLAG FOR P2LKWRK	N	2	1691	1692
548	F_P2MTHSWRK	IMPUTATION FLAG FOR P2MTHSWRK	N	2	1693	1694
549	F_P2AGE	IMPUTATION FLAG FOR P2AGE	N	2	1695	1696
550	F_P2AGEPAR	IMPUTATION FLAG FOR P2AGEPAR	N	2	1697	1698

		W - 11 - 1 - 1			Start	End
Order	Variable name	Variable label	Format	Length	column	column
551	F_P2AGEPARDK	IMPUTATION FLAG FOR P2AGEPARDK	N	2	1699	1700
552	F_HHTOTAL	IMPUTATION FLAG FOR HHTOTAL	N	2	1701	1702
553	F_HHBROS	IMPUTATION FLAG FOR HHBROS	N	2	1703	1704
554	F_HHSISS	IMPUTATION FLAG FOR HHSISS	N	2	1705	1706
555	F_HHAUNTS	IMPUTATION FLAG FOR HHAUNTS	N	2	1707	1708
556	F_HHUNCLS	IMPUTATION FLAG FOR HHUNCLS	N	2	1709	1710
557	F_HHGMAS	IMPUTATION FLAG FOR HHGMAS	N	2	1711	1712
558	F_HHGPAS	IMPUTATION FLAG FOR HHGPAS	N	2	1713	1714
559	F_HHCSNS	IMPUTATION FLAG FOR HHCSNS	N	2	1715	1716
560	F_HHPRTNRS	IMPUTATION FLAG FOR HHPRTNRS	N	2	1717	1718
561	F_HHORELS	IMPUTATION FLAG FOR HHORELS	N	2	1719	1720
562	F_HHONRELS	IMPUTATION FLAG FOR HHONRELS	N	2	1721	1722
563	F_RELATION	IMPUTATION FLAG FOR RELATION	N	2	1723	1724
564	F_HHENGLISH	IMPUTATION FLAG FOR HHENGLISH	N	2	1725	1726
565	F_HHSPANISH	IMPUTATION FLAG FOR HHSPANISH	N	2	1727	1728
566	F_HHFRENCH	IMPUTATION FLAG FOR HHFRENCH	N	2	1729	1730
567	F_HHCHINESE	IMPUTATION FLAG FOR HHCHINESE	N	2	1731	1732
568	F_HHOTHLANG	IMPUTATION FLAG FOR HHOTHLANG	N	2	1733	1734
569	F_HWELFTAN	IMPUTATION FLAG FOR HWELFTAN	N	2	1735	1736
570	F HWELFST	IMPUTATION FLAG FOR HWELFST	N	2	1737	1738
571	F HWIC	IMPUTATION FLAG FOR HWIC	N	2	1739	1740
572	F HFOODST	IMPUTATION FLAG FOR HFOODST	N	2	1741	1742
573	F HMEDICAID	IMPUTATION FLAG FOR HMEDICAID	N	2	1743	1744
574	F HCHIP	IMPUTATION FLAG FOR HCHIP	N	2	1745	1746
575	F HSECN8	IMPUTATION FLAG FOR HSECN8	N	2	1747	1748
576	F TTLHHINC	IMPUTATION FLAG FOR TTLHHINC	N	2	1749	1750
577	F_YRSADDR	IMPUTATION FLAG FOR YRSADDR	N	2	1751	1752
578	F OWNRNTHB	IMPUTATION FLAG FOR OWNRNTHB	N	2	1753	1754
579	F HVINTRNT	IMPUTATION FLAG FOR HVINTRNT	N	2	1755	1756

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the 2012 National Household Education Surveys Program (ECPP-NHES:2012).

Table B-2. Public-Use Data File Layout in Position Order, PFI:2012

Order	Variable name	Variable label	Format	Length	Start column	End column
1	BASMID	Unique child identifier	N	12	1	12
2	RCVDATE	Survey Date	С	8	13	20
3	PATH	D-Questionnaire path	С	1	21	21
4	QTYPE	D-Survey Path	N	2	22	23
5	GRADEAT	E1. Grade attending	N	2	24	25
6	GRADEBT	E2. Grade write-in	N	2	26	27
7	HOMESCHLX	E2. Homeschooled for some classes or subjects	N	2	28	29
3	SCPUBPRI	E3. Type of school	N	2	30	31
9	SCHOICEX	E4. Regularly assigned school	N	2	32	33
10	SCHRTSCHL	E5. Charter school	N	2	34	35
11	SNEIGHBRX	E6. Move to attend school	N	2	36	37
12	SPUBCHOIX	E7. Choice of public school	N	2	38	39
13	SCONSIDR	E8. Other schools considered	N	2	40	41
14	SPERFORM	E9. Seek information on school performance	N	2	42	43
15	S1STCHOI	E10. First choice school	N	2	44	45
16	SSAMSC	E11. Same school since beginning of school year	N	2	46	47
17	SMVMTH	E12. Month started current school	N	2	48	49
18	SEENJOY	E13. Child enjoyment of school	N	2	50	51
19	SEGRADES	E14. Child's grades	N	2	52	53
20	SEADPLCX	E15. Advanced placement enrollment	N	2	54	55
21	SEBEHAVX	E16. Times contacted about behavior problems	N	2	56	57
22	SESCHWRK	E16. Times contacted about problems with school work	N	2	58	59
23	SEGBEHAV	E16. Times contacted about very good behavior	N	2	60	61
24	SEGWORK	E16. Times contacted about very good school work	N	2	62	63
25	SEABSNT	E17. Days absent	N	3	64	66
26	SEREPEAT	E18. Grades repeated	N	2	67	68
27	SEREPTK	E19. Which grades repeated -K	N	2	69	70
28	SEREPT1	E19. Which grades repeated -1	N	2	71	72
29	SEREPT2	E19. Which grades repeated -2	N	2	73	74
30	SEREPT3	E19. Which grades repeated -3	N	2	75	76
31	SEREPT4	E19. Which grades repeated -4	N	2	77	78
32	SEREPT5	E19. Which grades repeated -5	N	2	79	80
33	SEREPT6	E19. Which grades repeated -6	N	2	81	82
4	SEREPT7	E19. Which grades repeated -7	N	2	83	84
5	SEREPT8	E19. Which grades repeated -8	N	2	85	86
36	SEREPT9	E19. Which grades repeated -9	N	2	87	88
37	SEREPT10	E19. Which grades repeated -10	N	2	89	90
38	SEREPT11	E19. Which grades repeated -11	N	2	91	92
39	SEREPT12	E19. Which grades repeated -12	N	2	93	94
10	SESUSOUT	E20. Out of school suspension	N	2	95	96
. s 11	SESUSPIN	E20. In school suspension	N	2	97	98
12	SEEXPEL	E20. Expelled	N	2	99	100
43	SEFUTUREX	E21. Expectations for child's future education	N	2	101	102
1 3	SEGRADEQ	E22. Description of school work	N	2	103	104
45	SNETCRS	E23. Internet instruction	N	2	105	106
46	SPBSCH	E24. Internet instruction provided by - local public school	N N	2	107	108
+0 47	SCHRTR	E24. Internet instruction provided by - local public school E24. Internet instruction provided by - charter school	N	2	107	110
	SAPBSCH	E24. Internet instruction provided by - other public school	N	2	111	112
48 40		E24. Internet instruction provided by - other public school E24. Internet instruction provided by - private school		2		
49 50	SPRIVSCH	, , , ,	N		113	114
50	SUNIVSCH	E24. Internet instruction provided by - college	N	2	115	116
51	SINTST	E24. Write-in. Internet instruction provided by – state	N	2	117	118
52	SEDWEB	E24. Write-in. Internet instruction provided by – educa	N	2	119	120
53	SOTHSCH	E24. Internet instruction provided by - other	N	2	121	122
54	SINSTFEE	E25. Fee for instruction	N	2	123	124
55	FSSPORTX	E26. Attend a school event	N	2	125	126
56	FSVOL	E26. Serve as a volunteer	N	2	127	128
57	FSMTNG	E26. Attend a school meeting	N	2	129	130
58	FSPTMTNG	E26. Attend a parent-teacher organization meeting	N	2	131	132
59	FSATCNFN	E26. Attend parent-teacher conference	N	2	133	134
	FSFUNDRS		N	2	135	136

Order	Variable name	Variable label	Format	Length	Start column	End column
61	FSCOMMTE	E26. Serve on school committee	N	2	137	138
62	FSCOUNSLR	E26. Meet with guidance counselor	N	2	139	140
63	FSFREQ	E27. Times participated in school meetings	N	2	141	142
64	FSNOTESX	E28. Receive notes or emails	N	2	143	144
65	FSMEMOSX	E28. Receive newsletters	N	2	145	146
66	FSPHONCHX	E28. Receive phone calls	N	2	147	148
67	FSSPPERF	E29. School provides child progress between report cards	N	2	149	150
68	FSSPHW	E29. School provides information on homework help	N	2	151	152
69	FSSPCOUR	E29. School provides information on class placement	N	2	153	154
70	FSSPROLE	E29. School provides information on your expected role	N	2	155	156
71	FSSPCOLL	E29. School provides information on college	N	2	157	158
72	FCSCHOOL	E30. Satisfaction with schools	N	2	159	160
73	FCTEACHR	E30. Satisfaction with teachers	N	2	161	162
74	FCSTDS	E30. Satisfaction with academic standards	N	2	163	164
75	FCORDER	E30. Satisfaction with discipline	N	2	165	166
76	FCSUPPRT	E30. Satisfaction with school staff/parent interaction	N	2	167	168
77	FHHOME	E31. Time spent doing homework	N	2	169	170
78	FHWKHRS	E32. Hours spent doing homework	N	2	171	172
79	FHAMOUNT	E33. Adult's feelings about amount of homework assigned	N	2	173	174
80	FHCAMT	E34. Child's feelings about amount of homework	N	2	175	176
81	FHPLACE	E35. Place at home to do homework	N	2	177	178
82	FHCHECKX	E36. Check for homework completion	N	2	179	180
83	FHHELP	E37. Days help with homework	N	2	181	182
84	HSWHOX	H1. Person providing homeschool instruction	N	2	183	184
85	HSTUTOR	H2. Homeschool instruction by tutor	N	2	185	186
86	HSCOOP	H3. Homeschool instruction by homeschool group	N	2	187	188
87	HSCOLL	H4. Homeschool instruction at public or private school or university	N	2	189	190
88	HSPUBLIC	H5. Homeschool type of school - Public	N	2	191	192
89	HSPRIVATE	H5. Homeschool type of school - Private	N	2	193	194
90	HSCOLLEGE	H5. Homeschool type of school - College	N	2	195	196
91	HSSCHR	H6. Hours spent in public or private school	N	2	197	198
92	GRADEEQA	H7. Homeschool grade - equivalent Kindergarten	N	2	199	200
93	GRADEEQB	H7. Homeschool grade - equivalent 1-12	N	2	201	202
94	HSDAYS	H8. Days a week homeschooled	N	2	203	204
95	HSHOURS	H8. Hours a week homeschooled	N	2	205	206
96	HSKACTIV	H9. Participated in activities while homeschooled	N	2	207	208
97	HSSTYL	H10. Homeschool teaching style	N	2	209	210
98	HSCLIBRX	H11. Homeschool curriculum source - library	N	2	211	212
99	HSCHSPUBX	H11. Homeschool curriculum source - homeschool catalog	N	2	213	214
100	HSCEDPUBX	H11. Homeschool curriculum source - educational publisher	N	2	215	216
101	HSCORGX	H11. Homeschool curriculum source - homeschooling organization	N	2	217	218
102	HSCCHURX	H11. Homeschool curriculum source - church	N	2	219	220
103	HSCPUBLX	H11. Homeschool curriculum source - public school	N	2	221	222
104	HSCPRIVX	H11. Homeschool curriculum source - private school	N	2	223	224
105	HSCRELX	H11. Homeschool curriculum source - bookstore	N	2	225	226
106	HSCNETX	H11. Homeschool curriculum source - websites	N	2	227	228
107	HSCOTH	H11. Homeschool curriculum source - other source	N	2	229	230
108	HSCOURS	H12. Family member courses taken for homeschool instruction	N	2	231	232
109	HSINTNET	H13. Internet homeschool instruction	N	2	233	234
110	HSINTPUB	H14. Homeschool instruction provided by - local public school	N	2	235	236
111	HSINTCH	H14. Homeschool instruction provided by - charter school	N	2	237	238
112	HSINTAPB	H14. Homeschool instruction provided by - another public school	N	2	239	240
113	HSINTPRI	H14. Homeschool instruction provided by - private school	N	2	241	242
114	HSINTCOL	H14. Homeschool instruction provided by - university	N	2	243	244
115	HSINTST	H14. Homeschool instruction provided by - State	N	2	245	246
116	HSINTOH	H14. Homeschool instruction provided by - someplace else	N	2	247	248
117	HSFEE	H15. Fee charged for homeschool instruction	N	2	249	250
118	HOMEKX	H16. Homeschooled in Kindergarten	N	2	251	252
119	HOME1	H16. Homeschooled in first grade	N	2	253	254
120	HOME2	H16. Homeschooled in second grade	N	2	255	256

Order	Variable name	Variable label	Format	Length	Start column	End column
121	HOME3	H16. Homeschooled in third grade	N	2	257	258
122	HOME4	H16. Homeschooled in fourth grade	N	2	259	260
123	HOME5	H16. Homeschooled in fifth grade	N	2	261	262
124	HOME6	H16. Homeschooled in sixth grade	N	2	263	264
125	HOME7	H16. Homeschooled in seventh grade	N	2	265	266
126	HOME8	H16. Homeschooled in eighth grade	N	2	267	268
127	HOME9	H16. Homeschooled in ninth grade	N	2	269	270
128	HOME10	H16. Homeschooled in tenth grade	N	2	271	272
129	HOME11	H16. Homeschooled in eleventh grade	N	2	273	274
130	HOME12	H16. Homeschooled in twelfth grade	N	2	275	276
131	HSSAFETYX	H17. Why homeschool - peer pressure	N	2	277	278
132	HSDISSATX	H17. Why homeschool - dissatisfied with instruction	N	2	279	280
133	HSRELGON	H17. Why homeschool - religious instruction	N	2	281	282
134	HSMORAL	H17. Why homeschool - moral instruction	N	2	283	284
135	HSDISABLX	H17. Why homeschool - health problem	N	2	285	286
136	HSILLX	H17. Why homeschool - temporary illness	N	2	287	288
137	HSSPCLNDX	H17. Why homeschool - special needs	N	2	289	290
138	HSALTX	H17. Why homeschool - nontraditional education	N	2	291	292
139	HSOTHERX	H17. Why homeschool - specify	N	2	293	294
140	HSMOSTX	H18. Why homeschool - Most important reason	С	2	295	296
141	HSFUTUREX	H19. Expectations for child's homeschool education	N	2	297	298
142	HSART	H20. Homeschool subject areas taught - Art	N	2	299	300
143	HSMUSIC	H20. Homeschool subject areas taught - Music	N	2	301	302
144	HSALG1	H20. Homeschool subject areas taught - Algebra	N	2	303	304
145	HSALG2	H20. Homeschool subject areas taught - Algebra II	N	2	305	306
146	HSGEOM	H20. Homeschool subject areas taught - Geometry	N	2	307	308
147	HSCALC	H20. Homeschool subject areas taught - Calculus	N	2	309	310
148	HSPROB	H20. Homeschool subject areas taught - Probability	N	2	311	312
149	HSSCIEN	H20. Homeschool subject areas taught - Scientific inquiry	N	2	313	314
150	HSGEOL	H20. Homeschool subject areas taught - Earth science	N	2	315	316
151	HSBIOL	H20. Homeschool subject areas taught - Biology	N	2	317	318
152	HSCHEM	H20. Homeschool subject areas taught - Chemistry	N	2	319	320
153	HSGEOG	H20. Homeschool subject areas taught - Geography	N	2	321	322
154	HSENGL	H20. Homeschool subject areas taught - English	N	2	323	324
155	HSCOMSCI	H20. Homeschool subject areas taught - Computer science	N	2	325	326
156 157	HSHIST HSFOLANG	H20. Homeschool subject areas taught - Social studies	N N	2	327 329	328 330
158	HSASSNX	H20. Homeschool subject areas taught - Foreign language H24. Participate in homeschool group	N	2	329	332
159	HSFREQX	H25. Participate in homeschool group - times	N	2	333	334
160	HSNATL	H26. Member in homeschool organization	N	2	335	336
161	FOSTORY2X	E38/H21. In the past week, times child has been told a story	N	2	337	338
162	FOCRAFTS	E38/H21. In the past week, time spent on arts and crafts	N	2	339	340
163	FOGAMES	E38/H21. In the past week, played board games	N	2	341	342
164	FOBUILDX	E38/H21. In the past week, worked on a project	N	2	343	344
165	FOSPORT	E38/H21. In the past week, time spent playing sports	N	2	345	346
166	FORESPON	E38/H21. In the past week, discussed time management	N	2	347	348
167	FOHISTX	E38/H21. In the past week, discussed ethnic heritage	N	2	349	350
168	FODINNERX	E39/H22. Eaten the evening meal together in the past week	N	2	351	352
169	FOLIBRAYX	E40/H23. Visited a library in the past month	N	2	353	354
170	FOBOOKSTX	E40/H23. Visited a bookstore in the past month	N	2	355	356
171	FOCONCRTX	E40/H23. Gone to a play in the past month	N	2	357	358
172	FOMUSEUMX	E40/H23. Visited an art gallery in the past month	N	2	359	360
173	FOZOOX	E40/H23. Visited a zoo in the past month	N	2	361	362
174	FOGROUPX	E40/H23. Attended a religious event in the past month	N	2	363	364
175	FOSPRTEVX	E40/H23. Attended a sporting event in the past month	N	2	365	366
176	HDHEALTH	E41/H27. Health of child	N	2	367	368
177	HDLEARNX	E42/H28. Learning disability	N	2	369	370
178	HDINTDIS	E42/H28. Intellectual disability	N	2	371	372
179	HDSPEECHX	E42/H28. Speech or language impairment	N	2	373	374
180	HDDISTRBX	E42/H28. Serious emotional disturbance	N	2	375	376

Order	Variable name	Variable label	Format	Length	Start column	End column
181	HDDEAFIMX	E42/H28. Deafness or another hearing impairment	N	2	377	378
182	HDBLINDX	E42/H28. Blindness or another visual impairment	N	2	379	380
183	HDORTHOX	E42/H28. Orthopedic impairment	N	2	381	382
184	HDAUTISMX	E42/H28. Autism	N	2	383	384
185	HDPDDX	E42/H28. Pervasive Developmental Disorder	N	2	385	386
186	HDADDX	E42/H28. Attention Deficit Disorder	N	2	387	388
187	HDDELAYX	E42/H28. Developmental Delay	N	2	389	390
188	HDTRBRAIN	E42/H28. Traumatic Brain Injury	N	2	391	392
189	HDOTHERX	E42/H28. Another health impairment	N	2	393	394
190	HDRECSER	E44/H30. Receiving services for condition	N	2	395	396
191	HDSCHLX	E45/H31. Local school district provides services	N	2	397	398
192	HDGOVTX	E45/H31. Local health or service agency provides services	N	2	399	400
193	HDDOCTORX	E45/H31. Doctor, clinic, or other provider provides services	N	2	401	402
194	HDIEP	E46/H32. Services provided by IEP	N	2	403	404
195	HDDEVIEPX	E47/H33. Develop/change IEP	N	2	405	406
196	HDCOMMUX	E48/H34. Satisfied with service provider communication	N	2	407	408
197	HDTCHR	E48/H34. Satisfied with special needs teacher/therapist	N	2	409	410
198	HDACCOMX	E48/H34. Satisfied with ability to accommodate child's needs	N	2	411	412
199	HDCOMMITX	E48/H34. Satisfied with commitment to help child	N	2	413	414
200	HDSPCLED	E49/H35. Enrollment in special education classes	N	2	415	416
201	HDCGONE	E50/H36. No longer has condition	N	2	417	418
202	HDLEARN	E50/H36. Condition interferes with learning	N	2	419	420
203	HDPLAY	E50/H36. Condition interferes with participation in sports	N N	2 2	421	422
204	HDOUT	E50/H36. Condition interferes with attending school regularly		2	423	424
205 206	HDFRNDS CDOBMM	E50/H36. Condition interferes with making friends E51/H37. Month born	N N	2	425	426 428
207	CDOBWIN			4	427 429	432
207	CPLCBRTH	E51/H37. Year born E52/H38. Country where child born	N N	2	429	432
209	CMOVEAGE	E53/H39. Age of child when first moved to US	N	2	435	436
210	CHISPAN	E54/H40. Child Spanish, Hispanic, or Latino	N	2	437	438
211	CAMIND	E55/H41. Child Spanish, riispanic, of Eathlo	N	2	439	440
212	CASIAN	E55/H41. Child Race - Asian	N	2	441	442
213	CBLACK	E55/H41. Child Race - Black	N	2	443	444
214	CPACI	E55/H41. Child Race - Hawaiian or Pacific Islander	N	2	445	446
215	CWHITE	E55/H41. Child Race - White	N	2	447	448
216	CHISPRM	E55/H41. Child Hispanic - race not reported	N	2	449	450
217	CSEX	E55/H41. Child sex	N	2	451	452
218	CLIVELSW	E56/H42. Where child lived for school year	N	2	453	454
219	CSPEAKX	E57/H43. Language spoken by child at home	N	2	455	456
220	CENGLPRG	E58/H44. Enrolled in language program	N	2	457	458
221	P1REL	E59/H45. Relation of first parent/guardian to child	N	2	459	460
222	P1SEX	E60/H46. First parent/guardian Male/Female	N	2	461	462
223	P1MRSTA	E61/H47. First parent/guardian marital Status	N	2	463	464
224	P1FRLNG	E62/H48. First parent/guardian first language	N	2	465	466
225	P1SPEAK	E63/H49. Language spoken most often at home by first parent/guardian	N	2	467	468
226	P1DIFFI	E64. First parent/guardian difficulty participating in child's school due to language	N	2	469	470
227	P1SCINT	E65. Interpreters at school for first parent/guardian	N	2	471	472
228	P1WRMTL	E66. Written materials at school in first parent/guardian native language	N	2	473	474
229	P1PLCBRTH	E67/H50. Country where first parent/guardian born	N	2	475	476
230	P1AGEMV	E68/H51. Age of first parent/guardian when first moved to US	N	2	477	478
231	P1HISPAN	E69/H52. First parent/guardian of Spanish, Hispanic, or Latino origin	N	2	479	480
232	P1AMIND	E70/H53. First parent/guardian Race - American Indian	N	2	481	482
233	P1ASIAN	E70/H53. First parent/guardian Race - Asian	N	2	483	484
234	P1BLACK	E70/H53. First parent/guardian Race - Black	N	2	485	486
235	P1PACI	E70/H53. First parent/guardian Race - Pacific Islander	N	2	487	488
236	P1WHITE	E70/H53. First parent/guardian Race - White	N	2	489	490
237	P1HISPRM	E70/H53. First parent/guardian Race -Hispanic, race not reported	N	2	491	492
238	P1EDUC	E71/H54. First parent/guardian highest grade level completed	N	2	493	494
239	P1ENRL	E72/H55. First parent/guardian attending school	N	2	495	496
240	P1EMPL	E73/H56. First parent/guardian employment status	N	2	497	498

Order	Variable name	Variable label	Format	Length	Start column	End column
241	P1HRSWK	E74/H57. First parent/guardian hours worked per week	N	2	499	500
242	P1LKWRK	E75/H58. First parent/guardian looking for work	N	2	501	502
243	P1MTHSWRK	E76/H59. First parent/guardian months worked	N	2	503	504
244	P1AGE	E77/H60. First parent/guardian age	N	2	505	506
245	P1AGEPAR	E78/H61. First parent/guardian age when became parent	N	2	507	508
246	P1AGEPARDK	E78/H61. First parent/guardian age when became parent (Don't Know)	N	2	509	510
247	P2GUARD	E79/H62. Second parent/guardian	N	2	511	512
248	P2REL	E80/H63. Relation of second parent/guardian to child	N	2	513	514
249	P2SEX	E81/H64. Second parent/guardian Male/Female	N	2	515	516
250	P2MRSTA	E82/H65. Second parent/guardian marital Status	N	2	517	518
251	P2FRLNG	E83/H66. Second parent/guardian first language	N	2	519	520
252	P2SPEAK	E84/H67. Language spoken most often at home by second parent/guardian	N	2	521	522
253	P2DIFFI	E85. Second parent/guardian difficulty participating in child's school due to language	N	2	523	524
254	P2SCINT	E86. Interpreters at school for second parent/guardian	N	2	525	526
255	P2WRMTL	E87. Written materials at school in second parent/guardian native language	N	2	527	528
256	P2PLCBRTH	E88/H68. Country where second parent/guardian born	N	2	529	530
257	P2AGEMV	E89/H69. Age of second parent/guardian when first moved to US	N	2	531	532
258	P2HISPAN	E90/H70. Second parent/guardian of Spanish, Hispanic, or Latino origin	N	2	533	534
259	P2AMIND	E91/H71. Second parent/guardian Race - American Indian	N	2	535	536
260	P2ASIAN	E91/H71. Second parent/guardian Race - Asian	N	2	537	538
261	P2BLACK	E91/H71. Second parent/guardian Race - Black	N	2	539	540
262	P2PACI	E91/H71. Second parent/guardian Race - Pacific Islander	N	2	541	542
263	P2WHITE	E91/H71. Second parent/guardian Race - White	N 	2	543	544
264	P2HISPRM	E91/H71. Second parent/guardian race - Hispanic, race not reported	N 	2	545	546
265	P2EDUC	E92/H72. Second parent/guardian highest grade level completed	N	2	547	548
266	P2ENRL	E93/H73. Second parent/Guardian attending school	N 	2	549	550
267	P2EMPL	E94/H74. Second parent/guardian employment status	N	2	551	552
268	P2HRSWK	E95/H75. Second parent/guardian hours worked per week	N	2	553	554
269	P2LKWRK	E96/H76. Second parent/guardian looking for work	N	2	555	556
270 271	P2MTHSWRK P2AGE	E97/H77. Second parent/guardian months worked E98/H78. Second parent/guardian age	N N	2 2	557 559	558 560
271	P2AGEPAR	E99/H79. Second parent/guardian age when became parent	N	2	561	562
273	P2AGEPARDK	E99/H79. Second parent/guardian age when became parent (Don't Know)	N	2	563	564
274	HHTOTALX	E100/H80. Total people in household	N	2	565	566
275	HHBROS	E101/H81. Brothers	N	2	567	568
276	HHSISS	E101/H81. Sisters	N	2	569	570
277	HHAUNTS	E101/H81. Aunts	N	2	571	572
278	HHUNCLS	E101/H81, Uncles	N	2	573	574
279	HHGMAS	E101/H81. Grandmothers	N	2	575	576
280	HHGPAS	E101/H81. Grandfathers	N	2	577	578
281	HHCSNS	E101/H81. Cousins	N	2	579	580
282	HHPRTNRS	E101/H81. Parent's girlfriend/boyfriend/partner	N	2	581	582
283	HHORELS	E101/H81. Other relatives	N	2	583	584
284	HHONRELS	E101/H81. Other non-relatives	N	2	585	586
285	RELATION	E102/H82. Respondent relation to child	N	2	587	588
286	HHENGLISH	E103/H83. Language spoken at home - English	N	2	589	590
287	HHSPANISH	E103/H83. Language spoken at home - Spanish	N	2	591	592
288	HHFRENCH	E103/H83. Language spoken at home - French	N	2	593	594
289	HHCHINESE	E103/H83. Language spoken at home - Chinese	N	2	595	596
290	HHOTHLANG	E103/H83. Language spoken at home - Other	N	2	597	598
291	HWELFTAN	E104/H84. Received TANF in past 12 months	N	2	599	600
292	HWELFST	E104/H84. Received Welfare or family assistance in past 12 months	N	2	601	602
293	HWIC	E104/H84. Received WIC in past 12 months	N	2	603	604
294	HFOODST	E104/H84. Received Food stamps in past 12 months	N	2	605	606
295	HMEDICAID	E104/H84. Received Medicaid in past 12 months	N	2	607	608
296	HCHIP	E104/H84. Received CHIP in past 12 months	N	2	609	610
297	HSECN8	E104/H84. Received Section 8 in past 12 months	N	2	611	612
298	TTLHHINC	E105/H85. Total income	N	2	613	614
299	YRSADDR	E106/H86. Years at address	N	2	615	616
300	OWNRNTHB	E107/H87. Own/rent house	N	2	617	618

Order	Variable name	Variable label	Format	Length	Start column	End column
301	HVINTRNT	E109/H89. Internet access	N	2	619	620
302	DISABLTYX	D-Child currently has disability	N	2	621	622
303	DISBLTY2X	D-Child has disability including autism, add, and pdd	N	2	623	624
304	PAR1EDUC	D-Educational attainment of child's parent or guardian	N	2	625	626
305	PAR1EMPL	D-Work status of child's parent or guardian	N	2	627	628
306	PAR1FTFY	D-Parent 1 or Guardian 1 works full time	N	2	629	630
307	PAR1TYPE	D-Specific relationship of parent/guardian 1 to child	N	2	631	632
308	PAR2EDUC	D-Educational attainment of child's parent 2 or guardian 2	N	2	633	634
309	PAR2EMPL	D-Work status of child's parent 2 or guardian 2	N	2	635	636
310	PAR2FTFY	D-Parent 2 or Guardian 2 works full time	N	2	637	638
311	PAR2TYPE	D-Specific relationship of parent/guardian 2 to child	N	2	639	640
312	HHPARNX	D-Parents in household	N	2	641	642
313	HHPARN12X	D-Parents in household including same sex parents/partners	N	2	643	644
314	NUMSIBSX	D-Number of child's siblings	N	2	645	646
315	FAMILYX	D-Family type	N	2	647	648
316	FAMILY12X	D-Family type including same sex parents/partners	N	2	649	650
317	HHUNDR6X	D-Number of household members younger than age 6	N	2	651	652
318	HHUNDR10X	D-Number of household members younger than age 10	N	2	653	654
319	HHUNDR16X	D-Number of household members younger than age 16	N	2	655	656
320	HHUNDR18X	D-Number of household members younger than age 18	N	2	657	658
321	HHUNID	D-Other household member, not identified	N	2	659	660
322	LANGUAGEX	D-English spoken most by parents including same sex partners	N	2	661	662
323	PARGRADEX	D-Parent/guardian highest education	N	2	663	664
324	RACEETHN	D-Race and ethnicity of child	N	2	665	666
325	RACEETH2	D-Detailed race and ethnicity of child	N	2	667	668
326	ALLGRADEX	D-Child's enrollment and grade equivalent	С	2	669	670
327	CENREG	D-Census region where child lives	N	2	671	672
328	ZIP18PO2	D-Percent of families in zipcode with children <18 below the poverty line	N	2	673	674
329	ZIPBLHI2	D-Percent of persons in zipcode who were Black or Hispanic	N	2	675	676
330	ZIPLOCL	D-Zip code classification by community type	N	2	677	678
331	S12CHART	D-School charter, magnet/regular public, other on CCD	N	2	679	680
332	S12NUMST	D-Total school enrollment of students on CCD/PSS	N	2	681	682
333	S12PBPV	D-School is public or private on CCD/PSS	N	2	683	684
334	S12SAMSX	D-Coeducational status of school on PSS	N	2	685	686
335	S12TITL1	D-Schoolwide title 1 on CCD	N	2	687	688
336	S12TYPE	D-Type of school on CCD/PSS	N	2	689	690
337	SCHLGRAD	D-Classification of child's school	N	2	691	692
338	ENGLSPAN	D-Questionnaire in English or Spanish	N	2	693	694
339	AGE2011	D-Age of child as of Dec 31, 2011	N	2	695	696
340	CHAGE1	D-Age of 1st nonsampled child	N	2	697	698
341	CHAGE2	D-Age of 2nd nonsampled child	N	2	699	700
342	CHAGE3	D-Age of 3rd nonsampled child	N	2	701	702
343	CHAGE4	D-Age of 4th nonsampled child	N	2	703	704
344	CHSEX1	D-Sex of 1st nonsampled child	N	2	705	706
345	CHSEX2	D-Sex of 2nd nonsampled child	N	2	707	708
346	CHSEX3	D-Sex of 3rd nonsampled child	N	2	709	710
347	CHSEX4	D-Sex of 4th nonsampled child	N	2	711	712
348	CHENRL1	D-Enrollment status of 1st nonsampled child	N	2	713	714
349	CHENRL2	D-Enrollment status of 2nd nonsampled child	N	2	715	716
350	CHENRL3	D-Enrollment status of 3rd nonsampled child	N	2	717	718
351	CHENRL4	D-Enrollment status of 4th nonsampled child	N	2	719	720
352	CHGRD1	D-Grade of 1st nonsampled child	N	2	721	722
353	CHGRD2	D-Grade of 2nd nonsampled child	N	2	723	724
354	CHGRD3	D-Grade of 3rd nonsampled child	N	2	725	726
355	CHGRD4	D-Grade of 4th nonsampled child	N	2	727	728
356	PPSU	PSU for Taylor Series Var Est	N	6	729	734
357	PSTRATUM	Stratum for Taylor Series Var Est	N	1	735	735
358	FPWT	FINAL INTV WEIGHT	N	10.3	736	745
359	FPWT1	FINAL INTV REPLICATE WEIGHT, FPWT1	N	10.3	746	755
360	FPWT2	FINAL INTV REPLICATE WEIGHT, FPWT2	N	10.3	756	765

Order	Variable name	Variable label	Format	Length	Start column	End column
361	FPWT3	FINAL INTV REPLICATE WEIGHT, FPWT3	N	10.3	766	775
362	FPWT4	FINAL INTV REPLICATE WEIGHT, FPWT4	N	10.3	776	785
363	FPWT5	FINAL INTV REPLICATE WEIGHT, FPWT5	N	10.3	786	795
364	FPWT6	FINAL INTV REPLICATE WEIGHT, FPWT6	N	10.3	796	805
365	FPWT7	FINAL INTV REPLICATE WEIGHT, FPWT7	N	10.3	806	815
366	FPWT8	FINAL INTV REPLICATE WEIGHT, FPWT8	N	10.3	816	825
367	FPWT9	FINAL INTV REPLICATE WEIGHT, FPWT9	N	10.3	826	835
368	FPWT10	FINAL INTV REPLICATE WEIGHT, FPWT10	N	10.3	836	845
369	FPWT11	FINAL INTV REPLICATE WEIGHT, FPWT11	N	10.3	846	855
370	FPWT12	FINAL INTV REPLICATE WEIGHT, FPWT12	N	10.3	856	865
371	FPWT13	FINAL INTV REPLICATE WEIGHT, FPWT13	N	10.3	866	875
372	FPWT14	FINAL INTV REPLICATE WEIGHT, FPWT14	N	10.3	876	885
373	FPWT15	FINAL INTV REPLICATE WEIGHT, FPWT15	N	10.3	886	895
374	FPWT16	FINAL INTV REPLICATE WEIGHT, FPWT16	N	10.3	896	905
375	FPWT17	FINAL INTV REPLICATE WEIGHT, FPWT17	N	10.3	906	915
376	FPWT18	FINAL INTV REPLICATE WEIGHT, FPWT18	N	10.3	916	925
377	FPWT19	FINAL INTV REPLICATE WEIGHT, FPWT19	N	10.3	926	935
378	FPWT20	FINAL INTV REPLICATE WEIGHT, FPWT20	N	10.3	936	945
379	FPWT21	FINAL INTV REPLICATE WEIGHT, FPWT21	N	10.3	946	955
380	FPWT22	FINAL INTV REPLICATE WEIGHT, FPWT22	N	10.3	956	965
381	FPWT23	FINAL INTV REPLICATE WEIGHT, FPWT23	N	10.3	966	975
382	FPWT24	FINAL INTV REPLICATE WEIGHT, FPWT24	N	10.3	976	985
383	FPWT25	FINAL INTV REPLICATE WEIGHT, FPWT25	N	10.3	986	995
384	FPWT26	FINAL INTV REPLICATE WEIGHT, FPWT26	N	10.3	996	1005
385	FPWT27	FINAL INTV REPLICATE WEIGHT, FPWT27	N	10.3	1006	1015
386	FPWT28	FINAL INTV REPLICATE WEIGHT, FPWT28	N	10.3	1016	1025
387	FPWT29	FINAL INTV REPLICATE WEIGHT, FPWT29	N	10.3	1026	1035
388	FPWT30	FINAL INTV REPLICATE WEIGHT, FPWT30	N	10.3	1036	1045
389	FPWT31	FINAL INTV REPLICATE WEIGHT, FPWT31	N	10.3	1046	1055
390	FPWT32	FINAL INTV REPLICATE WEIGHT, FPWT32	N	10.3	1056	1065
391	FPWT33	FINAL INTV REPLICATE WEIGHT, FPWT33	N	10.3	1066	1075
392	FPWT34	FINAL INTV REPLICATE WEIGHT, FPWT34	N	10.3	1076	1085
393	FPWT35	FINAL INTV REPLICATE WEIGHT, FPWT35	N	10.3	1086	1095
394	FPWT36	FINAL INTV REPLICATE WEIGHT, FPWT36	N	10.3	1096	1105
395	FPWT37	FINAL INTV REPLICATE WEIGHT, FPWT37	N	10.3	1106	1115
396	FPWT38	FINAL INTV REPLICATE WEIGHT, FPWT38	N	10.3	1116	1125
397	FPWT39	FINAL INTV REPLICATE WEIGHT, FPWT39	N	10.3	1126	1135
398	FPWT40	FINAL INTV REPLICATE WEIGHT, FPWT40	N	10.3	1136	1145
399	FPWT41	FINAL INTV REPLICATE WEIGHT, FPWT41	N	10.3	1146	1155
400	FPWT42	FINAL INTV REPLICATE WEIGHT, FPWT42	N	10.3	1156	1165
401	FPWT43	FINAL INTV REPLICATE WEIGHT, FPWT43	N	10.3	1166	1175
402	FPWT44	FINAL INTV REPLICATE WEIGHT, FPWT44	N	10.3	1176	1185
403	FPWT45	FINAL INTV REPLICATE WEIGHT, FPWT45	N	10.3	1186	1195
104	FPWT46	FINAL INTV REPLICATE WEIGHT, FPWT46	N	10.3	1196	1205
405	FPWT47	FINAL INTV REPLICATE WEIGHT, FPWT47	N	10.3	1206	1215
406	FPWT48	FINAL INTV REPLICATE WEIGHT, FPWT48	N	10.3	1216	1225
407	FPWT49	FINAL INTV REPLICATE WEIGHT, FPWT49	N	10.3	1226	1235
408	FPWT50	FINAL INTV REPLICATE WEIGHT, FPWT50	N	10.3	1236	1245
409	FPWT51	FINAL INTV REPLICATE WEIGHT, FPWT51	N	10.3	1246	1255
110	FPWT52	FINAL INTV REPLICATE WEIGHT, FPWT52	N	10.3	1256	1265
111	FPWT53	FINAL INTV REPLICATE WEIGHT, FPWT53	N	10.3	1266	1275
112	FPWT54	FINAL INTV REPLICATE WEIGHT, FPWT54	N	10.3	1276	1285
413	FPWT55	FINAL INTV REPLICATE WEIGHT, FPWT55	N	10.3	1286	1295
414	FPWT56	FINAL INTV REPLICATE WEIGHT, FPWT56	N	10.3	1296	1305
415	FPWT57	FINAL INTV REPLICATE WEIGHT, FPWT57	N 	10.3	1306	1315
416	FPWT58	FINAL INTV REPLICATE WEIGHT, FPWT58	N 	10.3	1316	1325
117	FPWT59	FINAL INTV REPLICATE WEIGHT, FPWT59	N	10.3	1326	1335
418	FPWT60	FINAL INTV REPLICATE WEIGHT, FPWT60	N 	10.3	1336	1345
419	FPWT61	FINAL INTV REPLICATE WEIGHT, FPWT61	N	10.3	1346	1355
420	FPWT62	FINAL INTV REPLICATE WEIGHT, FPWT62	N	10.3	1356	1365

Order	Variable name	Variable label	Format	Length	Start column	End column
421	FPWT63	FINAL INTV REPLICATE WEIGHT, FPWT63	N	10.3	1366	1375
122	FPWT64	FINAL INTV REPLICATE WEIGHT, FPWT64	N	10.3	1376	1385
423	FPWT65	FINAL INTV REPLICATE WEIGHT, FPWT65	N	10.3	1386	1395
424	FPWT66	FINAL INTV REPLICATE WEIGHT, FPWT66	N	10.3	1396	1405
425	FPWT67	FINAL INTV REPLICATE WEIGHT, FPWT67	N	10.3	1406	1415
426	FPWT68	FINAL INTV REPLICATE WEIGHT, FPWT68	N	10.3	1416	1425
427	FPWT69	FINAL INTV REPLICATE WEIGHT, FPWT69	N	10.3	1426	1435
428	FPWT70	FINAL INTV REPLICATE WEIGHT, FPWT70	N	10.3	1436	1445
429	FPWT71	FINAL INTV REPLICATE WEIGHT, FPWT71	N	10.3	1446	1455
430	FPWT72	FINAL INTV REPLICATE WEIGHT, FPWT72	N	10.3	1456	1465
431	FPWT73	FINAL INTV REPLICATE WEIGHT, FPWT73	N	10.3	1466	1475
432	FPWT74	FINAL INTV REPLICATE WEIGHT, FPWT74	N	10.3	1476	1485
433	FPWT75	FINAL INTV REPLICATE WEIGHT, FPWT75	N	10.3	1486	1495
434	FPWT76	FINAL INTV REPLICATE WEIGHT, FPWT76	N	10.3	1496	1505
435	FPWT77	FINAL INTV REPLICATE WEIGHT, FPWT77	N	10.3	1506	1515
436	FPWT78	FINAL INTV REPLICATE WEIGHT, FPWT78	N	10.3	1516	1525
437	FPWT79	FINAL INTV REPLICATE WEIGHT, FPWT79	N	10.3	1526	1535
438	FPWT80	FINAL INTV REPLICATE WEIGHT, FPWT80	N	10.3	1536	1545
439	F_GRADEAT	IMPUTATION FLAG FOR GRADEAT	N	2	1546	1547
440	F_GRADEBT	IMPUTATION FLAG FOR GRADEBT	N	2	1548	1549
441	F_HOMESCHLX	IMPUTATION FLAG FOR HOMESCHLX	N	2	1550	1551
442	F_SCPUBPRI	IMPUTATION FLAG FOR SCPUBPRI	N	2	1552	1553
443	F_SCHOICEX	IMPUTATION FLAG FOR SCHOICEX	N	2	1554	1555
444	F_SCHRTSCHL	IMPUTATION FLAG FOR SCHRTSCHL	N	2	1556	1557
445	F_SNEIGHBRX	IMPUTATION FLAG FOR SNEIGHBRX	N	2	1558	1559
446	F_SPUBCHOIX	IMPUTATION FLAG FOR SPUBCHOIX	N	2	1560	1561
447	F_SCONSIDR	IMPUTATION FLAG FOR SCONSIDR	N	2	1562	1563
448	F_SPERFORM	IMPUTATION FLAG FOR SPERFORM	N	2	1564	1565
449	F_S1STCHOI	IMPUTATION FLAG FOR S1STCHOI	N	2	1566	1567
450	F_SSAMSC	IMPUTATION FLAG FOR SSAMSC	N	2	1568	1569
451	F_SMVMTH	IMPUTATION FLAG FOR SMVMTH	N	2	1570	1571
452	F_SEENJOY	IMPUTATION FLAG FOR SEENJOY	N	2	1572	1573
453	F_SEGRADES	IMPUTATION FLAG FOR SEGRADES	N	2	1574	1575
454	F_SEADPLCX	IMPUTATION FLAG FOR SEADPLCX	N	2	1576	1577
455	F_SEBEHAVX	IMPUTATION FLAG FOR SEBEHAVX	N	2	1578	1579
456	F_SESCHWRK	IMPUTATION FLAG FOR SESCHWRK	N	2	1580	1581
457	F_SEGBEHAV	IMPUTATION FLAG FOR SEGBEHAV	N	2	1582	1583
458	F_SEGWORK	IMPUTATION FLAG FOR SEGWORK	N	2	1584	1585
459	F_SEABSNT	IMPUTATION FLAG FOR SEABSNT	N	2	1586	1587
460	F_SEREPEAT	IMPUTATION FLAG FOR SEREPEAT	N	2	1588	1589
461	F_SEREPTK	IMPUTATION FLAG FOR SEREPTK	N	2	1590	1591
462	F_SEREPT1	IMPUTATION FLAG FOR SEREPT1	N	2	1592	1593
463	F_SEREPT2	IMPUTATION FLAG FOR SEREPT2	N	2	1594	1595
464	F_SEREPT3	IMPUTATION FLAG FOR SEREPT3	N	2	1596	1597
465	F_SEREPT4	IMPUTATION FLAG FOR SEREPT4	N	2	1598	1599
466	F_SEREPT5	IMPUTATION FLAG FOR SEREPT5	N	2	1600	1601
467	F_SEREPT6	IMPUTATION FLAG FOR SEREPT6	N	2	1602	1603
468	F_SEREPT7	IMPUTATION FLAG FOR SEREPT7	N	2	1604	1605
469	F_SEREPT8	IMPUTATION FLAG FOR SEREPT8	N	2	1606	1607
470	F_SEREPT9	IMPUTATION FLAG FOR SEREPT9	N	2	1608	1609
471	F_SEREPT10	IMPUTATION FLAG FOR SEREPT10	N	2	1610	1611
472	F_SEREPT11	IMPUTATION FLAG FOR SEREPT11	N	2	1612	1613
473	F_SEREPT12	IMPUTATION FLAG FOR SEREPT12	N	2	1614	1615
474	F_SESUSOUT	IMPUTATION FLAG FOR SESUSOUT	N	2	1616	1617
475	F_SESUSPIN	IMPUTATION FLAG FOR SESUSPIN	N	2	1618	1619
476	F_SEEXPEL	IMPUTATION FLAG FOR SEEXPEL	N	2	1620	1621
477	F_SEFUTUREX	IMPUTATION FLAG FOR SEFUTUREX	N	2	1622	1623
478	F_SEGRADEQ	IMPUTATION FLAG FOR SEGRADEQ	N	2	1624	1625
479	F_SNETCRS	IMPUTATION FLAG FOR SNETCRS	N	2	1626	1627
480	F_SPBSCH	IMPUTATION FLAG FOR SPBSCH	N	2	1628	1629

Order	Variable name	Variable label	Format	Length	column	column
481	F_SCHRTR	IMPUTATION FLAG FOR SCHRTR	N	2	1630	1631
182	F_SAPBSCH	IMPUTATION FLAG FOR SAPBSCH	N	2	1632	1633
183	F_SPRIVSCH	IMPUTATION FLAG FOR SPRIVSCH	N	2	1634	1635
184	F_SUNIVSCH	IMPUTATION FLAG FOR SUNIVSCH	N	2	1636	1637
185	F_SOTHSCH	IMPUTATION FLAG FOR SOTHSCH	N	2	1638	1639
186	F_SINSTFEE	IMPUTATION FLAG FOR SINSTFEE	N	2	1640	1641
187	F_FSSPORTX	IMPUTATION FLAG FOR FSSPORTX	N	2	1642	1643
188	F_FSVOL	IMPUTATION FLAG FOR FSVOL	N	2	1644	1645
189	F_FSMTNG	IMPUTATION FLAG FOR FSMTNG	N	2	1646	1647
190	F_FSPTMTNG	IMPUTATION FLAG FOR FSPTMTNG	N	2	1648	1649
191	F_FSATCNFN	IMPUTATION FLAG FOR FSATCNFN	N	2	1650	1651
192	F_FSFUNDRS	IMPUTATION FLAG FOR FSFUNDRS	N	2	1652	1653
193	F_FSCOMMTE	IMPUTATION FLAG FOR FSCOMMTE	N	2	1654	1655
194	F_FSCOUNSLR	IMPUTATION FLAG FOR FSCOUNSLR	N	2	1656	1657
495	F_FSFREQ	IMPUTATION FLAG FOR FSFREQ	N	2	1658	1659
496	F_FSNOTESX	IMPUTATION FLAG FOR FSNOTESX	N	2	1660	1661
197	F_FSMEMOSX	IMPUTATION FLAG FOR FSMEMOSX	N	2	1662	1663
198	F_FSPHONCHX	IMPUTATION FLAG FOR FSPHONCHX	N	2	1664	1665
199	F_FSSPPERF	IMPUTATION FLAG FOR FSSPPERF	N	2	1666	1667
500	F_FSSPHW	IMPUTATION FLAG FOR FSSPHW	N	2	1668	1669
501	F_FSSPCOUR	IMPUTATION FLAG FOR FSSPCOUR	N	2	1670	1671
502	F_FSSPROLE	IMPUTATION FLAG FOR FSSPROLE	N	2	1672	1673
503	F_FSSPCOLL	IMPUTATION FLAG FOR FSSPCOLL	N	2	1674	1675
504	F_FCSCHOOL	IMPUTATION FLAG FOR FCSCHOOL	N	2	1676	1677
505	F_FCTEACHR	IMPUTATION FLAG FOR FCTEACHR	N	2	1678	1679
506	F_FCSTDS	IMPUTATION FLAG FOR FCSTDS	N	2	1680	1681
507	F_FCORDER	IMPUTATION FLAG FOR FCORDER	N	2	1682	1683
808	F_FCSUPPRT	IMPUTATION FLAG FOR FCSUPPRT	N	2	1684	1685
09	F_FHHOME	IMPUTATION FLAG FOR FHHOME	N	2	1686	1687
10	F_FHWKHRS	IMPUTATION FLAG FOR FHWKHRS	N	2	1688	1689
511	F_FHAMOUNT	IMPUTATION FLAG FOR FHAMOUNT	N	2	1690	1691
12	F_FHCAMT	IMPUTATION FLAG FOR FHCAMT	N	2	1692	1693
13	F_FHPLACE	IMPUTATION FLAG FOR FHPLACE	N	2	1694	1695
14	F FHCHECKX	IMPUTATION FLAG FOR FHCHECKX	N	2	1696	1697
15	F_FHHELP	IMPUTATION FLAG FOR FHHELP	N	2	1698	1699
16	F FOSTORY2X	IMPUTATION FLAG FOR FOSTORY2X	N	2	1700	1701
17	F FOCRAFTS	IMPUTATION FLAG FOR FOCRAFTS	N	2	1702	1703
518	F FOGAMES	IMPUTATION FLAG FOR FOGAMES	N	2	1704	1705
19	F_FOBUILDX	IMPUTATION FLAG FOR FOBUILDX	N	2	1706	1707
20	F_FOSPORT	IMPUTATION FLAG FOR FOSPORT	N	2	1708	1709
21	F_FORESPON	IMPUTATION FLAG FOR FORESPON	N	2	1710	1711
522	F FOHISTX	IMPUTATION FLAG FOR FOHISTX	N	2	1712	1713
23	F FODINNERX	IMPUTATION FLAG FOR FODINNERX	N	2	1714	1715
24	F_FOLIBRAYX	IMPUTATION FLAG FOR FOLIBRAYX	N	2	1716	1717
25	F_FOBOOKSTX	IMPUTATION FLAG FOR FOBOOKSTX	N	2	1718	1719
26	F_FOCONCRTX	IMPUTATION FLAG FOR FOCONCRTX	N	2	1720	1721
27	F FOMUSEUMX	IMPUTATION FLAG FOR FOMUSEUMX	N	2	1722	1723
28	F_FOZOOX	IMPUTATION FLAG FOR FOZOOX	N	2	1724	1725
29	F_FOGROUPX	IMPUTATION FLAG FOR FOGROUPX	N	2	1726	1727
30	F_FOSPRTEVX	IMPUTATION FLAG FOR FOSPRTEVX	N	2	1728	1729
31	F_HSWHOX	IMPUTATION FLAG FOR HSWHOX	N N	2	1730	1731
32	F HSTUTOR	IMPUTATION FLAG FOR HSTUTOR	N	2	1732	1733
33	F HSCOOP	IMPUTATION FLAG FOR HSCOOP	N	2	1732	1735
34	F HSCOLL	IMPUTATION FLAG FOR HSCOLL	N	2	1734	1737
35	F_HSPUBLIC	IMPUTATION FLAG FOR HSPUBLIC	N N	2	1738	1737
	_					
36 37	F_HSPRIVATE	IMPUTATION FLAG FOR HSCOLLEGE	N	2	1740 1742	1741
37 20	F_HSCOLLEGE	IMPUTATION FLAG FOR HSCOLLEGE	N	2	1742	1743
						1745
	_					1747 1749
538 539 540	F_HSSCHR F_GRADEEQA F_GRADEEQB	IMPUTATION FLAG FOR HSSCHR IMPUTATION FLAG FOR GRADEEQA IMPUTATION FLAG FOR GRADEEQB	N N N	2 2 2	1744 1746 1748	

Order	Variable name	Variable label	Format	Length	Start column	End column
541	F_HSDAYS	IMPUTATION FLAG FOR HSDAYS	N	2	1750	1751
542	F_HSHOURS	IMPUTATION FLAG FOR HSHOURS	N	2	1752	1753
543	F_HSKACTIV	IMPUTATION FLAG FOR HSKACTIV	N	2	1754	1755
544	F_HSSTYL	IMPUTATION FLAG FOR HSSTYL	N	2	1756	1757
545	F_HSCLIBRX	IMPUTATION FLAG FOR HSCLIBRX	N	2	1758	1759
546	F_HSCHSPUBX	IMPUTATION FLAG FOR HSCHSPUBX	N	2	1760	1761
547	F_HSCEDPUBX	IMPUTATION FLAG FOR HSCEDPUBX	N	2	1762	1763
548	F_HSCORGX	IMPUTATION FLAG FOR HSCORGX	N	2	1764	1765
549	F_HSCCHURX	IMPUTATION FLAG FOR HSCCHURX	N	2	1766	1767
550	F_HSCPUBLX	IMPUTATION FLAG FOR HSCPUBLX	N	2	1768	1769
551	F_HSCPRIVX	IMPUTATION FLAG FOR HSCPRIVX	N	2	1770	1771
552	F_HSCRELX	IMPUTATION FLAG FOR HSCRELX	N	2	1772	1773
553	F_HSCNETX	IMPUTATION FLAG FOR HSCNETX	N	2	1774	1775
554	F_HSCOTH	IMPUTATION FLAG FOR HSCOTH	N	2	1776	1777
555	F_HSCOURS	IMPUTATION FLAG FOR HSCOURS	N	2	1778	1779
556	F_HSINTNET	IMPUTATION FLAG FOR HSINTNET	N	2	1780	1781
557	F_HSINTPUB	IMPUTATION FLAG FOR HSINTPUB	N	2	1782	1783
558	F_HSINTCH	IMPUTATION FLAG FOR HSINTCH	N	2	1784	1785
559	F_HSINTAPB	IMPUTATION FLAG FOR HSINTAPB	N	2	1786	1787
560	F_HSINTPRI	IMPUTATION FLAG FOR HSINTPRI	N	2	1788	1789
561	F_HSINTCOL	IMPUTATION FLAG FOR HSINTCOL	N	2	1790	1791
562	F_HSINTST	IMPUTATION FLAG FOR HSINTST	N	2	1792	1793
563	F_HSINTOH	IMPUTATION FLAG FOR HSINTOH	N	2	1794	1795
564	F_HSFEE	IMPUTATION FLAG FOR HSFEE	N	2	1796	1797
565	F_HOMEKX	IMPUTATION FLAG FOR HOMEKX	N	2	1798	1799
566	F_HOME1	IMPUTATION FLAG FOR HOME1	N	2	1800	1801
567	F_HOME2	IMPUTATION FLAG FOR HOME2	N	2	1802	1803
568	F_HOME3	IMPUTATION FLAG FOR HOME3	N	2	1804	1805
569	F_HOME4	IMPUTATION FLAG FOR HOME4	N	2	1806	1807
570	F_HOME5	IMPUTATION FLAG FOR HOME5	N	2	1808	1809
571	F_HOME6	IMPUTATION FLAG FOR HOME6	N	2	1810	1811
572	F_HOME7	IMPUTATION FLAG FOR HOME7	N	2	1812	1813
573	F_HOME8	IMPUTATION FLAG FOR HOME8	N	2	1814	1815
574	F_HOME9	IMPUTATION FLAG FOR HOME9	N	2	1816	1817
575	F_HOME10	IMPUTATION FLAG FOR HOME10	N	2	1818	1819
576	F_HOME11	IMPUTATION FLAG FOR HOME11	N	2	1820	1821
577	F_HOME12	IMPUTATION FLAG FOR HOME12	N	2	1822	1823
578	F_HSSAFETYX	IMPUTATION FLAG FOR HSSAFETYX	N	2	1824	1825
579	F_HSDISSATX	IMPUTATION FLAG FOR HSDISSATX	N	2	1826	1827
580	F_HSRELGON	IMPUTATION FLAG FOR HSRELGON	N	2	1828	1829
581	F_HSMORAL	IMPUTATION FLAG FOR HONDRARL	N	2	1830	1831
582	F_HSDISABLX	IMPUTATION FLAG FOR HSDISABLX	N	2	1832	1833
583	F_HSILLX	IMPUTATION FLAG FOR HISBLIX	N	2	1834	1835
584	F_HSSPCLNDX	IMPUTATION FLAG FOR HOSPICIALTY	N	2	1836	1837
585 - 0 c	F_HSALTX	IMPUTATION FLAG FOR HSOTUFDY	N	2	1838	1839
586	F_HSOTHERX	IMPUTATION FLAG FOR HISOTHERX	N	2	1840	1841
587 500	F_HSMOSTX	IMPUTATION FLAG FOR HISTORY	N	2	1842	1843
588 = 00	F_HSFUTUREX	IMPUTATION FLAG FOR HSART	N N	2	1844	1845 1847
589	F_HSART	IMPUTATION FLAG FOR HSART		2	1846	
590 =01	F_HSMUSIC	IMPUTATION FLAG FOR HSMUSIC IMPUTATION FLAG FOR HSALG1	N N	2	1848 1850	1849 1851
591 =02	F_HSALG1					
592 593	F_HSALG2 F_HSGEOM	IMPUTATION FLAG FOR HSALG2 IMPUTATION FLAG FOR HSGEOM	N N	2	1852 1854	1853 1855
594	F_HSGEOM F HSCALC	IMPUTATION FLAG FOR ASGEOM IMPUTATION FLAG FOR HSCALC	N N	2	1856	1857
595	F_HSPROB	IMPUTATION FLAG FOR HSPROB	N N	2	1858	1859
	_		N N	2	1860	1861
596 597	F_HSSCIEN F_HSGEOL	IMPUTATION FLAG FOR HSSCIEN	N N	2	1862	1863
	F_HSGEOL	IMPUTATION FLAG FOR HSBIOL				
598 599	F_HSBIOL F_HSCHEM	IMPUTATION FLAG FOR HSCHEM	N	2	1864 1866	1865 1867
	I. LIOCUEIN	IMPUTATION FLAG FOR HSCHEM	N		1000	1867

Order	Variable name	Variable label	Format	Length	Start column	End column
601	F_HSENGL	IMPUTATION FLAG FOR HSENGL	N	2	1870	1871
602	F_HSCOMSCI	IMPUTATION FLAG FOR HSCOMSCI	N	2	1872	1873
503	F_HSHIST	IMPUTATION FLAG FOR HSHIST	N	2	1874	1875
604	F_HSFOLANG	IMPUTATION FLAG FOR HSFOLANG	N	2	1876	1877
605	F_HSASSNX	IMPUTATION FLAG FOR HSASSNX	N	2	1878	1879
606	F_HSFREQX	IMPUTATION FLAG FOR HSFREQX	N	2	1880	1881
607	F_HSNATL	IMPUTATION FLAG FOR HSNATL	N	2	1882	1883
808	F_HDHEALTH	IMPUTATION FLAG FOR HDHEALTH	N	2	1884	1885
609	F_HDRECSER	IMPUTATION FLAG FOR HDRECSER	N	2	1886	1887
310	F_HDSCHLX	IMPUTATION FLAG FOR HDSCHLX	N	2	1888	1889
311	F_HDGOVTX	IMPUTATION FLAG FOR HDGOVTX	N	2	1890	1891
312	F_HDDOCTORX	IMPUTATION FLAG FOR HDDOCTORX	N	2	1892	1893
613	F_HDIEP	IMPUTATION FLAG FOR HDIEP	N	2	1894	1895
614	F_HDDEVIEPX	IMPUTATION FLAG FOR HDDEVIEPX	N	2	1896	1897
315	F_HDCOMMUX	IMPUTATION FLAG FOR HDCOMMUX	N	2	1898	1899
316	F_HDTCHR	IMPUTATION FLAG FOR HDTCHR	N	2	1900	1901
617	F_HDACCOMX	IMPUTATION FLAG FOR HDACCOMX	N	2	1902	1903
618	F_HDCOMMITX	IMPUTATION FLAG FOR HDCOMMITX	N	2	1904	1905
619	F_HDSPCLED	IMPUTATION FLAG FOR HDSPCLED	N	2	1906	1907
620	F_HDCGONE	IMPUTATION FLAG FOR HDCGONE	N	2	1908	1909
621	F_HDLEARN	IMPUTATION FLAG FOR HDLEARN	N	2	1910	1911
522	F_HDPLAY	IMPUTATION FLAG FOR HDPLAY	N	2	1912	1913
623	F_HDOUT	IMPUTATION FLAG FOR HDOUT	N	2	1914	1915
624	F_HDFRNDS	IMPUTATION FLAG FOR HDFRNDS	N	2	1916	1917
625	F_CDOBMM	IMPUTATION FLAG FOR CDOBMM	N	2	1918	1919
626	F_CDOBYY	IMPUTATION FLAG FOR CDOBYY	N	2	1920	1921
527	F_CPLCBRTH	IMPUTATION FLAG FOR CPLCBRTH	N	2	1922	1923
528	F_CMOVEAGE	IMPUTATION FLAG FOR CMOVEAGE	N	2	1924	1925
629	F_CHISPAN	IMPUTATION FLAG FOR CHISPAN	N	2	1926	1927
30	F_CAMIND	IMPUTATION FLAG FOR CAMIND	N	2	1928	1929
31	F_CASIAN	IMPUTATION FLAG FOR CASIAN	N	2	1930	1931
32	F_CBLACK	IMPUTATION FLAG FOR CBLACK	N	2	1932	1933
333	F_CPACI	IMPUTATION FLAG FOR CPACI	N	2	1934	1935
634	F_CWHITE	IMPUTATION FLAG FOR CWHITE	N	2	1936	1937
35	F_CSEX	IMPUTATION FLAG FOR CSEX	N	2	1938	1939
36	F_CLIVELSW	IMPUTATION FLAG FOR CLIVELSW	N	2	1940	1941
637	F_CSPEAKX	IMPUTATION FLAG FOR CSPEAKX	N	2	1942	1943
638	F_CENGLPRG	IMPUTATION FLAG FOR CENGLPRG	N	2	1944	1945
639	F_P1REL	IMPUTATION FLAG FOR P1REL	N	2	1946	1947
640	F_P1SEX	IMPUTATION FLAG FOR P1SEX	N	2	1948	1949
641	F_P1MRSTA	IMPUTATION FLAG FOR P1MRSTA	N	2	1950	1951
642	F_P1FRLNG	IMPUTATION FLAG FOR P1FRLNG	N	2	1952	1953
643	F_P1SPEAK	IMPUTATION FLAG FOR P1SPEAK	N	2	1954	1955
644	F_P1DIFFI	IMPUTATION FLAG FOR P1DIFFI	N	2	1956	1957
645	F_P1SCINT	IMPUTATION FLAG FOR P1SCINT	N	2	1958	1959
646	F_P1WRMTL	IMPUTATION FLAG FOR P1WRMTL	N	2	1960	1961
647	F_P1PLCBRTH	IMPUTATION FLAG FOR P1PLCBRTH	N	2	1962	1963
648	F_P1AGEMV	IMPUTATION FLAG FOR P1AGEMV	N	2	1964	1965
649	F_P1HISPAN	IMPUTATION FLAG FOR P1HISPAN	N	2	1966	1967
50	F_P1AMIND	IMPUTATION FLAG FOR P1AMIND	N	2	1968	1969
351	F_P1ASIAN	IMPUTATION FLAG FOR P1ASIAN	N	2	1970	1971
552	F_P1BLACK	IMPUTATION FLAG FOR P1BLACK	N	2	1972	1973
553	F_P1PACI	IMPUTATION FLAG FOR P1PACI	N	2	1974	1975
554	F_P1WHITE	IMPUTATION FLAG FOR P1WHITE	N	2	1976	1977
355	F_P1EDUC	IMPUTATION FLAG FOR P1EDUC	N	2	1978	1979
56	F_P1ENRL	IMPUTATION FLAG FOR P1ENRL	N	2	1980	1981
657	F_P1EMPL	IMPUTATION FLAG FOR P1EMPL	N	2	1982	1983
658	F_P1HRSWK	IMPUTATION FLAG FOR P1HRSWK	N	2	1984	1985
659	F_P1LKWRK	IMPUTATION FLAG FOR P1LKWRK	N	2	1986	1987
360	F_P1MTHSWRK	IMPUTATION FLAG FOR P1MTHSWRK	N	2	1988	1989

Order	Variable name	Variable label	Format	Length	Start column	column
661	F_P1AGE	IMPUTATION FLAG FOR P1AGE	N	2	1990	1991
662	F_P1AGEPAR	IMPUTATION FLAG FOR P1AGEPAR	N	2	1992	1993
663	F_P1AGEPARDK	IMPUTATION FLAG FOR P1AGEPARDK	N	2	1994	199
664	F_P2GUARD	IMPUTATION FLAG FOR P2GUARD	N	2	1996	1997
665	F_P2REL	IMPUTATION FLAG FOR P2REL	N	2	1998	1999
666	F_P2SEX	IMPUTATION FLAG FOR P2SEX	N	2	2000	2001
667	F_P2MRSTA	IMPUTATION FLAG FOR P2MRSTA	N	2	2002	2003
668	F_P2FRLNG	IMPUTATION FLAG FOR P2FRLNG	N	2	2004	2005
669	F_P2SPEAK	IMPUTATION FLAG FOR P2SPEAK	N	2	2006	2007
670	F_P2DIFFI	IMPUTATION FLAG FOR P2DIFFI	N	2	2008	2009
671	F_P2SCINT	IMPUTATION FLAG FOR P2SCINT	N	2	2010	2011
672	F_P2WRMTL	IMPUTATION FLAG FOR P2WRMTL	N	2	2012	2013
673	F_P2PLCBRTH	IMPUTATION FLAG FOR P2PLCBRTH	N	2	2014	2015
674	F_P2AGEMV	IMPUTATION FLAG FOR P2AGEMV	N	2	2016	2017
675	F_P2HISPAN	IMPUTATION FLAG FOR P2HISPAN	N	2	2018	2019
676	F_P2AMIND	IMPUTATION FLAG FOR P2AMIND	N	2	2020	2021
677	F_P2ASIAN	IMPUTATION FLAG FOR P2ASIAN	N	2	2022	2023
678	F_P2BLACK	IMPUTATION FLAG FOR P2BLACK	N	2	2024	2025
679	F_P2PACI	IMPUTATION FLAG FOR P2PACI	N	2	2026	2027
680	F P2WHITE	IMPUTATION FLAG FOR P2WHITE	N	2	2028	2029
681	F P2EDUC	IMPUTATION FLAG FOR P2EDUC	N	2	2030	2031
682	F P2ENRL	IMPUTATION FLAG FOR P2ENRL	N	2	2032	2033
683	F P2EMPL	IMPUTATION FLAG FOR P2EMPL	N	2	2034	2035
684	F P2HRSWK	IMPUTATION FLAG FOR P2HRSWK	N N	2	2036	2037
685	F P2LKWRK	IMPUTATION FLAG FOR P2LKWRK	N	2	2038	2039
686	F P2MTHSWRK	IMPUTATION FLAG FOR P2MTHSWRK	N	2	2040	2041
687	F P2AGE	IMPUTATION FLAG FOR P2AGE	N	2	2042	2043
688	F P2AGEPAR	IMPUTATION FLAG FOR P2AGEPAR	N	2	2042	2045
689	F P2AGEPARDK	IMPUTATION FLAG FOR P2AGEPARDK	N	2	2044	2043
	_		N	2	2048	2047
690 601	F_HHTOTAL	IMPUTATION FLAG FOR HITOTAL		2		
691	F_HHBROS	IMPUTATION FLAG FOR HIBROS	N		2050	2051
692	F_HHSISS	IMPUTATION FLAG FOR HHSISS	N N	2	2052	2053
693	F_HHAUNTS	IMPUTATION FLAG FOR HHAUNTS	N	2	2054	2055
694	F_HHUNCLS	IMPUTATION FLAG FOR HHUNCLS	N	2	2056	2057
695	F_HHGMAS	IMPUTATION FLAG FOR HHGMAS	N	2	2058	2059
696	F_HHGPAS	IMPUTATION FLAG FOR HHGPAS	N	2	2060	2061
697	F_HHCSNS	IMPUTATION FLAG FOR HHCSNS	N	2	2062	2063
698	F_HHPRTNRS	IMPUTATION FLAG FOR HHPRTNRS	N	2	2064	2065
699	F_HHORELS	IMPUTATION FLAG FOR HHORELS	N	2	2066	2067
700	F_HHONRELS	IMPUTATION FLAG FOR HHONRELS	N	2	2068	2069
701	F_RELATION	IMPUTATION FLAG FOR RELATION	N	2	2070	2071
702	F_HHENGLISH	IMPUTATION FLAG FOR HHENGLISH	N	2	2072	2073
703	F_HHSPANISH	IMPUTATION FLAG FOR HHSPANISH	N	2	2074	2075
704	F_HHFRENCH	IMPUTATION FLAG FOR HHFRENCH	N	2	2076	2077
705	F_HHCHINESE	IMPUTATION FLAG FOR HHCHINESE	N	2	2078	2079
706	F_HHOTHLANG	IMPUTATION FLAG FOR HHOTHLANG	N	2	2080	2081
707	F_HWELFTAN	IMPUTATION FLAG FOR HWELFTAN	N	2	2082	2083
708	F_HWELFST	IMPUTATION FLAG FOR HWELFST	N	2	2084	2085
709	F_HWIC	IMPUTATION FLAG FOR HWIC	N	2	2086	2087
710	F_HFOODST	IMPUTATION FLAG FOR HFOODST	N	2	2088	2089
711	F_HMEDICAID	IMPUTATION FLAG FOR HMEDICAID	N	2	2090	2091
712	F_HCHIP	IMPUTATION FLAG FOR HCHIP	N	2	2092	2093
713	F_HSECN8	IMPUTATION FLAG FOR HSECN8	N	2	2094	2095
714	F_TTLHHINC	IMPUTATION FLAG FOR TTLHHINC	N	2	2096	2097
715	F_YRSADDR	IMPUTATION FLAG FOR YRSADDR	N	2	2098	2099
716	F OWNRNTHB	IMPUTATION FLAG FOR OWNRNTHB	N	2	2100	2101
		IMPUTATION FLAG FOR HVINTRNT	N N	2	2102	

Appendix C. Comparison of Estimates

Table C-1. Percentage distribution for household size, place of birth, age and number of children in the household: ECPP-NHES:2012_PFL-NHES:2012_and CPS:2011

	ECPP-NHES:2012	and PFI-	CPS:2011		Difference	
	NHES:2012	2	CP5:2011		Difference	
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.
Household size						
2	5	#	5	0.1	#	0.1
3-4	53	#	52	0.3	#	0.3
5+	43	#	43	0.3	#	0.3
Child's place of birth						
US state or DC	94	0.2	96	0.1	-2	0.2
US territory	1	0.1	#	#	1	0.1
Another country	5	0.2	4	0.1	1	0.2
Age category						
0–2 years	18	0.1	16	0.2	1	0.2
3–5 years	17	0.2	17	0.2	#	0.3
6–9 years	21	0.2	22	0.2	-1	0.3
10–12 years	16	0.1	16	0.2	1	0.2
13–15 years	16	0.2	16	0.2	1	0.3
16–18 years	11	0.1	13	0.2	-2	0.2
19-20 years	#	#	#	#	#	#
Number of children in household						
1	25	0.3	19	0.2	6	0.4
2	38	0.3	38	0.3	#	0.4
3	22	0.4	25	0.2	-3	0.5
4	10	0.3	11	0.2	-1	0.3
5+	5	0.4	7	0.1	-2	0.4

#Rounds to zero.

NOTE: s.e. is standard error. Percentage estimates for both NHES:2012 and CPS are person-level estimates for all characteristics shown. CPS s.e.s are computed assuming simple random sampling. Household size of 1 (18-20 year olds) from CPS:2011 are excluded.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2012 and Parent and Family Involvement in Education Survey of the NHES, 2012. U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 2011.

Table C-2A. Percentage distribution of children ages 3 through 20 not enrolled in school or enrolled in kindergarten through grade 12: ECPP-NHES:2012 and PFI-NHES:2012

	Number of children							current gra							
Child's age	(thousands)	Not Enrolled	Kindergarten	1	2	3	4	5	6	7	8	9	10	11	12
3	3,682	100													
4	3,941	89	9		1										
5	5,042	21	73	3	1			1				1			
6	3,650		33	62	3		1								
7	4,065		1	33	63	2		1							
8	3,993		2	2	33	62	2								
9	3,815				2	34	61	3							
10	4,052					2	35	61	2						
11	4,110		1			3	37	57	1					1	
12	3,899		1					2	32	61	3				
13	4,079		1				1		2	35	57	3			
14	3,906									2	33	60	3		1
15	4,037										3	34	59	2	1
16	3,804		1									4	35	57	3
17	3,125		1									1	3	36	59
18	991		1			1					1		2	7	87
19	179					2		1				4	4	6	84
20	83		10							3	8	2	4	74	10

NOTE: Homeschoolers are excluded from the NHES estimates. Because of rounding, percentages may not add to 100. Blank cells in the table represent estimates that round to zero. SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES),

Table C-2B. Standard errors of the percentage distribution of children ages 3 through 20 not enrolled in school or enrolled in kindergarten through grade 12: ECPP-NHES:2012 and PFI-NHES:2012

	Number of children						Child's	current gr	ade						
G1 11 11	-	Not													
Child's age	(thousands)	Enrolled	Kindergarten	1	2	3	4	5	6	7	8	9	10	11	12
3	3,682	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	
4	3,941	2.2	2.1	0.3	0.5	0.2	-	0.1	-	0.4	0.1	-	-	-	-
5	5,042	1.6	1.0	0.8	0.6	0.4	-	0.7	-	-	-	0.5	0.1	-	-
6	3,650	-	2.2	2.3	1.0	0.3	0.6	0.2	0.2	0.2	-	-	-	-	-
7	4,065	-	0.6	2.4	2.5	0.7	0.1	0.6	-	0.2	-	-	-	-	0.1
8	3,993	-	0.7	0.6	1.9	1.8	0.4	0.1	-	0.1	0.3	-	-	-	0.1
9	3,815	-	0.2	0.1	0.7	1.9	2.1	1.1	0.1	0.1	-	0.1	-	-	-
10	4,052	-	0.2	0.1	0.0	0.6	1.9	1.8	0.3	0.1	0.1	-	-	-	-
11	4,110	-	0.3	-	0.2	0.1	1.0	2.0	2.0	0.3	0.1	0.2	-	0.2	0.1
12	3,899	-	0.3	-	-	0.2	0.2	0.6	1.8	1.9	0.8	0.1	0.1	-	0.1
13	4,079	-	0.4	-	-	-	0.4	0.3	0.5	2.0	1.9	1.3	0.1	0.2	-
14	3,906	-	0.2	0.3	-	-	0.2	-	0.1	0.5	1.5	1.8	1.2	0.1	0.2
15	4,037	-	0.1	-	-	-	0.1	0.1	0.2	0.2	0.9	2.2	2.0	0.5	0.2
16	3,804	-	0.5	0.1	-	-	0.1	-	0.2	-	0.1	0.7	1.7	1.7	0.5
17	3,125	-	0.3	0.1	-	-	-	-	0.1	-	0.1	0.4	0.7	1.5	1.6
18	991	-	0.7	0.1	0.4	0.5	0.5	-	-	0.1	0.7	0.1	1.1	1.1	2.1
19	179	-	-	-	-	1.4	-	0.5	-	-	-	1.9	2.6	2.6	4.5
20	83	-	9.7	-	-	-	-	-	-	1.9	-	6.1	1.8	2.2	10.8

NOTE: Standard errors increase for children who are 18, 19, and 20 years old. This is because there are small numbers of those children in the grade categories shown above. Blank cells in the table SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES),

Table C-2C. Percentage distribution of children ages 3 through 20 not enrolled in school or enrolled in kindergarten through grade 12: CPS:2011

	Number of children							current gra							
Child's age	(thousands)	Not Enrolled	Kindergarten	1	2	3	4	5	6	7	8	9	10	11	12
3	4,289	98	2												
4	4,462	92	8												
5	4,199	25	70	5	1										
6	4,215	3	20	73	3	1									
7	4,163		1	21	72	5	1								
8	4,071			2	24	69	4	1							
9	4,064				2	27	66	5	1						
10	3,995				1	3	25	67	4	1					
11	4,131						3	26	66	4	1				
12	3,884						1	3	27	65	4				
13	3,921								3	26	66	5			
14	3,852									3	26	64	6	1	
15	3,949									1	3	25	63	7	1
16	4,210										1	4	29	58	7
17	3,959											1	6	28	64
18	1,428											1	3	14	82
19	248											2	5	18	75
20	112									12	3	_	16	12	56

NOTE: Homeschoolers are included in the CPS estimates. Because of rounding, percentages may not add to 100. Blank cells in the table represent estimates that round to zero. SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 2011.

Table C-2D. Standard errors of the percentage distribution of children ages 3 through 20 not enrolled in school or enrolled in kindergarten through grade 12: CPS: 2011

	Number of children	V						current gra							
Child's age	(thousands)	Not Enrolled Kind	ergarten	1	2	3	4	5	6	7	8	9	10	11	12
3	4,289	0.3	0.3												
4	4,462	0.6	0.6												
5	4,199	1.0	1.1	0.5	0.2										
6	4,215	0.4	0.9	1.0	0.4	0.2									
7	4,163		0.2	1.0	1.1	0.5	0.2								
8	4,071			0.3	1.0	1.1	0.5	0.2							
9	4,064				0.3	1.0	1.1	0.5	0.2						
10	3,995				0.2	0.4	1.0	1.1	0.5	0.2					
11	4,131						0.4	1.0	1.1	0.5	0.2				
12	3,884						0.2	0.4	1.1	1.1	0.5	0.2			
13	3,921								0.4	1.0	1.1	0.5			
14	3,852									0.4	1.0	1.1	0.6	0.2	
15	3,949									0.2	0.4	1.0	1.2	0.6	0.3
16	4,210										0.2	0.5	1.1	1.2	0.6
17	3,959											0.2	0.6	1.1	1.2
18	1,428											0.3	0.7	1.4	1.6
19	248											1.3	2.2	3.8	4.3
20	112									5.0	2.4		5.6	5.0	7.6

NOTE: Blank cells in the table represent estimates that round to zero.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 2011.

Table C-2E. Difference in percentage distribution of children ages 3 through 20 not enrolled in school or enrolled in kindergarten through grade 12: NHES vs. CPS

Children	Number of children						Child's	current gra	ade						
Child's age	(thousands)	Not Enrolled	Kindergarten	1	2	3	4	5	6	7	8	9	10	11	12
3	-607	2	-2												
4	-521	-3	1		1										
5	843	-4	4	-2	#			1				1			
6	-565	-3	14	-11	-1	-1	1								
7	-98		#	11	-9	-3	-1	1							
8	-78		2	#	9	-8	-3	-1							
9	-249				#	7	-6	-2	-1						
10	57				-1	-1	10	-6	-2	-1					
11	-21		1			3	34	31	-64	-4	-1			1	
12	15		1				-1	-1	5	-4	-1				
13	158		1				1		-2	9	-8	-1			
14	54									#	7	-4	-3	-1	1
15	88									-1	#	9	-4	-4	-1
16	-406		1								-1	-1	6	-1	-4
17	-834		1									#	-3	8	-6
18	-437		1			1					1	-1	#	-7	4
19	-69					2		1				2	-1	-12	9
20	-29		10							-10	6	2	-13	62	-46

Rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2012 and Parent and Family Involvement in Education Survey of the NHES, 2012. U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 2011.

Table C-2F. Standard errors of the difference in percentage distribution of children ages 3 through 20 not enrolled in school or enrolled in kindergarten through grade 12: NHES vs. CPS

	Number of children														
Child's age	(thousands)	Not Enrolled	Kindergarten	1	2	3	4	5	6	7	8	9	10	11	12
3	-607	#	#												
4	-521	2	1	#	1	#		#		#	#				
5	843	1	#	#	#	#		1				#	#		
6	-565		1	1	1	#	1	#	#	#					
7	-98		#	1	1	#	#	1		#					#
8	-78		1	#	1	1	#	#		#	#				#
9	-249		#	#	#	1	1	1	#	#		#			
10	57		#	#	#	#	1	1	#	#	#				
11	-21		#		#	#	1	1	1	#	#	#		#	#
12	15		#			#	#	#	1	1	#	#	#		#
13	158		#				#	#	#	1	1	1	#	#	
14	54		#	#			#		#	#	#	1	1	#	#
15	88		#				#	#	#	#	1	1	1	#	#
16	-406		#	#			#		#		#	#	1	#	#
17	-834		#	#					#		#	#	#	#	#
18	-437		1	#	#	#	#			#	1	#	#	#	1
19	-69					1		1				1	#	-1	#
20	-29		10							-3		6	-4	-3	3

Rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2012 and Parent and Family Involvement in Education Survey of the NHES, 2012. U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 2011.

Table C-3 Number of children in kindergarten through grade 12, by school type and by student grade level: PFI-NHES:2012 and CPS:2011

	PFI-NHES	5:2012	CPS:2	2011	Differe	ence
School type and grade	Number (thousands)	s.e. (thousands)	Number (thousands)	s.e. (thousands)	Number (thousands)	s.e. (thousands)
Total number of children in						
kindergarten through 12th grade	52,215	92	52,827	340	-612	352
School type						
Public	47,682	153	48,302	330	-620	364
Private	4,532	136	4,525	116	7	179
Student grade						
level						
K	5,589	119	4,181	112	1,408	163
1	3,868	138	4,208	112	-340	178
2	3,949	150	4,213	112	-264	187
3	4,012	108	4,228	113	-216	156
4	4,294	122	4,024	110	270	164
5	3,771	114	4,083	111	-312	159
6	4,026	102	4,072	111	-46	150
7	3,916	121	3,874	108	42	162
8	4,068	117	3,853	108	215	159
9	4,016	131	3,810	107	206	169
10	3,490	113	4,169	112	-679	159
11	3,060	103	3,912	108	-852	150
12	3,160	70	4,198	112	-1,038	132

NOTE: s.e. is standard error. Because of rounding, details may not add to totals. CPS s.e.s. are computed using a generalized variance formula for population totals and parameters from the Employment and Earnings documentation (2/11, Table 1-D, p. 195). The CPS did not identify homeschoolers and the NHES:2012 estimates exclude homeschoolers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2012. U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 2011.

Table C-4. Number and percentage of children in kindergarten through grade 12 enrolled in public and private schools: PFI-NHES:2012 and CPS:2011

			School ty	<i>т</i> ре			
		Public]	Private		
Child's current grade	Number (thousands)	Percent	s.e.	Number (thousands)	Percent	s.e.	
PFI-NHES:2012							
K	4,927	88	1.2	661	12	1.2	
1	3,395	88	1.2	473	12	1.2	
2	3,744	90	1.2	406	10	1.2	
3	3,601	91	1.1	348	9	1.1	
4	3,692	92	0.9	320	8	0.9	
5	3,930	92	1.0	364	8	1.0	
6	3,462	92	0.9	309	8	0.9	
7	3,752	93	0.8	273	7	0.8	
8	3,658	93	0.7	257	7	0.7	
9	3,720	91	0.8	348	9	0.8	
10	3,753	93	0.6	262	7	0.6	
11	3,224	92	0.8	266	8	0.8	
12	2,820	92	0.8	240	8	0.8	
CPS:2011							
K	3,699	88	0.8	482	12	0.8	
1	3,864	92	0.6	344	8	0.6	
2	3,838	91	0.7	375	9	0.7	
3	3,834	91	0.7	394	9	0.7	
4	3,690	92	0.7	334	8	0.7	
5	3,672	90	0.7	412	10	0.7	
6	3,697	91	0.7	376	9	0.7	
7	3,498	90	0.7	376	10	0.7	
8	3,564	92	0.6	289	8	0.6	
9	3,530	93	0.6	280	7	0.6	
10	3,850	92	0.6	320	8	0.6	
11	3,664	94	0.6	248	6	0.6	
12	3,903	93	0.6	295	7	0.6	
Difference							
K	1,228	#	1.4	179	#	1.4	
1	-469	-4	1.4	129	4	1.4	
2	-94	-1	1.4	31	1	1.4	
3	-233	#	1.3	-46	#	1.3	
4	2	#	1.1	-14	#	1.1	
5	258	2	1.3	-48	-2	1.3	
6	-235	1	1.1	-67	-1	1.1	
7	254	3	1.1	-103	-3	1.1	
8	94	1	1.0	-32	-1	1.0	
9	190	-1	1.0	68	1	1.0	
10	-97	1	0.9	-58	-1	0.9	
11	-440	-1	1.0	18	1	1.0	
12	-1,083	-1	1.0	-55	1	1.0	

NOTE: s.e. is standard error. The CPS did not identify homeschoolers and the NHES:2012 estimates exclude homeschoolers. SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (NHES), 2012. U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 2011.

Table C-5. Percentage of children from birth through age 6 and not enrolled in school, by household income: ECPP-NHES:2012 and ACS: 2011

Household	ECPP-NHES:2012		ACS: 2011		Difference		
income	Percent	s.e.	Percent	s.e.	Percent	s.e.	
\$10,000 or less	8	#	9	0.1	-1	0.1	
\$10,001 to \$20,000	10	#	11	0.1	-1	0.1	
\$20,001 to \$30,000	10	#	11	0.1	-1	0.1	
\$30,001 to \$40,000	10	#	10	0.1	#	0.1	
\$40,001 to \$50,000	9	#	9	0.1	#	0.1	
\$50,001 to \$60,000	8	#	8	0.1	#	0.1	
\$60,001 to \$75,000	10	#	10	0.1	#	0.1	
\$75,001 to \$100,000	13	#	12	0.1	#	0.1	
\$100,001 to \$150,000	13	#	11	0.1	2	0.1	
Over \$150,000	9	#	7	0.1	2	0.1	

NOTE: s.e. is standard error. Because of rounding, percentages may not add to 100.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey (ECPP) of the National Household Education Surveys Program (NHES), 2012. U.S. Department of Commerce, Bureau of the Census, American Community Survey, 2011.

Table C-6. Number and percentage of children ages 0 through 6 and not enrolled in school, by household income and race/ethnicity: ECPP-NHES:2012 and ACS:2011

	Number of			I	Household	lincome			
	children	Less than \$20,000		\$20,001 to \$ 40,000		\$40,001 to \$60	0,000	More than \$60,000	
Race/ethnicity	(thousands)	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
ECPP-NHES:2012									
White, non-Hispanic	10,892	11	0.4	15	0.4	16	0.3	57	0.4
Black, non-Hispanic	2,889	37	#	24	#	14	#	24	#
Hispanic	5,469	24	#	28	#	17	#	30	#
Asian/Pacific Islander, non-Hispanic	1,108	9	1.8	14	1.9	14	2.0	62	2.8
Other	1,314	19	2.6	22	2.5	19	2.5	40	2.7
ACS: 2011									
White, non-Hispanic	8,321	13	0.2	17	0.2	18	0.2	52	0.3
Black, non-Hispanic	2,180	40	0.5	24	0.5	14	0.5	22	0.4
Hispanic	4,455	26	0.3	29	0.3	18	0.3	27	0.4
Asian/Pacific Islander, non-Hispanic	662	10	0.6	14	0.7	14	0.6	62	1.0
Other	1,040	23	0.6	22	0.6	15	0.5	40	0.7
Difference									
White, non-Hispanic	2,571	-2	0.4	-2	0.4	-2	0.4	6	0.5
Black, non-Hispanic	709	-2	0.5	0	0.5	0	0.5	2	0.4
Hispanic	1,014	-2	0.3	-1	0.3	0	0.3	3	0.4
Asian/Pacific Islander, non-Hispanic	446	-1	1.9	0	2.0	0	2.1	0	3.0
Other	274	-4	2.6	0	2.6	4	2.5	-1	2.8

[#]Rounds to zero.

NOTE: s.e. is standard error. Because of rounding, percentages may not add to 100.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey (ECPP) of the National Household Education Surveys Program (NHES), 2012. U.S. Department of Commerce, Bureau of the Census, American Community Survey, 2011.

Table C-7. Percentage of children in kindergarten through grade 12, by household income: PFI-NHES:2012 and ACS:2011

	PFI-NHES:201	2	ACS:2011		Difference	
Household income	Percent	s.e.	Percent	s.e.	Percent	s.e.
\$10,000 or less	6	#	7	0.1	#	0.1
\$10,001 to \$20,000	9	#	9	0.1	-1	0.1
\$20,001 to \$30,000	10	#	10	0.1	#	0.1
\$30,001 to \$40,000	9	#	9	0.1	#	0.1
\$40,001 to \$50,000	9	#	9	0.1	#	0.1
\$50,001 to \$60,000	7	#	8	0.1	#	0.1
\$60,001 to \$75,000	11	#	10	0.1	#	0.1
\$75,001 to \$100,000	13	#	13	0.1	#	0.1
\$100,001 to \$150,000	15	#	14	0.1	1	0.1
Over \$150,000	12	#	11	0.1	1	0.1

NOTE: s.e. is standard error. Because of rounding, percentages may not add to 100.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey (PFI) of the National Household Education Surveys Program (NHES), 2012. U.S. Department of Commerce, Bureau of the Census, American Community Survey, 2011.

Table C-8. Number and percentage of children in kindergarten through grade 12, by household income and race/ethnicity: PFI-NHES:2012 and ACS:2011

	Number of			I	Household	income			
	children	Less than \$20	0,000	\$20,001 to \$40	0,000	\$40,001 to \$6	0,000	More than \$6	0,000
Race/ethnicity	(thousands)	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
PFI-NHES:2012									
White, non-Hispanic	27,900	8	0.2	13	0.3	15	0.3	63	0.4
Black, non-Hispanic	7,534	29	#	25	#	16	#	29	#
Hispanic	12,204	20	#	28	#	19	#	33	#
Asian/Pacific Islander, non-Hispanic	2,904	14	1.6	14	1.7	15	2.0	56	2.2
Other	2,894	17	1.6	17	1.6	16	2.0	50	2.3
ACS:2011									
White, non-Hispanic	28,769	9	0.1	14	0.1	16	0.1	61	0.2
Black, non-Hispanic	7,534	31	0.3	25	0.3	16	0.2	28	0.3
Hispanic	12,205	22	0.2	28	0.3	18	0.2	31	0.3
Asian/Pacific Islander, non-Hispanic	2,317	10	0.3	14	0.4	14	0.4	62	0.6
Other	2,613	18	0.4	20	0.5	17	0.5	45	0.5
Difference									
White, non-Hispanic	-869	-1	0.2	-1	0.3	-1	0.3	2	0.4
Black, non-Hispanic	#	-1	0.3	#	0.3	#	0.2	1	0.3
Hispanic	-1	-2	0.2	#	0.3	#	0.2	1	0.3
Asian/Pacific Islander, non-Hispanic	587	4	1.7	#	1.7	1	2.0	-6	2.3
Other	281	-1	1.6	-3	1.7	-1	2.0	5	2.4

[#]Rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent and Family Involvement in Education Survey (PFI) of the National Household Education Surveys Program (NHES), 2012. U.S. Department of Commerce, Bureau of the Census, American Community Survey, 2011

NOTE: s.e. is standard error. Because of rounding, percentages may not add to 100.

Number and percentage of children enrolled in kindergarten through grade 12 in public and private schools, Table C-9.

		PFI-NHE	S:2012	2			CPS:2	2011				Differ	ence		
	Number of children	Public		Private		Number of children	Public		Private		Number of children	Public		Privat	:е
Race/ethnicity	(thousands)	Percent	s.e.	Percent	s.e.	(thousands)	Percent	s.e.	Percent	s.e.	(thousands)	Percent	s.e.	Percent	s.e.
White, non-Hispanic	27,900	89	0.4	11	0.4	29,360	88	0.3	12	0.3	-1,460	1	0.5	-1	0.5
Black, non-Hispanic	7,534	94	0.6	6	0.6	7,510	95	0.4	5	0.4	24	-1	0.7	1	0.7
Hispanic Asian/Pacific Islander,	12,204	94	0.5	6	0.5	11,924	96	0.3	4	0.3	280	-2	0.6	2	0.6
non-Hispanic	2,904	92	1.3	8	1.3	2,267	92	0.8	8	0.8	637	#	1.6	#	1.6
Other	2,894	92	1.1	8	1.1	1,765	94	0.8	6	0.8	1,129	-2	1.3	2	1.3

#Rounds to zero.

NOTE: s.e. is standard error. Percentages include only those students for whom public/private enrollment was reported, that is, children whose parents indicated they were enrolled in school.

(PFI) of the National Household Education Surveys Program (NHES), 2012. U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 2011.

Table C-10. Percentage of children ages 0 through 6 not yet in kindergarten participating in different care arrangements, by race/ethnicity: ECPP-NHES:2012, ECPP-NHES:2005

				Type of arrange	ment		
	Number of children	Relative car	e	Nonrelative ca	are	Center- or school program	-based
Child's race/ethnicity	(thousands)	Percent	s.e.	Percent	s.e.	Percent	s.e.
ECPP-NHES:2012							
White, non-Hispanic	10,892	26	0.8	18	0.8	36	0.9
Black, non-Hispanic	2,889	34	2.3	13	1.7	42	2.3
Hispanic	5,469	31	1.7	12	1.2	28	1.2
Asian/Pacific Islander, non-Hispanic	1,108	25	2.3	9	1.3	36	2.7
Other	1,314	26	2.2	16	1.8	32	2.5
Total	21,674	28	0.7	15	0.6	34	0.7
ECPP-NHES:2005							
White, non-Hispanic	11,500	21	0.9	17	0.9	38	0.9
Black, non-Hispanic	2,969	28	2.7	10	1.4	44	2.4
Hispanic	4,290	21	1.0	10	1.0	25	1.3
Asian/Pacific Islander, non-Hispanic	655	16	3.5	8	1.8	37	3.8
Other	1,278	28	3.2	10	1.9	38	3.3
Total	20,691	22	0.7	14	0.5	36	0.6
Difference							
White, non-Hispanic	-608	5	#	1	#	-2	#
Black, non-Hispanic	-80	7	#	2	#	-2	#
Hispanic	1,179	10	1	2	#	2	#
Asian/Pacific Islander, non-Hispanic	453	9	-1	2	#	-1	-1
Other	36	-2	-1	6	#	-6	-1
Total	983	6	#	1	#	-2	#

NOTE: s.e. is standard error. Center-based programs include nursery schools, preschools, center-based Head Start programs, and prekindergartens.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey (ECPP) of the National Household Education Surveys Program (NHES), 2005 and 2012.

Table C-11. Percentage of children (ages 0 through 6 not yet in kindergarten) participating in relative, nonrelative, or center- or school-based care who participate in the care arrangement at least once each week, by race/ethnicity: ECPP-NHES:2012, ECPP-NHES:2005

			-	Гуре of arrangement o	hild is in		
	-	Relative care		Nonrelative car		Center- or school program	-based
Child's race/ethnicity	Number of children	Percent participating weekly	s.e.	Percent s.e. participating weekly		Percent participating weekly	s.e.
ECPP-NHES:2012		· · · · · · · · · · · · · · · · · · ·		•		•	
White, non-Hispanic	2,829	89	1.3	96	1.0	99	0.3
Black, non-Hispanic	993	94	1.6	91	3.9	99	0.4
Hispanic	1,718	91	1.8	93	1.9	97	1.3
Asian/Pacific Islander, non-Hispanic	278	78	5.5	86	5.0	98	1.3
Other	345	91	2.9	93	3.7	100	0.5
ECPP-NHES:2005							
White, non-Hispanic	11,500	93	1.1	96	1.2	99	0.3
Black, non-Hispanic	2,969	95	1.9	99	1.5	99	0.6
Hispanic	4,290	95	2.0	97	1.4	100	0.1
Asian/Pacific Islander, non-Hispanic	655	98	1.6	98	2.2	100	0.0
Other	1,278	92	7.8	93	5.0	99	0.8
Difference							
White, non-Hispanic	-8,671	-4	1.7	#	1.5	#	0.4
Black, non-Hispanic	-1,976	-1	2.5	-8	4.1	1	0.7
Hispanic	-2,572	-4	2.7	-4	2.3	-3	1.3
Asian/Pacific Islander, non-Hispanic	-377	-20	5.7	-11	5.5	-2	1.3
Other	-933	-1	8.3	-1	6.2	1	0.9

[#]Rounds to zero

NOTE: s.e. is standard error. Center-based programs include nursery schools, preschools, center-based Head Start programs, and prekindergartens. Percentage estimates are computed for the subset of children who participate in each particular type of care.

Table C-12. Percentage of children ages 0 through 6 not yet in kindergarten participating in center-based programs, by high and low income: ECPP-NHES:2012, ECPP-NHES:2005

	ECPP-NHES:20	12	ECPP-NHES:2005	ECPP-NHES:2005		
Income level	Percent	s.e.	Percent	s.e.	Percent	s.e.
High income	27	1.0	29	1.0	-2	1.4
Low income	41	0.9	29	2.8	11	2.9

NOTE: s.e. is standard error. Center-based programs include nursery schools, preschools, center-based Head Start programs, and prekindergartens. High income was defined as household income of over \$50,000. Low income was defined as household income of \$20,000 or less.

Table C-13. Percentage of children ages 0 through 6 not yet in kindergarten, by family characteristics: ECPP-NHES:2012, ECPP-NHES:2005

	ECPP-NHES:2	2012	ECPP-NHES:2	2005	Difference	
Family characteristics	Percent	s.e.	Percent	s.e.	Percent	s.e.
Family structure						
Both mother/female guardian and father/male						
guardian	74	0.6	79	0.5	-5	0.8
Mother/female guardian only	20	0.4	18	0.5	2	0.7
Father/male guardian only	3	0.3	2	0.3	2	0.4
Nonparent guardian(s)	3	0.3	2	0.2	1	0.3
Parents' highest education						
Less than high school	13	#	7	0.5	6	0.5
High school graduate	20	#	25	0.8	-5	0.8
Some college	28	0.5	27	0.8	#	0.9
College graduate	24	0.5	22	0.6	2	0.8
Graduate school	16	#	19	0.7	-3	0.7

[#]Rounds to zero.

NOTE: s.e. is standard error. Mother and father refer to birth, adoptive, step, or foster parents. Detail may not sum to totals because of rounding. Parents' highest level of education for ECPP-NHES:2012 was derived by taking into account the education level of second mothers/female guardians and second fathers/male guardians whereas parents' highest level of education for prior years was derived by taking into account only the education level of primary mothers/female guardians and primary fathers/male guardians.

Table C-14. Number and percentage of children ages 0 through 6 not yet in kindergarten, by parents' highest level of education and race/ethnicity: ECPP-NHES:2012, ECPP-NHES:2005

					Parent	s' highest level	of educati	ion			
	Number of children	Less than high	school	High scho	ol	Some colle	ge	College grad	luate	Graduate sc	hool
Race/ethnicity	(thousands)	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
ECPP-NHES:2012											,
White, non-Hispanic	10,892	6	0.5	17	0.7	27	0.6	30	0.8	21	0.4
Black, non-Hispanic	2,889	16	1.9	25	2.2	37	2.3	15	1.7	8	0.8
Hispanic	5,469	26	1.1	27	1.3	26	1.2	14	0.9	7	0.5
Asian/Pacific Islander, non-Hispanic	1,108	7	2.3	8	1.7	15	2.3	39	3.3	31	2.1
Other	1,314	13	3.2	18	2.6	30	2.6	21	2.4	17	1.4
ECPP-NHES:2005											
White, non-Hispanic	11,500	2	0.4	20	0.9	26	0.9	28	0.9	24	1.1
Black, non-Hispanic	2,969	8	1.4	37	2.6	32	2.9	16	1.7	7	1.0
Hispanic	4,290	19	1.3	35	1.6	26	1.3	11	1.0	8	0.9
Asian/Pacific Islander, non-Hispanic	655	2	1.1	11	2.6	15	2.9	29	3.7	44	4.4
Other	1,278	3	1.6	22	2.9	35	4.0	14	2.0	26	3.0
Difference											
White, non-Hispanic	-608	3	0.6	-3	1.2	1	1.1	2	1.2	-3	1.1
Black, non-Hispanic	-80	8	2.4	-12	3.4	5	3.7	-2	2.3	1	1.2
Hispanic	1,179	7	1.7	-8	2.1	#	1.8	3	1.4	-1	1.0
Asian/Pacific Islander, non-Hispanic	453	5	2.6	-2	3.1	1	3.7	10	5.0	-13	4.9
Other	36	10	3.6	-4	3.9	-5	4.8	8	3.1	-9	3.3

NOTE: s.e. is standard error. Detail may not sum to totals because of rounding. Parents' highest level of education for ECPP-NHES:2012 was derived by taking into account the education level of second mothers/female guardians and second fathers/male guardians whereas parents' highest level of education for prior years was derived by taking into account only the education level of primary mothers/female guardians and primary fathers/male guardians.

Table C-15. Percentage of children ages 0 through 6 not yet in kindergarten whose parents reported reading to them: ECPP-NHES:2012 and ECPP-NHES:2005

	ECPP-NHES:2012		ECPP-NHES:	2005	Difference	
Frequency read to per week	Percent	s.e.	Percent	s.e.	Percent	s.e.
Not at all	11	0.5	6	0.3	5	0.6
Once or twice	12	0.6	14	0.6	-3	0.8
Three or more times	78	0.7	80	0.7	-2	1.0

NOTE: s.e. is standard error.

Table C-16. Percentage of children ages 0 through 6 not yet in kindergarten with specific disabilities: ECPP-NHES:2005

NIIES.2012, ECTT-NIIES.20	ECPP-NHES:	:2012	ECPP NHES:	2005	Difference	
Disability	Percent	s.e.	Percent	s.e.	Percent	s.e.
Learning disability	2	0.2	2	0.3	#	0.4
Speech impairment	6	0.4	10	0.6	-5	0.7
Serious emotional disturbance	1	0.1	1	0.2	#	0.3
Deafness or another hearing impairment	1	0.2	1	0.1	#	0.2
Blindness or another visual impairment	1	0.2	1	0.2	#	0.2
An orthopedic impairment	1	0.2	2	0.4	#	0.4
Percent with any disability	7	0.4	10	0.6	-3	0.7

[#]Rounds to zero.

NOTE: s.e. is standard error.

Table C-17. Percentage of children in kindergarten through grade 12, by family structure and parents' highest level of education: PFI-NHES:2012. PFI-NHES:2007

Family and community	PFI-NHES:20	012	PFI-NHES:20	07	Differenc	е
characteristics	Percent	s.e.	Percent	s.e.	Percent	s.e.
Family structure						
Both mother/female guardian and						
father/male guardian	69	0.5	73	0.5	-4	0.7
Mother/female guardian only	21	0.4	20	0.6	1	0.7
Father/male guardian only	6	0.3	3	0.2	3	0.4
Nonparent guardian(s)	4	0.2	4	0.4	#	0.4
Parents' highest education						
Less than high school	12	#	7	0.4	5	0.4
High school graduate	20	#	21	0.6	-1	0.6
Some college	30	0.3	29	0.6	1	0.7
College graduate	23	0.3	22	0.5	1	0.6
Graduate school	15	#	21	0.5	-6	0.5

NOTE: s.e. is standard error. Mother and father refer to birth, adoptive, step, or foster parents. Because of rounding, percentages may not add to 100. Parents' highest level of education for PFI-NHES:2012 was derived by taking into account the education level of second mothers/female guardians and second fathers/male guardians whereas parents' highest level of education for prior years was derived by taking into account only the education level of primary mothers/female guardians and primary fathers/male guardians.

Table C-18. Number and percentage of students in kindergarten through grade 12, by parents' highest level of education and race/ethnicity: PFI-NHES:2012, PFI-NHES:2007

	Number of				Paren	ts' highest level	of education	on			
	children	Less than high	school	High scho	ol	Some colle	ge	College grad	uate	Graduate sc	hool
Race/ethnicity	(thousands)	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
PFI-NHES:2012											
White, non-Hispanic	27,900	4	0.4	18	0.5	31	0.6	29	0.5	18	0.2
Black, non-Hispanic	7,534	16	1.4	21	1.4	38	1.5	15	1.1	11	0.7
Hispanic	12,204	29	0.9	27	1.0	25	1.0	12	0.7	7	0.4
Asian/Pacific Islander, non-Hispanic	2,904	14	1.7	12	1.5	20	2.0	32	2.0	22	1.5
Other	2,894	5	1.2	20	2.4	37	2.2	22	1.8	15	1.3
PFI-NHES:2007											
White, non-Hispanic	29,830	2	0.3	17	0.7	28	0.8	27	0.7	26	0.6
Black, non-Hispanic	7,837	11	1.6	30	2.0	33	2.2	15	1.6	11	1.0
Hispanic	9,765	19	1.4	29	1.6	29	1.5	13	1.2	10	0.7
Asian/Pacific Islander, non-Hispanic	1,566	2	1.4	10	3.3	16	2.8	29	3.1	43	3.4
Other	2,598	4	1.7	19	3.2	38	3.2	19	2.1	20	2.2
Difference											
White, non-Hispanic	-1,930	2	0.5	1	0.8	3	0.9	2	0.9	-8	0.7
Black, non-Hispanic	-303	5	2.1	-10	2.5	4	2.6	#	1.9	#	1.2
Hispanic	2,439	10	1.6	-2	1.9	-4	1.8	-1	1.3	-3	0.8
Asian/Pacific Islander, non-Hispanic	1,338	11	2.2	2	3.7	4	3.4	3	3.7	-21	3.7
Other	296	1	2.1	2	4.0	-1	3.9	3	2.8	-5	2.6

NOTE: s.e. is standard error. Because of rounding, percentages may not add to 100. Parents' highest level of education for PFI-NHES:2012 was derived by taking into account the education level of second mothers/female guardians and second fathers/male guardians whereas parents' highest level of education for prior years was derived by taking into account only the education level of primary mothers/female guardians and primary fathers/male guardians.

Table C-19. Percentage of students enrolled in kindergarten through grade 12 whose parents reported selected school contacts with family: PFI-NHES:2012. PFI-NHES:2007

	PFI-NHES:2012		PFI-NHES:2	007	Difference	e
School effort to contact family	Percent	s.e.	Percent	s.e.	Percent	s.e.
School contacted parents about student's academic performance	22	0.5	23	0.6	-1	0.8
School contacted parents about student's behavior	19	0.4	23	0.6	-4	0.8

NOTE: s.e. is standard error. Students who are homeschooled are not represented.

Table C-20. Percentage of students enrolled in kindergarten through grade 12 whose parents reported attendance at selected school meetings, events, and volunteering: PFI-NHES:2012, PFI-NHES:2007

	PFI-NHES:2	2012	PFI-NHES:2	2007	Differenc	e
Participation in school activities by a parent or guardian	Percent	s.e.	Percent	s.e.	Percent	s.e.
Attended a general school meeting (open house), back-to-school	83	0.5	87	0.5	-4	0.7
night, meeting of parent-teacher organization						
Went to a regularly scheduled parent-teacher conference with	76	0.4	78	0.5	-2	0.7
child's teacher						
Attended a school or class event (e.g., play, sports event, science	74	0.5	74	0.6	#	0.7
fair) because of child						
Acted as a volunteer at the school or served on a committee	40	0.5	44	0.6	-4	0.8
Participated in fundraising for the school	58	0.5	65	0.7	-7	0.8

[#]Rounds to zero.

NOTE: s.e. is standard error. Students who are homeschooled are not represented.

Table C-21. Percentage of children in kindergarten through grade 12 with specific disabilities: PFI-NHES:2012, PFI-NHES:2007

	PFI-NHES:2012		PFI-NHES:2	007	Difference	
Disability	Percent	s.e.	Percent	s.e.	Percent	s.e.
Learning disability	9	0.3	10	0.5	-1	0.6
Speech impairment	6	0.3	9	0.4	-2	0.5
Serious emotional disturbance	3	0.2	3	0.3	-1	0.4
Deafness or another hearing impairment	1	0.1	2	0.2	-1	0.2
Blindness or another visual impairment	1	0.1	2	0.1	#	0.2
An orthopedic impairment	2	0.1	2	0.2	-1	0.2
Percent with any disability	15	0.5	27	0.7	-12	0.8

NOTE: s.e. is standard error.

Table C-22. Number of children in kindergarten through grade 12, by school type and by student grade level: PFI-NHES:2012 and PFI-NHES:2007

•	PFI-	NHES:2012		PFI-	NHES:2007			Difference	
	Number			Number			Number		
School type and grade	(thousands)	Percent	s.e.	(thousands)	Percent	s.e.	(thousands)	Percent	s.e.
Total number of children in kindergarten									
through 12th grade	51,765			51,392			373		
School type									
Public, assigned	42,176	81	0.4	37,168	72	0.7	5,008	9	0.8
Public, chosen	5,531	11	0.4	8,227	16	0.6	-2,696	-5	0.7
Private, religious	3,276	6	0.2	4,558	9	0.4	-1,282	-3	0.4
Private, not religious	781	2	0.1	1,438	3	0.2	-657	-1	0.3

NOTE: s.e. is standard error. Because of rounding, details may not add to totals. Less than 1 percent of cases in 2007 and 3 percent of cases in 2012 are excluded from the analysis because inconsistent parent and CCD/PSS reports on school type result in some missing data on school choice items.

Table C-22. Percentage distribution for number of siblings: ECPP-NHES:2012, ECPP-NHES:2005, PFI-NHES:2012, and PFI-NHES:2007

	ECPP:2012/PFI:2012		ECPP:2005/PFI:20	07	Difference	
Characteristic	Percent	s.e.	Percent	s.e.	Percent	s.e.
ECPP						
Mean number of siblings	1.1	0.02	1.3	0.03	-0.1	0.03
PFI						
Mean number of siblings	1.4	0.01	1.5	0.02	-0.1	0.02

NOTE: s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2005 and 2012 and Parent and Family Involvement in Education Survey of the NHES, 2007 and 2012.

Table C-24. Percentage of children in ages 2 through 6 and not enrolled in school, by pretending to read: ECPP-NHES:2012 and ECPP:2005

	ECPP-NHES:20	ECPP-NHES:2012			Difference	
Pretends to read	Percent	s.e.	Percent	s.e.	Percent	s.e.
Yes	97	0.4	97	0.4	#	0.5
No	3	0.4	3	0.4	#	0.5

[#]Rounds to zero.

NOTE: s.e. is standard error. Because of rounding, percentages may not add to 100. Pretends to read includes cases where the respondent said the child both pretends to read and reads actual words.

Appendix D. Screener Nonresponse Interview Adjustment Cells

Appendix D

Exhibit D-1. Definitions of column headings for Screener nonresponse interview adjustment cells table

Column Heading	Definition	Response Categories
Route type	Whether the address is a street address, PO Box address, high-rise building address, or rural-route address	1=street; 2=PO box; 3=high rise; 4=rural route
Presence of phone number for HH	Existence of a telephone number on the sampling frame for the household	0=no phone number exists on sampling frame; 1=phone number exists
Age of HOH	Age of the head of the household	0=age information missing on sampling frame; 1=0-17 years; 2=18-24 years; 3=25-34 years; 4=35-44 years; 5=45-64 years; 6=65+ years
HH income	Household income	0=income information missing from sampling frame; 1=\$0-\$10,000; 2=\$10,001-\$20,000; 3=\$20,001-\$30,000; 4=\$30,001-\$40,000; 5=\$40,001-\$50,000; 6=\$50,001-\$60,000; 7=\$60,001-\$75,000; 8=\$75,001-\$100,000; 9=\$100,001-\$150,000; 10=\$150,001+
Number of adults in HH	Number of adults in the household	0=information missing on sampling frame; 1=1 adult in the household; 2=2 adults in the household;
Vacancy status	Whether the address is vacant	1=vacant; 2=not vacant
Race/ethnicity	Race or ethnicity of the head of the household	0=race information missing on sampling frame; 1=White; 2=Black; 3=Hispanic; 4=Asian or Pacific Islander; 5=Other, unknown ¹
Home tenure	Whether the address was owned or rented by the household	1=owned or other; 2=rented
Education	Highest educational attainment of the head of the household	0=educational information missing on sampling frame; 1=High school diploma; 2=Some college; 3=Bachelor degree; 4=Graduate degree; 5= Less than high school diploma
Gender of HOH	Gender of the head of the household	1=male; 2=female
Single/multi family unit	Whether the address is for a single-family or multi-unit structure	1=single-family; 2=multi-unit
Marital status	Marital status of the head of the household	0=marital status information missing on sampling frame; 1=single; 2=married
Ques. logo	Whether the questionnaire had a Census Bureau or Department of Education logo	1=Census Bureau; 2=Department of Education

¹ "White" included these categories from the vendor's frame: Czech, Dutch, Eastern European, English, French, German, Greek, Irish, Italian, Jewish, Middle Eastern, Polish, Portuguese, Russian, Scandinavian, Scotch, Swiss, Ukrainian, and Western European. "Black" included African and African American. "Hispanic" included Hispanic. "Asian or Pacific Islander" included Asian, Chinese, Hawaiian, Indonesian, Japanese, Korean, Polynesian, and Vietnamese. "Other, unknown" included Miscellaneous Other, Native American, and unknown. Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

Table D-1. Screener nonresponse interview adjustment cells: NHES 2012 (UPDATED 2014.07.15)

HAID ⁵ cell	Vacancy status	Route type	Presence of phone number for HH ²	Home tenure	Race/ ethnicity	Age of HoH ³	Education	Number of adults in HH ²		Marital status	Questionnaire logo	HoH ³	family unit	Estima respor rate (%
	2		1	1	0	1-4	†	t	†	†	t		+	78.85
	2		1	1	0	0,1	†	0,1	+	†	+		t	78.66
	2		1	1	0	0,1	t		†	†	†		†	84.153
	2		1	1	0	5	†		0-8	†	†	†	†	83.803
	2		1	1	0	5	†	+	9+	†	+		†	88.78
	2		1	1	0	6+	†		0-4	†	+	t	†	87.147
	2		1	1	0	6+	t	+	5-7	†	†		†	89.908
	2		1	1	0	6+	†	0-2	8+	t	†		†	93.988
	2		1	1	0	6+	t	3+	8+	†	†	t	t	92.060
	2	1,4	1	1	1,5	0,1	3,4	†	†	†	†	t	t	82.077
	2	1,4	1	1	1,5	0,1	0,1,2,5	2+	†	t	†	t	t	75.40
	2	1,4	1	1	1,5	0,1	0,1	0,1	†	t	†	†	t	71.77
	2	1,4	1	1	1,5	0,1	2,5	0,1	†	†	†	t	t	67.692
	2	1,4	1	1	1,5	1-4	4	†	†	†	†	t	t	83.658
	2	1,4	1	1	1,5	1-4	3	†	9+	†	†	t	t	81.18
	2	1,4	1	1	1,5	1-3	3	†	0-8	†	†	t	t	76.85
	2	1,4	1	1	1,5	4	3	†	0-8	t	†	t	t	80.816
	2	1,4	1	1	1,5	1-4	0,1,2,5	0,1	†	t	t	t	t	72.96
	2	1,4	1	1	1,5	1-4	0,1,2,5	4+	†	t	†	t	t	81.57
	2	1,4	1	1	1,5	1-4	0,1,2,5	2,3	0-5	t	†	t	t	75.58
	2	1,4	1	1	1,5	1-4	0,1,2,5	2,3	6,7	t	†	t	t	72.89
	2		1	1	1,5	1-4	0,1,2,5	2,3	8	t	+	t	t	76.57
	2		1	1	1,5	1-4	0,1,2,5	2,3	9+	†	t		†	80.74
	2		1	1	1,5	5	0,5	†	†	†	t	+	†	78.85
	2		1	1	1,5	5	3,4	0,1	+	†	t	+	†	82.69
	2		1	1	1,5	5	3,4	2	+	†	†	+	t	84.94
	2		1	1	1,5	5	3,4		+	+	†		t	87.16
	2		1	1	1,5	5	3,4		0-7	†	†	t	+	84.72
	2		1	1	1,5	5	3	3	8+	+	†	t	t	88.87
	2		1	1	1,5	5	4	3	8+	+	†	t	t	87.85
	2		1	1	1,5	5	3	4	†	†	†		†	89.75
	2		1	1	1,5	5	4	4	†	†	+		†	88.37
									t					
	2		1	1	1,5	5	1,2	†		1	†		†	74.55
	2		1	1	1,5	5	1,2	0-2	†	2	1		+	84.47
	2		1	1	1,5	5	1,2		†	2	1		†	87.51
	2		1	1	1,5	5	1,2		0-4	2	2		†	84.46
	2		1	1	1,5	5	1,2		5	2	2		†	82.35
	2		1	1	1,5	5	1,2	+	6	2	2		†	86.64
	2		1	1	1,5	5	1,2	+	7	2	2		t	80.94
	2		1	1	1,5	5	1,2	3	8+	2	2		t	83.00
	2		1	1	1,5	5	1,2	4+	8+	2	2		t	81.46
	2		1	1	1,5	5	1	0-2	8+	2	2		t	85.94
	2		1	1	1,5	5	2	0-2	8+	2	2	†	t	84.10
	2		1	1	1,5	5	1,2	0,1	†	0	†	t	t	84.26
	2	1,4	1	1	1,5	5	1,2	2+	†	0		†	t	80.15
	2	1,4	1	1	1,5	6+	†	0-2	†	2	1	†	t	95.75
	2	1,4	1	1	1,5	6+	†	3+	†	2	1	†	t	93.40
	2	1,4	1	1	1,5	6+	t	†	0-4	2	2	t	t	90.07
	2	1,4	1	1	1,5	6+	t	†	5	2	2	t	t	92.78
	2	1,4	1	1	1,5	6+	†	†	6	2	2	t	t	88.87
	2		1	1	1,5	6+	1,3	†	7+	2	2	†	t	91.14
	2	1,4	1	1	1,5	6+	5	†	7+	2	2	†	t	89.10
	2		1	1	1,5	6+	0,2,4	0-2	7+	2	2	t	t	93.22
	2		1	1	1,5	6+	0,2,4	3+	7+	2	2	t	t	90.97
	2		1	1	1,5	6+	†	+	†	0,1	1	t	t	92.50
	2		1	1	1,5	6+	t	+	0-4	0,1	2	t	t	83.69
	2		1	1	1,5	6+	†	†	9+	0,1	2	+	†	89.41
	2		1	1	1,5	6+	†	†	5-8	0,1	2	0,1	†	84.51
	2		1	1	1,5	6+	0,1	†	5-8	0,1	2	2	t	90.32
	2		1	1	1,5	6+	2-5	†	5-8	0,1	2		+	86.61
	2		1	1	4	†	0,3-5	†	†	†	†	†	†	82.34
	2		1	1	4	†	1,2	†	†	†	†	t	†	77.33
	2		1	1	2,3	0-4	0,1,4	†	+	†	+	t	†	67.95
	2		1	1	2,3	0-4	5	†	†	†	†	†	†	65.29
	2							†		†	†	†	†	
			1	1	2,3	0-4	2,3		0-5					67.63
	2		1	1	2,3	0-4	2,3	†	6+	†	+	†	†	76.32
	2		1	1	2,3	5	0,3,4	†	†	†	†	†	†	78.99
	2		1	1	2,3	5	5	+	+	†	+	†	†	66.85
	2		1	1	2,3	5	1,2	†	0-5	†	†	†	+	74.09
	2		1	1	2,3	5	1,2	†	6+	†	†	t	+	77.92
	2		1	1	2,3	6+	0-4	†	†	†	†	†	†	85.76
	2	1,4	1	1	2,3	6+	5	†	†	†	†	†	t	76.64
	2	1,4	1	0,2	t	6+	t	+	†	t	+	t	t	80.03
	2		1	0,2	3	0,1	†	†	†	†	t	t	t	54.79
	2		1	0,2	2	0,1	t	†	†	t	†	t	t	52.17
	2		1	0,2	0,4,5	0,1	†	†	0-3	†	t	+	†	69.74
			1	0,2	0,4,5	0,1			-	†				

313

CHAID ⁵ cell	Vacancy status	Route type	Presence of phone number for HH ²	Home tenure	Race/ ethnicity	Age of HoH ³		Number of adults in HH ²	HH ² income	Marital status	Questionnaire logo	HoH ³	Single/ multi family unit	Estimated response rate (%) ⁴
79	2		1	0,2	1	0,1	†		†	0,1	†		†	58.0059
80	2		1	0,2	†	1-4	†		0-4	†	†		t	58.5454
81	2		1	0,2	t	1-4	†		5+	†	†		†	66.9906
82	2		1	0,2	†	5	†		+	0,2	+		†	74.1637
83 84	2		1 0	0,2 1	† 0,1,4,5	5 6+	† †		† 0-4	1	†		†	61.8198 79.4715
85	2		0	1	0,1,4,5	0-4	†		0-4	†	1		†	70.0982
86	2	1,4	0	1	0,1,4,5	0-4	†	+	0-4	†	2	2	t	66.1575
87	2		0	1	0,1,4,5	0-2	t		0-4	†	2		t	61.4273
88	2		0	1	0,1,4,5	3,4	†		0-4	†	2 †		† _	64.3955 76.4819
89 90	2		0	1	0,1,4,5 0,1,4,5	5 5	1,3,4 0,2,5		0-4 0-4	† †	†		† †	69.5843
91	2		0	1	0,1,4,5	0-4	0,3-5		5	t	†		+	69.4568
92	2		0	1	0,1,4,5	0-4	1,2		5	†	t	†	†	64.0578
93	2		0	1	0,1,4,5	5+	1,3,4		5	†	†		†	78.8511
94 95	2		0	1	0,1,4,5 0,1,4,5	5+ 0-4	0,2,5 3,4		5 6,7	†	†		† †	74.3629 72.6636
96	2		0	1	0,1,4,5	1-3	0,2		6,7	+	†		†	65.5209
97	2		0	1	0,1,4,5	4	0,2		6,7	†	t		†	71.5674
98	2	1,4	0	1	0,1,4,5	0,1	0,2		6,7	†	t	t	t	70.3881
99	2		0	1	0,1,4,5	0,1	0,2		6,7	†	†		†	78.8117
100 101	2		0	1	0,1,4,5	0-4 0-4	1,5 1,5		6,7 6,7	†	†		† †	65.2039 66.2779
101	2		0	1	0,1,4,5 0,1,4,5	5	†		6,7	†	1		†	82.2338
103	2		0	1	0,1,4,5	5	0,3,4		6,7	t	2		+	76.0703
104	2	1,4	0	1	0,1,4,5	5	1	t	6,7	†	2	t	t	72.0400
105	2		0	1	0,1,4,5	5	2,5		6,7	†	2		+	68.6161
106 107	2		0	1	0,1,4,5	6+	1-4		6,7	† †	†		† _	88.5278
107	2		0	1	0,1,4,5 0,1,4,5	6+ 6+	0,5 †		6,7 8	†	†		†	78.9751 85.8113
109	2		0	1	0,1,4,5	0-2	2-4		8	†	†		+	74.3211
110	2	1,4	0	1	0,1,4,5	0-2	0,1,5	+	8	t	t	t	t	67.9331
111	2		0	1	0,1,4,5	3,4	t		8	†	t		+	66.7006
112 113	2		0	1	0,1,4,5	3,4	†		8	†	†		†	74.2647
113	2		0	1	0,5 1,4	5 5	†		8	†	†		†	79.5864 75.4007
115	2		0	1	0,1,4,5	6+	†		9	†	†		+	89.1179
116	2	1,4	0	1	0,1,4,5	0,1	†	0,1	9	†	t	t	t	70.9476
117	2		0	1	0,1,4,5	0,1	†		9	†	†		+	75.9895
118 119	2		0	1	0,1,4,5	1-4	0,3,5		9	†	†		†	78.1104 71.6670
120	2		0	1	0,1,4,5 0,1,4,5	1-4 5	1,2,4 †		9	†	†		†	75.4667
121	2		0	1	0,1,4,5	5	†		9	†	†		+	81.6389
122	2	1,4	0	1	0,1,4,5	5	t	3+	9	t	t	t	t	79.3522
123	2		0	1	0,1,4,5	†	†		10+	†	1		+	84.9024
124 125	2		0	1	0,1,4,5	0,1 1+	125		10+ 10+	† †	2 2		†	77.6122 81.1032
126	2		0	1	0,1,4,5 0,1,4,5	1+	1,3,5 0		10+	†	2		†	79.8113
127	2		0	1	0,1,4,5	1+	2,4		10+	†	2		†	77.6790
128	2	1,4	0	1	3	t	0,1	+	†	†	†	t	t	67.4921
129	2		0	1	3	0-4	2-4	†	†	†	†		+	67.5445
130	2		0	1	3	5+ †	2-4 5	-	†	†	†	†	†	74.4121
131 132	2		0	1	3	†	5		†	0,1	†		†	63.4431 58.4094
133	2		0	1	2	0,1	t	†	+	t	†		t	56.2315
134	2		0	1	2	1-4	t	t	†	t	t		t	60.3489
135	2		0	1	2	5+	1,3,4	†	+	†	†	†	†	68.3972
136 137	2		0	1 0,2	2 1,4,5	5+ †	0,2,5 3,4	†	†	†	†		†	63.2203 70.5196
137	2		0	0,2	1,4,5	†	5		†	†	†		†	70.5196 59.1831
139	2		0	0,2	1,4,5	0-4	1	†	+	t	t	t	†	64.4564
140	2		0	0,2	1,4,5	5+	1	t	†	t	t	t	t	74.4948
141	2		0	0,2	1,4,5	†	0,2	†	†	†	1		†	70.2354
142 143	2		0	0,2	1,4,5	†	0,2	†	†	1	2 2	†	† †	67.6213 59.8047
143	2		0	0,2 0,2	1,4,5 1,4,5	†	0,2 0	†	†	2	2	†	†	68.3130
145	2		0	0,2	1,4,5	†	2	t	+	2	2	t	†	63.6128
146	2	1,4	0	0,2	0	t	t		†	t	t		2	58.3532
147	2		0	0,2	0	†	†		†	†	1		1	71.4983
148 149	2		0	0,2	0	†	† †		0-2	†	2		1 1	67.6227
150	2		0	0,2	0	†	†	†	3,4 5,6	†	2		1	60.0476 63.9627
151	2		0	0,2	0	†	+	t	7+	t	2		1	66.2677
152	2		0	0,2	3	t	0-2,4	t	†	t	+	t	t	59.9695
153	2		0	0,2	3	†	3,5		†	†	†		†	55.7734
154 155	2		0	0,2	2	† †	† †	†	0-3 4+	†	†		†	54.8654 57.8733
	∠	1,4	0	0,2	†	1	†		4+ †	†	†		†	57.8733

			Presence of											Estimated
CHAID ⁵	Vacancy	Route		Home	Race/	Age of		Number of	HH^2	Marital	Questionnaire	Gender of	Single/ multi	response
cell	status	type	for HH ²	tenure	ethnicity	HoH^3	Education	adults in HH ²	income	status	logo	HoH^3	family unit	rate (%)4
157	2	2	1	t	†	0-3	†	Ť	0	†	Ť	t	†	65.2646
158	2	2	1	†	t	0-3	†	t	6+	†	t	†	†	74.1255
159	2	2	1	†	†	0-3	†	t	1-5	†	†	2	†	69.1522
160	2	2	1	†	t	0-3	†	t	1-5	†	t	0,1	†	65.7828
161	2	2	1	1	t	5	†	t	†	†	t	†	†	81.2023
162	2	2	1	0,2	1,4,5	5	t	t	t	t	t	t	†	75.1135
163	2	2	1	0,2	0,2,3	5	†	t	†	†	t	†	†	67.8300
164	2	2	1	1	t	6+	†	t	†	†	t	†	†	88.3704
165	2	2	1	0,2	1,5	6+	†	t	†	†	†	†	†	85.8828
166	2	2	1	0,2	0,2,3,4	6+	†	t	†	†	t	t	†	81.1363
167	2	2	0	1	t	0-2	†	t	†	†	t	t	†	68.2436
168	2	2	0	1	†	3,4	†	†	†	†	†	†	t	71.7374
169	2	2	0	1	1,3,5	5+	†	†	†	†	†	†	t	83.3547
170	2	2	0	1	0,2,4	5+	†	†	†	†	†	t	†	75.4822
171	2	2	0	2	t	6+	†	t	†	†	t	t	†	77.5129
172	2	2	0	2	t	0-4	†	t	6	†	t	t	†	58.8259
173	2	2	0	2	t	0-4	†	t	7	†	t	t	†	64.7246
174	2	2	0	2	t	0-4	†	t	8+	†	t	t	†	70.2607
175	2	2	0	2	t	0-4	†	t	0-3	†	1	t	†	67.8628
176	2	2	0	2	1,3,5	0-4	†	t	0-3	†	2	t	†	62.1768
177	2	2	0	2	0,2,4	0-4	†	t	0-3	†	2	2	†	60.0911
178	2	2	0	2	0,2,4	0-4	†	t	0-3	†	2	0,1	†	58.3447
179	2	2	0	2	t	0-4	†	t	4,5	†	t	2	†	68.2804
180	2	2	0	2	t	0-4	†	t	4,5	†	t	0,1	†	62.0302
181	2	2	0	2	1,3,5	5	†	t	†	†	t	t	†	69.5532
182	2	2	0	2	0,2,4	5	†	†	†	†	t	t	†	66.2512
183	2	2	0	0	t	t	†	†	†	†	1	t	†	65.1348
184	2	2	0	0	t	t	†	t	0	†	2	t	†	60.9882
185	2	2	0	0	t	t	†	†	1-5	†	2	t	†	59.5433
186	2	2	0	0	t	t	†	t	6+	†	2	t	†	61.5794
187	2	3	†	2	t	t	†	t	†	†	t	t	†	59.4866
188	2	3	†	1	t	4	†	t	†	†	t	t	†	61.2653
189	2	3	†	1	t	0-3	†	0,1	†	†	t	t	†	63.5654
190	2	3	†	1	t	0-3	†	2+	†	†	t	t	†	67.7372
191	2	3	t	1	†	5	†	†	0-2	†	†	†	t	63.0044
192	2	3	t	1	†	5	†	†	3	†	†	†	t	72.7738
193	2	3	t	1	†	5	†	t	4+	t	†	†	t	68.9803
194	2	3	t	1	†	6+	†	t	†	2	t	t	t	85.5643
195	2	3	t	1	t	6+	†	t	t	0,1	t	t	t	77.9555
196	2	3	t	0	t	t	†	t	t	2	t	t	t	67.2201
197	2	3	t	0	t	t	†	t	t	0,1	1	t	t	62.4919
198	2	3	t	0	t	t	†	0	t	0,1	2	t	t	57.1735
199	2	3	t	0	t	t	†	1+	t	0,1	2	t	t	57.3025
200	1	t	t	t	t	t	†	t	t	t	t	t	1	84.8397
201	1	t	t	t	t	t	†	t	†	†	t	t	2	77.8670
202	1	t	†	t	t	+	†	t	t	t	t	t	0	91.1800

 $^{^{1}} Category\ codes\ for\ characteristics\ are\ specified\ in\ Exhibit\ 7.1\ of\ the\ Weighting\ and\ Standard\ Error\ Calculation\ Chapter.$

²HH: Household

³HoH: Head of household

⁴The estimated response rate is the number of completed interviews divided by the sum of the number of completed interviews and nonresponses, weighted by the probability of

⁵CHAID: Chi-square automatic interaction detection

[†]Not applicable. In these cases, the cell consisted of all values of the particular variable.

Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

Appendix E. ECPP Nonresponse Interview Adjustment Cells

Appendix E

Exhibit E-1. Response categories for the ECPP nonresponse interview adjustment cells table

Column Headings	Response Categories
Race/ethnicity stratum	1=Black stratum; 2=Hispanic stratum; 3=Other stratum
Ques. Logo = whether the questionnaire had a Census Bureau or Department of Education logo	1=Census Bureau; 2=Department of Education
Incentive amount	1=\$5; 2=\$15
Number of children 20 or younger in the household	0=0 children in the household ¹ ; 1=1 child in the household;5=5 children in the household; 6=6+ children in the household; 7=number-of-children information was missing ²
Number of youth in the household age 20 or younger ineligible for the topical survey due to attending college	0=0 youth ineligible for the topical survey; 1=1 youth; 2=2 youth; 3=3+ youth
Child's age	0=age 0; 1=age 1; 6=age 6; 7=age information was missing ³
Child's enrollment status	1=public/private/preschool; 2=homeschool; 3=not in school
Child's sex	0=sex information was missing; 1=male; 2=female

¹ This information came from a screener variable where the respondent was asked to fill in the number of children in the household. For a few screener forms, this question was answered with '0' even though the screener respondent filled in enough other information about children in the household that it was possible to select a child for one of the Topical surveys..

Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

² For some screener forms, this question was left blank even though the screener respondent filled in enough other information about children in the household that it was possible to select a child for one of the Topical surveys.

³ A child could be selected for a Topical survey even though age was missing if there was enough other information about the child. For example, where age was missing, but the screener indicated that the child was in preschool, the child was selected for the ECPP survey.

<u>Table E-1. ECPP nonresponse interview adjustment cells: NHES:2012 (UPDATED 2017.07.15)</u>
Number of

children age 20 or Esti-mated Child's Race/ $CHAID^4$ response ethnicity younger in enrollment Child's Incentive 11م etratum HH^2 etatue Child's age gender amount rate (%)3

cell	stratum	HH^2	status	Child's age	gender	amount	rate (%) ³
1	3	4	+	+	†	+	81.5909
2	3	5+	+	+	t	+	71.1520
3	3	0,1	+	0	†	2	86.3068
4	3	0,1	†	0	†	1	78.9129
5	3	0,1	+	1	0,1	+	91.5633
6	3	0,1	†	1	2	+	83.6333
7	3	0,1	1	2+	†	1	87.5754
8	3	0,1	0,2,3	2+	†	1	82.4573
9	3	0,1	0,1,2	2+	t	2	84.0056
10	3	0,1	3	2+	1	2	81.4795
11	3	0,1	3	2+	0,2	2	75.4878
12	3	2	1	0,1,2,3	†	+	89.1350
13	3	2	1	4+	2	+	87.6594
14	3	2	1	4+	1	+	83.1330
15	3	2	0,3,2	0,1	†	2	84.8544
16	3	2	0,3,2	2+	0,1	2	81.5801
17	3	2	0,3,2	2+	2	2	78.8034
18	3	2	0,3,2	0,1,2	†	1	78.6382
19	3	2	0,3,2	3+	†	1	74.0542
20	3	3	0,1,2	+	†	1	83.4036
21	3	3	0,1,2	+	†	2	86.0494
22	3	3	3	0,1,2	†	+	76.1544
23	3	3	3	3+	†	+	76.1974
24	2	0,1	+	+	†	+	75.9093
25	2	2	†	+	†	+	76.7436
26	2	3	+	+	t	+	71.7679
27	2	4+	+	+	t	+	64.5101
28	1	†	1,2	+	0,1	+	77.1021
29	1	+	1,2	+	2	+	73.0124
30	1	+	0,3	0	†	+	66.6218
31	1	+	0,3	3+	t	+	67.2407
32	1	+	0,3	1,2	1	+	77.8733
33	1	+	0,3	1,2	0,2	+	67.2495

¹Category codes for characteristics are specified in Exhibit 7.1 of the Weighting and Standard Error Calculation Chapter.

²HH: Household

³The estimated response rate is the number of completed interviews divided by the sum of the number of completed interviews and nonresponses, weighted by the probability of selection.

⁴CHAID: Chi-square automatic interaction detection

[†]Not applicable. In these cases, the cell consisted of all values of the particular variable.

Appendix F. PFI Nonresponse Interview Adjustment Cells

Appendix F

Table F-1. PFI nonresponse interview adjustment cells: NHES:2012

Column Headings	Response Categories
Race/ethnicity stratum	1=Black stratum; 2=Hispanic stratum; 3=Other stratum
Ques. Logo = whether the questionnaire had a Census Bureau or Department of Education logo	1=Census Bureau; 2=Department of Education
Incentive amount	1=\$5; 2=\$15
Number of children 20 or younger in the household	0=0 children in the household ¹ ; 1=1 child in the household;5=5 children in the household; 6=6+ children in the household; 7=number-of-children information was missing ²
Number of youth in the household age 20 or younger ineligible for the topical survey due to attending college	0=0 youth ineligible for the topical survey; 1=1 youth; 2=2 youths; 3=3+ youths
Child's age	0=age 0; 1=age 1; 20=age 20; 21=age information was missing ³
Child's sex	0=sex information was missing; 1=male; 2=female

¹ This information came from a screener variable where the respondent was asked to fill in the number of children in the household. For a few screener forms, this question was answered with '0' even though the screener respondent filled in enough other information about children in the household that it was possible to select a child for one of the Topical surveys..

Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2012.

² For some screener forms, this question was left blank even though the screener respondent filled in enough other information about children in the household that it was possible to select a child for one of the Topical surveys.

³ A child could be selected for a Topical survey even though age was missing if there was enough other information about the child. For example, where age was missing, but the screener indicated that the child was in preschool, the child was selected for the ECPP survey.

Number of youth in Number of youth in Number of youth in HH¹	_
Number of children ineligible due to $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	response o rate (%) ³ 63.6782
children ineligible Race/ age 20 or due to CHAID ⁴ ethnicity younger in Child's Incentive attending Question cell stratum Child's age HH ² gender amount college naire log 1 3 19+ † † † † † 2 3 0-6 0,1 † † † † 3 3 0-6 3+ † † † † 4 3 0-6 2 0,2 † † †	response o rate (%) ³ 63.6782
CHAID ⁴ ethnicity younger in cell Child's age Incentive attending amount Question college 1 3 19+ † <td>response o rate (%)³ 63.6782</td>	response o rate (%) ³ 63.6782
CHAID ⁴ ethnicity younger in cell Child's age Incentive attending amount Question college 1 3 19+ † † † † † † † 2 3 0-6 0,1 † † † † † 3 0-6 3+ † † † † † 4 3 0-6 2 0,2 † † † †	response o rate (%) ³ 63.6782
cell stratum Child's age HH² gender amount college naire log 1 3 19+ † † † † † 2 3 0-6 0,1 † † † † 3 3 0-6 3+ † † † † 4 3 0-6 2 0,2 † † †	o rate (%) ³ 63.6782
cell stratum Child's age HH² gender amount college naire log 1 3 19+ † † † † † 2 3 0-6 0,1 † † † † 3 3 0-6 3+ † † † † 4 3 0-6 2 0,2 † † †	o rate (%) ³ 63.6782
1 3 19+ † † † † † † 2 3 0-6 0,1 † † † † † 3 3 0-6 3+ † † † † † 4 3 0-6 2 0,2 † † †	63.6782
2 3 0-6 0,1 † † † † 3 3 0-6 3+ † † † † † 4 3 0-6 2 0,2 † † † †	
3 3 0-6 3+ † † † † † † † † † † † † † † † † † †	
	80.7377
	83.6542
5 3 0-6 2 1 + + +	75.3114
6 3 9 0,1 + + + +	85.7160
7 3 7,8 0,1 0,1 † † †	79.9617
8 3 7,8 0,1 2 † † †	79.2791
9 3 7-9 2 2 † † †	83.8094
10 3 7-9 2 0,1 2 † †	82.4170
11 3 7-9 2 0,1 1 † †	79.3003
12 3 7-9 3+ 0,1 † † †	82.6080
13 3 7-9 3+ 2 † † †	78.2565
14 3 10 3+ + + + + +	78.5878
15 3 10 0-2 0,2 † † †	80.8333
16 3 10 0-2 1 † † †	81.6220
17 3 11,12 0,1 † 1 † †	81.8822
18 3 13,14 0,1 † 1 † †	84.5407
19 3 11,12 0,1 † 2 † †	81.6284
20 3 13,14 0,1 0,2 2 † †	82.6335
21 3 13,14 0,1 1 2 † †	79.2777
22 3 11-14 2 † † 1+ †	79.8897
23 3 11 2 † 2 0 †	84.9989
24 3 12 2 † 2 0 †	82.6513
25 3 13,14 2 † 2 0 †	85.4412
26 3 11,12 2 † 1 0 †	86.2023
27 3 13,14 2 † 1 0 †	80.1302
28 3 11 3+ † † † †	78.3072
29 3 12 3+ † † † †	87.1257
30 3 13 3+ † † † †	79.3436
31 3 14 3+ † † † †	80.2418
32 3 15 † † 1 † †	85.6735
33 3 15 † 0,2 2 † †	85.1484
34 3 15 † 1 2 † †	79.2476
35 3 16 † † † † 1	84.5758
36 3 17 † † † † 1	81.8432
37 3 16,17 3+ + + + 2	75.6854
38 3 16 0,1 † † † 2	78.4096
39 3 17 0,1 0,2 † † 2	86.8627
40 3 17 0,1 1 † † 2	81.4250
41 3 16,17 2 0,1 † † 2	86.1250
42 3 16,17 2 2 † † 2	77.5804
43 3 18 † 2 † † †	78.2949
44 3 18 † 0,1 † † †	72.1373
45 2 0-6 † † † † †	74.2041

						Number of		
						youth in		
			Number of			HH^1		
			children			ineligible		
	Race/		age 20 or			due to		Estimated
CHAID ⁴	ethnicity		younger in	Child's	Incentive	attending	Question-	response
cell	stratum	Child's age	HH^2	gender	amount	college	naire logo	rate (%) ³
46	2	10,11	†	†	+	+	†	73.4848
47	2	12,13	†	†	+	+	†	71.6659
48	2	14,15	†	†	+	+	†	75.5620
49	2	16	†	†	+	+	†	75.2059
50	2	17+	†	†	+	+	†	68.9480
51	2	7-9	†	1	+	+	+	79.4555
52	2	7-9	†	0,2	+	+	+	68.2007
53	1	†	3	†	+	+	†	70.6546
54	1	†	4+	†	+	+	+	63.9909
55	1	†	0,1	†	1	+	†	74.7054
56	1	0-14	0,1	†	2	+	+	76.3767
57	1	15+	0,1	†	2	+	†	70.4085
58	1	+	2	†	1	+	†	72.9384
59	1	0-11	2	†	2	+	†	77.3666
60	1	12+	2	†	2	†	†	74.6030

¹Category codes for characteristics are specified in Exhibit 7.1 of the Weighting and Standard Error Calculation Chapter.

²HH: Household

³The estimated response rate is the number of completed interviews divided by the sum of the number of completed interviews and nonresponses, weighted by the probability of selection.

⁴CHAID: Chi-square automatic interaction detection

[†]Not applicable. In these cases, the cell consisted of all values of the particular variable.

Appendix G. Summary of Weighting and Sample Variance Estimation Variables

Appendix G

Exhibit 1. Summary of weighting and sample variance estimation variables: 1991–2012

			C	Computing sampli	ing errors		
		(We	Replication method esVar, SUDAAN, STATA	A, AM^1)	(SUDAAN,	series method Stata, SAS 8 ² ,AM, implex Samples)	DEFT (Average Root Design Effect) for
NHES data file	Full sample	Respondent ID	Replicate weights	Jackknife method	Sample design	Nesting variables	approximating
NHES data file NHES:1991 Early Childhood Education, Primary file	weight EWGT	PERSID	EWREPL1- EWREPL50	JK1	WR	VSTRAT PSU	sampling errors 1.2
NHES:1991 Early Childhood Education, Preprimary file	EWGT	PERSID	EWREPL1- EWREPL50	JK1	WR	VSTRAT PSU	1.2
NHES:1991 <i>Adult Education</i> Adult file	AEWT	PERSID CLASID	AEREPL1- AEREPL50	JK1	WR	VSTRAT PSU	2.1 Full Sample 1.5 Participants 1.7 Nonparticipants 2.0 Black (non-Hispanic) 1.8 Hispanic 1.7 White (non-Hispanic) 1.6 Other races
NHES:1991 Adult Education Course file ³	AEWT	PERSID CLASID	AEREPL1- AEREPL50	JK1	WR	VSTRAT PSU	2.1 Full Sample 1.5 Participants 1.7 Nonparticipants 2.0 Black (non-Hispanic) 1.8 Hispanic 1.7 White (non-Hispanic) 1.6 Other races
NHES:1993 School Readiness	FWGT0	ENUMID	FWGT1 - FWGT60	JK2	WR	STRATUM PSU	1.3

Exhibit 2. Summary of weighting and sample variance estimation variables: 1991–2012—Continued

			Co	mputing samplir	ng errors		
		(We	Replication method esVar, SUDAAN, STATA	, AM ¹)	(SUDAAN,	series method Stata, SAS 8 ² ,AM, implex Samples)	DEFT (Average Root Design Effect) for
NHES data file	Full sample weight	Respondent ID	Replicate weights	Jackknife method	Sample design	Nesting variables	approximating sampling errors
NHES:1993 School Safety & Discipline, Parent interviews only	FWGT0	BASMID	FWGT1-FWGT60	JK2	WR	STRATUM PSU	1.4
NHES:1993 School Safety & Discipline, Parent & Emancipated Youth (EY) interviews	FWGT0 (for parents) & PFWGT0 (for EY)	BASMID	FWGT1-FWGT60, PFWGT1-PFWGT60	JK2	WR	STRATUM PSU	1.4
NHES:1993 School Safety & Discipline, Youth interviews (including Emancipated Youth)	FWGT0	ENUMID	FWGT1-FWGT60	JK2	WR	STRATUM PSU	1.5
NHES:1995 Early Childhood Program Participation	EWEIGHT	ENUMID	ERPL1 - ERPL50	JK1	WR	STRATUM PSU	1.2
NHES:1995 Adult Education ⁴	AEWEIGHT	BASMID	ARPL1 - ARPL50	JK1	WR	STRATUM PSU	1.3
NHES:1996 Screener/ Household & Library	FHWT	BASEID	FHWTR1-FHWTR80	JK1	WR	HSTRATUM HPSU	1.1
NHES:1996 Parent PFI/CI	FPWT	BASMID	FPWTR1-FPWTR80	JK1	WR	PSTRATUM PPSU	1.3
NHES:1996 Youth CI	FYWT	BASMID	FYWTR1-FYWTR80	JK1	WR	YSTRATUM YPSU	1.4
NHES:1996 Adult CI	FAWT	BASMID	FAWTR1-FAWTR80	JK1	WR	ASTRATUM APSU	1.2
NHES:1999 Parent Interview	FPWT	BASMID	FPWT1-FPWT80	JK1	WR	PSTRATUM PPSU	1.3
NHES:1999 Youth Interview	FYWT	BASMID	FYWT1-FYWT80	JK1	WR	YSTRATUM YPSU	1.3
NHES:1999 Adult Education Interview	FAWT	BASMID	FAWT1-FAWT80	JK1	WR	ASTRATUM APSU	1.3 Full sample1.4 Participants1.5 Black, non- Hispanic
NHES:2001 Early Childhood Program Participation	FEWT	BASMID	FEWT1-FEWT80	JK1	WR	ESTRATUM EPSU	1.2 Full sample 1.3 Black, non- Hispanic

Exhibit 3. Summary of weighting and sample variance estimation variables: 1991–2012—Continued

			(Computing sampl	ing errors		
		(W	Replication method esVar, SUDAAN, STAT		(SUDAAN,	series method Stata, SAS 8 ² ,AM, mplex Samples)	DEFT (Average Root Design Effect) for
NHES data file	Full sample weight	Respondent ID	Replicate weights	Jackknife method	Sample design	Nesting variables	approximating sampling errors
NHES:2001 Before- and After-School Programs and Activities	FSWT	BASMID	FSWT1-FSWT80	JK1	WR	SSTRATUM SPSU	1.3 Full sample 1.4 Black, non- Hispanic
NHES:2001 Adult Education	FAWT	BASMID	FAWT1-FAWT80	JK1	WR	ASTRATUM APSU	1.3
NHES:2003 Parent and Family Involvement in Education	FPWT	BASMID	FPWT1-FPWT80	JK1	WR	PSTRATUM PPSU	1.3 Full sample 1.4 Race/ethnicity subgroups
NHES:2003 Adult Education for Work-Related Reasons	FAWT	BASMID	FAWT1-FAWT80	JK1	WR	ASTRATUM APSU	1.3 Full sample 1.4 Hispanics 1.4 Work-related adult education participants
NHES:2005 Early Childhood Program Participation	FEWT	BASMID	FEWT1-FEWT80	JK1	WR	ESTRATUM EPSU	1.4 Full sample 1.3 Preschoolers
NHES:2005 After-School Programs and Activities	FSWT	BASMID	FSWT1-FSWT80	JK1	WR	SSTRATUM SPSU	1.4 Full sample 1.3 Home schoolers 1.3 White, non- Hispanic 1.5 Black, non- Hispanic
NHES:2005 Adult Education	FAWT	BASMID	FAWT1-FAWT80	JK1	WR	ASTRATUM APSU	1.6 Full sample 1.5 White, non- Hispanic 1.5 Black, non- Hispanic 1.5 Nonparticipants 1.7 Less than high school 1.4 High school diploma/ equiv. 1.4 Bachelors or higher 1.5 Associates degree

Exhibit 4. Summary of weighting and sample variance estimation variables: 1991–2012—Continued

				Computing sampl	ing errors			
		(W	Replication methodesVar, SUDAAN, STAT		(SUDAAN,	series method Stata, SAS 8 ² ,AM, mplex Samples)	DEFT (Average Root Design Effect) for	
NHES data file	Full sample weight	Respondent ID	Replicate weights	Jackknife method	Sample design	Nesting variables	approximating sampling errors	
NHES:2007 School Readiness	FSWT	BASMID	FSWT1-FSWT80	JK1	WR	RSTRATUM RPSU	1.4 Full sample 1.5 Preschoolers 1.6 Black, non- Hispanic	
NHES:2007 Parent and Family Involvement in Education	FPWT	BASMID	FPWT1-FPWT80	JK1	WR	PSTRATUM PPSU	 1.4 Full sample 1.5 Elementary schoolers 1.5 Middle schoolers 1.5 High schoolers 1.5 Black, non- Hispanic 	
NHES:2012 Early Childhood Program Participation	FEWT	BASMID	FEWT1-FEWT80	JK1	WR	ESTRATUM EPSU	1.3 Full sample (1.30256) 1.4 White, non- Hispanic (1.43268) 1.4 Black, non- Hispanic (1.43268) 1.4 Hispanic (1.43268) 2.2 All other, multiple races, non-Hispanic (2.16520) 1.5 Infants (1.52149) 1.5. Preschoolers (1.52149)	

Exhibit 5 Summary of weighting and sample variance estimation variables: 1991–2012—Continued

NHES data file	Full sample weight	Computing sampling errors					
		Replication method (WesVar, SUDAAN, STATA, AM¹)			Taylor series method (SUDAAN, Stata, SAS 8 ² ,AM, SPSS Complex Samples)		DEFT (Average Root Design Effect) for
		Respondent ID	Replicate weights	Jackknife method	Sample design	Nesting variables	approximating sampling errors
NHES:2012 Parent and Family Involvement in Education	FPWT	BASMID	FPWT1-FPWT80	ЈК1	WR	PSTRATUM PPSU	1.5 Full Sample (1.45932) 1.6 White, non- Hispanic (1.59891) 1.6 Black, non- Hispanic (1.59891) 1.6 Hispanic (1.59891) 2.1 All other, multiple races, non-Hispanic (2.05125) 1.6 Elementary schoolers (1.64958) 1.6 Middleschoolers (1.64958) 1.6 High schoolers (1.64958) 2.8 Homeschoolers (2.75817)

¹ WesVar Complex Samples software, version 5.1, is available from Westat (www.westat.com). Information on SUDAAN can be obtained at www.rti.org. SUDAAN performs replication using the JK1 procedure but not the JK2 procedure. Information on Stata can be obtained at www.stata.com. Information on AM can be obtained at www.am.air.org.

² Information on SUDAAN can be obtained at www.rti.org. Information on Stata can be obtained at www.stata.com. Additionally, SAS version 9 includes survey procedures that use the Taylor series method for variance estimation. (See www.sas.com.) Information on AM can be obtained at www.am.air.org. Information on SPSS Complex Samples can be obtained at http://www-142.ibm.com/software/products/us/en/spss-complex-samples/.

³ Unlike the NHES:1995 Adult Education data file, no course weights are provided in the NHES:1991 course file. The full sample weight and variables for computing sampling errors are provided in the course file for making adult-level estimates. Information as to the total number of courses that adults took is also available, and procedures similar to those described in the NHES:1995 *Adult Education Data File User's Manual* (Collins et al. 1996) could be used to create weights for making course-related estimates. However, it is important to note that the course information collected in the NHES:1991 pertains to the four most recent courses taken, rather than a random sample of courses as was the case in the NHES:1995.

⁴ This data file contains weights for making "person-course" estimates pertaining to work-related and other formal structured courses. A simple way of doing this is to create a new variable that is the product of the course weight and the variable of interest. The standard weight and variance estimation methods are then applied to the new variable. The weight variables are called WRWGT, for adjusting for the courses adults took in work-related classes, and SAWGT, for adjusting for personal development courses. Weights are required for these types of courses because course-related data were collected only for a random subsample of courses. See the NHES:1995 *Adult Education Data File User's Manual* (Collins et al. 1996) for more details. Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 1991-2012.